

# Digital policy action areas for a connected ASEAN

ASEAN best practice benchmarking and an action plan for regional harmonization





# **Asia-Pacific region**

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#### **Abstract**

This report assesses the level of readiness of digital policy, legal and governance frameworks for digital transformation in the Association of Southeast Asian Nations (ASEAN) member states and proposes action areas to advance preparedness for digital transformation of the region and its members through the acceleration of a harmonized, best-practice-oriented and locally grounded enabling regulatory environment.

# **Acknowledgements**

This assessment report and regional harmonization action plan were prepared in the framework of a collaboration between ITU and the Malaysian Communications and Multimedia Commission (MCMC) to support the work of the ASEAN Secretariat in accelerating the implementation of the ASEAN Digital Masterplan 2025. The report and the various related activities (research and analysis, benchmarking and country interviews) build on the core work of the ITU Telecommunication Development Bureau (BDT) in the area of collaborative digital regulation.

The report was prepared by the ITU Regulatory and Market Environment Division (RME) of BDT with financial support from MCMC. This analysis was authored by Ms Imme Philbeck, Managing Director, SWIFT, in her capacity as an ITU expert.

ITU and MCMC would like to thank the following officials for their time and thoughtful contribution to this study.

- Sothie Keo, Secretary of State at Ministry of Post and Telecommunications (MPTC), Cambodia
- Mao Neang, Director, General of Information and Communication Technology (ICT) for the Ministry of Post and Telecommunications (MPTC), Cambodia
- Bunhong Taing, Director, Policy and Legal Ministry of Post and Telecommunications (MPTC),
   Cambodia
- Monirida Sous, Deputy Director of Telecommunication Regulator of Cambodia (TRC), Cambodia
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- Mohamad Azam Toiman, Deputy Undersecretary, International Division, Ministry of Communications and Digital Malaysia (KKD), Malaysia
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- Ivy Grace Villasoto, Chief Policy Development Division, National Privacy Commission (NPC), Philippines

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#### ISBN

978-92-61-38341-1 (Electronic version)



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#### Foreword



I am pleased to present this new regional study prepared in collaboration with the Association of Southeast Asian Nations (ASEAN) Secretariat and the Malaysian Communications and Multimedia Commission.

The ASEAN Digital Master Plan 2025 (ADM 2025) stands as a visionary blueprint for the future of the ASEAN region. Recognizing the pivotal role of technology in shaping the socio-economic fabric of the region, ADM 2025 charts a course towards a more connected, innovative and inclusive ASEAN.

As the target date approaches and all countries need to navigate the complexities of a rapidly evolving digital landscape, this study serves as a compass, providing an insightful, comprehensive assessment of the current

state of digital policy and regulation within ASEAN nations and takes a close look at their state of readiness for digital transformation.

Achieving the goals of the ADM 2025 also hinges upon a cohesive and holistic regional approach to digital policy and regulation across member states. A harmonized regulatory environment ensures a seamless and conducive ecosystem for innovation, investment and growth. It strengthens public services, enables businesses and protects consumers, allowing the benefits of digitalization to be shared equitably. This is why the study and, importantly, the action plan for regulatory harmonization serve as crucial tools in moving forward the regional digital agenda and enhancing ASEAN's competitiveness on the global stage.

This collaboration between ITU and the ASEAN Secretariat reflects our shared commitment to steer the region toward a digitally resilient and sustainable future. It is our hope that this assessment and action plan will inspire further dialogue and concerted efforts, guiding us towards the successful realization of the objectives of ADM 2025. Together, we navigate the complexities of the digital era, fostering unity and unlocking the vast potential that a harmonized digital landscape offers to the region.

Dr Cosmas Luckyson Zavazava

Director, Telecommunication Development Bureau

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# 1 Introduction and background

In the rapidly evolving landscape of the digital age, digital transformation has become an imperative for economies and societies worldwide. The Association of Southeast Asian Nations (ASEAN) is fast becoming a leading digital community and economic bloc, propelled by secure and transformative digital services, technologies, and ecosystems for which the ASEAN Digital Masterplan 2025 (ADM 2025) sets out a conducive environment that supports digital development and harmonization of legal, governance, and policy frameworks.

The digital revolution requires a supportive environment that transcends traditional telecommunication markets and encompasses the entirety of digital markets and enablers across all economic sectors. The enabling environment must adapt to each nation's unique context, taking into account political and legal systems, cultural backgrounds, and economic priorities. While there is no one-size-fits-all best-practice blueprint, there exists a range of tools and strategies converging towards common goals and standards that can facilitate regulatory harmonization and digital transformation at the national, regional, and global levels.

In today's interconnected global digital economy, regulatory harmonization plays a pivotal role in fostering cross-border trade and facilitating economic and social activities. The ASEAN region has identified key areas that yield significant benefits and has assessed current priorities, challenges, and gaps in policy and regulatory frameworks to create an action plan. Such plans contribute to solidifying the position of the region as a significant digital economic partner, enabling ASEAN to thrive amidst the ever-evolving digital-driven global landscape.

Embracing best practices and innovative strategies in the area of telecommunications and digital policies can propel ASEAN member states towards comprehensive digital transformation, ensuring prosperity and prominence in the dynamic digital landscape of the future. This journey towards harmonized digital policy, legal, and governance frameworks will not only bolster ASEAN economic growth but also enable it to thrive in the interconnected global digital economy, fostering cross-border trade and facilitating economic and social activities.

This report examines the level of readiness of policy and regulatory frameworks in ASEAN member states using the ITU unified framework as the basis of assessment and proposes measures for regulatory harmonization to propel an inclusive and sustainable digital transformation in the region.

#### ASEAN Digital Masterplan 2025

The ADM 2025 is the third in a line of comprehensive strategic plans for the region. It takes stock of the state of digital development and sets out ways for the region to strengthen use of digital technologies to spur economic and social development.

The ADM 2025 specifies three conditions for ASEAN member states to become a leading digital community and economic bloc, powered by secure and transformative digital services, technologies and ecosystems:

- The availability of high quality and ubiquitous connectivity delivered through the underlying telecommunication infrastructure.
- 2 The availability of safe and relevant digital services.
- The removal of barriers to the use of digital services by businesses and consumers. For businesses the focus is on improving productivity through digital skills and for consumers the focus is on improving basic digital literacy and affordability so that digital services can be widely used.

The plan identifies eight desired outcomes (DO) and corresponding high, medium, and low priority enabling actions (EA) to achieve them (Table 1).

#### Table 1: ADM 2025 desired outcomes and enabling actions

#### ADM 2025

Desired outcomes (DO): High priority (HP), medium priority (MP), and low priority (LP) enabling actions

#### DO1: Actions of ADM 2025 prioritized to speed ASEAN recovery from COVID-19

- HP 1.1: Make the economic case for prioritizing ADM 2025 actions
- MP 1.2: Assess the economic case for facilitating use of digital services that would help recovery from the COVID-19 pandemic

#### DO2: Increase in the quality and coverage of fixed and mobile broadband infrastructure

- HP 2.1: Encouraging investment in the digital and ICT field (corresponds to ITU unified Framework: B1, B7, B5)
- HP 2.2: Moving towards best practices in permits and access rights for local and national infrastructure including submarine cable repair (corresponds to ITU unified Framework: B6, B1)
- MP 2.3: Facilitate adoption of region wide telecommunications regulation best practices by market players to provide regulatory certainty
- MP 2.4: Ensure adequate international Internet connectivity
- MP 2.5: Develop regional mechanisms to encourage skills in integrated and end-to end services
- HP 2.6: Ensuring increased and harmonized spectrum allocation across the region (ITU unified Framework: B6. B7
- MP 2.7: Adopt regional policy to deliver best practice guidance on Al governance and ethics, IoT spectrum and technology
- MP 2.8: Develop regional mechanisms to encourage skills in integrated and end-to end services
- HP 2.9: Establishing a centre of excellence for best practice rural connectivity (corresponds to ITU unified Framework: B1)

## DO3: The delivery of trusted digital services and the prevention of consumer harm

- HP 3.1: Enabling trust through greater and broader use of online security technologies (corresponds to ITU unified Framework: B4, B7)
- MP 3.2: Build trust through enhanced security for finance, healthcare, education and government
- HP 3.3: Identifying improvements in legal and regulatory measures on the management and protection of data and other data-related activities that could be harmful (corresponds to ITU unified Framework: B7)
- HP 3.4: Improve coordination and cooperation for regional computer incident response teams (corresponds to ITU unified Framework: B4)
- HP 3.5: Promote consumer protection and rights in relation to e-commerce (corresponds to ITU unified Framework: B2, B3, B7)

#### DO4: A sustainable competitive market for the supply of digital services

- HP 4.1: Continue to identify opportunities to harmonise digital regulation to facilitate cross-border data flows (corresponds to ITU unified Framework: B9)
- MP 4.2: Deepen collaboration between ICT and competition regulatory authorities across ASEAN on the ICT sector and digital economy

#### **ADM 2025**

# Desired outcomes (DO): High priority (HP), medium priority (MP), and low priority (LP) enabling actions

LP 4.3: Monitor developments in regulation of digital platforms in other jurisdictions

#### DO5: Increase in the quality and use of e-government services

- HP 5.1: Establish ASEAN wide reporting on the level of use of e-government services in line with ITU requirements (corresponds to ITU unified Framework: B7)
- HP 5.2: Helping make key government departments more productive through their internal use of ICT and e-services (corresponds to ITU unified Framework: B7)
- HP 5.3: Explore how to introduce digital identities in each AMS in a way which safeguards civil liberties (corresponds to ITU unified Framework: B7)
- ML 5.4: Help developing AMS improve the quality of their e-government e-services
- LP 5.5: Improve the cohesion of AMS by making key government e-services interoperable across the ASEAN region

#### DO6: Digital services to connect business and to facilitate cross-border trade

- HP 6.1: Facilitate compliance and secure the benefits of telecommunications services and electronic commerce in line with relevant ASEAN trade agreements (corresponds to ITU unified Framework: B9)
- HP 6.2: Support trade digitalisation through seamless and efficient flow of electronic trade documents (e.g. invoices) and goods within ASEAN (corresponds to ITU unified Framework: B9)
- ML 6.3: Assess the net benefits of including IR 4.0 technologies in trade facilitation processes
- ML 6.4: Reduce regional business travel costs, by lowering roaming rates for mobile data services across ASEAN
- ML 6.5: Promote e-commerce trade in ASEAN, enhance last-mile fulfilment cooperation, and improve competitiveness in the digital economy

#### DO7: Increased capability for business and people to participate in the digital economy

- LP 7.1: Continue to support the advancement and harmonization of ICT qualifications across ASEAN
- MP 7.2: Promote development of advanced digital skills, such as coding, hackathons, innovative challenges
- HP 7.3: Develop a framework that encourages the development and growth of digital start-ups in ASEAN (corresponds to ITU unified Framework: B7)
- MP 7.4: Progress the work on smart cities begun in AIM 2020

#### DO8: A digitally inclusive society in ASEAN

- HP 8.1: Ensuring citizens and businesses have the skills and motivation to use digital services (corresponds to ITU unified Framework: B1)
- MP 8.2: Reduce affordability barriers to getting online
- MP 8.3: Reduce accessibility barriers to getting online
- LP 8.4: Encourage deeper adoption and use of 'vertical' digital services

Source: Adapted from ADM 2025 pp. 16-18.

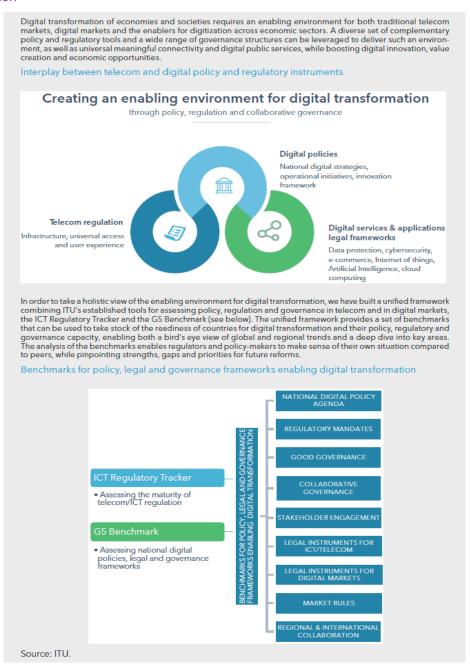
Note: Only the ADM enabling high priority actions have been considered in the stakeholder consultation questionnaire.

# ITU unified framework and linkages with ADM 2025

This section provides a brief overview of the framework, emerging best-practice trends, and what is considered best practice across the nine benchmark areas.

To provide a unified reference for assessing the advancement of policy, regulatory and governance efforts towards digital transformation, ITU has designed a unified framework. This incorporates two well-established metrics, the ICT Regulatory Tracker and the G5 Benchmark, to assess national capacities and readiness for digital transformation based on nine interrelated thematic benchmarks that reflect the journey of digital transformation from ICT-focused agendas to whole-of-ecosystems approaches. With a total of 119 indicators or targets (for the full list of indicators, see the Global Digital Regulatory Outlook 2023), the unified framework helps to evaluate digital transformation readiness.

Figure 1: Unified framework and benchmarks for policy, legal and governance frameworks enabling digital transformation



#### Emerging best practice strategies and trends across all indicators

According to ITU, there is no single blueprint for best practices for digital transformation, but rather a range of tools that can help to converge towards common goals by using data that reflect the specificities of national contexts, political and legal systems, cultural backgrounds, and economic priorities. Overall, policy and regulation have shifted focus from the narrow telecommunication sector to powering digital transformation across the economy. New approaches have surfaced that increasingly rely on shorter and more inclusive policy cycles, agile regulatory responses, and continuous experimentation, to match the pace of innovation and the ambition of the global development agenda.

There are five strategies that broaden policy options and avoid anchoring decisions in the past or using a silo perspective:

- (1) Building leadership based on more inclusive, multistakeholder processes and embracing concepts such as sandboxing, policy labs, high-level framework for experimentation.
- (2) Bridging silos by adopting a whole-of-ecosystem approach to policy inception, design, prototyping and implementation.
- (3) Developing a common language through effective stakeholder dialogue, data and analytical evidence, regulatory taxonomies, and building an environment and a culture of consultation.
- (4) Reframing and operationalizing policy agendas for example by extending from a single-sector to a whole-of-society approach that engages fundamental principles of equality, good governance, and participation. This will also help to shape common stakeholder roadmaps, to align objectives, and include a focus on sustainable development goals and sustainability.
- (5) Skilling-up by building adequate institutional capacity and continuously developing regulatory expertise to integrate new technologies, competencies, and skills and to allow for data- and evidence-based decision-making.

ITU's Global Digital Outlook provides an in-depth description of these new emerging trends.<sup>1</sup>

The nine unified framework benchmarks comprise 119 best-practice indicators / targets (for the full list, see the ). In the context of emerging strategies, new good practice and evolving trends in digital transformation are no longer focused on telecommunications, ICT regulation and policy but now englobe the wider digital economy. This increased scope incorporates innovation, science and technology, and telecommunication infrastructure among key areas of interest. This new view requires the development of observatories that monitor indicators across development of the digital sector and digital transformation of the economy. It should also incorporate as a conventional course of action the implementation of regulatory impact tools that systematically capture all dimensions of the digital economy. The ITU unified framework comprises 119 best-practice indicators).<sup>2</sup>

From an institutional standpoint, countries at the leading edge of constructing collaborative regulatory frameworks have implemented high-level national coordination bodies which comprise not only representatives of the different agencies and ministries, including sub-sovereign parties, but also private sector participants. Policy coherence is key and achieved by cross-institutional coordination and through proactive action of the executive branch at its highest level. This can enable different agencies pulling together through agenda setting, goal formulation, and implementation of monitoring processes. This high-level political commitment brings all agencies and institutions together in fulfilling collaboration. Collaborative digital regulation needs to be underlined by holistic economic policy considerations. Under the proposed cross-institutional framework, countries should have the capability to assess trade-offs, and make policy decisions by examining the multiple economic dimensions while keeping the development of the digital economy as their North Star.

<sup>&</sup>lt;sup>1</sup> Global Digital Regulatory Outlook 2023, pp. 41-76, <a href="https://www.itu.int/pub/D-PREF-BB.REG">https://www.itu.int/pub/D-PREF-BB.REG</a> OUT01

<sup>&</sup>lt;sup>2</sup> See: Global Digital Regulatory Outlook 2023, https://www.itu.int/pub/D-PREF-BB.REG\_OUT01

# A first global unified framework assessment

In a first global assessment of the state of readiness of the enabling environment for digital transformation of the different regions and countries<sup>3</sup>, ITU has identified that in all regions and in most countries worldwide, the current state of the enabling environment does not provide sufficient leverage to public sector initiatives nor to private sector players to unleash the full potential of digital transformation. There is a stark contrast between the level of preparedness for digital transformation in developed economies in Europe and North America (at a readiness level of 6.8 and 7.8 out of 10 respectively) and in the level of preparedness in Africa, Arab States, Asia-Pacific, and CIS, ranging between 3.4 and 4.6 out of 10, and 5 (close to the world average) in the Americas region.

While the readiness levels of Germany, Finland and Singapore is close to 9 out of 10, readiness levels of the world's least prepared countries, such as Tuvalu and Libya, is over 20 times less, at only 0.4 out of 10. Significant gaps persist within regions too, with readiness levels in some countries being between 3 and 20 times higher than their least prepared regional neighbours. Compared to the world average, interregional gaps remain less significant in Europe and the Americas and most pronounced in the Arab States and the CIS.

Overall readiness, woldwide and by region, 2022

10

8

6

4

2

Africa Arab States Asia-Pacific CIS Euope Americas

Regions ----- World

Figure 2: Worldwide and by regional readiness for digital transformation, 2022

Source: ITU, Global Digital Regulatory Outlook 2023.

# Mapping ADM 2025 desired outcomes to the unified framework targets

To understand what best-practice tools and practices contained in the ITU unified framework benchmarks correspond most meaningfully to the desired outcomes identified in the ADM 2025. Table 2 presents a high-level mapping. It should be noted that more than one benchmark can correspond to a desired outcome, given that they are very broad.

6

<sup>&</sup>lt;sup>3</sup> See: 'Global Digital Regulatory Outlook 2023', https://www.itu.int/pub/D-PREF-BB.REG\_OUT01

Table 2: Mapping unified framework benchmarks to the ADM 2025 desired outcomes

$\Lambda \square \Lambda \Lambda$	2025 ~	00:400	outcome	$I \cap \cap I$
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**DO1**: Actions of ADM 2025 prioritized to speed ASEAN recovery from COVID-19 (digital Services development, regulatory reform).

DO2: Increase in the quality and coverage of fixed and mobile broadband infrastructure (telecommunication infrastructure development, bandwidth upgrades, coverage extension especially rural).

**DO3:** The delivery of trusted digital services and the prevention of consumer harm (cybersecurity, digital governance best practice).

**DO4:** A sustainable competitive market for the supply of digital services (sound and sustainable development of digital services, enhance competitiveness of different digital market players).

**DO5:** Increase in the quality and use of e-government services (development of high-quality and relevant digital government services, availability of government data to users).

**DO6:** Digital services to connect business and to facilitate cross-border trade (leveraging telecommunications services and electronic commerce to facilitate cross-border trade).

**DO7:** Increased capability for business and people to participate in the digital economy (development of local innovation and creative capabilities).

**DO8:** A digitally inclusive society (digital skills development, affordability and accessibility).

ITU unified framework benchmark

B1: National digital policy agenda

**B2:** Regulatory capacity

B7: Legal instruments for digital markets

**B5:** Stakeholder engagement

B1: National digital policy agenda

**B2:** Regulatory capacity

**B4:** Collaborative governance

**B6:** Legal instruments for ICT/telecom markets

**B6:** Legal instruments for ICT/telecom markets

B7: Legal instruments for digital markets

**B9:** Regional and international cooperation

**B2:** Regulatory capacity

B3: Good governance

**B4:** Collaborative governance

B7: Legal instruments for digital markets

**B8**: Market rules

B1: National digital policy agenda

**B7:** Legal instruments for digital markets

**B5**: Stakeholder engagement

B7: Legal instruments for digital markets

**B9:** Regional and international cooperation

B1: National digital policy agenda

**B5**: Stakeholder engagement

B7: Legal instruments for digital markets

B1: National digital policy agenda

**B5**: Stakeholder engagement

B7: Legal instruments for digital markets

Source: Adapted from ADM 2025 Figure 11, p. 6 and ITU unified framework.

# 2 Regulatory harmonization opportunities and priority tracks

# 2.1 High-level snapshot of ASEAN digital regulatory practices

This section sets out a snapshot of the readiness of the policy, regulatory and governance framework for digital transformation using the ITU unified framework as a benchmarking tool. This section also includes a country factsheet for each ASEAN member state, which sets out the regulatory and digital policy status, the ITU unified framework scoring, the proposed areas for improvement, and the country priorities to achieve the ASEAN Digital Masterplan 2025.

Each of the nine thematic benchmarks of the unified framework are used to highlight what ASEAN member states are doing, reflecting their areas of strength and where there is room for improvement. The nine benchmarks and their respective indicators offer insights into trends and gaps in specific areas:

- Benchmark 1: National digital policy agenda
- Benchmark 2: Regulatory capacity
- Benchmark 3: Good Governance
- Benchmark 4: Collaborative governance
- Benchmark 5: Stakeholder engagement
- Benchmark 6: Legal instruments for ICT/telecommunication markets
- Benchmark 7: Legal instruments for digital markets
- Benchmark 8: Market rules
- Benchmark 9: Regional and international cooperation

# Overview and global digital readiness

ASEAN member states have made significant strides in digital readiness, achieving either transitioning or advanced status according to the ITU unified framework. Singapore has a rate of achievement for target indicators of 89 per cent (on par with Germany) and Malaysia, Philippines, and Thailand also stand out with high scores of 84 per cent, 78 per cent, and 75 per cent, respectively. However, the region falls below the World and South and East Asia regional averages, emphasizing the need for more comprehensive efforts towards digital transformation.

Figure 3 shows the overall readiness of ASEAN member states for digital transformation based on the ITU unified framework:<sup>4</sup>

- Countries with an advanced level of preparedness have an overall rate of achievement for target indicators of 67 per cent to 100 per cent.
- Countries with a transitioning level of preparedness have an overall rate of achievement for target indicators of 34 per cent to 66 per cent.

<sup>&</sup>lt;sup>4</sup> The scoring is based on 2022 unified framework data and 2023 stakeholder questionnaire responses.



Figure 3: Overall percentage of readiness of policy, regulatory and governance frameworks for digital transformation in the ASEAN region

Source: ITU unified framework 2022 and 2023 stakeholder questionnaire responses.

Legend: A traffic light system has been used in the choropleth map above, which categorizes countries into three categories according to the target achievement rates in the ITU unified framework:

- · 'Advanced' where 67 per cent-100 per cent of targets have been achieved, indicated on the map as green,
- 'Transitioning' where 34 per cent-66 per cent of targets have been achieved, indicated on the map in yellow.

It should be noted that this categorization implies that the state of development can still vary significantly within each category. Note: The designations employed and presentation of material in this publication, including maps, do not imply the expression of any opinion whatsoever on the part of ITU concerning the legal status of any country, territory, city or area, or concerning the delimitations of its frontiers or boundaries.

Table 3 reveals overall rates of achievement for indicator targets of digital transformation efforts around the world in each of the nine unified framework benchmarks. The ASEAN region stands out as one of the advanced regions, achieving an overall unified framework score of 57 per cent. However, it should be noted that regional averages are based on very broad groupings, 'sub-regions' such as 'Western Europe' would score significantly higher, well above 70 per cent, and 'North America' comprises only two countries, Canada and the United States of America, both with well-developed regulatory and policy frameworks.

However, significant disparities exist between levels of digital readiness. According to the ITU Global Digital Regulatory Outlook 2023, countries such as Finland, Germany, and Singapore have reached nearly 90 per cent readiness. In stark contrast, some of the world's least prepared countries, such as Tuvalu and Libya, lag far behind with readiness levels around 5 per cent, 18 times less. These disparities are not confined to individual countries.

Disparities are found within each region too, where digitally prepared countries are between three and 20 times more advanced than their least prepared neighbours. Africa and Europe show relatively lower interregional gaps in digital readiness compared to the Arab States region and Asia and the Pacific, where disparities are most pronounced.

Table 3: ITU unified framework benchmark achievement status by region

	66			The same		<b>₩</b>		<u>"</u>	ĬÍ	
		B1	B2	В3	B4	B5	В6	В7	В8	В9
ASEAN	57%	63%	55%	60%	53%	50%	61%	57%	56%	54%
World	51%	43%	63%	58%	42%	34%	59%	39%	59%	36%
Africa	51%	39%	64%	57%	46%	33%	59%	39%	58%	49%
Arab States	53%	51%	63%	56%	52%	33%	61%	38%	63%	39%
CIS	46%	35%	67%	55%	42%	20%	52%	22%	59%	31%
East Asia and Pacific	54%	48%	58%	61%	46%	44%	63%	45%	62%	34%
Europe	50%	43%	63%	58%	39%	32%	59%	37%	60%	41%
Latin America	48%	38%	65%	57%	33%	30%	58%	36%	57%	37%
North America	76%	82%	85%	77%	78%	80%	88%	72%	59%	50%
South Asia	43%	34%	55%	51%	33%	36%	50%	39%	46%	22%
Limited: 0%-33%				Transition	ing: 34%-	-66%	Adva	nced: 67	%-100%	

Source: ITU unified framework 2022 data and ASEAN member states 2023 questionnaire responses

#### **ASEAN** readiness

Although, the level of readiness measured across the nine unified framework benchmarks in ASEAN member states indicates that about half have reached an advanced level of readiness with 67 per cent to 100 per cent of individual indicator targets achieved per benchmark, however, for the other half many benchmark targets remain either in transition or with limited progress.

#### Areas of strength

Notable progress can be observed for the ASEAN region in specific benchmarks:

- B1: National digital policy agenda
- B6: Legal instruments for ICT/telecommunication markets
- B3: Good governance
- B7: Legal instruments for digital markets

#### B8: Market rules

Across the ASEAN region, more than half of the unified framework benchmarks have been fully achieved (reaching an average of 55 per cent or more), reflecting the positive impact of best practice regulatory and policy tools and practices.

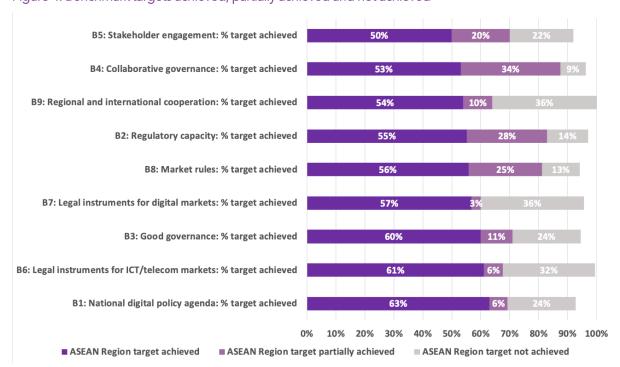


Figure 4: Benchmark targets achieved, partially achieved and not achieved

Source: ITU unified framework data 2022 and 2023 stakeholder questionnaire responses.

Note: Figure 4 shows the percentage of the benchmark achieved (max score 2), partially achieved (score less than 2), and not achieved (score 0) in ASEAN member states. Not all benchmarks add up to 100 per cent due to missing information for some individual indicators and countries.

#### Areas for improvement

There are three benchmarks where the ASEAN region performs less well:

- B4: Collaborative governance
- B5: Stakeholder engagement
- B9: Regional and international cooperation

Concerning collaborative governance, the region is in the process of identifying shortfalls and actively addressing current gaps, with initiatives in the pipeline to move towards full achievement of targets. While the benchmark for legal instruments for digital markets has been recorded at 56 per cent and the benchmark for legal instruments for ICT/telecommunication markets at 61 per cent, there is still a 36 per cent shortfall with regard to legal tools in place to address policy and regulatory issues in digital markets, and a 32 per cent gap indicating the absence of tools in place to address issues in ICT/telecommunication markets. This impacts on the state of readiness of other benchmarks.

In the following section, a benchmark-by-benchmark analysis is presented, taking into consideration the individual indicators and corresponding targets achieved.

# ASEAN benchmark analysis

#### B1: National digital policy agenda

The national digital policy agenda benchmark emerges as the most satisfied target for the ASEAN

region, with 63 per cent with maximum scores, with only 30 per cent indicating room for improvement for targets that have either been only partially achieved or have not yet been achieved. As Table 3 shows, this performance aligns closely with best practices, placing the ASEAN region ahead of several other regions such as Europe (43%), Arab States (51%), and Africa (39%) as well as East Asia and Pacific (48%), and South Asia (34%). The performance in the ASEAN region also surpasses the world average, which stands at 43 per cent. Overall, considerable progress has been made by ASEAN member states in developing and adopting national digital policy agendas.

#### Areas of strength

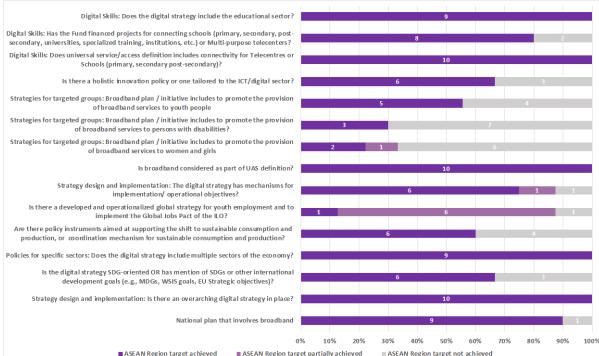
Most ASEAN member states have a national broadband plan, which indicates their commitment to enhancing digital connectivity. Moreover, every ASEAN member state has a comprehensive digital strategy, which sets the course for their digital transformation journey.

National digital strategies span across sectors in nine out of the ten ASEAN member states reflecting holistic approaches to harnessing the potential of digital technologies for socio-economic development. In addition, ASEAN member states recognize the crucial role of the education sector within their digital strategy, highlighting their dedication to leveraging digital tools and technologies for educational advancement. Furthermore, in more than half of the ASEAN member states, the digital strategy is complemented by specific mechanisms for implementation and/or operational objectives. This proactive approach reflects the dedication to translate digital visions into tangible actions, ensuring that digital initiatives yield meaningful and measurable outcomes for their citizens and economies.

Broadband is integral to universal access and service in all ASEAN member states, which underlines the importance of equitable access to digital services for all their citizens. Furthermore, connectivity for telecentres and schools is also emphasized in all ASEAN member states, illustrating their commitment to bridging the digital divide and enabling access to information and resources in remote and underserved areas.

not achieved Digital Skills: Does the digital strategy include the educational sector? Digital Skills: Has the Fund financed projects for connecting schools (primary, secondary, post secondary, universities, specialized training, institutions, etc.) or Multi-purpose telecenters? Digital Skills: Does universal service/access definition includes connectivity for Telecentres or

Figure 5: Benchmark 1 - National digital policy agenda: Indicator targets achieved, partially achieved, and



Source: ITU unified framework data 2022 and 2023 stakeholder questionnaire response.

Note: This figure shows the number of countries that have achieved the indicator target, partially achieved the target, or not achieved the target for Benchmark 1.

#### Areas for improvement

Among best practice targets in the national digital policy agenda benchmark, the most conspicuous discrepancies arise in broadband strategies tailored specifically for marginalized groups, such as women and girls, youth, and persons with disabilities. Additionally, the pursuit of a comprehensive global strategy to tackle youth unemployment and effectively implement the International Labour Organization (ILO) Global Jobs Pact remains a challenge. Surprisingly, only one country has successfully reached this target, while six other ASEAN member states have made some progress, albeit partial, by introducing initiatives and programmes aimed at fostering youth employment.

Another noteworthy observation concerns digital strategies in place across different countries. Remarkably, only six ASEAN member states have adopted a digital strategy aligned with the Sustainable Development Goals (SDGs) or international development objectives, showcasing their commitment to leverage digitalization for inclusive growth and sustainable progress.

Moreover, a holistic approach to innovation, encompassing various sectors and demographics, is only apparent in six ASEAN member states, indicating that innovation strategies need further development and implementation across the region.

#### B2: Regulatory capacity

An essential component for facilitating digital transformation lies in regulatory capacity, which entails the establishment of competent independent authorities, agencies, and governmental departments. These entities collaboratively orchestrate and facilitate the effective and inclusive provision of appropriate digital products and services, involving all relevant stakeholders.

Across the ASEAN region, the regulatory capacity benchmark has been achieved at 55 per cent, showcasing notable progress in this domain as indicated in Table 4. Bolstering regulatory capacities in the ASEAN region will further accelerate digital transformation.

East Asia and North Latin Arab ASEAN Africa CIS Europe States **Pacific** America America 鹼 67% 85% **B2** Limited: 0%-33% Transitioning: 34%-66% Advanced: 67%-100%

Table 4: Reaching the regulatory capacity benchmark

Source: ITU unified framework 2022 data and 2023 questionnaire responses for ASEAN member states

#### Areas of strength

Across the ASEAN region, institutional landscapes are reasonably well developed, especially in traditional areas. A separate telecommunication/ICT regulator has been created in seven out of ten member states. In eight out of ten countries, ICT regulators have strong traditional mandates in core areas such as licensing, and quality of service obligations and measuring and monitoring. Additionally, entities in charge of ICT regulation (either sector ministries or separate regulators) have established mandates in spectrum monitoring and enforcement, and radio frequency allocation and assignment in seven out of ten countries. One positive trend that has gained momentum in seven out of ten countries is the strengthening of enforcement powers and the authority of entities in charge of ICT regulation to impose sanctions on market players. ASEAN member states have also progressed with regards to traditional areas such as interconnection, price regulation, and universal access and service, with seven and, respectively, six out of ten having achieved maximum scores.

Consumer issues: entity responsible for comparative tariff information, consumer education and handling consumer complaints New mandate: entity in charge of IT New mandate: entity in charge of Internet content New mandate: entity in charge of broadcasting content New mandate: entity in charge of broadcasting (radio and TV transmission) Entity in charge of universal service/access Entity in charge of Spectrum Monitoring and Enforcement Spectrum: Entity in charge of radio frequency allocation and assignment Traditional mandate: entity in charge of interconnection rates and price regulation Traditional mandate: entity in charge of licensing Traditional mandate: entity in charge of quality of service obligations measures and service quality monitoring Sanctions or penalties imposed by regulator Enforcement power Percentage of diversified funding Accountability Autonomy in decision making Separate telecom/ICT regulator 2 ■ ASEAN Region target achieved ■ ASEAN Region target partially achieved ASEAN Region target not achieved

Figure 6: Benchmark 2 - Regulatory capacity: Indicator targets achieved, partially achieved, and not achieved

Source: ITU unified framework data 2022 and 2023 stakeholder questionnaire response.

Note: This figure shows the number of countries that have achieved the indicator target, partially achieved the target, or not achieved the target by indicator for Benchmark 2.

#### Areas for improvement

In line with global trends, new regulatory mandates have evolved at a slower pace compared to traditional mandates and remain underdeveloped in the ASEAN region (see figure 6). Few countries have scored the maximum points for the creation of new mandates for IT and Internet content, whereas new mandates for broadcasting content and the entity in charge of broadcasting are in place in five countries. Critical but under-recognized areas include cloud computing and IT services.

Moderate progress has been made in regulatory capacity in autonomous regulatory agencies - a proxy for more efficient governance models. Regrettably, only five countries have achieved autonomy targets in regulatory decision-making, with two countries having partially achieved, and three countries having not achieved the target. Also, little headway has been made towards more accountable institutions, with six countries failing to achieve the target and five countries having only partially achieved it.

Globally, few countries have accountability mechanisms regarding the appointment of the agency head or commissioners, reporting requirements and annual budget approvals. As concerns the granting to ICT regulators of diversified sources of funding to limit the risk of capture, six countries across the ASEAN have achieved the target. Moreover, concerning the entity handling comparative tariff information, consumer education and handling consumer complaints, only four countries have achieved the target relative to consumer issues.

#### B3: Good governance

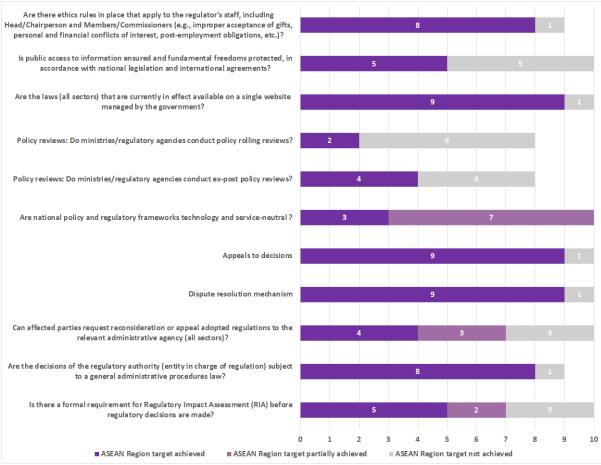
Good governance practices across government ministries and regulatory agencies are essential for impactful policy implementation and to achieve development goals. The ASEAN region is on track as regards good governance, with the benchmark being almost two-thirds achieved (at 60%), ahead of most other regions and two places behind the highest regional benchmark score of 77 per cent.

#### Areas of strength

As shown in Figure 7, dispute resolution and appeal mechanisms are well established in the telecommunication sector in nine out of ten member states. Furthermore, decisions of the regulatory authority are subject to a general administrative procedures law in all but one member state. Other advanced areas, where eight out of ten have achieved the target, include ethics rules in place that apply to regulator staff and the laws that are currently in effect are available on a single website for all sectors managed by the government, increasing transparency and public trust.

achieved Are there ethics rules in place that apply to the regulator's staff, including Head/Chairperson and Members/Commissioners (e.g., improper acceptance of gifts, personal and financial conflicts of interest, post-employment obligations, etc.)?

Figure 7: Benchmark 3 - Good governance: Indicator targets achieved, partially achieved, and not



Source: ITU unified framework data 2022 and 2023 stakeholder questionnaire response.

Note: This figure shows the number of countries that have achieved the indicatortarget, partially achieved the target, or not achieved the target by indicator for Benchmark 3.

#### Areas for improvement

In the ASEAN region, monitoring and evaluation of government agency efforts stand out as the major area in need of improvement as regards good governance practices. Only two of the ASEAN member states conduct rolling policy reviews, and ex-post policy reviews are undertaken in only four countries, which is on par with global trends<sup>5</sup>. Additionally, only five countries require regulatory impact assessments (RIAs) before regulatory decisions are made, which is below the world average; RIAs are regularly used to inform major decisions of ICT regulators in half of countries worldwide.

<sup>&</sup>lt;sup>5</sup> Only 30 per cent of countries worldwide require ex-post reviews of sectoral policies and only 10 per cent require policy rolling reviews.

Without a clear understanding of implementation levels, challenges, and changing contexts, the achievement of policy goals may be at risk. Today, governments have more data, evidence, and evaluation tools at their fingertips than ever before – and the failure to use them to guide policy implementation can have important negative consequences not only for government agencies, but for citizens and business alike. Moreover, as highlighted above, while dispute resolution and appeal mechanisms are well established, only in four ASEAN member states can affected parties request reconsideration or appeal of adopted regulations to the relevant administrative agency (all sectors).

#### B4: Collaborative governance

In today's digital and interrelated world, collaborative digital governance makes a real difference, as the bedrock of meaningful and outcome-driven institutional action in digital transformation. It is the benchmark for a whole-of-government and outcome-oriented approach, where multiple agencies have been established with mandates over digital transformation issues that tackle the challenges of telecommunication markets and navigate digital transformation.

On a global scale, collaborative digital governance is gaining momentum, although the progress is gradual. The ASEAN region stands out in embracing collaborative governance. Notably, 53 per cent of the target indicators of this benchmark have been fully achieved across the ASEAN region, surpassing both the global average of 42 per cent and other regional averages, except for North America which has reached 78 per cent.

# Areas of strength

Looking at the individual indicator targets where the ASEAN region is making headway as presented in Figure 8, eight out of ten ASEAN member states engage in collaboration with the ministry of economic development or similar entities that focus on specific economic sectors such as agriculture or fishery sectors. Eight out of ten countries also collaborate with the ministry of education (e-education) and the ministry of health (e-health), while seven countries work together with the spectrum authority. In terms of environmental concerns, seven countries cooperate with the ministry of environment on e-waste management. Furthermore, six countries collaborate with the broadcasting content authority and the same number of countries participate in collaborations with the finance regulator. In the area of cybersecurity, six countries work together with the computer emergency response team (CERT) and five undertake collaborations with the cybersecurity authority. Four countries engage in partnerships with the postal service, and five countries with the competition authority.

Looking at the global situation, the ICT regulator collaborates most often with spectrum agencies and competition and consumer protection authorities, which is most often formally anchored. Collaboration is also undertaken with broadcasting and postal authorities, cybersecurity agencies, financial regulators and national coordination bodies for digital transformation or the information society in at least half of countries worldwide. The collaboration is more often formal, with the exception of the national coordination agency.

Collaboration with Ministry of Economic development OR similar focusing on a single or a subset of economic sector/s, e.g., Industry, Agriculture, Fishery) Collaboration with Ministry of Environment (e-waste) Collaboration with Ministry of Education (e-education) Collaboration with Ministry of Health (e-health) Collaboration with (Independent) Consumer Protection Authority Collaboration with Postal regulation Authority Collaboration with (Independent) Competition Authorities Collaboration with Transport regulatory Authority Collaboration with Energy regulatory Authority Collaboration with (Independent) Finance Regulator Collaboration between ICT ministry OR ICT regulator AND Information Society Agency Collaboration with (Independent) Data Protection Authority Collaboration with CERT Collaboration with Cyber security agency Collaboration with (Independent) Broadcasting (content) Authority Collaboration with (Independent) Spectrum Authority ■ ASEAN Region target achieved ■ ASEAN Region target partially achieved ASEAN Region target not achieved

Figure 8: Benchmark 4 - Collaborative governance: Indicator target achieved, partially achieved, and not achieved

Source: ITU unified framework data 2022 and 2023 stakeholder questionnaire response.

Note: This figure shows the number of countries that have achieved the indicator target, partially achieved the target, or not achieved the target for Benchmark 4.

#### Areas of improvement

Globally, data protection is an area where collaboration among ICT regulators is relatively limited, as it is not commonly integrated into their mandates and operations and only less than half of all countries have established a form of collaboration with data protection authorities. Similarly in the ASEAN region, only two countries have achieved the targets in collaborating with data protection authorities. Strengthening collaboration in this aspect is crucial, given the diverse challenges related to data governance, digital platform content moderation, and cross-border data flows, which necessitate joint reflection and, in some cases, regulatory action.

Furthermore, there are other areas that require attention in terms of collaboration. For instance, formal collaboration between the ICT ministry or ICT regulator and the information society agency has been established in only four countries. Similarly, formal collaboration with the ministry of energy was established in two countries, and in three countries with the ministry of transport. Given the significance of both transport and energy infrastructures in facilitating universal and meaningful connectivity, both with regards to fibre and wireless networks, enhancing cooperation between regulators becomes a priority. On a global scale, 64 per cent of transport regulators and 54 per cent of energy regulators do not engage in any form of collaboration, indicating the urgent need for improvement in this area.

#### B5: Stakeholder engagement

Broad participation and input from diverse stakeholders, including market players, academia, civil society, consumers, end users, and government agencies, enhances digital policy and regulation cycles. Stakeholder engagement and consultation lead to well-informed, rigorous, and accountable decision-making, crucial for successful policy implementation.

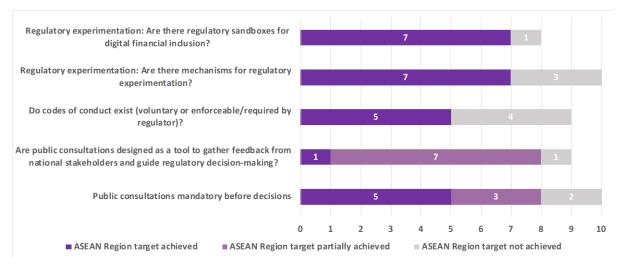
Globally, stakeholder engagement in digital markets needs urgent attention by regulators, with only 34 per cent average achievement in the region. This hinders regional integration, highlighting the importance of regulatory harmonization for equitable digital access. Notably, the ASEAN region leads with a score of 50 per cent, second only to North America with 80 per cent.

#### Areas of strength

Amidst the ever-evolving landscape of digital transformation, the spotlight is on regulatory alternatives, which are gaining rapid momentum to tackle the challenges posed by disruptive technologies, novel business models, and unforeseen events. To navigate this transformative era successfully, various tools for regulatory experimentation have emerged as vital testing grounds. These include cutting-edge concepts such as telecommunication or fintech sandboxes, as well as industry codes of practice or conduct, all of which are being rigorously assessed across different geographical regions.

Among the regions embracing these innovative approaches, the ASEAN region stands out as a prominent player, with seven countries actively implementing mechanisms for regulatory experimentation. Noteworthy in this area is the establishment of regulatory sandboxes dedicated to digital financial inclusion, showcasing the region's commitment to fostering a progressive and adaptive regulatory environment for digital markets (Figure 9).

Figure 9: Benchmark 5 - Stakeholder engagement: Indicator target achieved, partially achieved, and not achieved



Source: ITU unified framework data 2022 and 2023 stakeholder questionnaire response.

Note: This figure shows the number of countries that have achieved the indicator target, partially achieved the target, or not achieved the target for Benchmark 5.

#### Areas of improvement

In the area of public consultations preceding regulatory decisions, there is scope for improvement. As a crucial benchmark for national stakeholder engagement, public consultations form the foundation of participative approaches. Their widespread enhancement is crucial to foster a more inclusive decision-making process on a global scale. In addition to conducting such consultations on a regular basis, it is important to set a framework or rules for engaging with stakeholders, genuinely enriching the draft regulatory instruments with the views, expertise and experience of private sector, academia and the technical community. Although the majority of countries require public consultations to be held before some regulatory decisions, meaningfully integrating the feedback received and holding a transparent and informed public discussion remains a challenge in approximately 80 per cent of countries worldwide.

In the ASEAN region, only half of countries currently mandate public consultations prior to major regulatory decisions. Moreover, only one country has established explicit rules, timelines, and procedures to ensure that consultations effectively encompass and reflect stakeholder perspectives.

This indicates a substantial opportunity to promote greater transparency and participation in decision-making processes within the region.

Furthermore, codes of conduct are a measure that can be effective in driving desired market outcomes, providing more flexibility and without the severity of binding regulations and complex administrative processes. Across the ASEAN member states, only five nations make use of such tools and have implemented codes of conduct.

#### B6: Legal instruments for ICT/telecommunication markets

Across the ASEAN region, the enabling policy and regulatory environment for the telecommunication sector is slightly better developed compared to requirements for digital markets, which is in line with global trends. With 61 per cent benchmark achievement, the ASEAN member states are progressing well, being largely on par with most of the other regions.<sup>6</sup>

#### Areas of strength

Telecommunication regulation has evolved steadily in the ASEAN region (see Figure 10). Best practice infrastructure and scarce resource sharing targets that have been achieved by most countries include an infrastructure sharing permission for mobile operators (in place in nine ASEAN member states), band migration allowed (in ten countries), an LLU requirement (in place in seven countries) and a co-location/ site sharing mandate (in nine countries). The publishing of interconnection prices is mandated in seven countries and a RIO publishing requirement for operators is available in eight countries. The possibility for individual users to use voice-over-IP is equally present in nine countries and a requirement of quality of service monitoring to ensure service quality is available in ten countries.

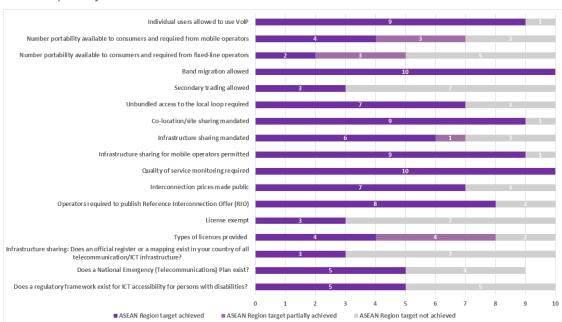


Figure 10: Benchmark 6 - Legal Instruments for ICT/telecommunication markets indicator targets: achieved, partially achieved, and not achieved

Source: ITU unified framework data 2022 and 2023 stakeholder questionnaire response.

Note: This figure shows the number of countries that have achieved indicator targets, partially achieved the target, or not achieved the target for Benchmark 6.

<sup>-</sup>

<sup>&</sup>lt;sup>6</sup> Other regions score as follows for Benchmark 5: Arab States, Africa, Europe, and world averages all at 59 per cent, East Asia and Pacific at 63 per cent, and North America (88%).

#### Areas of improvement

To improve competition in mobile and fixed markets, the introduction and implementation of number portability is key to enable consumers to switch providers. At this point in time, only four countries have mobile number portability in place and only two countries have fixed number portability in place. Moreover, to use spectrum most effectively and efficiently, secondary spectrum trading can be instrumental. Currently, this is only possible in three countries.

Likewise, in a converged platform world more flexibility is needed for service provision. It is therefore of benefit to have a licensing regime that is based on class or general licensing. At present, only four countries have a more flexible approach to licensing (types of licences). Also, only three countries offer the possibility of licence exemption.

With climate change and accompanying natural hazards on the rise, the existence of national emergency telecommunications plans is paramount. These only exist in half of the ASEAN member states. To drive down costs and avoid duplication of infrastructure, infrastructure sharing is key. It is therefore best practice to mandate infrastructure sharing at least over some parts of digital infrastructures. Currently, in the ASEAN region, an infrastructure mandate is in place in only six countries, which hinders the achievement of key goals in the area of affordability and access. In the area of accessibility, a regulatory framework for ICT accessibility for persons with disabilities exists in only half of the ASEAN member states.

## B7: Legal instruments for digital markets

The current trend of policies focusing beyond the telecommunication sector and on the broader digital economy indicates that policymakers increasingly see digital solutions as a prerequisite for achieving multiple social and economic development goals. To ensure that digital solutions can be effective in driving digital development, they require a robust and diverse set of supporting policies and a high level of policy coherence across the board. Globally, adoption of digital policies remains partial in scope and lags traditional economic policies. Importantly, digital policies need to be operationalized and connected to other sectors. In the ASEAN region, the adoption of digital policies is on track and spans different sectors. The benchmark is achieved with a score of 56 per cent, far ahead of all other regions and only second to North America with 72 per cent.

## Areas of strength

In order to promote and foster digital economic activity, every ASEAN nation has established policies and regulations concerning e-commerce (see Figure 10). Furthermore, eight countries have adopted cybersecurity legislation and adopted formal data protection rules. To facilitate the adoption and mainstreaming of digital services, seven countries have adopted a digital identity framework, while six countries have implemented an e-government strategy, also providing a framework for public services. Moreover, seven ASEAN member states have embraced policies, regulations, and initiatives for e-health/smart health, along with e-applications or m-applications for education and learning.

Are there policies and regulations for e-commerce/e-transactions? Are there any cross-sector (ICT and other) infrastructure sharing or fibre co-deployment regulations/agreements/promotion initiatives in your country? Cybersecurity: Is there cybersecurity/cybercrime legislation or regulation? Public services: Has your country adopted any policy/legislation/regulation related to eapplications and/or m-applications on Education and Learning? Public services: Has your country adopted any policy/legislation/regulation related to e-Health or Smart Health? Public services: Has your country adopted any policy/legislation/regulation related to Smart Cities? Is there a legislation/regulation for child online protection? Data Protection: Are there formal data protection rules (e.g., law, regulations)? Has your country adopted e-waste regulations or e-waste management standards? Is there an e-gov/ Digital first government National e- government strategy or equivalent? Is there a digital identity framework in place? Has your country adopted a forward-looking or innovative national strategy, policy or initiative focusing on spectrum (e.g., IMT-2000, 5G, FWA, satellite, HAPS, 6 GHz)? Industry 4.0: Has your country adopted a national strategy, policy or initiative focusing on AI? Industry 4.0: Has your country adopted any policy/legislation/regulation related to cloud computing? Industry 4.0: Does it includes a strategy, policy or initiative focusing on IoT? Or applied any measure regarding spectrum management and availability for IoT? Has your country adopted any policy/legislation/regulation related to e-apps and/or mapps linked to Agriculture/Science/Financial Services? 0 ■ ASEAN Region target achieved ■ ASEAN Region target partially achieved ASEAN Region target not achieved

Figure 11: Benchmark 7 - Legal Instruments for digital markets indicator targets: achieved, partially achieved, and not achieved

Source: ITU unified framework data 2022 and 2023 stakeholder questionnaire response.

Note: This figure shows the number of countries that have achieved the indicator target, partially achieved the target, or not achieved the target for Benchmark 7.

#### Areas of improvement

Despite an overall target achievement of 56 per cent of the benchmark for legal instruments for digital markets, many areas are insufficiently developed although they are needed to drive an inclusive, secure and whole-of-ecosystems approach to digital transformation. Digital policy and regulation still lack leverage in the ASEAN region, in particular in the areas of national policies or strategies in the areas of artificial intelligence (AI), cloud computing, or e-applications linked to agriculture, science and financial services. Only five countries have policies or strategies in place relating to the Internet of Things (IoT), smart cities and cloud computing, and only three countries have a national AI strategy and a forward-looking innovative national strategy on spectrum management. In the area of child online protection, only five countries have policies in place. This is in line with global developments. Only slightly more than a third of countries worldwide are at the leading or advanced level of preparedness, with policy, legal and governance frameworks fit for digital transformation.

#### **B8: Market rules**

Ensuring fair competition and market regulations in telecommunication and digital services is vital for promoting an inclusive and equitable digital transformation. It stands as a crucial priority for regulators and policymakers. In the ASEAN region, progress is evident, with 56 per cent achievement of the benchmark. However, the approaches to competition policy for digital markets vary across the region, resulting in the lack of regional harmonization and a conducive cross-border policy environment. In this context, the EU Digital Service Act and Digital Markets Act might serve as examples among others, offering both incentive-based and enforcement-driven methods for regulators to consider.

#### Areas of strength

Most ASEAN member states have adopted and implemented the concept of dominance in telecommunication markets (nine countries) and use corresponding criteria in competition analysis (eight countries). In most ASEAN member states, the majority of market segments are competitive,

including mobile cellular services, basic fixed-line telecommunication services, fixed broadband services, leased lines and international gateways. Moreover, most countries allow foreign ownership in Internet service providers (ISPs) and value-added service providers.

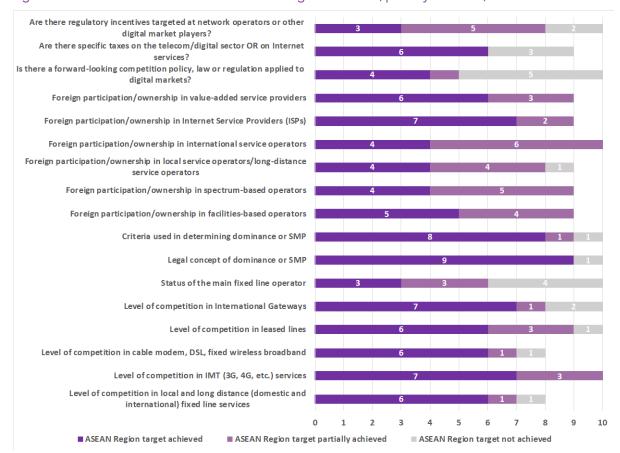


Figure 12: Benchmark 8 - Market rules indicator targets: achieved, partially achieved, and not achieved

Source: ITU unified framework data 2022 and 2023 stakeholder questionnaire response.

Note: This figure shows the number of countries that have achieved the indicator target, partially achieved the target, or not achieved the target for Benchmark 8.

#### Areas of improvement

Key gaps to be addressed to advance digital transformation in an inclusive, open and fair manner pertain to the ownership of the main fixed-line incumbent, foreign participation in facilities-based, spectrum-based, local service and long-distance and international service providers.

Importantly, only four countries have developed a forward-looking competition policy, law or legislation applied to digital markets, and only three countries have introduced incentives targeted at network operators or other digital market players to improve ICT infrastructure, connectivity and services.

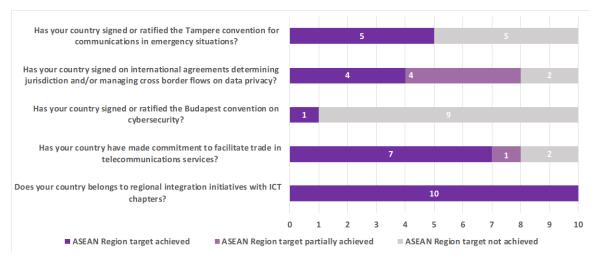
## B9: Regional and international cooperation

In order to advance digital transformation in the region and foster regional digital integration and development, regional and international cooperation is key. This is particularly so for cross-border data flows and cybersecurity. To-date the ASEAN region scores 54 per cent on the benchmark, which is the leading scorer, ahead of all other regions.

#### Areas of strength

The targets achieved by the majority of ASEAN member states include the indicator for countries' belonging to a regional integration initiative with ICT chapters (ten countries) and the commitment made to facilitate trade in telecommunications services (seven countries). Only half of the ASEAN member states have ratified the Tampere Convention for communications in emergency situations.

Figure 13: Benchmark 9 - Regional collaboration indicator targets: achieved, partially achieved, and not achieved



Source: ITU unified framework data 2022 and 2023 stakeholder questionnaire response.

Note: This figure shows the number of countries that have achieved the indicator target, partially achieved the target, or not achieved the target for Benchmark 9.

#### Areas of improvement

The largest gaps include the absence of ratification of the Budapest Convention<sup>7</sup> on Cybercrime and the only partial achievement of any international agreements determining jurisdiction and/or managing cross border data flows on data privacy. Presently, only one country has ratified the Budapest Convention, and only four countries have signed international agreements on cross-border data flows on data privacy. These two areas need to be addressed to ensure that value generation and value capture from the data economy will be to the benefit of the region, and that ICT infrastructure and the services that run on it are trusted and safe and have contingency plans.

# Summary: Areas for improvement at the regional level

To enable the identification of key target areas for regional harmonization, Figure 14 below provides a summary overview of the identified areas for improvements from the preceding regional analysis, including the individual targets by benchmark.

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<sup>&</sup>lt;sup>7</sup> https://www.coe.int/en/web/cybercrime/the-budapest-convention

Figure 14: Summary overview of areas for improvement/gaps at the regional level



- Tailored broadband strategies for marginalized groups, such as women and girls, youth, and persons with disabilities
- Comprehensive global strategy for youth employment and effective implementation of the Global Jobs Pact of the ILO
- Alignment of **Digital Strategy with SDGs**
- Adoption of a holistic innovation strategy



- Accountability of autonomous regulatory agencies and autonomy in decision making



- · Better governance practices: monitoring and evaluation of government agencies' efforts through the of conduct





- Design of public consultations as a tool for stakeholder engagement by establishing explicit rules, timelines, and procedures





- National AI strategy, policy or regulation related to cloud computing, policy or regulation for IoT and policy or regulation for smart cities
- Policy or regulation for public services in the area of e-apps / m-apps linked to Agriculture, Science and financial services



- Ownership status of the fixed-line operator
- Foreign participation in facilities-based, spectrum-based, local service and long-distance and international service providers



- Ratify the Tampere Convention on for communications in emergency situations
- Sign international agreements determining jurisdiction and/or managing cross border data flows on data privacy

### 2.2 ASEAN action plan for regulatory harmonization

This section sets out an action plan for policy and regulatory harmonization for the ASEAN region, based on regional and country priorities, challenges, gaps, ADM priorities and proposed target areas as presented in the regional analysis and the country assessments in this report.

### Towards a harmonized agenda

The digital transformation of economies and societies necessitates creating an enabling environment that encompasses traditional telecommunication markets, digital markets, and the facilitators of digitization across economic sectors. While there is no one-size-fits-all best practice blueprint, there is a range of tools that converge towards common goals and standards which, in turn, align with each nation's unique context, encompassing political and legal systems, cultural backgrounds, and economic priorities. Adopting these tools can facilitate harmonization of policy, legal, and governance frameworks at the national, regional, and global levels, thereby promoting integrated digital transformation. This cohesion is crucial in today's interconnected global digital economy, as it fosters cross-border trade and facilitates economic and social activities.

To establish a solid foundation for regulatory harmonization and propel the ASEAN region towards comprehensive digital readiness, it is essential to identify key areas that would yield the most significant benefits. This requires a thorough assessment of current priorities, challenges, and existing gaps in policy and regulatory frameworks. Additionally, it is vital to consider the numerous ongoing initiatives<sup>8</sup> that address member states' priorities and tackle some of the challenges they face within the ASEAN region.

By building an action plan for regulatory harmonization, the ASEAN region can further integrate and solidify its position as a significant digital economic partner in the future. This approach will not only facilitate smoother operations within the region but also enable ASEAN member states to thrive in an increasingly digital-driven global landscape.

### Priority areas, challenges and proposed target areas for ASEAN member states

Due to varying states of readiness among the ASEAN member states, there may be distinct priorities and challenges in some areas, often with significant differences. Nonetheless, certain priorities are shared by all ASEAN members, along with challenges that are encountered across most countries within the region on their journey of digital transformation. These common, foundational priorities for the ASEAN region are outlined below. To illustrate countries' efforts in achieving them, the analysis features specific examples. These are not exhaustive and do not represent all current efforts of all countries.

#### **Priorities**

ASEAN member states share some of their high-level priorities for digital transformation as provided in the stakeholder questionnaire responses, with a focus on inclusive and sustainable growth, citizen empowerment, and a competitive digital landscape. Inclusive digital transformation takes centre stage, aiming to extend the benefits of digitalization to all levels of society and the economy. This involves enhancing digital infrastructure and connectivity, promoting digital literacy, and empowering citizens to participate in the digital economy.

1) **E-Government and digital governance** are crucial elements, a key priority included in the ADM 25 as DO5, with most ASEAN member states striving to create efficient, transparent, and citizen-centric digital government services. This includes adopting digital tools to streamline processes and foster transparency. The Philippines, for example, is in the process of introducing the eGovernance-Act<sup>9</sup> to establish a digitally empowered and integrated government that offers secure, responsible, and transparent services to citizens.

<sup>&</sup>lt;sup>8</sup> https://asean.org/our-communities/economic-community/asean-digital-sector/key-documents/

<sup>9</sup> http://www.cnnphilippines.com/news/2023/3/6/House-passes-proposed-E-Governance-Act.html

- 2) Secondly, the development of a vibrant and innovative digital ecosystem is a top priority, as ASEAN member states recognize the potential of the digital economy for driving economic growth and global competitiveness. Supporting startups and promoting e-commerce are key components of this agenda, which is in in line with the ADM 2025 DO7. Here, Singapore continues to invest in small and medium-sized enterprises (SMEs) to help them in their digital transformation efforts. Brunei Darussalam with its Digital Economy Masterplan (2025) prioritizes industry digitalization by evaluating stakeholders' readiness to adopt IR 4.0 technologies, with a particular focus on raising awareness among micro, small, and medium enterprises (MSMEs).
- Cybersecurity and data protection are of utmost importance in the digital age and a key priority, with ASEAN member states committed to safeguarding their digital infrastructure and personal data. Robust cybersecurity frameworks and data protection laws are being developed to build trust in the digital ecosystem, aligned with ADM 2025 DO3. For example, Malaysia has established the National Cyber Security Agency (NACSA) to coordinate efforts and enhance the country's resilience against cyber threats. In this regard, the Malaysia Personal Data Protection Commission (PDPC) oversees personal data protection and the National Cybersecurity Policy and Strategy 2020-2024 provides the strategic framework.
- 4) A skilled digital workforce is essential to meet the demands of the digital era, leading to investment in upskilling and reskilling initiatives, digital talent scholarships, and collaborations with the private sector, with many initiatives in place or in the pipeline across all ASEAN member states.
- Digital infrastructure development, including broadband and 4G/5G and international submarine cable connectivity is a major focus area to ensure fast and reliable access to digital services. For example, the Ministry of Post and Telecommunications of Cambodia, plans to launch a new submarine cable linking Cambodia to Hong Kong, Special Administrative Region of China in the coming years and extend fibre to all communes. In addition, Cambodia's Digital Economy and Society Policy Framework 2021-203510, Cambodia's Digital Government Policy 2022-2035<sup>11</sup> and other ASEAN member state policies prioritize digital infrastructure development, including the development of high-speed broadband network infrastructure. Similarly, digital infrastructure development is a key priority in Myanmar's Digital Economy Roadmap, Indonesia's Rencana Strategis Kementerian Komunikasi Dan Informatika (Renstra 2020-2024), or Malaysia's JENDELA Initiative.
- 6) Collaboration and regional integration play a key role, with member states working together to foster cross-border data flows, harmonize regulations, and promote digital trade and investment, as evident by existing initiatives at ASEAN level.<sup>12</sup>

These shared priorities of ASEAN member states for driving digital transformation are reflected in the Desired Outcomes of the ADM 2025 as shown in Figure 15.

<sup>&</sup>lt;sup>10</sup> See Annex "1. Matrix of Policy Measures".

<sup>&</sup>lt;sup>11</sup> See Strategy 1: Building and improving digital connectivity infrastructure.

<sup>12</sup> https://asean.org/our-communities/economic-community/asean-digital-sector/key-documents/

Figure 15: ADM 2025 Desired Outcomes



### General challenges

Across the ASEAN region, member states face several common challenges on their journey of digital transformation which have far-reaching consequences on digital development in multiple areas. These challenges arise with regards to regulatory and policy frameworks, infrastructure development, technological advancements, digital literacy, and cybersecurity.

In terms of regulatory and policy frameworks, one key challenge is the need for updated regulations to keep up with the rapid advancements in technology. Technologies such as AI, blockchain, IoT, and big data are evolving faster than the regulatory development process, making it difficult for governments to create timely and effective policies. Outdated regulations that require amendment or the introduction of new laws also hinder progress in digital transformation.

- Infrastructure development poses another significant challenge. Ensuring broadband availability in rural and remote areas is essential to bridge the digital divide. Geographical conditions and limited electricity supply in some regions, particularly in Indonesia, create disparities in Internet access and infrastructure provision. Addressing these gaps requires comprehensive implementation plans and private sector investment in digital infrastructure.
  - Technological advancements also bring complexity to digital transformation. The fast-paced nature of technological progress makes it challenging for regulatory bodies to keep up and future-proof regulations. Additionally, meeting rising consumer expectations for quality of experience adds to the complexity.
- **Digital literacy** is a widespread challenge across ASEAN member states. The lack of knowledge and skills, including gender-based disparities, hinder the effective use of digital technologies. Implementing cohesive policies governing digital literacy programmes is crucial to address this issue.
- Finally, **cybersecurity** remains a paramount concern. Limited data protection laws and weak cybersecurity measures may hinder trust and engagement with digital services. To foster a secure digital transformation, ASEAN member states need robust cybersecurity regulations and infrastructure, as well as enhanced law enforcement capabilities to combat online crime.

Addressing these challenges requires coordinated efforts among relevant regulatory agencies, public and private sector collaborations, and agile policymaking that promotes innovation while protecting consumer rights. Comprehensive implementation plans and investments in digital infrastructure are also vital to bridge the digital divide between urban and rural areas.

Moreover, in today's rapidly evolving digital age, governments and regulators need to be mindful of an array of additional challenges that are brought about by a host of complex issues demanding thoughtful and comprehensive regulatory approaches. Many ASEAN member states raise concerns over Internet regulation. Here, regulators must balance freedom of expression with protecting users from privacy violations, misinformation, and cyberbullying. Moreover, jurisdictional issues arise where global platforms do not have a physical presence and hence do not fall within the ambit of national policies or regulations. Similarly, advancements in AI raise ethical questions that require careful handling to promote innovation while ensuring responsible development. The popularity of cryptocurrencies also demands regulatory oversight to balance promotion and safeguard consumers, and in the area of space, regulators must manage activities to ensure sustainable use of earth orbits and avoid disruptions.

### Proposed target areas for action

Based on the readiness assessment in the previous section of the report, the following 11 areas can be identified, where the main gaps persist across ASEAN member states with regards to the unified framework best practice benchmarks.

#### Action area 1: Measures to close the digital divide and promote inclusive growth

In the area of broadband strategies, there is a lack of specific consideration of marginalized groups such as women and girls, youth, and persons with disabilities. Moreover, most countries do not have a regulatory framework for persons with disabilities in place. To bridge the digital divide and promote inclusive growth, it is recommended to develop and implement such frameworks and strategies.

#### Action area 2: Comprehensive global strategy for youth employment

A comprehensive global strategy for youth employment is lacking in most countries, including the adoption of the ILO Global Jobs Pact. Such measures can help address the youth unemployment challenges. Additional measures could entail the sharing of best practices across the region in this area and the exploration of partnerships with private sector stakeholders to create more job opportunities for youth.

#### Action area 3: Digital strategies aligned with SDGs

Most ASEAN member states have not aligned their digital strategy with the SDGs or international development objectives, which is key to address challenges such as climate change and population growth. In this regard it might help to promote the exchange of knowledge and experiences among countries that have adopted digital strategies in line with SDGs to foster inclusive growth and sustainable progress. Moreover, to address climate-related disasters, it is recommended to develop national emergency telecommunications plans, which are in place in only a few of the ASEAN member states.

#### Action area 4: Strengthening innovation strategies

Only few ASEAN member states have a holistic innovation strategy in place. Local and regional innovation is key for developing a healthy value-generating and value capturing digital ecosystem that is built on local and regional capacities and specificities. It is therefore paramount to encourage all ASEAN member states to develop and implement holistic innovation strategies encompassing various sectors and demographics to spur economic growth and development. In support of creating holistic innovation strategies, knowledge-sharing, and cooperation between countries with successful innovation strategies and those in need of further development could be targeted.

#### Action area 5: Enhancing regulatory capacity and autonomy

Having autonomous and accountable regulatory agencies in place is key for better and more effective policy and regulation making, driving better market outcomes. It is therefore key to promote the

establishment of autonomous regulatory agencies to ensure more efficient governance models and advocate for stronger and more accountable institutions with clear mechanisms for appointment, reporting, and budget approvals. Best practice sharing in place in peer countries of the ASEAN or other regions may assist to achieve sound accountability mechanisms and diversified funding sources for ICT regulators.

#### Action area 6: Strengthening monitoring and evaluation of government agencies

To strengthen the effectiveness of regulatory and government agencies and entities, it is key to conduct regular rolling and ex-post policy reviews and require regulatory impact assessments (RIAs) to inform major decisions of ICT regulators. Here, sharing experiences and expertise in effective monitoring and evaluation practices to improve policy implementation and achievement of goals may drive better outcomes.

#### Action area 7: Cross-sector collaboration

In the converged digital world based on digital infrastructure, collaboration across different regulators, government agencies and sectors will ensure that benefits of a secure, resilient, and inclusive digital transformation are achieved for all. Strengthening collaboration among ICT regulators, and ICT ministries and information society agencies to align strategies is of utmost importance. Moreover, the promotion of cooperation between ICT ministries/regulators and agencies responsible for energy and transport infrastructures is of key importance to enhance universal connectivity.

### Action area 8: Promoting public consultations and industry codes of practice or conduct

In our converged world, it is important to seek the views of a multitude of stakeholders in order to make the right decisions and minimize and negative effects or externalities that could arise from regulatory decision-making. It is therefore highly recommended to establish mandatory public consultations before major regulatory decisions to ensure inclusivity and transparency. While regulation can be an effective tool to drive particular market outcomes, the implementation of codes of conduct that are jointly developed between government/regulators and the industry can also be a good complementary tool to drive market outcomes and flexibility without the severity of binding regulations (in areas where such tools would be deemed sufficient).

### Action area 9: Improving competition and access in ICT markets

In many ASEAN member states, telecommunication markets are not yet sufficiently competitive, mainly because different tools for driving competition are not yet in place. It could be of benefit to support the introduction and implementation of number portability in both mobile and fixed markets to enable consumers to switch providers easily. Moreover, mobile operators should be enabled to undertake secondary spectrum trading and operate on the basis of a more flexible licensing regime to encourage effective use of spectrum and drive down costs. In this regard, a mandate requiring infrastructure sharing (and the creation of one central register for all ICT infrastructure) could help avoid infrastructure duplication, reduce costs and increase transparency, spurring competition.

### Action area 10: Advancing digital policy, regulation and market rules

To advance digital transformation and foster the creation of a safe and resilient digital ecosystem, the development and implementation of policies and strategies in key areas such as IoT, smart cities, cloud computing, national AI, and child online protection should be considered. To address issues that arise from the provision of services by global platforms, it could be beneficial to develop and introduce a forward-looking competition policy, law or legislation applied to digital markets. Moreover, to foster the development of better ICT infrastructure, connectivity and services, consideration could be given to the introduction of incentives.

### Action area 11: Addressing cybersecurity and cross-border data flows

Cybersecurity is high on every ASEAN member country's agenda and at the regional level there are existing initiatives such as the ASEAN Cybersecurity Cooperation Strategy 2021-2025. Yet, only few have ratified a regional or international instrument related to cybersecurity, a key best-practice tool to advance on achieving the unified framework benchmark. Moreover, to foster the secure flow of trade and data across border, the signing of international agreements on cross-border data flows and data privacy, and the leveraging of existing cross-border data initiatives such as the ASEAN Framework on Digital Data Governance<sup>13</sup> is highly recommended.

### Ongoing initiatives in the ASEAN region

To foster digital transformation across the ASEAN, there are many ongoing harmonization initiatives that can be further leveraged towards achieving the ADM 25 desired outcomes and addressing the ASEAN common priorities as above (the list is non-exhaustive):

- 1) ASEAN Framework on Digital Data Governance<sup>14</sup>: This agreement, adopted in 2018, aims to facilitate cross-border data flows while ensuring data privacy and security. It outlines principles and guidelines for data governance in the region.
- 2) ASEAN Regulatory Framework for E-commerce <sup>15</sup>: This initiative seeks to standardize and harmonize regulations related to e-commerce within the ASEAN region. It addresses various aspects such as consumer protection, online transactions, and digital payments.
- 3) ASEAN Single Window for Customs <sup>16</sup>: The ASEAN Single Window is a regional initiative to streamline customs clearance and trade processes by providing a single platform for exchanging trade-related documents and information among ASEAN member states.
- 4) ASEAN Digital Integration Framework Action Plan<sup>17</sup>: Launched in 2019, this action plan aims to promote digital integration and collaboration among ASEAN member states. It seeks to improve digital infrastructure, enhance digital skills, and promote e-commerce in the region.
- 5) **ASEAN Spectrum Harmonization Framework**<sup>18</sup>: This initiative focuses on harmonizing spectrum allocation and management policies to ensure efficient use of radio frequency resources for wireless communication services across ASEAN member states.
- 6) ASEAN Cybersecurity Cooperation Strategy<sup>19</sup>: This strategy aims to enhance regional cybersecurity cooperation and resilience. It focuses on capacity building, information sharing, and collaborative responses to cyber threats.
- 7) **ASEAN Framework for Digital Skills Development**<sup>20</sup>: This framework aims to address the digital skills gap and promote a digitally literate workforce across the region through various capacity-building programmes and initiatives.
- 8) **ASEAN Framework on Personal Data Protection**<sup>21</sup>: This framework aims to establish common principles and guidelines for the protection of personal data, facilitating cross-border data flows while safeguarding individual privacy.

<sup>16</sup> https://asean.org/our-communities/economic-community/asean-single-window/

<sup>13</sup> https://asean.org/wp-content/uploads/2012/05/6B-ASEAN-Data-Management-Framework.pdf

<sup>14</sup> https://asean.org/wp-content/uploads/2012/05/6B-ASEAN-Data-Management-Framework.pdf

<sup>15</sup> https://asean.org/ecommerce/

<sup>&</sup>lt;sup>17</sup> https://www.mti.gov.sg/ASEAN/ASEAN-Digital-Integration

 $<sup>^{18}\,</sup>https://asean.org/wp-content/uploads/2022/02/03-ASEAN-5G-Ecosystem-Best-Practices-Guide Final-Report SG ASEC TL PH MY.pdf$ 

<sup>&</sup>lt;sup>19</sup> https://www.dataguidance.com/news/international-asean-publishes-draft-cybersecurity

 $<sup>\</sup>frac{^{20}}{\text{https://asean.org/wp-content/uploads/2021/09/FRAMEWORK-FOR-DEVELOPING-DIGITAL-READINESS-AMONG-ASEAN-CITIZEN.pdf}$ 

<sup>&</sup>lt;sup>21</sup> https://asean.<u>org/our-communities/economic-community/asean-digital-sector/key-documents/</u>

### Action plan for regulatory harmonization 2023-2025

The action plan for regulatory harmonization should be oriented towards addressing some of the main gaps as identified in the unified framework, while also reflecting the ADM 2025 desired outcomes, country priorities and challenges, and building on ongoing regional initiatives. Table 4 aims to provide an overview and mapping of the ADM 2025 desired outcomes, key unified framework proposed target areas, country priorities and ASEAN region ongoing initiatives.

Table 4: ADM 2025 desired outcomes, key unified framework gaps, country priorities and ongoing initiatives

ADM 2025 priority desired outcomes	Key unified framework gaps/target areas	Shared country priorities	Ongoing ASEAN initiatives (non- exhaustive) <sup>22</sup>
DO1: Actions of ADM 2025 prioritized to speed ASEAN's recovery from COVID-19	Remaining targets of B1, B2, B7, B5		
DO2: Increase in the quality and coverage of fixed and mobile broadband infrastructure	Remaining targets of B1, B2, B4, B6  - Collaboration with the Ministry of Energy  - Collaboration with the Ministry of Transport  - Allow secondary spectrum trading  - Introduce a more flexible licensing regime (class license, general licenses) and licensing exemptions  - Mandate infrastructure sharing  - Create an infrastructure mapping or register of all ICT infrastructure	Digital infrastructure development	<ul> <li>ASEAN Digital         <ul> <li>Integration</li> <li>Framework Action</li> <li>Plan</li> </ul> </li> <li>ASEAN Spectrum         <ul> <li>Harmonization</li> </ul> </li> <li>Framework</li> </ul>
DO3: The delivery of trusted digital services and the prevention of consumer harm	Remaining targets of B6, B7, B9  - Child Online Protection regulation or policy  - Implementation of Codes of Conduct  - Ratify a regional or international instrument related to cybersecurity?  - National AI strategy, policy or regulation related to cloud computing, policy, or regulation for IoT	Cybersecurity and data protection	<ul> <li>ASEAN Cybersecurity         Cooperation Strategy</li> <li>ASEAN Framework on         Personal Data         Protection (2016)</li> </ul>
DO4: A sustainable competitive market for the supply of digital services	Remaining targets of B1, B2, B3, B4, B7, B8  - Forward-looking competition policy for digital markets  - Alignment of Digital Strategy with the SDGs	Collaboration and regional integration	

<sup>&</sup>lt;sup>22</sup> https://asean.org/our-communities/economic-community/asean-digital-sector/key-documents/

ADM 2025 priority desired outcomes	Key unified framework gaps/target areas	Shared country priorities	Ongoing ASEAN initiatives (non- exhaustive) <sup>22</sup>
	<ul> <li>Ownership status of the fixed-line operator</li> <li>Foreign participation in facilities-based, spectrum-based, local service and long-distance and international service providers</li> <li>Forward-looking competition policy, law or legislation applied to digital markets</li> <li>Collaboration between the ICT ministry or ICT regulator and the Information Society Agency</li> <li>Accountability of autonomous regulatory agencies and autonomy in decision making</li> <li>Creation of new mandates for IT and Internet content</li> <li>Entity handling comparative tariff information, consumer education and handling consumer complaints</li> <li>Better governance practices: monitoring and evaluation of government agencies' efforts through the of conduct rolling policy reviews, and ex-post policy reviews</li> <li>Regulatory Impact Assessments</li> <li>Possibility for reconsideration or appeal of adopted regulations to the relevant administrative agency (all sectors)</li> </ul>		
DO5: Increase in the quality and use of e- government services	Remaining targets of B1, B7  - Policy or regulation for <b>public</b> services in the area of e-apps/m-apps linked to Agriculture,  Science and financial services	E-Government and digital services	
DO6: Digital services to connect business and to facilitate cross-border trade	Remaining targets of B5, B7, B9 - Sign international agreements determining jurisdiction and/or managing cross border data flows on data privacy	Regional integration	<ul> <li>ASEAN Framework on Digital Data Governance (2018)</li> <li>ASEAN Data Management Framework (2021)</li> <li>Implementing Guidelines for ASEAN Data Management Framework and Cross Border Data Flows (2021)</li> <li>ASEAN Regulatory Framework for Ecommerce</li> </ul>

ADM 2025 priority desired outcomes	Key unified framework gaps/target areas	Shared country priorities	Ongoing ASEAN initiatives (non-exhaustive) <sup>22</sup>
			<ul> <li>ASEAN Single         Window for Customs</li> <li>ASEAN Digital         Integration         Framework Action         Plan</li> <li>Framework for         Promoting the Growth         of Digital Startups in         ASEAN and Policy         Recommendation:         Framework for         Promoting the Growth         of Digital Startups in         ASEAN</li> </ul>
DO7: Increased capability for business and people to participate in the digital economy	Remaining targets of B1, B5, B7  - Adoption of a holistic innovation strategy  - Adoption of a policy or regulation for smart cities	Development of an innovative digital ecosystem	<ul> <li>ASEAN Digital         Integration         Framework Action         Plan     </li> <li>ASEAN Framework for Digital Skills</li> <li>Development</li> </ul>
DO8: A digitally inclusive society in ASEAN	Remaining targets of B1, B5, B7  - Tailored Broadband strategies for marginalized groups (women & girls, youth, persons with disabilities)  - Comprehensive global strategy for youth employment and effective implementation of the ILO Global Jobs Pact  - Regulatory Framework for persons with disabilities  - Mandatory public consultations preceding regulatory decisions  - Design of public consultations as a tool for stakeholder engagement by establishing explicit rules, timelines, and procedures		

Source: AMD 2025, stakeholder questionnaires 2023, desk research.

Notes: Writing in blue indicate proposed areas for harmonization.

- B1 Benchmark 1: National Digital Policy Agenda
- B2 Benchmark 2: Regulatory Capacity
- B3 Benchmark 3: Good Governance
- B4 Benchmark 4: Collaborative Governance
- B5 Benchmark 5: Stakeholder Engagement
- ${\sf B6}$   ${\sf Benchmark}$  6: Legal Instruments for ICT/Telecom Markets
- B7 Benchmark 7: Legal Instruments for Digital Markets
- B8 Benchmark 8: Market Rules
- B9 Benchmark 9: Regional and International Cooperation

While all areas above deserve attention, based on priorities, ADM 2025 desired outcomes and the unified framework gaps, as well as existing initiatives that could be leveraged, the following areas crystallize as feasible areas for harmonization in the short-term:

- data governance;
- competition policy for digital markets, and
- child online protection.

#### Harmonization area 1: Data governance

The harmonization of digital governance within the ASEAN region has emerged as a critical objective, particularly concerning personal data protection and cross-border data management to facilitate cross-border integration and trade. This is in line with ADM 2025 DO 6: Digital services to connect business and to facilitate cross-border trade. It is also a key shared priority among ASEAN member states, and the unified framework gap analysis shows data governance to be a clear target area for improvement. The ongoing initiatives, including the ASEAN Framework on Digital Data Governance (2018) together with the Implementing Guidelines for ASEAN Data Management Framework and Cross Border Data Flows (2021) and ASEAN Data Management Framework and Model contractual Clauses on Cross-border Data Flows<sup>23</sup>, lend themselves as a good starting point and can be leveraged with ITU support in implementing the unified approach to addressing these challenges effectively and drive further development and implementation at the country level.

### Harmonization area 2: Competition policy for digital markets

The pursuit of achieving ADM 2025 DO4, which aims to establish a sustainable competitive market for digital services, faces challenges in developing competition policy for digital markets at both the individual country and ASEAN levels. Our interconnected digital world continuously tests national regulatory frameworks with new cross-border issues, impacting consumers and services. As digital technologies become increasingly integrated into governments and economies, a significant international and regional goal emerges: aligning legal frameworks related to competition policy, data privacy, and cross-border data flows. Governments are encouraged to collaborate and establish a common understanding, particularly regarding anti-competitive practices in the digital economy. This convergence towards regional harmonization is viewed as a catalyst for promoting innovation, investment in digital infrastructure and services, and ensuring value generation and capture. Harmonizing forward-looking competition policies for digital markets throughout the ASEAN region is thus considered a vital step to strengthen the ASEAN region as a leading digital economy player.

#### Harmonization area 3: Child online protection

To date, the ASEAN member states have made limited headway in the crucial domain of Child Online Protection, which plays a pivotal role in cultivating a digitally inclusive society as envisioned in ADM 2025, DO8. The establishment of reliable digital services and safeguarding consumers from harm (ADM 2025, DO3) are vital aspects that ensure the well-being and competence of the younger generation and future workforce in navigating the Internet and its myriad offerings. Consequently, harmonizing efforts in this domain will foster a healthier, safer, and adept online environment for all.

Figure 17 presents a high-level action plan for regulatory harmonization across the ASEAN region in the areas of data governance, competition policy for digital markets, and child online protection.

<sup>&</sup>lt;sup>23</sup> https://www.aiti.gov.bn/regulatory/pdp/asean-data-management-framework-and-model-contractual-clauses-on-cross-border-data-flows/

Figure 17: Action plan for regulatory harmonization, 2023-2025

#### Data Governance

- Examine state of adoption of the Guidelines for ASEAN Data Management Framework and Cross Border Data Flows (2021) and ASEAN Data Management Framework and Model contractual Clauses on Crossborder Data Flows
- 2. Assess regulatory capacities available to drive progress in adoption
- 3. **Provide assistance** in implementing the Guidelines at national level



#### Competition Policy for Digital Markets

- 1. Assess the state of readiness of competition policies and regulatory capacities at national level
- 2. **Identify key areas of overlap** across the ASEAN member states
- 3. Develop an ASEAN High-Level Regional Framework for Competition Policy for Digital Markets with accompanying Guidelines for national implementation



#### Child Online Protection

- 1. Assess existing national frameworks/laws/guidelines for child protection and child online protection (where they exist)
- 2. **Develop guiding principles/guidelines** for the ASEAN region using the ITU child online protection guidelines as a reference
- 3. Provide assistance in updating or adapting existing frameworks/laws/guidelines nationally



Source: ITU, based on analysis using the ITU unified framework for readiness of national legal, policy and governance frameworks for digital transformation, stakeholder analysis, ADM 2025 desired outcomes.

Addressing these three areas in the short term will help the ASEAN region in furthering digital transformation by strengthening different aspects of the legal and regulatory frameworks going forward.

### 2.3 Way forward

The digital transformation of ASEAN economies and societies is a critical step towards achieving the vision of a leading digital community and economic bloc by 2025 as spelled out in the ADM 2025. To ensure a successful and integrated digital transformation, regulatory harmonization is vital at the national, regional, and global levels. By adopting best practices, leveraging the ITU unified framework, and embracing innovative strategies, the ASEAN region can solidify its position as a significant digital player on the global stage. The journey towards harmonized digital policy, legal, and governance frameworks will not only bolster economic growth but also enable the region to thrive in the dynamic digital landscape of the future.

### **Appendices**

These appendices provide individual country analyses of the regulatory and policy gaps, priorities, and proposed target areas to address identified regulatory gaps, based on stakeholder questionnaires, interviews with relevant stakeholders, and desk research.

### Appendix A: Country status summary on regulatory and policy readiness

In this appendix, an outline of the unified framework scoring is presented, along with the shared priorities and challenges faced by ASEAN member states in their digital transformation journey. These insights are derived from stakeholder questionnaires and interviews. The section further offers concise fact sheets for each ASEAN country, encompassing details on their regulatory and digital policy status, unified framework scoring, proposed ITU unified framework target areas aimed at addressing identified gaps, and the country-specific priorities for accomplishing the ASEAN Digital Masterplan 2025, whenever this data was available.

### Box 1: Methodology country-by-country analysis

The country-by-country assessment to identify policy and regulatory gaps has been undertaken based on available ITU unified framework 2022 and its nine thematic benchmarks (see Part 3 below, sections 3.2 and the following). The dataset was mainly based on the latest information that was provided in response to the ITU World Telecommunication/ICT Regulatory Survey sent out every two years to ITU Member States and in some cases, additional desktop research based on official government sources or other international organization databases. To adequately reflect any developments since the last data gathering in 2022, tailored country questionnaires setting out the gaps were shared with administrations to provide updates in their regulatory and policy frameworks. The information presented is self-reported through the questionnaire responses (where submitted) and stakeholder interviews (where conducted) and supported by relevant evidence. Scoring on the various indicators and benchmarks has been adjusted accordingly, where additional supporting evidence was provided and according to the established methodologies of the ICT Regulatory Tracker, the G5 Benchmark and the unified framework, following a standardized approach:

- A score of 2 indicates the respective target has been achieved (usually through the existence of a given legal instrument or enforcement, or implementation mechanism that achieves the target).
- A score of 1 indicates the respective target has been partially achieved (usually through the limited existence of a given legal instrument or enforcement, or implementation mechanism that achieves the target).
- A score of 0 indicates the respective target has not been achieved (usually through the absence of a given legal instrument or enforcement, or implementation mechanism that

### A.1 Unified framework summary overview of country progress

The ASEAN member states have made significant strides in adopting best practice tools, processes, policies and regulations to foster digital transformation. The achievements and respective scores across the nine benchmarks of the ITU unified framework are illustrated in Table A1. Malaysia, Philippines, Singapore, and Thailand<sup>24</sup>, all achieve advanced scores of 75 per cent or higher. Malaysia and Singapore excel across all nine benchmarks, with Singapore surpassing 80 per cent and Malaysia achieving 70 per cent or more in each category. The Philippines closely follows with advanced scores exceeding 68 per cent in all but one benchmark (good governance). Thailand demonstrates

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<sup>&</sup>lt;sup>24</sup> It should be noted that Thailand did not submit any new information in response to the stakeholder questionnaire and no interview was held. Therefore, possible recent changes to the state of readiness could not be reflected.

advanced readiness for all but three benchmarks, with scores in the transitional category for digital policy agenda, collaborative governance, and legal instruments for digital markets).

Brunei Darussalam falls within the upper limit of the transitional category, displaying a solid foundation in digital policy agenda and regulatory capacity, laying the groundwork for digital transformation progress. However, attention is needed for benchmarks like market rules (38%) and good governance (50%), which could benefit from improvement. Indonesia scores an overall transitional score of 65 per cent, but progress in regulatory capacity is limited at 32 per cent, a crucial steppingstone for advancing digital transformation efforts. Other indicators are on a transitional track, indicating potential for further progress.

Cambodia has made significant strides in regulatory capacity and good governance benchmarks, establishing strong foundations for enhancing readiness in areas currently at the lower end of the transitional category (Benchmarks 5, 6, and 7). Viet Nam has made commendable progress in legal instruments for ICT/telecommunication markets, but more effort is required in areas such as national digital policy agenda, collaborative governance, and regional and international cooperation to make significant advances. Myanmar, having established an advanced national digital policy agenda, is now poised to focus on collaborative and good governance benchmarks, as well as regional and international cooperation, which have seen limited progress to date. Lao P.D.R. achieves the lowest score to-date at 38 per cent, indicating transitional readiness for digital transformation. A more detailed breakdown of each score across the nine unified framework targets can be found in the country factsheets.

Table A1: Overall unified framework scores and benchmark scores, 2023

	6			The
Country	Unified framework score	B1: National digital policy agenda	B2: Regulatory capacity	B3: Good governance
Singapore	89%	85%	93%	82%
Malaysia	84%	81%	88%	86%
Philippines	78%	85%	81%	73%
Thailand	75%	65%	91%	73%
Brunei Darussalam	66%	73%	93%	50%
Indonesia	65%	65%	32%	82%
Cambodia	63%	62%	85%	86%
Viet Nam	57%	32%	63%	64%
Myanmar	49%	67%	51%	36%
Lao P.D.R.	38%	47%	35%	23%



Source: ITU unified framework data 2022 and 2023 stakeholder questionnaire responses

### A.2 Brunei Darussalam Country Factsheet

### **BRUNEI DARUSSALAM**

### Regulatory and Digital Policy Status

Brunei Darussalam is at a transitional level of readiness of digital policy, legal and governance frameworks for digital transformation, with a ITU unified framework score of 66 per cent, which is above the Asia-Pacific region and world averages of 46 per cent and 50 per cent, respectively.

Based on unified framework analysis, Benchmark 2: Regulatory Capacity (93%), Benchmark 9: Regional and International Cooperation (80%), Benchmark 4: Collaborative Governance (78%) and Benchmark 1: National Digital Policy Agenda (73%) are the most advanced benchmarks, followed by Benchmark 7: Legal Instruments for Digital Markets achieving a target of 63 per cent, Benchmark 6: Legal Instruments for ICT/Telecom Markets with an achieved target of 62 per cent and Benchmark 5: Stakeholder Engagement attaining a target of 60 per cent. Benchmarks 3 and 8 are in transition with Benchmark 3: Good Governance (50%), and Benchmark 8: Market Rules (38%).



ICT Regulatory Tracker G3, 71.5

G5 Benchmark 48.92 Transitioning

ITU unified framework Achievement Scores

### Overall Target Achievement: 66%



P1: National Digital Policy Agenda



P2: Regulatory Capacity



P3: Good Governance

73%



93%

P5: Stakeholder Engagement

P6: Legal Instruments for ICT/Telecom Markets

78%

P4: Collaborative Governance

60%

62%



P7: Legal Instruments for Digital Markets



P8: Market Rules



P9: Regional and International Cooperation

63%

38

80%

Proposed ITU unified framework target areas for addressing the identified policy and regulatory gaps

#### B8: Market Rules - 38%

- Development/Implementation of a forward-looking competition policy for digital markets
- Introducing regulatory incentives targeted at network operators or other digital market players
- Review of rules concerning foreign participation
- Review of the ownership status of the fixed line operator
- Rules to improve the level of competition for different service:

### B3: Good Governance 50%

- Review rules for public access to information
- Consider the implementation of Regulatory Impact Assessments, rights to appeal, and policy reviews
- Review policies and the regulatory framework regarding aspect of technology and service neutrality

#### B5: Stakeholder Engagement -60%

- Consider making stakeholder consultations mandatory before regulatory decisions
- Design public consultations as a tool to gather feedback from national stakeholders and guide regulatory decision-making

### B6: Legal Instruments for ICT/Telecom Markets - 62%

- Consider the development of an official register or mapping of all telecommunications/ICT infrastructure
- Consider the creation of a national Emergency Telecommunications Plan
- Review the types of licenses available
- Consider the development of a regulatory framework for ICT accessibility for persons with disabilities
- Consider the possibility of secondary trading
- Address fixed and mobile number portability

# B7: Legal Instruments for Digital Markets -

- Consider introducing instruments for crosssector infrastructure sharing
- Assess the necessity for Smart City Regulation, policies for Al and IoT
- Consider developing a forward-looking innovative spectrum policy

Priorities for achieving the ASEAN Digital Masterplan 2025

DO1: Actions of ADM 2025 prioritized to speed ASEAN's recovery from COVID-19

DO2: Increase in the quality and coverage of fixed and mobile broadband infrastructure

DO3: The delivery of trusted digital services and the prevention of consumer harm

HP EA 3.3: Identifying improvements in legal and regulatory measures on the management and protection of data and other data-related activities that could be harmful

DO4: A sustainable competitive market for the supply of digital services  HP EA 4.1: Continue to identify opportunities to harmonize digital regulation to facilitate cross-border data flows	DO5: Increase in the quality and use of egovernment services	DO6: Digital services to connect business and to facilitate cross- border trade
DO7: Increased capability for business and people to participate in the digital economy  HP EA 7.3: Develop a framework that encourages the development and growth of digital start-ups in ASEAN	DO8: A digitally inclusive society in ASEAN  HP EA 8.1: Ensuring citizens and businesses have the skills and motivation to use digital services	

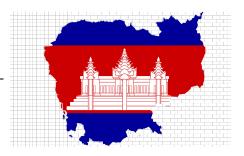
Source: ADM 2025 pp. 16-18, based on responses to the stakeholder country questionnaire.

### A.3 Cambodia Country Factsheet

### Cambodia

### Regulatory and Digital Policy Status

Cambodia achieves an overall unified framework score of 63 per cent, which is higher than the Asia-Pacific region and world averages of 46 per cent and 50 per cent, respectively, suggesting a transitional level of readiness of digital policy, legal and governance frameworks for digital transformation. Based on unified framework analysis, Benchmark 2: Regulatory Capacity (85%), Benchmark 3: Good Governance (77%) and Benchmark 4: Collaborative Governance with 69 per cent are the most advanced benchmarks, followed by Benchmark 8: Market Rules (68%). Benchmarks 1, 9 and 6 are at transitional stages with Benchmark 1: National Digital Policy Agenda achieving 62 per cent, Benchmark 9: Regional and International Cooperation attaining 60 per cent. Benchmark 7: Legal Instruments for Digital Markets (44%), Benchmark 6: Legal Instruments for ICT/Telecom Markets (41%) and Benchmark 5: Stakeholder Engagement (40%) are the least developed Benchmarks with room for improvement.



ICT Regulatory Tracker G2. 68

G5 Benchmark
39.81 Transitioning

ITU unified framework Scores

### Overall Target Achievement: 63%



B1: National Digital Policy Agenda



**B2: Regulatory Capacity** 



**B3: Good Governance** 

62%

85%

77%



B4: Collaborative Governance

B5: Stakeholder Engagement



B6: Legal Instruments for ICT/Telecom Markets

69%

40%

/119



B7: Legal Instruments for Digital Markets



**B8: Market Rules** 



B9: Regional and International Cooperation

44%

68%

60%

Proposed ITU unified framework target areas for addressing the identified policy and regulatory gaps

### B7: Legal Instruments for Digital Markets - 44%

- Assess the adoption of policy/legislation/regulation related to e-apps and/or mapps linked to Agriculture/Science/Financial
   Services
- Advance existing efforts in the areas of AI policy, Smart City Regulation, and policies for IoT and cloud computing
- Consider introducing instruments for cross-sector infrastructure sharing
- Develop formal data protection rules
- Consider developing a forward-looking innovative spectrum policy
- Consider the development and adoption of a forwardlooking or innovative national strategy, policy or initiative focusing on spectrum (e.g., IMT-2000, 5G, FWA, satellite, HAPS, 6 GHz)
- Consider the introduction of cross-sector (ICT and other) infrastructure sharing or fibre co-deployment regulations/agreements/pro motion initiatives in your country

### B5: Stakeholder Engagement - 40%

- Consider making stakeholder consultations mandatory before regulatory decisions
- Design public consultations as a tool to gather feedback from national stakeholders and guide regulatory decision-making
- Advance efforts and implementation of codes of conduct
- Consider the introduction of regulatory experimentation

### B6: Legal Instruments for ICT/Telecom Markets - 41%

- Consider the development of an official register or mapping of all telecommunications/ICT infrastructure
- Consider the creation of a national Emergency Telecommunications Plan
- Review the types of licenses available and consider license exemptions
- Consider making the Reference Interconnection Offer publicly available
- Advance the requirement for unbundled access to the local loop
- Consider the development of a regulatory framework for ICT accessibility for persons with disabilities
- Consider the possibility of secondary spectrum trading
- Address fixed and mobile number portability

### B9: Regional and International Cooperation -60%

- Consider signing or ratifying a regional or international instrument related to cybersecurity?
- Consider signing or ratifying the Tampere convention for communications in emergency situations

### B1: National Digital Policy Agenda - 62%

- Consider aligning the digital strategy with the SDGs or other international development goals (e.g., MDGs, WSIS goals, EU Strategic objectives)
- Develop policy instruments aimed at supporting the shift to sustainable consumption and production, or coordination mechanism for sustainable consumption and production
- Consider the introduction of a global strategy for youth employment and the implementation of the Global Jobs Pact of the ILO
- Create mechanisms for implementation/operationa I objectives for the Digital Strategy

### Priorities for achieving the ASEAN Digital Masterplan 2025

DO1: Actions of ADM 2025 prioritized to speed ASEAN's recovery from COVID-19 DO2: Increase in the quality and coverage of fixed and mobile broadband infrastructure

HP EA 2.2: Moving towards best practices in permits and access rights for local and national infrastructure including submarine cable repair

National initiative: Draft Sub-

HP EA 2.6: Ensuring increased and harmonized spectrum allocation across the region

ITU unified Framework: B6, B7

National initiative: A spectrum roadmap is being developed that will ensure increased and harmonized spectrum allocation

HP EA 2.9: Establishing a center of excellence for best practice rural connectivity

DO3: The delivery of trusted digital services and the prevention of consumer harm

HP EA 3.1: Enabling trust through greater and broader use of online security technologies

ITU unified Framework: B4, B7

National initiative: Draft law on cybersecurity and draft personal data protection law enable trust through greater and broader use of online security technologies

HP EA 3.3: Identifying improvements in legal and regulatory measures on the management and protection of data and other data-related activities that could be harmful

ITU unified Framework: B7

National initiative: Draft law or personal data protection

HP EA 3.5: Promote consumer protection and rights in relation to e-commerce

ITU unified Framework: B2, B3, B7

National initiative: Set up of "community technology centers" for the purpose of minimizing the digital divide and increasing rural connectivity.

Submarine cable project

National initiative: Law on E-Commerce and Law on Consumer Protection.
These laws also deal with cross-border e-commerce trade as well as the efficient flow of trade documents.

# DO4: A sustainable competitive market for the supply of digital services

HP EA 4.1: Continue to identify opportunities to harmonize digital regulation to facilitate cross-border data flows

ITU unified Framework: B9 National initiative: Draft law on personal data protection

### DO5: Increase in the quality and use of egovernment services

HP EA 5.2: Helping make key government departments more productive through their internal use of ICT and eservices

ITU unified Framework: B7

National Initiative: Draft law on digital government will address the improvement of egovernment services and help departments be more productive

HP EA 5.3: Explore how to introduce digital identities in each AMS in a way which safeguards civil liberties fied Framework: B7

**National Initiative:** MPTC is establishing a digital signature infrastructure to provide for seamless and secure authentication. <sup>25</sup>

DO6: Digital services to connect business and to facilitate cross-

### DO7: Increased capability for business and people to participate in the digital economy

### DO8: A digitally inclusive society in ASEAN

HP EA 8.1: Ensuring citizens and businesses have the skills and motivation to use digital services

National initiative: verify.gov.kh platform as RGC's document verification platform comports with the high priority on "ensuring citizens ... have the ... motivation to use digital services". It is clearly stated in Sub-Decree 52 dated 03 March 2023 that the platform is intended to make the usage of government documents more convenient, foster trust, save time, and reduce costs

Source: ADM 2025 pp. 16-18, based on responses to the stakeholder country questionnaire.

<sup>&</sup>lt;sup>25</sup> Digital signatures are already prescribed in the Sub-Decree on Digital Signature. Moreover, the Digital Government Policy 2022-2035 states under "Strategy 5: Organizing the Governance of Digital Government" that the "Law on Digital Government will establish legal norms regarding the use and management of digital identity."

### A.4 Indonesia Country Factsheet

### Indonesia

### Regulatory and Digital Policy Status

Indonesia achieves an overall unified framework score of 65 per cent, which is higher than the Asia-Pacific region and world averages of 46 per cent and 50 per cent, respectively, suggesting a transitional level of readiness of digital policy, legal and governance frameworks for digital transformation.

Based on unified framework analysis, Benchmark 8: Market Rules (94%) and Benchmark 3: Good Governance (82%) are the most advanced benchmarks, followed by Benchmark 7: Legal Instruments for Digital Markets (74%) and Benchmark 4: Collaborative Governance (72%). Benchmarks 1, 6, 9, and 5 all achieve targets between 50 per cent and 65 per cent and can be considered transitional – Benchmark 1: National Digital Policy Agenda (65%), Benchmark 6: Legal Instruments for ICT/Telecom Markets (53%), Benchmark 9: Regional and International Cooperation (50%), Benchmark 5: Stakeholder Engagement (50%). Benchmark 2: Regulatory Capacity only attains a target of 32 per cent and is the least developed Benchmark.



ICT Regulatory Tracker

G2, 62

G5 Benchmark

64.66 Advanced

ITU unified framework Scores

### Overall Target Achievement: 65%



P1: National Digital Policy Agenda



P2: Regulatory Capacity



P3: Good Governance

65%

32%

82%



P4: Collaborative Governance



P5: Stakeholder Engagement



P6: Legal Instruments for ICT/Telecom Markets

72%

50%

E20/



P7: Legal Instruments for Digital Markets



P8: Market Rules



P9: Regional and International Cooperation

74%

94%

50%

Proposed ITU unified framework target areas for addressing the identified policy and regulatory gaps

### B2: Regulatory Capacity - 32%

 Institutional governance structure towards best practice processes and tools (independent regulator, accountability, enforcement power, autonomy, funding, sanctions, and penalty mechanisms)

### B5: Stakeholder Engagement 50%

- Consultation design and mechanisms Codes of Conduct
- Regulatory experimentation

### B9: Regional and Internationa Cooperation - 50%

- Budapest convention on cybersecurity
- Tampere Convention for communications in emergency situations

#### B6: Legal Instruments for ICT / Telekom Markets -53%

- Licensina reaime
- Infrastructure sharing for mobile operators
- Number portability (fixed and mobile)
- Secondary spectrum trading

### B1: National Digital Policy Agenda (65%)

- Consider developing Broadband Strategies for targeted groups as part of the National Broadband Plan, including women and girls, persons with disabilities and youth
- Consider developing a holistic innovation policy or one tailored to the ICT/digital sector

Priorities for achieving the ASEAN Digital Masterplan 2025

# DO2: Increase in the quality and coverage of fixed and mobile

- Investment incentives
- Collaboration with the Private Sector
- Innovation Centers
- Simplified Licensing process
- Sustainable and equitable Spectrum Allocation Plan
- Infrastructure development in rura areas

# DO3: The delivery of trusted digital services and the prevention of consumer harm

- Formulating regulations on consumer protection in online transactions
- Pass laws on personal data protection
- Promoting education and awareness among consumers regarding their rights in

# DO5: Increase in the quality and use of e-government services

 Developing e-government systems to expedite government administrative processes

### DO8: A digitally inclusive society in ASEAN

 Implementing digital skills training programs for the general public

Source: ADM 2025 pp. 16-18, response to the stakeholder country questionnaire.

### A.5 Lao P.D.R. Country Factsheet

### Lao P.D.R

### Regulatory and Digital Policy Status

Lao P.D.R. achieves an overall unified framework score of 38 per cent, which is lower than the Asia-Pacific region and world averages of 46 per cent and 50 per cent, respectively, suggesting a transitioning level of readiness of digital policy, legal and governance frameworks for digital transformation. Based on unified framework, Benchmark 4: Collaborative Governance with a target achieved of 66 per cent is the most advanced benchmark, followed by Benchmark 6: Legal Instruments for ICT/Telecom Markets and Benchmark 1: National Digital Policy Agenda both with an achieved target of 47 per cent and Benchmark 2: Regulatory Capacity with a target of 35 per cent. Benchmarks 5, 8, 3, 9 and 7 show limited progress with targets attained between 30 per cent-20 per cent: Benchmark 5: Stakeholder Engagement (30%), Benchmark 8: Market Rules (28%), Benchmark 3: Good Governance (23%), Benchmark 9: Regional and International Cooperation (20%), and Benchmark 7: Legal Instruments for Digital (22%).



ICT Regulatory Tracker G1, 36,70

G5 Benchmark 41.98 Transitioning

ITU unified framework Scores

### Overall Target Achievement: 38%



B1: National Digital Policy Agenda



**B2: Regulatory Capacity** 



**B3: Good Governance** 

47%

25%

23%



B4: Collaborative Governance



**B5: Stakeholder Engagement** 



B6: Legal Instruments for ICT/Telecom Markets

66%

30%

47%



B7: Legal Instruments for Digital Markets



**B8: Market Rules** 



B9: Regional and International Cooperation

22%

28%

20%

Proposed ITU unified framework target areas for addressing the identified policy and regulatory gaps

### B9: Regional and International Cooperation - 20%

- Ratification of a regional or international instrument related to cybersecurity?
- Ratification of Tampere Convention for communications in emergency situations
- Advance commitments to facilitate trade in telecommunication services
- Consider signing on and implementing international cross-border data management agreements

### B7: Legal Instruments for Digital Markets - 22%

- Advance the introduction of cross-sector (ICT and other) infrastructure sharing or fibre co-deployment regulations/ agreements/promotion initiatives in your country
- Consider developing Child Online Protection policy/Regulation/legislation
- Assess the development of policy/legislation/regulation related to public service eapplications and/or mapplications on Education and Learning
- Evaluate the development of policy for e-Health or Smart Health, and for Smart Cities
- Assess the development of ewaste regulations or management standards
- Advance on the e government strategy
- Consider the development and introduction of a digital identity framework
- Consider the introduction of a forward looking or innovative national spectrum strategy/policy
- Consider developing legislation in relation to IoT,
   Al and Cloud Computing
- Consider the adoption of policy/legislation/regulation related to e-apps and/or mapps linked to Agriculture/Science/Financial Services

#### B8: Market Rules - 28%

- Development/Implementation of a forward-looking competition policy for digital markets
- Introducing regulatory incentives targeted at network operators or other digital market players
- Review of rules concerning foreign participation for all types of services
- Review of the ownership status of the fixed line operator
- Rules to improve the level of competition for different services
- Review and develop criteria for dominance or SMP
- Review taxes imposed on the telecom/digital sector or Internet services

### B3: Good Governance - 23%

- Review rules for public access to information
- Consider the implementation of rights to appeal decisions
- Review policies and the regulatory framework regarding aspect of technology and service neutrality
- Consider introducing ethics rules that apply to the regulator's staff, including
   Head/Chairperson and Members/Commissioners
   (e.g., improper acceptance of gifts, personal and financial conflicts of interest, postemployment obligations, etc.)
- Assess how public access to information is ensured and fundamental freedoms protected, in accordance with national legislation and international agreements
- Conduct ex-post and rolling policy reviews
- Introduce a formal requirement for Regulatory Impact Assessment
- Subject regulatory decisions to general administrative procedures law
- Allow for appeals of adopted regulations by affected parties to a relevant administrative agency (all sectors)

### B5: Stakeholder Engagement - 30%

- Consider making public consultations mandatory before regulatory decisions
- Review the design of public consultations to be a tool to gather feedback from national stakeholders and guide regulatory decisionmaking
- Assess the implementation of regulatory experimentation in the area of regulatory sandboxes for financial services
- Consider the introduction of Codes of Conduct

### B2: Regulatory Capacity (35%)

- Consider the development of an official register or mapping of all telecommunications/ICT infrastructure
- Consider the creation of a national Emergency Telecommunications Plan
- Review the types of licenses available
- Consider the development of a regulatory framework for ICT accessibility for persons with disabilities
- Consider the possibility of secondary trading
- Address fixed and mobile number portability
- Review status of telecom/ICT regulator
- Assess existing autonomy in decision making, accountability and enforcement power
- Review the percentage of diversified funding/regulatory budget
- Consider the introduction of sanctions or penalties by the regulator
- Review and consider revising the traditional and new regulatory mandates

### Priorities for achieving the ASEAN Digital Masterplan 2025

DO1: Actions of ADM 2025 prioritized to speed ASEAN's recovery from COVID-19 NA

DO2: Increase in the quality and coverage of fixed and mobile broadband infrastructure NA

DO3: The delivery of trusted digital services and the prevention of consumer harm
NA

DO4: A sustainable competitive market for the supply of digital services NA	DO5: Increase in the quality and use of e- government services NA	DO6: Digital services to connect business and to facilitate cross-border trade HP EA 6.1: Facilitate compliance and secure the benefits of telecommunications services and electronic commerce in line with relevant ASEAN trade agreements ITU unified Framework: B9 Country Priority: The government has committed to the ASEAN Work Programme on Electronic Commerce (AWPEC) 2017-2025, which will facilitate
		cross-border e-commerce in the region and connect Laos to larger markets
DO7: Increased capability for business and people to participate in the digital economy NA	DO8: A digitally inclusive society in ASEAN NA	

Source: ADM 2025 pp. 16-18, based on responses to the stakeholder country questionnaire.

### A.6 Malaysia Country Factsheet

### Malaysia

### Regulatory and Digital Policy Status

Malaysia's digital policy, legal, and governance frameworks have demonstrated a high level of readiness for digital transformation with an overall ITU unified framework score of 84 per cent, surpassing both the Asia-Pacific region and global averages by far (respectively 46% and 50%).

Based on unified framework analysis, Benchmarks such as B4 Collaborative Governance (91%), Benchmark 5 Stakeholder Engagement (90%), Benchmark 2 Regulatory Capacity (88%), Benchmark 7 Legal Instruments for Digital Markets (86%), Benchmark 8 Market Rules (82%), and Benchmark 1 National Digital Policy Agenda (81%) take the lead and have showcased advanced levels of development. These benchmarks are closely followed by Benchmark 3 Good Governance with a score of 77 per cent. The benchmarks with the lowest score include Benchmark 6 Legal Instruments for ICT/Telecom Markets (74%) and Benchmark 9 Regional and International Cooperation with a score of 70 per cent.





ICT Regulatory Tracker

G4, 85

G5 Benchmark

64.66 Advanced

ITU unified framework Scores

### Overall Target Achievement: 84%



B1: National Digital Policy Agenda



**B2: Regulatory Capacity** 



**B3: Good Governance** 

81% 88% 86%



B4: Collaborative Governance



B5: Stakeholder Engagement



B6: Legal Instruments for ICT/Telecom Markets

91% 90% 74%



B7: Legal Instruments for Digital Markets



**B8: Market Rules** 



B9: Regional and International Cooperation

86% 82% 70%

Proposed ITU unified framework target areas for addressing the identified policy and regulatory gaps

### B9: Regional and International Cooperation -70%

- the **Budapest Convention**
- international agreements determining jurisdiction and/or managing cross-border data privacy and

### B6: Legal Instruments for ICT/Telecom Markets -74%

- regulatory for ICT accessibility for persons
- introducing
- Assess the introduction of
- Review status of fixed line

#### B8: Market Rules - 82%

- Consider developing a forwardlooking competition policy, law or regulation applied to digital markets
- spectrum based, local service and long-distance, international services and value-added service operators

### Country priorities for achieving the ASEAN Digital Masterplan 2025

DO2: Increase in the

HP EA 2.1: Encouraging investment in the digital and ICT field

Country priority:

DO6: Digital services to facilitate cross-border trade

services and electronic commerce in line with relevant ASEAN trade agreements

HP EA 6.2: Support trade digitalization through seamless and efficient flow and goods within ASEAN

National E-Commerce Strategic Roadmap

DO7: Increased capability for in the digital economy

and growth of digital start-ups in

Country priority:

companies into ASEAN and

Country initiatives:

- National E-Commerce Strategic Roadmap (NESR) (E-Commerce)

### DO8: A digitally inclusive society in ASEAN

 HP EA 8.1: Ensuring citizens and businesses have the skills and motivation to use digital services

#### **Country Priorities:**

- Drive digital adoption to grow local businesses
- Create a digitally savvy society
- Facilitate business friendly and sustainable digital economy ecosystem
- Build a high-performing and efficient organization

#### Country Initiatives:

- Saya Digital (Digital Literacy)
- Global Online Workforce (Digital Talent)

Source: ADM 2025 pp. 16-18, response to the stakeholder country questionnaire.

### A.7 Myanmar Country Factsheet

### Myanmar

### Regulatory and Digital Policy Status

Myanmar achieves an overall unified framework score of 49 per cent, which is higher than the Asia-Pacific region average of 46 per cent and just below the world average of 50 per cent, suggesting a transitional level of readiness of digital policy, legal and governance frameworks for digital transformation.

Based on the ITU unified framework analysis, the most advanced Benchmarks include Benchmark 8: Market Rules (85%) and Benchmark 1: National Digital Policy Agenda (67%), scoring in the lower advanced category. Benchmark 6: Legal Instruments for ICT/Telecom Markets (56%) and Benchmark 2: Regulatory Capacity (51%) are just above ICT Regulatory Tracker mid-point, and Benchmark 4: Collaborative Governance (47%) and Benchmark 3: Good Governance (36%) have moved well into the transitional state of readiness. The least developed Benchmarks include Benchmark 5: Stakeholder Engagement and Benchmark 9: Regional and International Cooperation both at 30 per cent. Benchmark 7: Legal Instruments for Digital Markets (9%) to-date lags behind and shows limited progress.



G2, 63.50

G5 Benchmark

6.48 Limited

ITU unified framework Scores

### Overall Target Achievement: 49%



**B1: National Digital** Policy Agenda



**B2: Regulatory Capacity** 



**B3: Good Governance** 

67%



**B4: Collaborative Governance** 



B5: Stakeholder Engagement



**B6: Legal Instruments** for ICT/Telecom Markets

30%



B7: Legal Instruments for **Digital Markets** 

**B8: Market Rules** 



**B9: Regional and** International Cooperation

9%

85%

30%

Proposed ITU unified framework target areas to addressing the identified policy and regulatory gaps

### B7: Legal Instruments for Digital Markets (9%)

- Advance the introduction of crosssector (ICT and other) infrastructure sharing or fibre co-deployment regulations/agreements/promotion initiatives in your country
- Consider developing Child Online Protection policy/Regulation/legislation and the development of formal data protection rules/law/regulations
- Develop cybersecurity regulation / legislation
- Assess the development of policy/legislation/regulation related to e-applications and/or mapplications on Education and Learning
- Evaluate the development of policy for e-Health or Smart Health, and for Smart Cities
- Assess the development of e-waste regulations or management standards
- Advance on the e-government strategy
- Consider the development and introduction of a digital identity framework
- Consider the introduction of a forward looking or innovative national spectrum strategy/policy
- Consider developing legislation in relation to IoT, Al and Cloud Computing
- Consider the adoption of policy/legislation/regulation related to e-apps and/or m-apps linked to Agriculture/Science/Financial Services

### B9: Regional and International Cooperation -30%

- Ratification of a regional or international instrument related to cybersecurity?
- Ratification of Tampere Convention for communications in emergency situations
- Advance commitments to facilitate trade in telecommunication services
- Consider signing on and implementing international cross-border data management agreements

### B5: Stakeholder Engagement - 30%

- Develop appropriate consultation design and mechanisms that enable feedback gathering from relevant stakeholders
- Consider the introduction of Codes of Conduct
- Assess the implementation of regulatory experimentation, also in the area of regulatory sandboxes for financial services

#### B3: Good Governance (36%)

 Consider introducing ethics rules that apply to the regulator's staff, including Head/Chairperson and Members/Commissioners (e.g., improper acceptance of gifts, personal and financial conflicts of interest, post-employment obligations, etc.)

#### B4: Collaborative Governance - 47%

 Consider the implementation of formal collaborative mechanisms that span different sector regulators/agencies/ministries

- Assess how public access to information is ensured and fundamental freedoms protected, in accordance with national legislation and international agreements
- Conduct ex-post and rolling policy reviews
- Introduce a formal requirement for Regulatory Impact Assessment
- Subject regulatory decisions to general administrative procedures law
- Allow for appeals of adopted regulations by affected parties to a relevant administrative agency (all sectors)

Priorities for achieving the ASEAN Digital Masterplan 2025

### DO1: Actions of ADM 2025 DO2: Increase in the quality DO3: The delivery of prioritized to speed ASEAN's trusted digital services recovery from COVID-19 HP 3.3: Identifying ICT field measures on the management and protection of data and data-related ITU unified DO4: A sustainable competitive DO5: Increase in the quality DO6: Digital services to facilitate cross-border services services DO7: Increased capability for DO8: A digitally inclusive society in ASEAN business and people to participate in the digital businesses have the skills and motivation to use digital

Source: ADM 2025 pp. 16-18, based on desk research and responses to the stakeholder country questionnaire.

### A.8 Philippines Country Factsheet

### **Philippines**

Regulatory and Digital Policy Status

The Philippines achieves an overall ITU unified framework score of 78 per cent, which is higher than the Asia-Pacific region and world averages of 46 per cent and 50 per cent, respectively, suggesting an advanced level of readiness of digital policy, legal and governance frameworks for digital transformation.

The Philippines has excelled in various benchmarks. Benchmark 9: Regional and International Cooperation has achieved a perfect score of 100 per cent, followed closely by Benchmark 5: Stakeholder Engagement at 90 per cent. Moreover, Benchmark 1: National Digital Policy Agenda has achieved an impressive score of 85 per cent, while Benchmark 4: Collaborative Governance and Benchmark 2: Regulatory Capacity have attained 84 per cent and 81 per cent, respectively. Additionally, Benchmark 7: Legal Instruments for Digital Markets has scored 75 per cent, Benchmark 3: Good Governance, has achieved a score of 73 per cent, while Benchmark 8: Market Rules is close behind at 70 per cent. Notably, Benchmark 6: Legal Instruments for ICT/Telecom Markets has just entered the advanced category with a score of 68 per cent.



ICT Regulatory Tracker

G2, 69.20

G5 Benchmark

68.98 Advanced

ITU unified framework Scores

### Overall Target Achievement: 78%



B1: National Digital Policy Agenda



**B2: Regulatory Capacity** 



**B3: Good Governance** 

85%

81%

73%



B4: Collaborative Governance

 $\mathscr{H}$ 

B5: Stakeholder Engagement

B6: Legal Instruments for ICT/Telecom Markets

84%

90%

68%



B7: Legal Instruments for Digital Markets

**B8: Market Rules** 

B9: Regional and International Cooperation

75%

70%

100%

Proposed ITU unified framework target areas for addressing the identified policy and regulatory gaps

### B3: Good Governance - 73%

- Review national policy and regulatory frameworks as to their technology and service neutrality
- Conduct ex-post and rolling policy reviews
- Advance ongoing efforts regarding the introduction of a formal requirement for Regulatory Impact Assessment (RIA)
- Review current rules for appeals of adopted regulations by affected parties to a relevant administrative agency (all sectors)

# B7: Legal Instruments for ICT / Telecom Markets - 68%

- Consider mandating infrastructure sharing also for fixed operators
- Consider introducing number portability for fixed operators
- Implement mobile number portability as stipulated by the law RA 11202 / Act Requiring Mobile Service Providers to provide Nationwide Mobile number Portability
- Introduce a mandate that requires operators to publish their RIO

#### B8: Market Rules - 70%

- Consider revising ownership structure towards allowing full foreign ownership
- Address level of competition for different markets/services

### Priorities for achieving the ASEAN Digital Masterplan 2025

DO1: Actions of ADM 2025 prioritized to speed ASEAN's recovery from COVID-19

#### DO1

HP EA 1.1: Make the economic case for prioritizing ADM 2025 actions

 No specific initiative provided. This DO and EA will be supported by different policies more broadly. DO2: Increase in the quality and coverage of fixed and mobile broadband infrastructure HP EA 2.1: Encouraging investment in the digital and ICT field

ITU unified Framework: B1, B7, B5

#### Country Initiative:

Passage of the following legislative/administrative issuances:

- Republic Act No. 11534 -Corporate Recovery and Tax Incentives for Enterprises Act
- Republic Act No. 11647 -Amendments to Foreign Investments Act
- Republic Act No. 11659 -Amendments to Public Service Act
- DICT Department Circular No. 8, s. 2020 - Policy Guidelines on the Co-Location and Sharing of Passive Telecommunication Tower Infrastructure for Macro Cell Sites

DO3: The delivery of trusted digital services and the prevention of consumer harm

HP EA 3.4: Improve coordination and cooperation for regional computer incident response teams

ITU unified Framework: B

 DICT Department Circular No. 003, s. 2020 - prescribes the creation of the National Computer Emergency Response Team division of the DICT, Sectoral CERTs, Government CERTs, and Organizational CERTS in the private sector. The Circular also provides for the use of Escalation Protocol as issued by CERT-PH

HP EA 3.5: Promote consumer protection and rights in relation to e-commerce

ITU unified Framework: B2, B3, B7 Country Initiative:

 Republic Act No. 11934 - SIM Registration Act DICT Department Circular
 No. 2, s. 2021 Implementing Rules and
 Regulations on the Nationa
 Policy for Expanding the
 Provision of Internet
 Services Through Inclusive
 Access to Satallite Services

HP EA 2.9: Establishing a centre of excellence for best practice rural connectivity ITU unified Framework: B1 Country Initiative:

Technology for Education
Employment,
Entrepreneurs, and
Economic Development
(Tech4ED)/Digital
Transformation Centers

DO4: A sustainable competitive market for the supply of digital services

HP EA 4.1: Continue to identify opportunities to harmonise digital regulation to facilitate cross-border data flows

ITU unified Framework: B9 Country Initiative:

 Signing of APEC Cross border Privacy Rules DO5: Increase in the quality and use of e-government services
HP EA 5.1: Establish ASEAN wide reporting on the level of use of e-government services in line with ITU requirements
ITU unified Framework: B7

 e-Government/Digital Government Masterplan; e

HP EA 5.2: Helping make key government departments more productive through their internal use of ICT and eservices

ITU unified Framework: B7 Country Initiative:

 No specific initiative provided. This DO and EA will be supported by different policies more broadly.

HP EA 5.3: Explore how to introduce digital identities in each AMS in a way which safeguards civil liberties ITU unified Framework: B7

 Republic Act No. 11055 -PhilSys Act DO6: Digital services to connect business and to facilitate cross-border trade

HP EA 6.2: Support trade digitalisation through seamless and efficient flow of electronic trade documents (e.g. invoices) and goods within ASEAN ITU unified Framework: B9 Country Priority:

TradeNet/ASEAN Single Window

DO7: Increased capability for business and people to participate in the digital economy
HP EA 7.3: Develop a framework that encourages the development and growth of digital start-ups in ASEAN ITU unified Framework: B7 Country Initiative:

- Republic Act No. 11293 -Philippines Innovation Ac
- Republic Act No. 11337 -Innovative Startup Act

DO8: A digitally inclusive society in ASEAN
HP EA 8.1: Ensuring citizens and businesses have the skills and motivation to use digital services

ITU unified Framework: B1 Country Initiative:

 Republic Act No. 11927 -Philippines Digital Workforce Competitiveness Act

Source: ADM 2025 pp. 16-18, based on responses to the stakeholder country questionnaire

### A.9 Singapore Country Factsheet

# Singapore

### Regulatory and Digital Policy Status

Singapore achieves an overall unified framework score of 89 per cent, which is higher than the Asia-Pacific region and the world averages (respectively 46% and 50%), suggesting a leading level of readiness of digital policy, legal and governance frameworks for digital transformation.

Based on unified framework analysis, all Benchmarks are advanced with scores equal to or above 80 per cent. The Benchmarks scoring above 90 per cent include Benchmark 7: Legal Instruments for Digital Markets (100%), Benchmark 8: Market Rules (94%), and Benchmark 2: Regulatory Capacity (93%). Benchmark 4: Collaborative Governance stands at 88 per cent, both, Benchmark 6: Legal Instruments for ICT/Telecom Markets and Benchmark 1: National Digital Policy Agenda achieve a score of 85 per cent, and Benchmark 3 Good Governance scores 82 per cent. Benchmark 5: Stakeholder Engagement and Benchmark 9: Regional and International Collaboration score both at 80 per cent.



ICT Regulatory Tracker

G4, 93.5

G5 Benchmark

83.8 Leading

ITU unified framework Scores

# Overall Target Achievement: 89%



B1: National Digital Policy Agenda



**B2: Regulatory Capacity** 



**B3: Good Governance** 

85%

93%

82%



B4: Collaborative Governance

B5: Stakeholder Engagement

B6: Legal Instruments for ICT/Telecom Markets

88%

80%

85%



B7: Legal Instruments for Digital Markets

**B8: Market Rules** 

B9: Regional and International Cooperation

100%

94%

80%

Proposed target areas for addressing the identified policy and regulatory gaps

### B5: Stakeholder Engagement - 80%

- Consider
- as a tool to gather feedback

### B9: Regional and International Cooperation - 80%

**Budapest Convention** 

#### B3: Good Governance - 82%

- conducting policy rolling reviews

Country priorities for achieving the ASEAN Digital Masterplan 2025

DO1: Actions of ADM COVID-19

DO2: Increase in the quality and coverage of broadband infrastructure HP EA 2.1: Encouraging investment in the digital and ICT field

#### Country Initiative/measure:

DO3: The delivery of trusted digital services and the prevention of consumer harm

DO4: A sustainable the supply of digital services

identify opportunities to harmonise digital regulation to facilitate cross-border data flows

# Country Initiative/measure:

DO5: Increase in the quality and use of e-NA

DO6: Digital services to connect business and to facilitate crossborder trade

HP EA 6.2: Support trade digitalisation through seamless and efficient flow of electronic trade documents (e.g. invoices) and goods within ASEAN

Country initiative/measure:

DO7: Increased capability for business and people to participate in the digital economy
HP EA 7.3: Develop a framework that encourages the development and growth of digital start-ups in ASEAN ITU unified Framework: B7 Country initiative/measure: The new I&C Industry Transformation Map (ITM) 2023 aims to develop a strong and resilient I&C sector to power the growth of Singapore's Digital Economy and strengthen Singapore's position as a hub for leading tech companies and talent.

DO8: A digitally inclusive society in ASEAN
HP EA 8.1: Ensuring citizens and businesses have the skills and motivation to use digital services
ITU unified Framework: B1
Country initiative/measure:
In the new I&C Industry
Transformation Map (ITM) 2023 upskilling initiatives remain a key focus to ensure that
Singaporeans benefit from the growth of the Digital Economy.

Note: No information was provided regarding country priorities in relation to the ADM 2025 DOs. The information contained in the table is based on desk research.

### A.10 Thailand Country Factsheet

### Thailand

### Regulatory and Digital Policy Status

Thailand achieves an overall ITU unified framework score of 75 per cent, which is higher than the Asia-Pacific region and the world averages (respectively 46% and 50%), suggesting an advanced level of readiness of digital policy, legal and governance frameworks for digital transformation.

Based on unified framework analysis, Benchmark 2: Regulatory Capacity (91%), Benchmark 8: Market Rules (84%), Benchmark 5: Stakeholder Engagement (80%), Benchmark 6: Legal Instruments for ICT/Telecom Markets (76%), Benchmark 3: Good Governance (73%), and Benchmark 9: Regional and International Cooperation (70%), are the most advanced benchmarks. Benchmarks 4, 1, and 7 are transitioning at targets achieved between 63 per cent-66 per cent: Benchmark 4: Collaborative Governance achieves 66 per cent, Benchmark 1: National Digital Policy Agenda 65 per cent, and Benchmark 7: Legal Instruments for Digital Markets 63 per cent.



ICT Regulatory Tracker

G4, 93.5

G5 Benchmark

83.8 Leading

ITU unified framework Scores

# Overall Target Achievement: 75%



B1: National Digital Policy Agenda



**B2: Regulatory Capacity** 



**B3: Good Governance** 

65%

91%

73%



B4: Collaborative Governance



B5: Stakeholder Engagement

B6: Legal Instruments for ICT/Telecom Markets

66%

80%

76%



B7: Legal Instruments for Digital Markets

**B8: Market Rules** 

B9: Regional and International Cooperation

63%

84%

70%

Proposed ITU unified framework target areas for addressing the identified policy and regulatory gaps

### B7: Legal Instruments for Digital Markets - 63%

- Consider developing and adopting a national policy for Al
- Consider the adoption of policy/legislation/regulation related to e-apps and/or mapps linked to Agriculture/Science/Financial Services
- Develop policy/legislation/regulation for Child Online Protection
- Consider introducing regulation/policy for Smart Cities, e-Health or smart health
- Assess the introduction of policy or regulation in regard to e-applications and/or mapplications for Education and learning

### B1: National Digital Policy Agenda - 65%

- Align the Digital Strategy with the SDGs or other international development goals (e.g., MDGs, WSIS goals, EU Strategic objectives)
- Consider advancing on the development and operationalization of a global strategy for youth employment and to implement the Global Jobs Pact of the ILO
- Consider including strategies for targeted groups such as women and girls, youth and persons with disabilities as part of the National Broadband Plan

#### B4: Collaborative Governance -66%

- Develop mechanisms of collaboration with the Data Protection Authority, the Energy Regulator, the Transport Regulator and the Postal regulator.
- Consider formalizing the collaboration with the competition authority.

### Country priorities for achieving the ASEAN Digital Masterplan 2025

DO1: Actions of ADM 2025 prioritized to speed ASEAN's recovery from COVID-19 NA	DO2: Increase in the quality and coverage of fixed and mobile broadband infrastructure NA	DO3: The delivery of trusted digital services and the prevention of consumer harm
DO4: A sustainable competitive market for the supply of digital services	DO5: Increase in the quality and use of e- government services NA	DO6: Digital services to connect business and to facilitate cross- border trade NA
DO7: Increased capability for business and people to participate in the digital economy NA	DO8: A digitally inclusive society in ASEAN NA	

Note: No information was provided regarding country priorities in relation to the ADM 2025 DOs. The information contained in the table is based on desk research.

### A.11 Viet Nam Country Factsheet

### Viet Nam

### Regulatory and Digital Policy Status

Viet Nam achieves an overall unified framework score of 57 per cent, which is higher than the Asia-Pacific region and the world averages (respectively 46% and 50%), suggesting transitional level of readiness of digital policy, legal and governance frameworks for digital transformation.

Based on unified framework analysis, Benchmark 6: Legal Instruments for ICT/Telecom Markets is the most advanced Benchmark at 82 per cent. Benchmark 3: Good Governance and Benchmark 2: Regulatory Capacity score at 64 per cent and 63 per cent, respectively. Benchmark 7: Legal Instruments for Digital Markets and Benchmark 8: Market Rules both stand at 60 per cent and Benchmark 5 at 50 per cent. While Benchmark 4: Collaborative Governance achieves 40 per cent of the target, the Benchmarks with the least progress made include Benchmark 1: National Digital Policy Agenda (32%) and P9: Regional and International Cooperation (30%).



ICT Regulatory Tracker

G3, 70.8

G5 Benchmark

42.75 Transitioning

ITU unified framework Scores

# Overall Target Achievement: 57%



B1: National Digital Policy Agenda



**B2: Regulatory Capacity** 



**B3: Good Governance** 

32%

63%

64%



B4: Collaborative Governance



B5: Stakeholder Engagement



B6: Legal Instruments for ICT/Telecom Markets

44%

50%

82%



B7: Legal Instruments for Digital Markets



**B8: Market Rules** 



P9: Regional and International Cooperation

5/%

60%

30%

Proposed ITU unified framework target areas to addressing the identified policy and regulatory gaps

### B9: Regional and International Cooperation - 30%

- Ratification of a regional or international instrument related to cybersecurity?
- Ratification of Tampere Convention for communications in emergency situations
- Commitments to facilitate trade in telecommunication services and crossborder data management

# B1: National Digital Policy agenda - 32%

- Digital Strategy: extension of Digital Strategy to include all economic sectors (including education), alignment of Digital Strategy with SDGs, development of mechanisms for implementation/operational objectives
- Development of policy instruments that support the shift to sustainable consumption and production
- Introduction of a holistic innovation strategy

Targeted Broadband initiatives for youth and persons with disabilities

# B4: Collaborative Governance - 44%

 Implementation of collaborative mechanisms that span differen sector regulators/agencies/ministries (e.g., Transport, Postal Consumer Protection, CERT)

### B5: Stakeholder Engagement - 50%

 Consultation design and mechanisms, Codes of Conduct, Regulatory experimentation

# B7: Legal Instruments for Digital Markets - 57%

- Are there any cross-sector (ICT and other) infrastructure sharing or fibre co-deployment regulations/agreements/promotion initiatives in your country
- Consider developing Child Online Protection policy/Regulation/legislation
- Assess the development of e-waste regulations or management standards
- Advance on the e-government strategy
- Consider the introduction of a forward looking or innovative national spectrum strategy/policy
- Consider developing legislation in relation to Al and Cloud Computing

Priorities for achieving the ASEAN Digital Masterplan 2025

DO1: Actions of ADM 2025 prioritized to speed ASEAN's recovery from COVID-19

# DO2: Increase in the quality and coverage of fixed and mobile broadband infrastructure

Under the Digital National
Transformation Programme, Digital
society development and digital
divide bridging is targeted through:

DO3: The delivery of trusted digital services and the prevention of consumer harm

	<ul> <li>Fiber optic internet infrastructure covers more than 80 per cent of households and 100 per cent of communes;</li> <li>4G/5G service and smart phones are available nationwide;</li> <li>More than 50 per cent of the population have a digital checking account</li> </ul>	
DO4: A sustainable competitive market for the supply of digital services	DO5: Increase in the quality and use of e-government services  • Development of the digital Government with enhanced efficiency and performance, including many targets, see https://www.vietnam-briefing.com/news/vietnams-digital-transformation-plan-through-2025.html/  • Integrating the Center Governance system with Local Provincial System  • Developing National Data Centre	DO6: Digital services to connect business and to facilitate cross-border trade
DO7: Increased capability for business and people to participate in the digital economy  • Developing the law on ICT industries (strengthening the number of digital start-ups, creating R@D and Innovation Center)	DO8: A digitally inclusive society in ASEAN	

### Appendix B: Brunei Darussalam

This section analyses the unified framework indicators, where Brunei Darussalam has not achieved the target, the country priorities as stated during the stakeholder interviews, as well as the options to address the identified gaps.

### B.1 Policy and regulatory landscape and priorities

#### Landscape

The ICT policy and regulatory landscape in Brunei Darussalam is characterized by a "Whole-of-Nation" approach, which emphasizes the collaboration and integration of the Government, Industry, and Society within the digital economy ecosystem. This approach recognizes the interconnectedness of these entities and the vital role they play in driving the country's ICT initiatives forward.

AITI, the national regulatory body responsible for ICT, has aligned itself with the Government's vision of transforming Brunei Darussalam into a Smart Nation. In line with this vision, AITI has formulated a comprehensive five-year strategic plan<sup>26</sup> with the objective of turning the country into a Connected

<sup>&</sup>lt;sup>26</sup> https://www.aiti.gov.bn/media/sszjgumt/aiti-strategic-plan-2020-2025.pdf

Smart Nation. AITI aims to achieve this vision by implementing the strategic initiatives outlined in the plan. The Strategic Plan 2020-2025 developed by AITI serves as a roadmap to realize the goals set forth in the Digital Economy Masterplan 2025<sup>27</sup>. Furthermore, it closely aligns with the strategic objectives of the Ministry of Transport and Infocommunication (MTIC) for 2025, particularly those related to the advancement of the info-communications sector. The plan focuses on three strategic outcomes, which will be achieved through the implementation of stakeholder-oriented programs. These outcomes are as follows: (i) the establishment of a Thriving Digital Industry, (ii) the creation of a Connected Nation, and (iii) the development of a Digitally Enriched Society.

Through its strategic pillars and stakeholder-oriented programs, AITI aims to foster an environment conducive to the growth of the digital industry, improve connectivity across the nation, and empower the society with digital advancements. By closely collaborating with the Government, Industry, and Society, Brunei Darussalam is poised to achieve its aspirations of becoming a Smart Nation and leveraging the potential of the digital economy for the benefit of its citizens.

#### **Priorities**

Brunei Darussalam's ICT policy and regulatory environment prioritizes several key areas outlined in the Brunei Darussalam Digital Economy Masterplan (2025)<sup>28</sup> and supported by the AITI Strategic Plan. These priorities include:

- Industry Digitalization: Brunei aims to evaluate stakeholders' readiness to adopt IR 4.0 technologies, with a particular focus on raising awareness among micro, small, and medium enterprises (MSMEs).
- Government Digitalization: The government plays a crucial role in facilitating economic growth by implementing a digital identity ecosystem, enhancing public innovation, and promoting the use of cloud services.
- A Thriving Digital Industry: The ICT sector in Brunei strives to apply technologies effectively to nurture growth and improve local digital industries, as well as other sectors.
- Manpower and Talent Development: To keep pace with rapid technological advancements, Brunei focuses on equipping its workforce with the necessary capabilities through talent development initiatives.

In order to support the Digital Economy Masterplan (2025), the AITI Strategic Plan emphasizes the need for a conducive regulatory environment and digital infrastructure. The plan aims to achieve targets such as digitalizing MSMEs, promoting the development of digital businesses, and ensuring readiness for the rollout of 5G technology.

In addition, the Data Office, operated by AITI, is working on a new Personal Data Protection law to govern the collection, use, and disclosure of personal data by private organizations. This legislation acknowledges the obligations of private sector organizations and individuals' rights to protect their personal data.

Brunei also employs various other policy and regulatory tools to advance its digital economy. These include the Brunei National Cyber Security Framework<sup>29</sup> to enhance cybersecurity measures, the Innovation Ecosystem Platform to foster innovation<sup>30</sup>, the FinTech White Paper to promote financial technology<sup>31</sup>, e-commerce promotion initiatives<sup>32</sup>, and digital promotion efforts<sup>33</sup>.

<sup>&</sup>lt;sup>27</sup> https://www.mtic.gov.bn/Theme/Home.aspx

<sup>&</sup>lt;sup>28</sup> https://www.mtic.gov.bn/Theme/Home.aspx

<sup>&</sup>lt;sup>29</sup> https://www.csb.gov.bn/brunei-national-cyber-security-framework

<sup>30</sup> https://www.innovatebrunei.com/about-us/

<sup>&</sup>lt;sup>31</sup> https://www.bdcb.gov.bn/SiteAssets/Lists/Publications/White-Paper-State-of-FinTech-Brunei-Darussalam-2020.pdf

<sup>32</sup> https://www.dare.gov.bn/e-commerce

<sup>33</sup> https://digitalbrunei.bn/

Through these strategic priorities and regulatory tools, Brunei Darussalam aims to create a thriving digital economy and ensure the well-being of its people and society as a whole.

### B.2 Overview of regulatory and policy gaps

Brunei Darussalam has made significant progress in its digital transformation journey, as reflected in its current overall readiness for digital transformation captured by a unified framework score of 66 per cent. This score surpasses both the Asia-Pacific region and global averages, which stand at 46 per cent and 50 per cent respectively. The results also suggest that Brunei Darussalam has achieved a transitional level of in terms of digital policy, legal frameworks, and governance structures necessary for digital transformation.

Analysis of the benchmarks reveals the areas where Brunei Darussalam excels and those that require further attention. The most advanced benchmarks include B2: Regulatory Capacity (93%), B9: Regional and International Cooperation (80%), B4: Collaborative Governance (78%) and Benchmark B1: National Digital Policy Agenda (73%). These indicate the country's strong ability to establish regulations, foster collaboration, and engage in regional and international partnerships. Furthermore, the benchmark B7: Legal Instruments for Digital Markets (63%) and B6: Legal Instruments for ICT/Telecom Markets (62%) benchmark have achieved commendable scores, signifying Brunei Darussalam's progress in developing legal frameworks for the ICT and telecom sectors and digital markets. Benchmark B5: Stakeholder Engagement has realized a target of 60 per cent, showing advances in cross-stakeholder engagement.

However, some benchmarks are still in a transitional phase. B3: Good Governance (50%) fall within this category, indicating that efforts are underway but require further development. Benchmark B8: Market Rules (38%) on the other hand, shows limited progress, highlighting the need for more attention and improvements in this area.

### B.3 Benchmark 1: National Digital Policy Agenda

Benchmark 1 "National Digital Policy Agenda" has 15 targets, of which 11 have been met with maximum points. One target has score 1 point and 3 targets have scored 0 points. The total achievement to-date stands at **73 per cent**.

Table B1: Unified framework Benchmark 1 gaps

B1: National D	B1: National Digital Policy Agenda - 73%		
Target	Unified framework score	Ongoing initiatives to address gap/s	
Are there policy instruments aimed at supporting the shift to sustainable consumption and production, or coordination mechanism for sustainable consumption and production?	0		
Is there a developed and operationalized global strategy for youth employment and to implement the global jobs pact of the ILO?	0	AITI support for Coding Skills, https://borneobulletin.com.bn/jobseekers-to-receive- boost-in-ict-industry/, https://www.aiti.gov.bn/development/codingbn/	



# B1: National Digital Policy Agenda - 73%

Target	Unified framework score	Ongoing initiatives to address gap/s
Strategies for targeted groups: Broadband plan / initiative includes to promote the provision of broadband services to women and girls	1	Broadband Plan/Initiative Brunei has adopted the policy jointly developed by ITU on Broadband, https://www.itu.int/en/ITU-D/Regional-Presence/AsiaPacific/Documents/Publications-Reports/National Broadband Policy Brunei Darussal am.pdf Note: The approach taken by Brunei is to generalise member of the public, that is including youth, persons with disabilities and women & girls.  100 per cent of women use the Internet (92% of men use the Internet)
Is there a holistic innovation policy or one tailored to the ICT/digital sector?	0	There is work ongoing regarding Innovation Policy - Innovation Framework, https://thebruneian.news/2022/10/06/aiti-hosts-digital-innovation-profile-co-creation-workshop/ Brunei Innovation Lab, https://www.innovatebrunei.com/about-us/

### State of play and priorities

Brunei Darussalam's priorities focus notably on developing the digital industry to a new level, highlighting the importance of a conducive regulatory environment and digital infrastructure that enables the nation's need for ubiquitous connectivity.

The main strategies for Brunei Darussalam (up to 2025) are the Digital Economy Masterplan  $2025^{34}$  and AITI Strategic Plan  $2025^{35}$ .

### B.4 Benchmark 2: Regulatory Capacity

"Regulatory Capacity" has 17 targets, of which 14 targets have attained the target or maximum score of 2, 2 have attained a score of 1, and 1 shows a score of 1.5. The total achievement to-date stands at 93 per cent.

Table B2: unified framework Benchmark 2 Gaps



### B2: Regulatory Capacity - 93%

Target	unified framework Score	Ongoing initiatives to address gap/s
Accountability	1	
New mandate: entity in charge of IT	1	
Consumer issues: entity responsible for comparative tariff information, consumer education and handling consumer complaints	1.5	Separate consumer Protection Agency, but all that is tariff and consumer complaints is the regulator - not centralized

<sup>34 &</sup>lt;u>www.mtic.gov.bn/dec2025/Home.aspx</u>

<sup>35</sup> https://www.aiti.gov.bn/media/sszjgumt/aiti-strategic-plan-2020-2025.pdf

#### State of play and priorities

To enable conducive regulatory environment & digital infrastructure, Brunei Darussalam is focusing on the development of Postal Regulatory Framework and the development of a Personal Data Protection Policy. In the area of legislation and Regulatory Guidelines and Frameworks, Brunei Darussalam is reviewing, updating and implementing a Converged Regulatory Framework as well as updating and implementing the Universal Service Provision.

### Ongoing initiatives to address gaps

To address gaps with regards to accountability of regulatory agencies, in the area of Internet Content Regulation, AITI works with various agencies/regulators to oversee content related matters.<sup>36</sup> In the area of cybersecurity, Brunei Darussalam established Cyber Security Brunei (CSB)<sup>37</sup>, to address cyber security services for the public, private and public sectors in Negara Brunei Darussalam. In the area of FinTech, Brunei Darussalam Central Bank regulates the Financial Sector. 38

#### B.5 Benchmark 3: Good Governance

"Good Governance" has 11 targets, of which 5 targets have attained the maximum score of 2, 1 target has attained a score of 1, and 5 show a score of 0. The total achievement to-date stands at 50 per cent.

Table B2: unified framework Benchmark 3 Gaps



### B3: Good Governance - 50%

Target	unified framework Score	Ongoing initiatives to address gap/s
Can affected parties request reconsideration or appeal adopted regulations to the relevant administrative agency (all sectors)?	0	Appeal possible, but not public
Is there a formal requirement for Regulatory Impact Assessment (RIA) before regulatory decisions are made?	0	
Policy reviews: Do ministries/regulatory agencies conduct ex-post policy reviews?	0	This is done on an ad-hoc basis when required. <sup>39</sup>
Policy reviews: Do ministries/regulatory agencies conduct policy rolling reviews?	0	This is done on an ad-hoc basis when required.
Are national policy and regulatory frameworks technology and service-neutral?	1	Technology neutrality is anchored.
Is public access to information ensured and fundamental freedoms protected, in accordance with national legislation and international agreements?	0	AITI supports public access to information. In accordance with best practices, relevant laws in the country should still be applicable and overseen by the Content Advisory Council and Content Advisory Council Working Group, <a href="https://www.aiti.gov.bn/regulatory/content-regulation/">https://www.aiti.gov.bn/regulatory/content-regulation/</a>

<sup>&</sup>lt;sup>36</sup> https://www.aiti.gov.bn/regulatory/content-regulation

<sup>&</sup>lt;sup>37</sup> www.csb.gov.bn

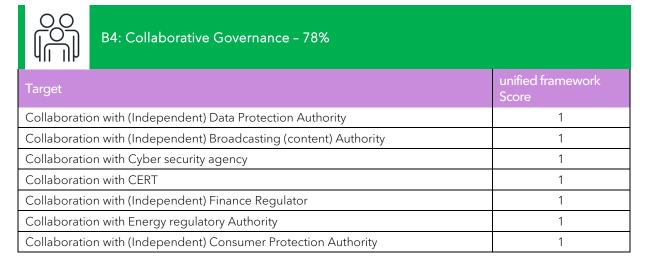
<sup>38</sup> https://www.bdcb.gov.bn/development/fintech

<sup>&</sup>lt;sup>39</sup> http://www.csps.org.bn/2022/02/16/fruitful-ict-market-study-ends/

#### B.6 Benchmark 4: Collaborative Governance

Benchmark 4 "Collaborative Governance" has 16 indicators, of which 9 indicators realize the maximum score of 2, and 7 attain a score of 1. The total achievement to-date stands at **78 per cent**.

Table B3: unified framework Benchmark 4 Gaps



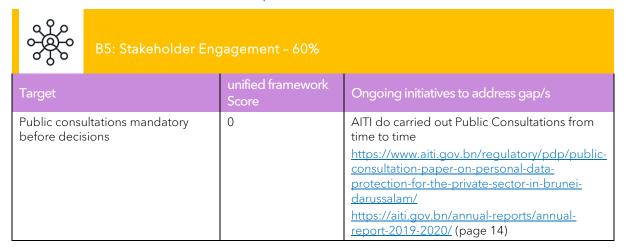
#### State of play and priorities

Development and/or strengthening of Policy, Legislation and Regulatory Framework on Telecommunication, Postal, Personal Data Protection, with full cooperation and participation of relevant key stakeholders under a "Whole of Nation" approach. 40 Brunei Darussalam's 5G Task Force consists of 110 members from 41 organizations, including all government ministries, academia and industry. 41

### B.7 Benchmark 5: Stakeholder Engagement

Benchmark 5 "Stakeholder Engagement" has 5 targets, of which 3 targets attain the maximum score of 2, and 2 achieve a score of 0. The total achievement to-date stands at **60 per cent**.

Table B4: unified framework Benchmark 5 Gaps



<sup>&</sup>lt;sup>40</sup> https://www.aiti.gov.bn/regulatory/pdp/public-consultation-paper-on-personal-data-protection-for-the-private-sector-in-brunei-darussalam/

<sup>41</sup> https://aiti.gov.bn/media/3dmdrmoy/5g-task-force-report.pdf, https://www.biicf.bn/misc-wg-ict/



#### B5: Stakeholder Engagement - 60%

Target	unified framework Score	Ongoing initiatives to address gap/s
Are public consultations designed as a tool to gather feedback from national stakeholders and guide regulatory decision-making?	0	Are in place and have been in place for a long time - we need reference documents

### B.8 Benchmark 6: Legal Instruments for ICT/Telecom Markets

Benchmark 6 "Legal Instruments for ICT/Telecom Markets" has 17 targets, of which 9 targets attain a maximum score of 2, 3 attain a score of 1, and 5 show a score of 0. The total achievement to-date stands at **62 per cent**.

Table B5: unified framework Benchmark 6 Gaps

B6: Legal Instruments for ICT/Telecom Markets - 62%		
Target	unified framework Score	
Infrastructure sharing: Does an official register or a mapping exist in your country of all telecommunication/ICT infrastructure?	0	
Does a regulatory framework exist for ICT accessibility for persons with disabilities?	0	
Does a National Emergency (Telecommunications) Plan exist?	0	
Types of licenses provided	1	
Secondary trading allowed	0	
Interconnection prices made public	0	
Number portability available to consumers and required from fixed-line operators	1	
Number portability available to consumers and required from mobile operators	1	

### State of play and priorities

Under the Digital Economy, the Government adopted the whole-of-government approach in terms of policy and direction towards a Digital Economy.<sup>42</sup> The Ministry of Transport of Infocommunications (ministry in-charge of ICT/Telecom) highlights some of the legal instruments in their strategic plan.<sup>43</sup>

Ongoing initiatives to address gaps

The regulatory frameworks in Brunei are fit-for-purpose, tailored to the small market of the country. 44

### B.9 Benchmark 7: Legal Instruments for Digital Markets

Benchmark 7 "Legal Instruments for Digital Markets" has 16 targets, of which 10 targets attain the maximum score of 2, and 6 show a score of 0. The total achievement to-date stands at **63 per cent**.

<sup>42</sup> https://www.gov.bn/SitePages/DEC.aspx

<sup>43</sup> www.mtic.gov.bn/MTIC2025/documents/MTIC 2025-Strategic-Plan FINAL.pdf

<sup>44</sup> https://www.aiti.gov.bn/reference-documents/list-of-legislations/

### Table B6: unified framework Benchmark 7 Gaps



#### B7: Legal Instruments for Digital Markets - 63%

Target	unified framework Score	Ongoing initiatives to address gap/s
Has your country adopted any policy/legislation/regulation related to e-apps and/or m-apps linked to Agriculture/Science/Financial Services?	0	
Industry 4.0: Does it includes a strategy, policy or initiative focusing on IoT? Or applied any measure regarding spectrum management and availability for IoT?	0	
Industry 4.0: Has your country adopted a national strategy, policy or initiative focusing on AI?	0	
Has your country adopted a forward-looking or innovative national strategy, policy or initiative focusing on spectrum (e.g., IMT-2000, 5G, FWA, satellite, HAPS, 6 GHz)?	0	Current Spectrum Planning initiatives are reflected online
Public services: Has your country adopted any policy/legislation/regulation related to Smart Cities?	0	
Are there any cross-sector (ICT and other) infrastructure sharing or fibre co-deployment regulations/agreements/promotion initiatives in your country?	0	

### B.10 Benchmark 8: Market Rules

Benchmark 8 "Market Rules" has 17 targets, of which 3 targets attain a maximum score of 2, 7 attain a score of 1, and 7 show a score of 0. The total achievement to-date stands at **38 per cent**.

Table B7: unified framework Benchmark 8 Gaps



#### B8: Market Rules – 38%

Target	unified framework Score
Level of competition in local and long distance (domestic and international) fixed line services	0
Level of competition in IMT (3G, 4G, etc.) services	1
Level of competition in cable modem, DSL, fixed wireless broadband	0
Level of competition in leased lines	1
Level of competition in International Gateways	0
Status of the main fixed line operator	0
Foreign participation/ownership in facilities-based operators	1
Foreign participation/ownership in spectrum-based operators	1
Foreign participation/ownership in local service operators/long-distance service operators	0
Foreign participation/ownership in international service operators	1



B8: Market Rules - 38%

Target	unified framework Score
Foreign participation/ownership in Internet Service Providers (ISPs)	1
Foreign participation/ownership in value-added service providers	1
Is there a forward-looking competition policy, law or regulation applied to digital markets?	0
Are there regulatory incentives targeted at network operators or other digital market players?	0

### State of play and priorities

For Market Rules, Brunei adopts global and regional best practices that is fit-for-purpose for a small economy and market size.

AITI's market competition framework<sup>45</sup> aims to promote and maintain fair and efficient market conduct and effective competition in Brunei Darussalam's telecommunications sector. Furthermore, Brunei take part in various trade agreement, such as, CPTPP, RCEP.

### B.11 Benchmark 9: Regional and International Cooperation

Benchmark 9 "Regional and International Cooperation" has 5 targets, of which 4 targets attain a maximum score of 2, and 1 realizes a score of 0. The total achievement to-date stands at **80 per cent**.

Table B8: unified framework Benchmark 9 Gaps

R.		B9: Regional and International Cooperation - 80%	
Target			unified framework Score
Has your country signed or ratified a regional or international instrument related to cybersecurity?			0

### State of play and priorities

In the area of Regional and International Cooperation, Brunei Darussalam is part of a number of ASEAN initiatives and frameworks as follows:

- ASEAN Data Management Framework and Model Contractual Clauses on Cross Border Data Flows, <a href="https://www.aiti.gov.bn/regulatory/pdp/asean-data-management-framework-and-model-contractual-clauses-on-cross-border-data-flows/">https://www.aiti.gov.bn/regulatory/pdp/asean-data-management-framework-and-model-contractual-clauses-on-cross-border-data-flows/</a>
- Member to the ASEAN Cyber Security, <a href="https://asean.org/our-communities/asean-political-security-community/peaceful-secure-and-stable-region/cyber-security/">https://asean.org/our-communities/asean-political-security-community/peaceful-secure-and-stable-region/cyber-security/</a>
- Brunei is participating of the IPEF, <a href="https://ustr.gov/trade-agreements/agreements-under-negotiation/indo-pacific-economic-framework-prosperity-ipef">https://ustr.gov/trade-agreements/agreements-under-negotiation/indo-pacific-economic-framework-prosperity-ipef</a>
- Brunei championing the ASEAN's Bandar Seri Begawan Roadmap, <a href="https://asean.org/wp-content/uploads/2021/10/Bandar-Seri-Begawan-Roadmap-on-ASEAN-Digital-Transformation-Agenda Endorsed.pdf">https://asean.org/wp-content/uploads/2021/10/Bandar-Seri-Begawan-Roadmap-on-ASEAN-Digital-Transformation-Agenda Endorsed.pdf</a>

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<sup>45</sup> https://www.aiti.gov.bn/regulatory/competition-management/

### B.12 Proposed target areas to addressing regulatory and policy gaps

This Section sets out proposed target areas identified based on unified framework 2022 data and updates made based on self-reported information from the questionnaire response to addressing the regulatory gaps.

Figure 18: Overview of proposed target areas to address unified framework gaps

Lowest scoring unified framework Benchmark	Proposed target areas
	Development/Implementation of a forward-looking competition policy for digital markets
B8: Market Rules	<ul> <li>Introducing regulatory incentives targeted at network operators or other digital market players</li> </ul>
(38%)	Review of rules concerning foreign participation
	<ul> <li>Review of the ownership status of the fixed line operator</li> </ul>
	Rules to improve the level of competition for different services
	Review rules for public access to information
B3: Good Governance (50%)	• Consider the implementation of Regulatory Impact Assessments, rights to appeal, and policy reviews
Governance (50%)	Review policies and the regulatory framework regarding aspect of technology and service neutrality
B5: Stakeholder	Consider making stakeholder consultations mandatory before regulatory decisions
Engagement (60%)	Design public consultations as a tool to gather feedback from national stakeholders and guide regulatory decision-making
	Consider the development of an official register or mapping of all telecommunications/ICT infrastructure
B6: Legal	Consider the creation of a national Emergency Telecommunications     Plan
Instruments for ICT/Telecom Markets	Review the types of licenses available
(62%)	<ul> <li>Consider the development of a regulatory framework for ICT accessibility for persons with disabilities</li> </ul>
	Consider the possibility of secondary trading
	<ul> <li>Address fixed and mobile number portability</li> </ul>
B7: Legal	Consider introducing instruments for cross-sector infrastructure sharing
Instruments for Digital Markets (63%)	Assess the necessity for Smart City Regulation, policies for Al and IoT
Digital Markets (03 %)	Consider developing a forward-looking innovative spectrum policy

### B.13 Key priorities for achieving the ASEAN Digital Masterplan 2025

This section outlines the key priorities that Brunei Darussalam has identified for digital transformation towards achieving the ASEAN Digital Masterplan 2025.

Brunei Darussalam states that the ADM2025 serves as a regional strategy for the ASEAN to realize the benefit of the Digital Economy. It further notes that the ADM2025 is generally in line with the national frameworks. The Desirable Outcomes (DOs) and high-priority Enabling Actions (EAs) are relevant to Brunei in its digital transformation journey. The ADM high-priority EAs towards which Brunei believes most progress will be made include the areas of data protection (DO3, HP EA 3.3), management of cross-border data flows (DO4, HP EA 4.1), digital start-up ecosystem (DO7, HP EA 7.3) and improvement of digital skills (DO8, HP EA).

Table B9: Country priority and/or initiatives corresponding to ADM 2025 DOs and High Priorities EAs

### ADM 2025 DOs and High Priority EAs

Country priority and/or specific country initiatives linked to ADM DOs and EAs

#### DO1: Actions of ADM 2025 prioritized to speed ASEAN's recovery from COVID-19

#### DO<sub>1</sub>

HP EA 1.1: Make the economic case for prioritizing ADM 2025 actions

 No specific initiative provided - listed as priority in the questionnaire response

#### DO2: Increase in the quality and coverage of fixed and mobile broadband infrastructure

#### DO2

HP EA 2.1: Encouraging investment in the digital and ICT field

ITU unified Framework: B1, B7, B5

#### DO2

HP EA 2.2: Moving towards best practices in permits and access rights for local and national infrastructure including submarine cable repair ITU unified Framework: B6, B1

#### DO2

HP EA 2.6: Ensuring increased and harmonized spectrum allocation across the region ITU unified Framework: B6, B7

#### DO<sub>2</sub>

HP EA 2.9: Establishing a centre of excellence for best practice rural connectivity ITU unified Framework: B1  No specific initiative provided - listed as priority in the questionnaire response

 No specific initiative provided - listed as priority in the questionnaire response

- No specific initiative provided listed as priority in the questionnaire response
- No specific initiative provided listed as priority in the questionnaire response

#### DO3: The delivery of trusted digital services and the prevention of consumer harm

#### DO3

HP EA 3.1: Enabling trust through greater and broader use of online security technologies ITU unified Framework: B4, B7

 No specific initiative provided - listed as priority in the questionnaire response

#### DO3

HP EA 3.3: Identifying improvements in legal and regulatory measures on the management and protection of data and other data-related activities that could be harmful ITU unified Framework: B7

- No specific initiative provided listed as priority in the questionnaire response
- Brunei Darussalam envisages most progress to be made in-country towards DO3 HP EA 3.3

### ADM 2025 DOs and High Priority EAs

# Country priority and/or specific country initiatives linked to ADM DOs and EAs

#### DO<sub>3</sub>

HP EA 3.4: Improve coordination and cooperation for regional computer incident response teams

ITU unified Framework: B4

#### DO<sub>3</sub>

HP EA 3.5: Promote consumer protection and rights in relation to e-commerce

ITU unified Framework: B2, B3, B7

• No specific initiative provided - listed as priority in the questionnaire response

 No specific initiative provided - listed as priority in the questionnaire response

#### DO4: A sustainable competitive market for the supply of digital services

#### DO<sub>4</sub>

HP EA 4.1: Continue to identify opportunities to harmonise digital regulation to facilitate cross-border data flows

ITU unified Framework: B9

- No specific initiative provided listed as priority in the questionnaire response
- Brunei Darussalam envisages most progress to be made in-country towards DO4 HP EA 4.1

#### DO5: Increase in the quality and use of e-government services

#### DO<sub>5</sub>

HP EA 5.1: Establish ASEAN wide reporting on the level of use of e-government services in line with ITU requirements

ITU unified Framework: B7

• No specific initiative provided - listed as priority in the questionnaire response

#### DO<sub>5</sub>

HP EA 5.2: Helping make key government departments more productive through their internal use of ICT and e-services

ITU unified Framework: B7

• No specific initiative provided - listed as priority in the questionnaire response

### DO5

HP EA 5.3: Explore how to introduce digital identities in each AMS in a way which safeguards civil liberties

ITU unified Framework: B7

• No specific initiative provided - listed as priority in the questionnaire response

### DO6: Digital services to connect business and to facilitate cross-border trade

#### DO6

HP EA 6.1: Facilitate compliance and secure the benefits of telecommunications services and electronic commerce in line with relevant ASEAN trade agreements

ITU unified Framework: B9

 No specific initiative provided - listed as priority in the questionnaire response

### DO6

HP EA 6.2: Support trade digitalisation through seamless and efficient flow of electronic trade documents (e.g. invoices) and goods within ASEAN

ITU unified Framework: B9

 No specific initiative provided - listed as priority in the questionnaire response

### ADM 2025 DOs and High Priority EAs

Country priority and/or specific country initiatives linked to ADM DOs and EAs

#### DO7: Increased capability for business and people to participate in the digital economy

#### DO7

HP EA 7.3: Develop a framework that encourages the development and growth of digital start-ups in ASEAN

ITU unified Framework: B7

- No specific initiative provided listed as priority in the questionnaire response
- Brunei Darussalam envisages most progress to be made in-country towards DO7 HP EA 7.3

#### DO8: A digitally inclusive society in ASEAN

#### DO8

HP EA 8.1: Ensuring citizens and businesses have the skills and motivation to use digital services ITU unified Framework: B1

- No specific initiative provided listed as priority in the questionnaire response
- Brunei Darussalam envisages most progress to be made in-country towards DO8 HP EA 8.1

Source: ADM 2025 pp. 16-18, based on responses to the stakeholder country questionnaire

### Appendix C: Cambodia

This section analyses the unified framework indicators, where Cambodia has achieved less than the maximum of points attainable, the country priorities as stated during the stakeholder interviews, as well as the proposed target areas to addressing the identified gaps.

### C.1 Policy and regulatory landscape, priorities, and challenges

#### Landscape

Cambodia's ICT landscape has witnessed proactive measures by the government to foster digital transformation and embrace the opportunities presented by the digital age. The implementation of initiatives such as the Cambodia Digital Economy and Society Policy Framework 2021-2035 and Cambodia Digital Government Policy 2022-2035 lays the groundwork for a balanced, inclusive, and equitable digital transformation of the country's economy and society.

To achieve these goals, Cambodia has utilized various policy and regulatory tools to advance its digital transformation. The Telecommunications-ICT Development Policy 2020 is a crucial instrument aimed at enhancing ICT connectivity and readiness, enabling the nation to keep pace with global technological advancements. Additionally, the Cambodia Digital Economy and Society Policy Framework 2021-2035 provides a clear vision for the country's digital transformation journey, guiding stakeholders towards a digitally empowered future.

One of the significant focuses of the Cambodia Digital Government Policy 2022-2035 is to improve the quality of public services through a digital government approach. By leveraging digital technologies and platforms, the government aims to enhance the efficiency and accessibility of its services, benefitting citizens and businesses alike.

To support the growing ICT sector and regulate digital transactions effectively, Cambodia has put in place essential legal frameworks. The Law on Telecommunications ensures a robust legal foundation for the telecommunications sector, fostering healthy competition, and safeguarding consumer rights. The Law on e-Commerce, on the other hand, addresses electronic transactions, promoting trust and security in online business activities. In a significant move towards digitalizing government processes and improving transparency, the government introduced the document verification platform verify.gov.kh in March 2023. This platform serves as a central hub for verifying the authenticity of government documents, enabling institutions and ministries to validate degrees and other official paperwork efficiently and securely.

In conclusion, Cambodia's policy and regulatory ICT landscape demonstrate a commitment to embrace the digital future fully. Through forward-thinking initiatives and a well-defined policy framework, the country is paving the way for a digitally empowered economy and society, ensuring that citizens and businesses can fully participate in and benefit from the digital revolution.

#### **Priorities**

Improving digital infrastructure, including national broadband connectivity and international submarine cables, is a priority. The Ministry of Post and Telecommunications plans to expand fiberization to all communes and establish a submarine cable connection to Hong Kong, China. Enhancing the availability and quality of telecommunications services is another key objective. Developing a skilled workforce and promoting digital literacy are crucial to ensure widespread participation and benefit from the digital economy. The government aims to foster innovation and entrepreneurship in the digital sector, driving economic growth and job creation. Emphasizing cybersecurity and data protection is vital to ensure the safety and security of citizens and businesses in the digital realm.

To support these goals, Cambodia is actively drafting laws and regulations on crucial aspects such as cybersecurity, personal data protection, digital government, and digital sector management. Additionally, policies like the cloud-first policy are being formulated to further strengthen the digital landscape. In the short-term (2025), Cambodia has set priorities that include building a robust digital infrastructure, introducing e-Government services, improving telecommunications services, developing a skilled workforce, promoting digital literacy, encouraging innovation and entrepreneurship, strengthening cybersecurity and data protection, and establishing necessary laws and regulations. In the long-term, Cambodia envisions a vibrant digital economy and society, fostering digital adoption and transformation among all social actors, including the state, citizens, and businesses. This vision aims to drive new economic growth and promote social welfare in the era of the new normal.

### Challenges

While progress has been made, Cambodia still faces challenges in its digital transformation journey. Limited digital infrastructure, particularly in terms of fixed broadband connectivity, hampers the growth of digital services and businesses. The digital divide between urban and rural areas remains significant, limiting access to digital services in rural communities. Digital literacy is also lacking among many Cambodians, impeding the effective use of digital technologies. The absence of comprehensive data protection laws may hinder trust and engagement with digital services. Strengthening cybersecurity measures is crucial to ensure a secure and successful digital transformation.

Cambodia's dedication to developing digital policies, regulatory frameworks, and infrastructure underscores its commitment to embracing the opportunities and addressing the challenges of the digital era. With continued efforts, the nation is poised to achieve a balanced, inclusive, and equitable digital transformation, ushering in a prosperous digital economy and society.

### C.2 Overview of regulatory and policy gaps

Once considered a transitional player in the realm of digital transformation, Cambodia has shown promising progress in its efforts to develop robust digital policies and regulatory frameworks. With an overall unified framework score of 63 per cent, surpassing the Asia-Pacific region average of 46 per cent and just below the global average of 50 per cent, Cambodia is on the path toward readiness for the digital era.

Among the benchmarks analyzed, Benchmark 2 focusing on Regulatory Capacity (85%), Benchmark 3 Good Governance (77%), Benchmark 4, Collaborative Governance (69%) and Benchmark 8 addressing Market Rules (68%) demonstrate the highest level of advancement. Close behind follow Benchmark 1 National Digital Policy Agenda (62%) and Benchmark 9 Regional and International Cooperation (60%) with transitional scores. Benchmark 7, Legal Instruments for Digital Markets (44%), Benchmark 6 Legal Instruments for ICT/Telecom Markets (41%), and Benchmark 5 Stakeholder Engagement (40%) lag behind, indicating room for improvement.

### C.3 Benchmark 1: National Digital Policy Agenda

Benchmark 1 "National Digital Policy Agenda" has 15 targets, of which 9 have been met with maximum points. 4 targets have scored 0 points, and for 2 targets, a score of 1 was achieved. The total achievement to-date stands at **62 per cent**.

Table C1: Unified framework Benchmark 1 Gaps



#### B1: National Digital Policy Agenda - 62%

Target	Unified framework score	Ongoing initiatives to address gap/s
Is the digital strategy SDG-oriented OR has mention of SDGs or other international development goals (e.g., MDGs, WSIS goals, EU Strategic objectives)?	0	The Policies are based on Environmental Sustainability  No reference found in the policy documents to the SDGs terminology, but to Environmental Sustainability (see pp. 33, 69, annex 3 p. 136)
Are there policy instruments aimed at supporting the shift to sustainable consumption and production, or coordination mechanism for sustainable consumption and production?	0	The Policies take into account environmental sustainability (Digital Economy and Society Policy Framework) - the Digital Economy and Business Committee is responsible in collaboration with Ministry of Public Works and Transportation Ministry of Post and Telecommunications Ministry of Planning Ministry of Economy and Finance
Is there a developed and operationalized global strategy for youth employment and to implement the Global Jobs Pact of the ILO?	1	The Policies are also focused on building capacity and digital literacy, thereby promoting youth employment. No direct mention to the Global Pact of the ILO.
Strategy design and implementation: The digital strategy has mechanisms for implementation/operational objectives?	1	The Digital Economy and Society Policy Framework specifies for the creation of the National Council for Digital Economy and Society with three Committees - Committee on Digital Economy and Business, Committee on Digital Government and Committee on Digital Security.
Strategies for targeted groups: Broadband plan/initiative includes to promote the provision of broadband services to persons with disabilities?	0	General references to 'inclusiveness' (see p. 32) but no specific provisions
Strategies for targeted groups: Broadband plan/initiative includes to promote the provision of broadband services to women and girls	0	

State of play and priorities

Cambodia is focusing its efforts to address current gaps in its National Digital Policy Agenda.

Many of the current priorities include strengthening and expanding digital connectivity infrastructure and rapidly building digital human capital in Cambodia. A new submarine cable project has commenced. Hundreds of full and partial scholarships, financial aids, and upskill/reskill trainings have been awarded each year in the last few years and expansions are being planned.

Cambodia's Digital Government Policy sets out the following:

#### • Two foundations:

- Digital infrastructure (connectivity, digital payment and financial technology, logistic and last mile delivery)
- Digital trust (policies, laws, regulations and cybersecurity)

#### • Three benchmarks:

- Digital citizen (digital literacy, digital talents and digital leadership).
- Digital government (digital public services, digital platform and enabler and data-driven governance).
- Digital business (enterprise digital transformation, entrepreneurship and startup ecosystems, digital value chains).

### Four Short term goals:

- 1. Digital Government Infrastructure
  - Establish cloud-based national data center.
  - Improve the digital government network infrastructure.
  - Strengthen the cybersecurity management and protection system for the national information infrastructure.
  - Develop and strengthen digital identity infrastructure.

#### 2. Digital Governance and Public Services

- Formulate data governance policy, open data policy and software promotion policy.
- Formulate laws on digital government, law on privacy and data protection, and law on cybersecurity.
- Develop standards on:
  - Digital government services;
  - Software engineering and information technology;
  - Cybersecurity;
  - Smart cities; and
  - Data centers.
  - Re-engineer government processes and develop government enterprise architecture.
  - Develop and improve administrative collaboration platform.
  - Develop one window service platform and digital public services.
- 3. "Building Digital Capacity and Innovation" and
- 4. "Promotion of Cooperation and Public and Private Partnership"

Appendix I of the Digital Government Policy 2022-2035 includes additional short-term priorities. For example, Priority Action No. 51 under Appendix I requires the government to "Promote the development and improvement of curricula to enhance digital literacy for students from primary and secondary school to higher education and general vocational training" within the time period of 2022-2025.

#### Challenges to addressing gaps

The key challenges in addressing gaps include: (1) the lack of laws and regulations; (2) human resources; and 3) financial resources.

Cambodia states that it envisages most room for maneuver to address current gaps in the short term (until 2025) in the areas of:

- Capacity building efforts
- Development of laws and regulations
- Establishment of digital infrastructure

### C.4 Benchmark 2: Regulatory Capacity

Benchmark 2 "Regulatory Capacity" has 17 targets, of which 12 targets have attained a maximum score of 2, 5 show a score of 1. The total achievement to-date stands at **85 per cent**.

Table C2: Unified framework Benchmark 2 Gaps

B2: Regulatory Capacity - 8	B2: Regulatory Capacity - 85%		
Target	Unified framework score	Ongoing initiatives to address gap/s	
Accountability	1	MPTC and TRC have undertaken significant steps to establish a clear and comprehensive regulatory framework. This includes redrafting the Prakas on the Conditions and Procedures for the Application of Telecommunications Permits, Certificates, and Licenses. By revising and updating these regulations, TRC aims to ensure transparency, accountability, and streamlined procedures for telecommunications services. Additionally, MPTC and TRC are working on the Prakas on Fees for Public Services. This step is crucial in defining the financial aspects of public services, establishing a fair and accountable fee structure, and promoting efficient service delivery. Article 12 of the Telecommunications Law sets out the functions and duties of the TRC, including the duty to report and recommend to the MPTC on all matters in relation to regulation (Article 12e)	
Entity in charge of universal service/access	1	This is the Ministry of Post and Telecommunications - USAF - USO Sub- decree provided	
New mandate: entity in charge of broadcasting (radio and TV transmission)	1	This is under the purview of the Ministry of Information.	
New mandate: entity in charge of broadcasting content	1	This is mainly within the purview of the Ministry of Information and Ministry of Culture and Fine Arts.	

	B2: Regulatory Capacity - 85%		
Target		Unified framework score	Ongoing initiatives to address gap/s
New manda	ate: entity in charge of IT	1	This is the mainly the Ministry of Post and Telecommunications and the National Council on Digital Economy and Society as well as other digital committees, in collaboration with other ministries and institutions depending on the specific area within IT.

### State of play and priorities

The current priority for enhancing regulatory capacity is focused on bolstering regulatory enforcement power. In pursuit of this goal, several crucial laws and regulations have been drafted, including the Sub-Decree on Transactional Fines, Sub-Decree on the Management, Construction, and Shared Use of Infrastructure Sharing, Sub-Decree on the management and allocation of spectrum, Law on Personal Data Protection, Law on Digital Government, Law on Digital Sector Management, Law on Cybersecurity, and the Law on the Postal Sector. The aim is to finalize and complete the implementation of these essential regulatory measures before 2025.

Specific to the General Department of Radio Frequency Spectrum Management, current priorities include:

- Developing policies and regulations that promote efficient and effective use of the radio frequency spectrum, while minimizing interference and ensuring equitable access.
- Strengthening regulatory capacity and expertise through training programs, partnerships with industry stakeholders, and investment in new technologies and tools.
- Enhancing coordination and collaboration among national and international regulatory bodies to address cross-border issues and harmonize standards and regulations.
- Supporting innovation and deployment of new technologies, such as 5G and Internet of Things (IoT), while ensuring safety and security of these systems.

Short term goals (up to 2025) to finish Sub Decree on Arrangement, Management and Allocation of Radio Frequency Spectrum and some priority regulations and provisions related to frequency management are as following:

- Prakas on Conditions and Procedures for Provision, Modification, Suspension, Transfer and Revocation of Radio Frequency License
- Prakas on the Conditions and Procedures for Licensing and Using of Radio Frequencies for Satellites and the Use of Satellite Orbits
- Prakas on Condition and Procedure of Recognition as Accredited Individuals for Installation and use of radio communication equipment
- Inter-Ministerial Prakas on the Types of Services Requiring Radio Frequency License, Permit for General Use and Fees for Using Radio Frequencies.
- Inter-Ministerial Prakas on the Conditions and Procedures of Frequency Radio Spectrum License Auction.

#### Challenges to addressing gaps

Some main challenges to addressing gaps include:

- Limited quality of education system especially STEM
- Weak R&D (infrastructure, governance, finance and collaboration)
- Lack of support and human resources

Overall, Cambodia faces several key challenges in building and strengthening its regulatory capacity. Some of the notable challenges include:

- Limited Resources: Cambodia may have limited human resources that can hinder the development and implementation of comprehensive regulatory frameworks, monitoring mechanisms, and enforcement activities.
- Adaptation of Legal and Regulatory Frameworks to emerging trends: digital sector, evolved from the telecommunications and ICT, continue to evolve rapidly, leading to industry transformations. New services, business models, and emerging technologies often outpace regulatory frameworks, making it challenging to adapt regulations to the changing landscape and adequately address emerging issues.
- Multi-stakeholder Collaboration: collaboration with various stakeholders, including government agencies, industry players, and international organizations is key. Ensuring effective collaboration and coordination can be challenging. The lack of coordination among policy domains and actors at the national level is not smooth.
- **Building and strengthening regulatory capacity** requires investments in training programs, partnerships with industry stakeholders, and new technologies and tools. Limited resources can hinder these efforts.
- Balancing competing interests: Regulatory bodies need to balance the interests of various stakeholders, including the needs of industry players, consumers, and national security concerns. Finding a balance that is fair and equitable for all parties can be difficult.

#### Ongoing initiatives to address gaps

In the short term, Cambodia focuses on specific areas to address gaps in limited human capacity, legal and regulatory frameworks and industry transformation:

- Limited Resources: (1) training and capacity building by investing in targeted training programs. (2) Collaborating with international partners and organizations to obtain valuable resources and expertise. (3) Developing strategies to attract and retain qualified professionals and skilled personnel.
- Adaptation of Legal and Regulatory Frameworks to emerging trends: (1) reviewing and updating regulations by conducting a comprehensive review of existing regulations to identify gaps, inconsistencies, and areas for improvement is essential. (2) Engaging in knowledge-sharing and cooperation with other countries and international organizations to learn from their experiences in developing effective legal and regulatory frameworks. (3) Collaborating with industry to facilitate a better understanding of industry needs, challenges, and emerging trends.

On radio frequency spectrum, in the short term (until 2025), there is significant potential for improving radio frequency spectrum policy and planning through greater coordination among stakeholders and more proactive approaches to spectrum management. This can involve the development of national table of frequency allocation that consider the needs and priorities of different users and allocate spectrum resources accordingly. It can also involve the adoption of more flexible regulatory frameworks that allow for innovative use of spectrum while still ensuring interference protection and efficient use of the resource.

#### C.5 Benchmark 3: Good Governance

Benchmark 3 "Good Governance" has 11 targets, of which 9 targets have attained the maximum score of 2, 1 shows a score of 1, and 1 shows a score of 0. The total achievement to-date stands at **86 per cent**.

Table C3: Unified framework Benchmark 3 Gaps



### B3: Good Governance - 86%

Target	Unified framework score	Ongoing initiatives to address gap/s
Is there a formal requirement for Regulatory Impact Assessment (RIA) before regulatory decisions are made?	1	There is a general guideline on RIA <sup>46</sup> and the government encourages government ministries/institutions to follow this RIA guideline.
Are the laws (all sectors) that are currently in effect available on a single website managed by the government?	0	First step- moving beyond fragmentation We have various websites, but one is: https://www.moj.gov.kh/kh/law-regular/. The list on the Ministry of justice website is incomplete, however the register of laws on the website of the parliament/national assembly is more comprehensive. Otherwise, relevant policies are recorded on each ministry's website.

#### State of play and priorities

Good governance is the core of the Rectangle Strategies of Government, which include public administration reform, public financial management reform, decentralization and de-concentration reform, legal and judicial reform, and armed forces reform. The Digital government policy sets the vision of "building a digital government to improve the people's quality of life and build trust among the people through better public service provision", which increases transparency, responsiveness, public participation, accountability, fairness and equity, efficiency and effectiveness. The policy enhances dispute resolution mechanism through negotiation, mediation and arbitration.

The Ministry of Post and Telecommunications has also been working closely with the Ministry of Education, Youth, and Sports to engage youth as a priority group for "going digital." Besides the first online issuance of the Temporary High School certificate with verifiable QR Code, the two ministries are also working on bringing better connectivity and institutional digital transformation to higher education institutions and high schools in Cambodia.

### Challenges to addressing gaps

Establishing good governance can be challenging due to resource constraints, resistance to change, lack of public trust, limited civil society engagement, and institutional fragmentation.

#### C.6 Benchmark 4: Collaborative Governance

Benchmark 4 "Collaborative Governance" has 16 targets, of which 8 targets have attained the maximum score of 2, 6 show a score of 1, and 2 show a score of 0. The total achievement to-date stands at 69 per cent.

<sup>&</sup>lt;sup>46</sup> http://www.ecosocc.gov.kh/images/book/4 About Regulatory Impact Assssement en.pdf and https://www.adb.org/projects/48298-001/main

Table C4: Unified: Unified framework Benchmark 4 Gaps



# B4: Collaborative Governance - 69%

Target	Unified framework score	Ongoing initiatives to address gap/s
Collaboration with (Independent) Broadcasting (content) Authority	0	An awareness workshop was organized with global content providers (Meta, TikTok) on issues within our purview like child online protection.  Other forms of collaboration include inter-ministries Prakas, committees or working groups, commitments.  In terms of collaboration with private sector and civil society, there have been multiple initiatives (e.g. education sector, to produce educational materials with partners such as a non-profit organization from the Republic of Korea).
Collaboration with (Independent) Data Protection Authority	0	There is no Data Protection Authority yet. We are working on drafting the Law on Data Protection.
Collaboration between ICT ministry OR ICT regulator AND Information Society Agency	1	The Ministry of Post and Telecommunications and the Telecommunication Regulator of Cambodia are the ICT ministry and regulator respectively, and is the entity the pushes forward the informatization agenda.
Collaboration with (Independent) Finance Regulator	1	Collaboration with the National Bank of Cambodia and Non-Bank Financial Service Authority when issues overlap.
Collaboration with Energy regulatory Authority	1	Collaboration with the energy authority when issues overlap.
Collaboration with Transport regulatory Authority	1	Collaboration with the Ministry of Public Transportation when issues overlap.
Collaboration with (Independent) Competition Authorities	1	The Telecommunication Regulator is the authority that handles competition and mergers and acquisitions within the telecommunication sector.
Collaboration with (Independent) Consumer Protection Authority	1	Collaboration with National Commission for Consumer Protection on various issues.

### State of play and priorities

Some key priorities for collaborative governance include building partnerships, ensuring inclusivity and equity, fostering innovation, building capacity, and monitoring and evaluation.

### Challenges to addressing gaps

The key challenges to addressing gaps include a lack of some legal and regulatory framework as well as integrated collaborative tools and limited digital skills of officials who use online platform, and willingness to change work processes.

#### Ongoing initiatives to address gaps

Cambodia perceives most room for maneuver to improve collaborative governance in the areas of creating and amending necessary laws and regulations, solidifying political will in pushing forward Collaborative Governance, and digital capacity building.

### C.7 Benchmark 5: Stakeholder Engagement

Benchmark 5 "Stakeholder Engagement" has 5 targets, of which one achieves the maximum score of 2, two targets attain a score of 1, and 2 achieve a score of 0. The total achievement to-date stands at 40 per cent.

Table C5: Unified framework Benchmark 5 Gaps



#### B5: Stakeholder Engagement – 40%

Target	Unified framework score	Ongoing initiatives to address gap/s
Public consultations mandatory before decisions	1	It is mandatory in practice. Government Circular F3 2013 publishes guidelines on drafting law/regulations which require consultations - implicitly, Art 64 give the right to telco operators to participate in the development of policies and regulations set out in the Telco Law.
Are public consultations designed as a tool to gather feedback from national stakeholders and guide regulatory decision-making?	1	The process of development of policies, laws and regulations consist of consultations with government ministries/institutions, private sectors, universities, international organizations and development partners.  Consultations are designed to gather important feedback, however formal guidelines are yet to be developed.
Regulatory experimentation: Are there mechanisms for regulatory experimentation?	0	Sandboxes and mechanisms for regulatory experimentation are in consideration.

### State of play and priorities

Inter terms of priorities in the area of stakeholder engagement, the digital information systems are being created to receive feedback from citizens and interact with service recipients. In this second level, the government's information is open to the public to ensure transparency and accountability. Laws and regulations before they are adopted always undergo stakeholder consultation.

#### Challenges to addressing gaps

Key challenges to addressing gaps include communication barriers, lack of stakeholder representation, lack of clarity on roles and responsibilities, and limited time and resources.

### Ongoing initiatives to address gaps

By 2025, under the governance and leadership of National Council for Digital Economy and Society and with the clear policy measures, Cambodia envisages the following to be improved:

• Building trust among stakeholder to increase participation in decision making processes.

- Strengthening of coordination bodies such as establishing committees, ministries digital transformation units.
- Codes of conduct: such instruments exist for digital technology firms. In the area of Child Online Protection, a Praka has been drafted, but is not yet put into practice. However, there is a guideline that was developed with private sector and published jointly with UNICEF on Child Online Protection<sup>47</sup>.

### C.8 Benchmark 6: Legal Instruments for ICT/Telecom Markets

Benchmark 6 "Legal Instruments for ICT/Telecom Markets" has 17 targets, of which 7 targets attain a maximum score of 2, and 10 show a score of 0. The total achievement to-date stands at **41 per cent**.

Table C6: Unified framework Benchmark 6 Gaps



#### B6: Legal Instruments for ICT/Telecom Markets - 41%

Target	Unified framework score	Ongoing initiatives to address gap/s
Does a regulatory framework exist for ICT accessibility for persons with disabilities?	0	We are preparing digital access standard for all which is a priority action plan in the Digital Government Policy.
Does a National Emergency (Telecommunications) Plan exist?	0	We have a National Emergency Plan for national security, health, and disasters.
Infrastructure sharing: Does an official register or a mapping exist in your country of all telecommunication/ICT infrastructure?	0	There is mapping for telecommunication/ICT infrastructure. It is not publicly available.
Types of licenses provided	0	We have different types of licenses depending on the type of business. For example, we have licenses for ISP providers, telecom operators, and ecommerce operators. We are currently in discussions on drafting a Prakas on the Conditions and Procedures for the Application of Telecommunications Permits, Certificates, and Licenses in order to simplify licensing processes. Sub-Decree 110 on Authorization to Operate Information and Communication Technology specifies types of licenses, certificates, and permits to be granted in the ICT sector; E-Commerce Law, which specifies intermediaries and electronic commerce service providers to request an online service certificate to operate; and the Law on Telecommunications specifies licenses, certificates, and permits to be granted within the telecommunications sector.
Licenses exempt	0	N/A except maybe in cases of national security.

<sup>&</sup>lt;sup>47</sup> https://www.unicef.org/cambodia/media/7751/file/Cambodian Child Online Protection Guidelines.pdf



#### B6: Legal Instruments for ICT/Telecom Markets - 41%

Target	Unified framework score	Ongoing initiatives to address gap/s
Operators required to publish Reference Interconnection Offer (RIO)	0	All operators are required to share their interconnection arrangements with the TRC. Is this published? No, they are not published but we will consider what should be published in the future to improve competition in the market
Unbundled access to the local loop required	0	This will be considered after the Sub- Decree on the Management, Construction, and Shared Use of Infrastructure. Sharing has been adopted.
Secondary trading allowed	0	This will be considered after the Sub- Decree on the Management and Allocation of Spectrum has been adopted
Number portability available to consumers and required from fixed-line operators	0	Cambodia will consider having the "Number Portability for Fixed and Mobile" in the future.
Number portability available to consumers and required from mobile operators	0	Cambodia will consider having the "Number Portability for Fixed and Mobile" in the future.

#### State of play and priorities

The current priorities regarding the Legal Instruments for ICT/Telecom Market are focused on the development of the Sub-Decree on Transactional Fines, the Sub-Decree on the Management, Construction, and Shared Use of Infrastructure, the Sub-Decree on the Management and Allocation of Spectrum, Prakas on Consumer Protection, Prakas on Competition and Prakas on Dispute Resolution.

The aim is to finalize and complete the implementation of these essential regulatory measures before 2025.

The current priorities also include Laws on Cybersecurity, Personal Data Protection, Digital Sector Management, and Digital Government.

In addition, there are other regulations that Cambodia is working on:

- Drafting Sub-Decree on Preparation, Management, and Distribution of Radio Frequencies.
- Drafting Prakas on National Numbering Plan.
- Drafting Prakas on the Condition and Procedure for the Transitional Penalty for Violations in Telecom Sector.
- Drafting Prakas on the Condition and Procedure for Requesting an Autonomous System Number and IP Address.
- Drafting Prakas on the Condition and Procedure for Requesting the Suspension and Revocation of the National Internet Gateway Licensing.
- Drafting various Prakas under the Sub-Decree on Domain Names.
- Other frequency regulations mentioned above under Benchmark 2, Q1 above.

#### Challenges to addressing gaps

Cambodia faces several key challenges in establishing and enforcing legal Instruments for ICT/Telecom markets. Some of the notable challenges include:

- Limited Resources: Cambodia may have limited human resources that can hinder the development and implementation of comprehensive regulatory frameworks, monitoring mechanisms, and enforcement activities.
- Adaptation of Legal and Regulatory Frameworks and Industry Transformation to emerging trends: digital sector, evolved from the telecommunications and ICT, continue to evolve rapidly, leading to industry transformations. New services, business models, and emerging technologies often outpace regulatory frameworks, making it challenging to adapt regulations to the changing landscape and adequately address emerging issues.
- Lack of Research and Development as a key enabler to collect and generate data to provide input on policy and provide recommendations.

### Ongoing initiatives to address gaps

In the short term, Cambodia focuses on specific areas to address gaps in limited human capacity, legal and regulatory frameworks and industry transformation:

- Limited Resources: (1) training and capacity building by investing in targeted training programs. (2) Collaborating with international partners and organizations to obtain valuable resources and expertise. (3) Developing strategies to attract and retain qualified professionals and skilled personnel.
- Adaptation of Legal and Regulatory Frameworks and Industry Transformation to emerging trends: (1) reviewing and updating regulations by conducting a comprehensive review of existing regulations to identify gaps, inconsistencies, and areas for improvement is essential. (2) Engaging in knowledge-sharing and cooperation with other countries and international organizations to learn from their experiences in developing effective legal and regulatory frameworks. (3) Collaborating with industry to facilitate a better understanding of industry needs, challenges, and emerging trends.
- Research and Development: Encourage and create incentives for investment into research and development. This is also in line with the promotion of digital skills and human resources.

### C.9 Benchmark 7: Legal Instruments for Digital Markets

Benchmark 7 "Legal Instruments for Digital Markets" has 16 targets, of which 7 targets show the maximum score of 2, 1 shows a score of 1, and 8 show a score of 0. The total achievement to-date stands at 44 per cent.

Table C7: Unified framework Benchmark 7 Gaps

B7: Legal Instruments for Di	B7: Legal Instruments for Digital Markets - 44%		
Target	Unified framework score	Ongoing initiatives to address gap/s	
Has your country adopted any policy/legislation/regulation related to eapps and/or m-apps linked to Agriculture/Science/Financial Services?	0	N/A	



#### B7: Legal Instruments for Digital Markets - 44%

Target	Unified framework score	Ongoing initiatives to address gap/s
Industry 4.0: Does it includes a strategy, policy or initiative focusing on IoT? Or applied any measure regarding spectrum management and availability for IoT?	0	There is a strategy for analogue switch off and digital turn on by 2025 that allocated 700MHz for 5G. We are also studying and developing the IoT policy, technical framework and platform.
Industry 4.0: Has your country adopted any policy/legislation/regulation related to cloud computing?	0	We are drafting a Cloud First Policy.
Industry 4.0: Has your country adopted a national strategy, policy or initiative focusing on AI?	0	We are working on developing Al ethics and guidelines.
Has your country adopted a forward-looking or innovative national strategy, policy or initiative focusing on spectrum (e.g., IMT-2000, 5G, FWA, satellite, HAPS, 6 GHz)?	0	We are studying and developing a roadmap for 5G.
Data Protection: Are there formal data protection rules (e.g., law, regulations)?	0	There are data protection sections/articles in existing laws and regulations; however, it covers only a limited number of activities. We are currently drafting a personal data protection law.
Public services: Has your country adopted any policy/legislation/regulation related to Smart Cities	1	We have strategies and action plans for Smart city for Phnom Penh, SiemReap and Battambang. We are developing National Smart City Development Roadmap.
Cybersecurity: Is there cybersecurity/cybercrime legislation or regulation?	0	We're drafting a law on cybersecurity and law on cybercrime (cybercrime is led by the Ministry of Interior). We have developed some cyber security standards from ISO/IEC. We are preparing a cyber security roadmap as well.
Are there any cross-sector (ICT and other) infrastructure sharing or fibre codeployment regulations/agreements/promotion initiatives in your country?	0	

### State of play and priorities

As regards priorities for Legal Instruments for Digital Markets, the RGC adopted the Cambodia Digital Government Policy 2022-2035 in January 2022. MPTC is also drafting a Cloud First Policy. These policies, as well as laws and regulations that MPTC is currently drafting (like the draft Law on Personal Data Protection) will encourage the development and use of digital markets.

#### Challenges to addressing gaps

The key challenges that impede progress with regards to advancing Legal Instruments for Digital Markets include lack of a comprehensive legal frameworks and regulatory capacity, a rapidly evolving digital landscape, emerging and evolving cybersecurity and privacy concerns, limited awareness and lack of public trust.

Cambodia envisages to have most room for maneuver to addressing gaps in the following areas:

- To have strong and up-to-date legal instruments that protect consumers' interests, promote competition, and ensure a level playing field for all operators.
- Building the capacity of regulatory bodies to effectively monitor and enforce legal instruments in the digital sector.
- Keeping up with the latest technological developments and updating legal instruments accordingly.
- To establish legal instruments that adequately address these concerns and ensure that digital platforms are safe for users.
- To ensure that stakeholders are informed and educated about the legal instruments in place and their role in ensuring compliance."

### C.10 Benchmark 8: Market Rules

Benchmark 8 "Market Rules" has 17 targets, of which 11 targets attain a maximum score of 2, 1 shows a score of 1, and 5 have a score of 0. The total achievement to-date stands at **68 per cent.** 

Table C8: Unified framework Benchmark 8 Gaps

	B8: Market Rules – 68%		
Target		Unified framework score	Ongoing initiatives to address gap/s
Status of the main fixed line operator		0	There are fixed-line services. However, development is so slow with limited demands.
Legal concept of dominance or SMP		0	General concepts are defined in the Law on Telecommunications, which prohibits the act of unfair competition using dominant market power.
Criteria used in determining dominance or SMP		0	General concepts are defined in the Law on Telecommunications, which prohibits the act of unfair competition using dominant market power.
Is there a forward-looking competition policy, law or regulation applied to digital markets?		0	MPTC has undertaken the process of drafting the Prakas on Competition.
	/digital sector players and vices exempt from specific	0	N/A
Are there regulatory incentives targeted at network operators or other digital market players?		1	Some initiatives exist.

### State of play and priorities

TRC works to ensure that only safe and quality equipment can be marketed. In addition, we MPTC and TRC ensure free and fair competition in digital markets including prices and qualities of services and maintain mutual benefits for both operators and consumers. MPTC and TRC are drafting Prakas on Consumer Protection and Competition.

#### Challenges to addressing gaps

Cambodia states that it urgently needs effective and comprehensive regulation for ensuring competition (Prakas on Competition) that is reflective of emerging market trends. One key aspect to be addressed by the competition law is the treatment of OTT players, that have significantly changed the dynamics. The difficulty at present is to manage and make sure operators and OTT Providers compete fairly and provide their services properly. It should be noted, that MPTC is currently drafting a "Prakas on fair and lawful competition activities of telecommunications operators and persons involved in the telecommunications sector". 48

Consequently, it perceives most room for maneuver in finishing the drafting of the Prakas on Competition as well as building an efficient and capable competition regulatory team within the TRC.

### C.11 Benchmark 9: Regional and International Collaboration

Benchmark 9 "Regional and International Cooperation" has 5 targets, of which 3 targets indicate a maximum score of 2. The other 2 indicators show a score of 0. The total achievement to-date stands at 60 per cent.

Table C9: Unified framework Benchmark 9 Gaps



#### B9: Regional and International Cooperation - 60%

Target	Unified framework score	Ongoing initiatives to address gap/s
Has your country signed or ratified a regional or international instrument related to cybersecurity?	0	Not yet, will be considered in the future.
Has your country signed or ratified the Tampere convention for communications in emergency situations?	0	No

### State of play and priorities

The priorities with regards to regional and international collaboration are focused on the harmonization of laws, regulations and standards and the strengthening of digital and cybersecurity development and cooperation.

### Challenges to addressing gaps

Key challenges perceive include cultural differences, funding and different legal and regulatory frameworks.

Most room for maneuver in the short term is perceived to be realized in the areas of:

- Establishing regional and international collaboration, by developing a mutual understanding and respect for each other's culture.
- Securing funding can be a challenge, especially in times of economic uncertainty, but it is necessary to ensure that projects can be successful.
- Ensuring that collaborations adhere to the legal and regulatory framework of all countries involved can be challenging but necessary for successful collaboration.
- Increased dialogue and participation in regional events on all levels.

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<sup>&</sup>lt;sup>48</sup> At this point in time, a Law on Competition that regulates competition in general is in place. Nevertheless, the Telecommunication Regulator of Cambodia regulates competition specific within the telecommunication sector.

## C.12 Proposed country target areas to addressing unified framework regulatory and policy gaps

This Section sets out proposed target areas identified based on unified framework 2022 data and updates made based on self-reported information from the questionnaire response to addressing the regulatory gaps.

Figure 19: Overview of proposed target areas to address unified framework gaps			
Lowest scoring unified framework Benchmark	Proposed target areas		
B5: Stakeholder Engagement (40%)	<ul> <li>Consider making stakeholder consultations mandatory before regulatory decisions</li> <li>Design public consultations as a tool to gather feedback from national stakeholders and guide regulatory decision-making</li> <li>Advance efforts and implementation of codes of conduct</li> <li>Consider the introduction of regulatory experimentation</li> </ul>		
B6: Legal Instruments for ICT/Telecom Markets (41%)	<ul> <li>Consider the development of an official register or mapping of all telecommunications/ICT infrastructure</li> <li>Consider the creation of a national Emergency Telecommunications Plan</li> <li>Review the types of licenses available and consider license exemptions</li> <li>Consider making the Reference Interconnection Offer publicly available</li> <li>Advance the requirement for unbundled access to the local loop</li> <li>Consider the development of a regulatory framework for ICT accessibility for persons with disabilities</li> <li>Consider the possibility of secondary spectrum trading</li> <li>Address fixed and mobile number portability</li> </ul>		
B7: Legal Instruments for Digital Markets (44%)	<ul> <li>Assess the adoption of policy/legislation/regulation related to eapps and/or m-apps linked to Agriculture/Science/Financial Services</li> <li>Advance existing efforts in the areas of Al policy, Smart City Regulation, and policies for IoT and cloud computing</li> <li>Consider introducing instruments for cross-sector infrastructure sharing</li> <li>Develop formal data protection rules</li> <li>Consider developing a forward-looking innovative spectrum policy</li> <li>Consider the development and adoption of a forward-looking or innovative national strategy, policy or initiative focusing on spectrum (e.g., IMT-2000, 5G, FWA, satellite, HAPS, 6 GHz)</li> <li>Consider the introduction of cross-sector (ICT and other) infrastructure sharing or fibre co-deployment regulations/agreements/promotion initiatives in your country</li> </ul>		
Regional and International B9:	<ul> <li>Consider signing or ratifying a regional or international instrument related to cybersecurity?</li> </ul>		

communications in emergency situations

Consider signing or ratifying the Tampere convention for

Lowest scoring unified framework Benchmark

## Proposed target areas

B1: National Digital Policy Agenda (62%)

- Consider aligning the digital strategy with the SDGs or other international development goals (e.g., MDGs, WSIS goals, EU Strategic objectives)
- Develop policy instruments aimed at supporting the shift to sustainable consumption and production, or coordination mechanism for sustainable consumption and production
- Consider the introduction of a global strategy for youth employment and the implementation of the Global Jobs Pact of the ILO
- Create mechanisms for implementation/operational objectives for the Digital Strategy

## C.13 Key priorities for achieving the ASEAN Digital Masterplan 2025

This section outlines the key priorities and/or country initiatives that Cambodia has identified /is actively developing and implementing that contribute towards achieving the ASEAN Digital Masterplan 2025.

Many of Cambodia's current activities to improve regulatory and policy frameworks and instruments for digital transformation prioritize the ADM high priorities. All of Cambodia's draft laws and regulations encourage inward investment in digital and ICT, as well as the postal and telecommunications sectors. Strong legal foundations create legal certainty and predictability, which creates a favorable environment for investments.

- In an effort to improve connectivity, Cambodia has drafted a Sub-Decree on Infrastructure Sharing which is a "move towards best practice permission and access rights for local and national infrastructure."
- On spectrum, Cambodia is working on a spectrum roadmap that will ensure increased and harmonized spectrum allocation.
- MPTC has initiated a project regarding the establishment of "community technology centers" for the purpose of minimizing the digital divide and increasing rural connectivity. Cambodia's submarine cable project also promotes this.
- Our draft law on cybersecurity law and personal data protection law enable trust through greater and broader use of online security technologies.
- The draft law on cybersecurity will strengthen the Ministry's ability to respond to cybersecurity threats and incidents, thereby improving coordination and cooperation for regional computer incident response teams.
- The draft law on personal data protection addresses the management of protection of data and other data-related activities that could be harmful. The draft law on personal data protection will work towards facilitating cross-border data flows. It also plays a role in promoting consumer protection and rights in relation to e-commerce. On this note, the Royal Government of Cambodia has already passed a Law on E-Commerce and Law on Consumer Protection. These laws also deal with cross-border e-commerce trade as well as the efficient flow of trade documents. MPTC is also establishing a digital signature infrastructure to provide for seamless and secure authentication.
- The draft law on digital government will address the improvement of e-government services and help departments be more productive.

- As regards digital identities, Cambodia has a Sub-Decree on Digital Signature. Moreover, the Digital Government Policy 2022-2035 states under "Strategy 5: Organizing the Governance of Digital Government" that the "Law on Digital Government will establish legal norms regarding the use and management of digital identity."
- The adoption of the verify.gov.kh platform as RGC's document verification platform comports with the high priority on "ensuring citizens ... have the ... motivation to use digital services". It is clearly stated in Sub-Decree 52 dated 03 March 2023 that the platform is intended to make the usage of government documents more convenient, foster trust, save time, and reduce costs.
- Last, the Digital Economy and Society Policy Framework as well as Digital Government Policy, both mentioned above, addresses all of the high importance priorities, including drafting of previously mentioned laws and regulations, and the encouragement and development of digital startups and promotion of skills and digital literacy of citizens, businesses, and government.

In Cambodia, progress is already being made in several areas related to the ADM 2025. However, the areas where Cambodia envisages significant progress being made by 2025 is "Help make key government departments more productive through their internal use of ICT and e-services". Under the Cambodia Digital Government Policy 2022-2035, the Digital Government Committee has been established with the role of leading and coordinating ministries and institutions at the national and sub-national level through their digital transformations.

Table C10: Country priority and/or initiatives corresponding to ADM 2025 DOs and High Priorities EAs

## ADM 2025 DOs and High Priority EAs

Country priority and/or specific country initiatives linked to ADM DOs and EAs

DO1: Actions of ADM 2025 prioritized to speed ASEAN's recovery from COVID-19

#### DO<sub>1</sub>

HP EA 1.1: Make the economic case for prioritizing ADM 2025 actions

DO2: Increase in the quality and coverage of fixed and mobile broadband infrastructure

#### DO2

HP EA 2.1: Encouraging investment in the digital and ICT field

ITU unified Framework: B1, B7, B5

#### DO<sub>2</sub>

HP EA 2.2: Moving towards best practices in permits and access rights for local and national infrastructure including submarine cable repair ITU unified Framework: B6, B1

Draft Sub-Decree on Infrastructure Sharing is available

## DO<sub>2</sub>

HP EA 2.6: Ensuring increased and harmonized spectrum allocation across the region ITU unified Framework: B6, B7

A spectrum roadmap is being developed that will ensure increased and harmonized spectrum allocation

Set up of "community technology centers" for the purpose of minimizing the digital divide and

#### DO<sub>2</sub>

HP EA 2.9: Establishing a centre of excellence for best practice rural connectivity

Submarine cable project

increasing rural connectivity.

ITU unified Framework: B1

## Country priority and/or specific country initiatives linked to ADM DOs and EAs

#### DO3: The delivery of trusted digital services and the prevention of consumer harm

#### DO3

HP EA 3.1: Enabling trust through greater and broader use of online security technologies ITU unified Framework: B4, B7

 Draft law on cybersecurity and draft personal data protection law enable trust through greater and broader use of online security technologies

#### DO<sub>3</sub>

HP EA 3.3: Identifying improvements in legal and regulatory measures on the management and protection of data and other data-related activities that could be harmful ITU unified Framework: B7

Draft law on personal data protection

#### DO<sub>3</sub>

HP EA 3.4: Improve coordination and cooperation for regional computer incident response teams

ITU unified Framework: B4

#### DO<sub>3</sub>

HP EA 3.5: Promote consumer protection and rights in relation to e-commerce ITU unified Framework: B2, B3, B7

 Law on E-Commerce and Law on Consumer Protection. These laws also deal with crossborder e-commerce trade as well as the efficient flow of trade documents.

## DO4: A sustainable competitive market for the supply of digital services

#### DO4

HP EA 4.1: Continue to identify opportunities to harmonise digital regulation to facilitate cross-border data flows

ITU unified Framework: B9

• Draft law on personal data protection

#### DO5: Increase in the quality and use of e-government services

#### DO5

HP EA 5.1: Establish ASEAN wide reporting on the level of use of e-government services in line with ITU requirements

ITU unified Framework: B7

#### DO<sub>5</sub>

HP EA 5.2: Helping make key government departments more productive through their internal use of ICT and e-services

ITU unified Framework: B7

 Draft law on digital government will address the improvement of e-government services and help departments be more productive

#### DO<sub>5</sub>

HP EA 5.3: Explore how to introduce digital identities in each AMS in a way which safeguards civil liberties

ITU unified Framework: B7

## Country priority and/or specific country initiatives linked to ADM DOs and EAs

- MPTC is establishing a digital signature infrastructure to provide for seamless and secure authentication
- Digital identities are addressed in Cambodia's Digital Government Policy 2022-2035, which states under "Strategy 5: Organizing the Governance of Digital Government" that the "Law on Digital Government will establish legal norms regarding the use and management of digital identity." Cambodia also has a Sub-Decree on Digital Signature.

#### DO6: Digital services to connect business and to facilitate cross-border trade

#### DO6

HP EA 6.1: Facilitate compliance and secure the benefits of telecommunications services and electronic commerce in line with relevant ASEAN trade agreements

ITU unified Framework: B9

#### D<sub>06</sub>

HP EA 6.2: Support trade digitalisation through seamless and efficient flow of electronic trade documents (e.g. invoices) and goods within ASEAN

ITU unified Framework: B9

#### DO7: Increased capability for business and people to participate in the digital economy

#### DO7

HP EA 7.3: Develop a framework that encourages the development and growth of digital start-ups in ASEAN

ITU unified Framework: B7

#### DO8: A digitally inclusive society in ASEAN

#### DO8

HP EA 8.1: Ensuring citizens and businesses have the skills and motivation to use digital services ITU unified Framework: B1

Source: ADM 2025 pp. 16-18, based on responses to the stakeholder country questionnaire.

## Appendix D: Indonesia

This section analyses the unified framework indicators, where Indonesia has achieved less than the maximum of points attainable, the country priorities as stated during the stakeholder interviews, as well as the proposed target areas to addressing the identified gaps.

 verify.gov.kh platform as RGC's document verification platform comports with the high priority on "ensuring citizens ... have the ... motivation to use digital services". It is clearly stated in Sub-Decree 52 dated 03 March 2023 that the platform is intended to make the usage of government documents more convenient, foster trust, save time, and reduce costs.

## D.1 Policy and regulatory landscape, priorities, and challenges

#### Landscape

The policy and regulatory landscape in Indonesia's digital and ICT domain is continually evolving to keep up with technological advancements and the need for digital transformation. The Indonesian government has established a comprehensive regulatory framework to govern various aspects of the digital and ICT sectors, encompassing laws such as the Electronic Information and Transactions Act<sup>49</sup>, Presidential Regulation<sup>50</sup>, and Minister of Communication and Informatics Regulation.<sup>51</sup>

Indonesia has implemented various policies and strategic plans to govern different aspects of the digital and ICT sectors. One notable initiative is the Palapa Ring infrastructure Policy, aimed at enhancing connectivity and providing integrated telecommunication infrastructure throughout the country. The Palapa Ring project has successfully improved mobile connectivity in remote Indonesian islands, addressing inequality in network experience. In terms of inclusion and digital literacy, Indonesia has launched programs such as the Indonesia Digital Literacy Program "Gerakan Nasional Literasi Digital" and the Digital Village Development Program. These initiatives aim to enhance digital literacy for 12.4 million people, particularly in remote areas and among low-income groups, and improve access to digital technology at the village level. To ensure consumer protection in electronic transactions, Indonesia has a Consumer Protection Law in place. This law regulates consumer rights and safeguards consumers against unfair business practices. In the area of innovation and entrepreneurship, Indonesia has launched the "Making Indonesia 4.0" plan, which aims to advance the industrial revolution 4.0 through the implementation of digital technology and innovation. Additionally, the 1000 Digital Startups Program supports the growth of the digital startup ecosystem by providing incentives, funding, and access to mentors and markets.

#### **Priorities**

As regards priorities, Indonesia has several long-term programs and strategies outlined in the RENCANA STRATEGIS KEMENTERIAN KOMUNIKASI DAN INFORMATIKA (RENSTRA 2020-2024) to develop ICT infrastructure and national digitalization. The Ministry of Communications and Informatics (Kominfo) leads these programs. Another long-term strategy is the "Making Indonesia 4.0" project, which aims to leverage digital technology and innovation to drive economic growth and competitiveness in various sectors. This strategy is cross-sector and encompasses digital transformation in manufacturing, agriculture, energy, tourism, health, and education. Cybersecurity is also a priority, with the implementation of the Cybersecurity Enhancement Strategy and the focus on protecting ICT infrastructure and sensitive data.<sup>54</sup> Addressing the need for digital talent capacity as a key priority, Indonesia has initiatives such as the Digital Talent Scholarship (DTS) by Kominfo<sup>55</sup>,

<sup>&</sup>lt;sup>49</sup> UU ITE No. 11 Tahun 2008.

<sup>&</sup>lt;sup>50</sup> Peraturan Presiden No. 95 Tahun 2019.

<sup>&</sup>lt;sup>51</sup> Permenkominfo - these regulations cover consumer protection in electronic transactions, network security, technical standards, Private Electronic System Operators (Permenkominfo 5/2020), Governance of Electronic Certification Operations (Permenkominfo 11/2022).

 $<sup>^{52}</sup>$  See articles:  $\frac{https://www.kominfo.go.id/content/detail/3298/sekilas-palapa-ring/0/palapa-ring}{https://www.opensignal.com/2020/11/26/palapa-ring-has-successfully-improved-mobile-connectivity-in-remote-indonesianislands}$ 

<sup>&</sup>lt;sup>53</sup> https://www.kominfo.go.id/content/detail/33924/siaran-pers-no123hmkominfo042021-tentang-menkominfoluncurkan-gerakan-nasional-literasi-digital-untuk-124-juta-masyarakat/0/siaran\_pers

https://bssn.go.id/wp-content/uploads/2018/08/Strategi-Keamanan-Siber-Nasionalsigned.pdf and https://bssn.go.id/kebut-penyusunan-rancangan-perpres-strategi-keamanan-siber-nasional-dan-manajemen-krisis-siber-bssnundang-berbagai-pemangku-kepentingan-keamanan-siber-nasional/

<sup>&</sup>lt;sup>55</sup> The Digital Talent Scholarship (DTS), which provides training opportunities to 100,000 scholarship recipients in 2023.

Kartu Prakerja<sup>56</sup>, and Skills for Jobs by the Coordinating Ministry for Economic Affairs (Kemenko Perekonomian) to focus on skilling, reskilling, and upskilling.<sup>57</sup> To foster the digital economy, Indonesia has implemented policies in the ICT sector with an ecosystem approach that includes device, network, and application aspects. These policies involve changes in TKDN regulations and the simplification of device certification<sup>58</sup>, as well as affirmative policies to incentivize operators.<sup>59</sup>

#### Challenges

On its digital transformation journey, Indonesia must overcome a number of challenges that relate to the disparity between regulation and the pace of technological advancement, the diverse geographical conditions and ensuing challenges for infrastructure provision, as well as digital literacy. The landscape of digital and ICT advancements is evolving at a rapid pace, surpassing the development of regulatory frameworks. This disparity between technological progress and regulatory measures creates challenges in effectively governing and managing digital transformation. In Indonesia, there exist significant gaps in internet access and infrastructure, stemming from diverse geographical conditions, limited electricity supply, varying bandwidth costs across regions (both within and outside Java), as well as the absence of affordable and suitable devices. Furthermore, the lack of local content production and knowledge, including digital literacy, skills, and gender-based disparities, further exacerbate these gaps. Digital literacy poses a significant challenge in Indonesian society, characterized by the widespread dissemination of hoaxes, unequal access to knowledge, and the absence of cohesive policies governing digital literacy programs. Addressing these challenges requires the development of solid and synergistic policies that can effectively bridge the digital divide and enhance digital literacy among the population.

## D.2 Overview of regulatory and policy gaps in the ITU unified framework

In a notable achievement, Indonesia emerges among the transitional frontrunners with regards to digital policy, legal, and governance frameworks for digital transformation. The country's overall unified framework score of 65 per cent surpasses both the Asia-Pacific region and global averages, which stand at 46 per cent and 50 per cent, respectively. This accomplishment indicates that Indonesia is positioned at a transitional level of readiness for embracing digital transformation.

Analysis of 2022 ITU unified framework data and data obtained from a follow-up 2023 questionnaire regarding unified framework gaps sheds light on the specific benchmarks where Indonesia excels and where room for improvement exists. Benchmark 8, Market Rules, stands out as the most advanced, boasting an impressive score of 94 per cent. This high score signifies that Indonesia has established robust regulations and policies governing digital markets, promoting fair competition and fostering innovation. Following closely behind, Benchmark 3, Good Governance, secures a commendable score of 82 per cent. This indicates that Indonesia has implemented effective governance practices to ensure accountability and transparency in the digital sphere.

<sup>&</sup>lt;sup>56</sup> The Kartu Prakerja initiative has already benefited K.4 million individuals, focusing on upskilling and reskilling.

<sup>&</sup>lt;sup>57</sup> https://digitalent.kominfo.go.id/.aka.ms/SfJIndonesia.https://www.prakerja.go.id/

<sup>&</sup>lt;sup>58</sup> https://sdppi.kominfo.go.id/berita-produsen-perangkat-sambut-baik-rancangan-permen-soal-penyederhanaan-sertifi-27-2828 and https://portal.kominfo.go.id/berita/kini/7562

<sup>&</sup>lt;sup>59</sup> https://www.kominfo.go.id/content/detail/11254/siaran-pers-no-211hmkominfo112017-tentang-strategi-pemerintah-indonesiadalam-membangun-ekonomi-digital/0/siaran\_pers

<sup>&</sup>lt;sup>60</sup> https://www.kominfo.go.id/index.php/content/detail/9474/perkembangan-tik-jaditantanganpemerintah/0/berita\_satker

<sup>61</sup> https://elsam.or.id/wpcontent/uploads/2022/03/Kertas-Posisi-CSO-Transformasi-Digital.pdf

<sup>62</sup> https://elsam.or.id/wp-content/uploads/2022/03/Kertas-Posisi-CSO-Transformasi-Digital.pdf

Furthermore, Indonesia has made significant progress in Benchmark 7: Legal Instruments for Digital Markets, with a score of 74 per cent. This implies that Indonesian policymakers see digital solutions as a prerequisite for achieving multiple social and economic development goals underpinned by a robust and diverse set of supporting policies and a high level of policy coherence across the board. The fourth most advanced benchmark is Benchmark 4: Collaborative Governance, where Indonesia achieves a score of 72 per cent. This suggests that the country has established mechanisms for multistakeholder collaboration, enabling effective cooperation among government entities, private sector organizations, and civil society.

In the mid-range of the unified framework, Indonesia demonstrates transitional progress in several benchmarks. Benchmark 1: National Digital Policy Agenda achieves a score of 65 per cent, indicating that the country has developed a comprehensive policy agenda to guide its digital transformation. Benchmark 6: Legal Instruments for ICT/Telecom Markets lags slightly behind with a score of 53 per cent, suggesting the need for further improvement in legal instruments governing the information and communication technology and telecommunications sectors.

Benchmark 9: Regional and International Cooperation and Benchmark 5: Stakeholder Engagement both attain scores of 50 per cent. This indicates that Indonesia has started to engage in regional and international cooperation in the digital sphere and has recognized the importance of involving stakeholders in decision-making processes beyond national borders. However, one area that requires significant attention and development is Benchmark 2: Regulatory Capacity. With a score of only 32 per cent, it is the least developed benchmark. This suggests that Indonesia needs to strengthen its regulatory capacity to effectively enforce digital policies and regulations.

Overall, Indonesia's accomplishments in digital policy, legal, and governance frameworks are commendable. The country's high unified framework score demonstrates its commitment to digital transformation and positions it among the transitional leaders in the region. Nonetheless, there is still room for improvement, particularly in enhancing regulatory capacity to keep pace with the rapidly evolving digital landscape.

## D.3 Benchmark 1: National Digital Policy Agenda

Benchmark 1 "National Digital Policy Agenda" has 15 targets, of which 10 have been met with maximum points. While one target has attained a score of 1, 4 targets have scored 0 points. The total achievement to-date stands at **65 per cent**.

Table D1: Unified framework Benchmark 1 Gaps



#### B1: National Digital Policy Agenda - 65%

Target	Unified framework score	Ongoing initiatives to address gap/s
Is there a developed and operationalized global strategy for youth employment and to implement the Global Jobs Pact of the ILO?	1	
Strategies for targeted groups: Broadband plan/initiative includes to promote the provision of broadband services to youth people	0	
Strategies for targeted groups: Broadband plan/initiative includes to promote the provision of broadband services to persons with disabilities?	0	
Strategies for targeted groups: Broadband plan/initiative includes to promote the provision of broadband services to women and girls	0	



#### B1: National Digital Policy Agenda - 65%

Target	Unified framework score	Ongoing initiatives to address gap/s
Is there a holistic innovation policy or one tailored to the ICT/digital sector?	0	

## D.4 Benchmark 2: Regulatory Capacity

Benchmark 2 "National Digital Policy Agenda" has 17 targets, of which 11 have attained a score of 1, and 6 show a score of 0. The total achievement to-date stands at **32 per cent**.

Table D2: Unified framework Benchmark 2 Gaps



## **B2: Regulatory Capacity – 32%**

Target	Unified framework score	Ongoing initiatives to address gap/s
Separate telecom/ICT regulator	0	
Autonomy in decision making	0	
Accountability	0	
Percentage of diversified funding	0	
Enforcement power	0	
Sanctions or penalties imposed by regulator	0	Permenkominfo 11/2014, and 5/2021 - done by ministry
Traditional mandate: entity in charge of quality of service obligations measures and service quality monitoring	1	Kominfo
Traditional mandate: entity in charge of quality of service obligations measures and service quality monitoring	1	Kominfo
Traditional mandate: entity in charge of interconnection rates and price regulation	1	Kominfo
Spectrum: Entity in charge of radio frequency allocation and assignment	1	Direktorat Jenderal Sumber Daya dan Perangkat Pos dan Informatika (SDPPI) of Kominfo
Entity in charge of Spectrum Monitoring and Enforcement	1	Kominfo
Entity in charge of universal service/access	1	Badan Aksesibilitas Telekomunikasi dan Informasi (BAKTI)
New mandate: entity in charge of broadcasting (radio and TV transmission)	1	Komisi Penyiaran Indonesia (KPI)
New mandate: entity in charge of broadcasting content	1	Kominfo
New mandate: entity in charge of Internet content	1	Kominfo



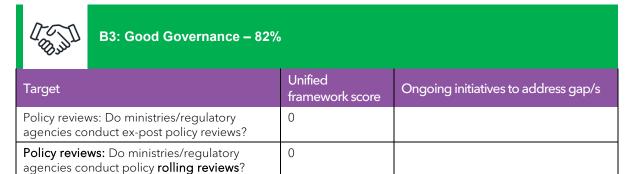
## **B2: Regulatory Capacity – 32%**

Target	Unified framework score	Ongoing initiatives to address gap/s
New mandate: entity in charge of IT	1	Badan Siber dan Sandi Negara (BSSN), Direktorat Jenderal Aplikasi Informatika (Aptika) of Kominfo, Badan Pengkajian dan Penerapan Teknologi (BPPT).
Consumer issues: entity responsible for comparative tariff information, consumer education and handling consumer complaints	1	The entity responsible for providing comparative tariff information, consumer education, and handling consumer complaints: Badan Perlindungan Konsumen Nasional (bpkn), and Kominfo.

## D.5 Benchmark 3: Good Governance

Benchmark 3 "Good Governance" has 11 targets, of which 9 targets have attained the maximum score of 2, and 2 show a score of 0. The total achievement to-date stands at **82 per cent**.

Table D3: Unified framework Benchmark 3 Gaps



### D.6 Benchmark 4: Collaborative Governance

Benchmark 4 "Good Governance" has 16 targets, of which 8 targets have realized the maximum score of 2, 7 attain a score of 1, and 1 shows a score of 0. The total achievement to-date stands at **72 per cent**.

Table D4: Unified framework Benchmark 4 Gaps



## **B4: Collaborative Governance - 72%**

Target	Unified framework score	Ongoing initiatives to address gap/s
Collaboration with (Independent) Spectrum Authority	1	
Collaboration with (Independent) Broadcasting (content) Authority	1	



## B4: Collaborative Governance – 72%

Target	Unified framework score	Ongoing initiatives to address gap/s	
Collaboration with Cyber security agency	1		
Collaboration with (Independent) Data Protection Authority	0		
Collaboration between ICT ministry OR ICT regulator AND Information Society Agency	1		
Collaboration with Energy regulatory Authority	1	Collaboration with energy regulatory authority: The collaboration involves Kementerian Lingkungan Hidup dan Kehutanan (LHK), Kementerian Energi dan Sumber Daya Mineral (ESDM), Kementerian Pertanian, Kementerian Perindustrian, and Kementerian Kelautan and Perikanan (KKP) held a Ministerial Leadership Meeting "Enhancing NDC Indonesia 2022" (https://bsilhk.menlhk.go.id/index.php/2022/08/11/limakementerian-kolaborasi-mencapai-target-ndc/)	
Collaboration with Transport regulatory Authority	1	Collaboration with transport regulatory authority: The collaboration involves the central government (Kemenhub through the Ditjen Perkeretaapian), local governments (Pemkab Tangerang and Pemkab Bogor), PT KAI (Indonesian Railways), and the private sector, specifically PT Agung Podomoro Land Tbk, for the development of Tigaraksa Commuter Line Station. (https://dephub.go.id/post/read/menhubapresiasi-kolaborasi-pemerintah-bumn-swasta-bangunstasiun-tigaraksa-dan-flyovertenjo)	
Collaboration with Postal regulation Authority	1		

## D.7 Benchmark 5: Stakeholder Engagement

Benchmark 5 "Stakeholder Engagement" has 5 targets, of which 2 targets have attained the maximum score of 2, 1 has achieved a score of 1, and 2 show a score of 0. The total achievement to-date stands at **50 per cent**.

Table D5: Unified framework Benchmark 5 Gaps



#### B5: Stakeholder Engagement – 50%

Target	Unified framework score	Ongoing initiatives to address gap/s
Are public consultations designed as a tool to gather feedback from national stakeholders and guide regulatory decision-making?	1	



## **B5: Stakeholder Engagement – 50%**

Target	Unified framework score	Ongoing initiatives to address gap/s
Do codes of conduct exist (voluntary or enforceable/required by regulator)?	0	
Regulatory experimentation: Are there mechanisms for regulatory experimentation?	0	

#### State of play and priorities

Various counterparts have played vital roles in establishing an enabling policy and regulatory environment for digital transformation. The government, led by the Ministry of Communications and Informatics and supported by the Coordinating Ministry for Economic Affairs and other relevant agencies, spearheads the development of supportive policies. Collaborating with the government, the ICT industry, including telecommunications companies, technology firms, and industry associations, contributes to shaping a conducive policy environment.

Research institutions and academia bring valuable insights and perspectives to inform the formulation of policies and regulations in the digital transformation domain. Civil society organizations and non-governmental organizations play a significant role in advocacy and collaboration, ensuring that policy environments are inclusive and equitable.

The private sector, represented by businesses and companies, actively engages in the policymaking process by providing input, sharing experiences, and offering industry perspectives to support digital transformation. Additionally, Indonesia embraces international partnerships, collaborating with international organizations and other countries to exchange experiences, share best practices, and receive support in developing relevant policies and regulations.

## D.8 Benchmark 6: Legal Instruments for ICT/Telecom Markets

Benchmark 6 "Legal Instruments for ICT/Telecom Markets" has 17 targets, of which 9 targets attain a maximum score of 2, and 8 show a score of 0. The total achievement to-date stands at **53 per cent**.

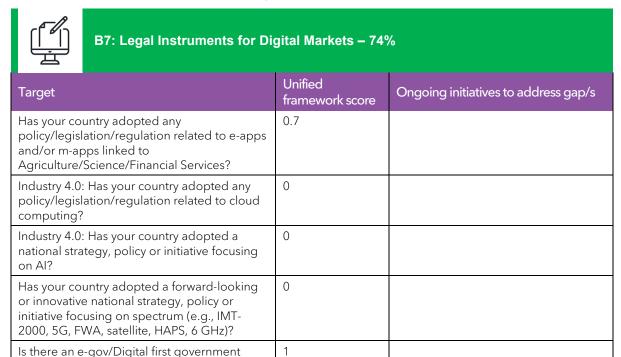
Table D6: Unified framework Benchmark 6 Gaps

B6: Legal Instruments for ICT/Telecom Markets – 53%			
Indicator	Reason for gap	Ongoing initiatives to address gap/s	
Does a National Emergency (Telecommunications) Plan exist?	0		
Types of licenses provided	0		
License exempt	0		
Infrastructure sharing for mobile operators permitted	0		
Unbundled access to the local loop required	0		
Secondary trading allowed	0		
Number portability available to consumers and required from fixed-line operators	0		
Number portability available to consumers and required from mobile operators	0		

## D.9 Benchmark 7: Legal Instruments for Digital Markets

Benchmark 7 "Legal Instruments for Digital Markets" has 16 targets, of which 11 targets show the maximum score of 2, one shows a score of 1, one shows a score of 0.7, and 3 show a score of 0. The total achievement to-date stands at **74 per cent**.

Table D7: Unified framework Benchmark 7 Gaps



#### D.10 Benchmark 8: Market Rules

National e- government strategy or

equivalent?

Benchmark 8 "Market Rules" has 17 targets, of which 15 targets show the maximum score of 2, and 2 show a score of 1. The total achievement to-date stands at **94 per cent**.

Table D8: Unified framework Benchmark 8 Gaps

	B8: Market Rules – 94%		
Target		Unified framework score	Ongoing initiatives to address gap/s
Status of the	e main fixed line operator	1	Partially private/privatized incumbent
Are there regulatory incentives targeted at network operators or other digital market players?		1	Some initiatives exist

## D.11 Benchmark 9: Regional and International Cooperation

Benchmark 9 "Regional and International Cooperation" has 5 targets, of which 2 targets show the maximum score of 2, and 1 achieves a score of 1, and 2 realize a score of 0. The total achievement todate stands at **50 per cent**.

Table D9: Unified framework Benchmark 9 Gaps



## B9: Regional and International Cooperation - 50%

Target	Unified framework score	Ongoing initiatives to address gap/s
Has your country signed or ratified a regional or international instrument related to cybersecurity?	0	
Has your country signed on international agreements determining jurisdiction and/or managing cross border flows on data privacy?	1	
Has your country signed or ratified the Tampere convention for communications in emergency situations?	0	

# D.12 Proposed country target areas to addressing unified framework regulatory and policy gaps

This Section sets out proposed target areas identified based on unified framework 2022 data and updates made based on self-reported information from the questionnaire response to addressing the regulatory gaps.

Areas that could benefit from review and/or revision are set out in Figure 19 include Benchmark 2 Regulatory Capacity, in particular as regards the institutional governance structure towards best practice processes and tools to advance policy goals towards digital transformation. Moreover, Benchmark 5 Stakeholder Engagement could benefit from review in the areas of consultation design and mechanisms, codes of conduct and regulatory experimentation. In the area of Regional and International Cooperation (Benchmark 9), consideration could be given to ratifying the Budapest and the Tampere convention. As regards Legal Instruments for ICT/Telecom Markets (Benchmark 6), the licensing regime as well as key measures such as infrastructure sharing and secondary spectrum trading for mobile operators could be examined. To foster competition, the introduction of number portability could be assessed. Although much progress has been made in the area of Legal instruments for Digital Markets, important policies or strategies that are currently not in place in Indonesia, but that are essential for the future and should be on every regulator's mind include a policy or strategy on Cloud computing, on Al and a forward-looking strategy on spectrum.

Figure 20: Overview of Priority areas to address unified framework gaps

Proposed target areas

B2: Regulatory
Capacity (32%)

B5: Stakeholder
Engagement (50%)

Proposed target areas

Proposed target areas

Proposed target areas

Review and consider revision of institutional governance structure towards best practice processes and tools (independent regulator, accountability, enforcement power, autonomy, funding, sanctions, and penalty mechanisms)

Consultation design and mechanisms, Codes of Conduct, Regulatory experimentation

Lowest scoring unified framework Benchmark

## Proposed target areas

B9: Regional and International Cooperation (50%)

- Consider the ratification of a regional or international instrument related to cybersecurity?
- Consider the ratification of the Tampere Convention for communications in emergency situations

B6: Legal Instruments for ICT/Telekom Markets (53%)

- Licensing regime
- Infrastructure sharing for mobile operators
- Number portability
- Secondary spectrum trading

B1: National Digital Policy Agenda (65%)

- Consider developing Broadband Strategies for targeted groups as part of the National Broadband Plan, including women and girls, persons with disabilities and youth
- Consider developing a holistic innovation policy or one tailored to the ICT/digital sector

## D.13 Key priorities for achieving the ASEAN Digital Masterplan 2025

Indonesia has many activities and initiatives that aim to achieve the high priorities as stipulated in the ADM 2025. These are set out in the table below.

The area that Indonesia envisages to be making **most progress by 2025** is ensuring citizens and businesses have the skills and motivation to use digital services. Kominfo's initiatives to increase digital literacy include Digital Talent Scholarship and the National Movement for Digital Literacy.

Table D10: Country Initiatives corresponding to ADM 2025 DOs High Priorities

ADM 2025 DOs and High Priority EAs Country priority and/or specific country initiatives linked to ADM DOs and EAs

DO1: Actions of ADM 2025 prioritized to speed ASEAN's recovery from COVID-19

DO1

HP EA 1.1: Make the economic case for prioritizing ADM 2025 actions

## DO2: Increase in the quality and coverage of fixed and mobile broadband infrastructure

DO<sub>2</sub>

HP EA 2.1: Encouraging investment in the digital and ICT field

ITU unified Framework: B1, B7, B5

- Providing incentives and facilities to attract investment in the digital sector (for example: Tax Holiday program that provides tax incentives to eligible technology companies, as well as expedited and simplified permit and licensing processes through the Online Single Submission (OSS) program)
- Increasing collaboration with the private sector to promote investment in digital technology. (for example: 1000 Digital Startup program)

## Country priority and/or specific country initiatives linked to ADM DOs and EAs

- Establishing innovation centers and start-up incubators to foster growth in the digital industry. (for example: KIBAR (Kreative Indonesia Berbasis Teknologi), which is a startup incubator in Jakarta, as well as various innovation centers such as Bandung Techno Park and Jogja Digital Valley that support the development of digital businesses and technological innovation.). Source: <a href="https://1000startupdigital.id/">https://1000startupdigital.id/</a>
- https://investindonesia.go.id/id/artikelinvestasi/detail/prosedur-baru-tax-holiday
   https://www.kominfo.go.id/index.php/content/detail/7720/ger akan-seribu-startup-digital-resmi-dimulai/0/sorotan\_media https://btp.or.id/ https://gudeg.net/direktori/4972/jogja-digital-valley.html

#### DO<sub>2</sub>

HP EA 2.2: Moving towards best practices in permits and access rights for local and national infrastructure including submarine cable repair

ITU unified Framework: B6, B1

- Simplifying the licensing process for digital infrastructure. (for example Online Single Submission [OSS] program)
- Improving access to telecommunications infrastructure in remote or rural areas. (for example Palapa Ring program)
   Source: <a href="https://www.opensignal.com/2020/11/26/palapa-ring-has-successfully-improved-mobile-connectivity-in-remoteindonesianIslands">https://www.opensignal.com/2020/11/26/palapa-ring-has-successfully-improved-mobile-connectivity-in-remoteindonesianIslands</a>
   <a href="https://oss.go.id/">https://oss.go.id/</a> Draft Sub-Decree on Infrastructure Sharing is available

#### DO<sub>2</sub>

HP EA 2.6: Ensuring increased and harmonized spectrum allocation across the region

ITU unified Framework: B6, B7

- Developing a sustainable and equitable spectrum allocation plan across Indonesia. (for example: The Indonesian government through the Ministry of Communication and Informatics (Kominfo) has developed a spectrum allocation plan that is sustainable and fair) source <a href="https://balmonsemarang.postel.go.id/wp-content/uploads/2022/06/20211007195057-Renstra-Ditjen-SDPPI-2020-2024.pdf">https://balmonsemarang.postel.go.id/wp-content/uploads/2022/06/20211007195057-Renstra-Ditjen-SDPPI-2020-2024.pdf</a>
- Enhancing coordination between regulators and telecommunications operators for optimal spectrum utilization. (The Indonesian government continues to work on improving coordination with telecommunications operators in terms of optimal spectrum utilization)A spectrum roadmap is being developed that will ensure increased and harmonized spectrum allocation

#### DO2

HP EA 2.9: Establishing a centre of excellence for best practice rural connectivity

ITU unified Framework: B1

• Implementing programs to develop telecommunications infrastructure in rural areas. (one of the example is the implementation of the Village Internet Service (Bumdes), Palapa Ring project, the USO program, and Desa Broadband Terpadu program by the Ministry of Communications and Informatics [Kominfo])

#### DO3: The delivery of trusted digital services and the prevention of consumer harm

#### DO<sub>3</sub>

HP EA 3.1: Enabling trust through greater and broader use of online security technologies

ITU unified Framework: B4, B7

Pass laws on personal data protection (Undang-Undang Nomor 27 Tahun 2022 and drafting Rancangan Peraturan Presiden Strategi Keamanan Siber Nasional (SKSN) and Manajemen Krisis Siber)

#### DO<sub>3</sub>

HP EA 3.3: Identifying improvements in legal and regulatory measures on the management and protection of data and other data-related activities that could be harmful ITU unified Framework: B7

#### DO<sub>3</sub>

HP EA 3.4: Improve coordination and cooperation for regional computer incident response teams ITU unified Framework: B4

#### DO<sub>3</sub>

HP EA 3.5: Promote consumer protection and rights in relation to e-commerce

ITU unified Framework: B2, B3, B7

## Country priority and/or specific country initiatives linked to ADM DOs and EAs

- Formulating regulations on consumer protection in online transactions (for example UU ITE Pasal 28 ayat (1))
- Promoting education and awareness among consumers regarding their rights in ecommerce. (for example one example is the ministry of trade of the Republic of Indonesia (Kemendag) conducting Socialization of Trade Policy Through Electronic Systems, regarding PP Nomor 80 tahun 2019)Draft law on personal data protection

#### DO4: A sustainable competitive market for the supply of digital services

#### DO<sub>4</sub>

HP EA 4.1: Continue to identify opportunities to harmonise digital regulation to facilitate cross-border data flows

ITU unified Framework: B9

#### DO5: Increase in the quality and use of e-government services

#### DO<sub>5</sub>

HP EA 5.1: Establish ASEAN wide reporting on the level of use of egovernment services in line with ITU requirements

ITU unified Framework: B7

## DO<sub>5</sub>

HP EA 5.2: Helping make key government departments more productive through their internal use of ICT and e-services

ITU unified Framework: B7

#### DO<sub>5</sub>

HP EA 5.3: Explore how to introduce digital identities in each AMS in a way which safeguards civil liberties

ITU unified Framework: B7

Developing e-government systems to expedite government administrative processes. (for example MANTRA application, Office administration MAYA (siMAYA), Government employees Mail (PNSMail), Private Network Security Box (PNSBox))

## Country priority and/or specific country initiatives linked to ADM DOs and EAs

### DO6: Digital services to connect business and to facilitate cross-border trade

#### DO6

HP EA 6.1: Facilitate compliance and secure the benefits of telecommunications services and electronic commerce in line with relevant ASEAN trade agreements

ITU unified Framework: B9

#### DO6

HP EA 6.2: Support trade digitalisation through seamless and efficient flow of electronic trade documents (e.g. invoices) and goods within ASEAN ITU unified Framework: B9

DO7: Increased capability for business and people to participate in the digital economy

#### DO7

HP EA 7.3: Develop a framework that encourages the development and growth of digital start-ups in ASEAN

ITU unified Framework: B7

## DO8: A digitally inclusive society in ASEAN

#### **DO8**

HP EA 8.1: Ensuring citizens and businesses have the skills and motivation to use digital services ITU unified Framework: B1  Implementing digital skills training programs for the general public. (for example Digital Talent Scholarship, Skills For Jobs, and Kartu Prakerja program)

Source: ADM 2025 pp. 16-18, response to the stakeholder country questionnaire.

## Appendix E: Lao P.D.R.

This section presents Lao P.D.R.'s policy and regulatory landscape, priorities and challenges as stated in the partial questionnaire response and based on desk research. It also analyses the ITU unified framework targets achieved by benchmark, where Lao P.D.R. has achieved less than the maximum of points attainable and outlines the proposed target areas to addressing the identified gaps.

## E.1 Policy and regulatory landscape, priorities, and challenges

#### Landscape

The ICT policy and regulatory environment in Laos is undergoing a transformation, as the government is fully committed to driving economic growth through the rapid development of the digital economy. The Digital Economy Strategy (2021-2030) and the National Digital Economy Development Plan (2021-2025) play crucial roles in fostering productivity enhancements by encouraging digital transformation in both public administration and the private sector.

Laos has already taken noteworthy strides towards embracing a digital future. Over 98 percent of the population now have access to telecom infrastructures, with approximately one million Lao individuals using mobile banking services. Additionally, digital startups are on the rise in the capital city, venturing into various sectors such as food delivery, e-commerce, and ride-hailing services. To expedite digital adoption and enhance government processes, a number of e-government applications and platforms have been developed across all levels of administration, including video conferencing and messaging applications. In response to the pandemic, the government introduced the LaoKYC (Lao Susu) application to manage digital vaccination certificates and passports, while the Khang Panya Lao digital educational platform successfully mitigated learning disruptions for 90,000 primary and pre-primary pupils during the COVID-19 crisis. Furthermore, the government has implemented supportive laws and regulations to bolster the digital economy and has made investments in data centers and cloud infrastructure. <sup>63</sup>

#### **Priorities**

Lao P.D.R.'s main priorities revolve around two key areas: institutional reform and the modernization of the legal and regulatory framework. These efforts aim to pave the way for enhanced infrastructure development, the digitalization of government services, and wider public engagement in the digital economy. As part of this modernization process, the government has already taken steps to update obsolete laws, with newer ones like the Law on Electronic Data Protection (2017) and the Law on Digital Signature (2018) reflecting the growing significance of digital services.

Additionally, the government has made a commitment to the ASEAN Work Programme on Electronic Commerce (AWPEC) for the period 2017-2025. By participating in this program, Lao P.D.R. aims to facilitate cross-border e-commerce within the region and establish connections to larger markets, benefiting its economy and trade prospects.<sup>64</sup>

#### Challenges

The majority of the population lacks mobile broadband subscriptions, and cash payments are still the predominant mode of transactions, while government offices continue to rely on paper archives without digitization. The absence of a comprehensive government digitalization strategy has led to isolated systems and processes. Additionally, the legal and regulatory framework for the digital economy requires further enhancement, especially concerning data protection.

The main hurdles consist of insufficient ICT infrastructure due to the absence of enabling legal and regulatory measures, as well as a lack of clarity regarding the implementation of existing laws and regulations. These issues are particularly evident in areas such as licensing, interconnection, competition management, tariffs, and Universal Service. Furthermore, several aspects remain unregulated, including wholesale access and infrastructure sharing, number portability, roaming, consumer protection, and quality of service.

## E.2 Overview of regulatory and policy gaps

A comprehensive assessment of its digital policy, legal, and governance frameworks based on 2022 ITU unified framework data and a partial questionnaire response reveals an overall unified framework score of 38 per cent, below the regional average of 46 per cent and the global average of 50 per cent. This indicates that Lao P.D.R. is still in the process of establishing the necessary readiness for digital transformation.

Delving deeper into the analysis, it becomes apparent that certain benchmarks of digital development in Lao P.D.R. are more advanced than others. Topping the list is Benchmark 4: Collaborative Governance, which achieves a notable score of 66 per cent. This indicates that efforts to foster cooperation and collaboration among various stakeholders in the digital domain have been successful, paving the way for more effective policy implementation.

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<sup>&</sup>lt;sup>63</sup> https://thedocs.worldbank.org/en/doc/c01714a0bc2ca257bdfe8f3f75a64adc-0070062022/original/Positioning-The-Lao-PDR-for-a-Digital-Future-11-10-22.pdf

<sup>&</sup>lt;sup>64</sup> Ibid.

Following closely behind is Benchmark 6: Legal Instruments for ICT/Telecom Markets, and Benchmark 1: National Digital Policy Agenda, both achieving a score of 47 per cent. These benchmarks highlight Lao P.D.R.'s commitment to creating a supportive legal and policy environment for the growth of ICT and telecommunications markets within the country.

Benchmark 2: Regulatory Capacity, with a score of 35 per cent, demonstrates moderate progress. While it indicates that Lao P.D.R. has made some headway in developing regulatory frameworks, further efforts are needed to strengthen its capacity to enforce and oversee these regulations effectively.

On the other hand, Benchmarks 5, 8, 3, 9, and 7 exhibit limited progress, with scores ranging from 30 per cent to 19 per cent. Benchmark 5: Stakeholder Engagement, at 30 per cent, indicates that involving all relevant actors in the digital ecosystem remains a challenge. Benchmark 8: Market Rules and Benchmark 3: Good Governance follows closely behind with scores of 28 per cent and 23 per cent respectively, pointing to the need for more robust market regulations and improved governance practices.

Benchmark 9: Regional and International Cooperation achieves a score of 20 per cent, reflecting the relatively low level of collaboration with regional and international partners in the digital realm. Lastly, Benchmark 7: Legal Instruments for Digital lags behind with a score of 22 per cent, signaling the necessity for strengthened legal frameworks to address the evolving challenges of the digital age.

The results of this analysis provide a clear roadmap for Lao P.D.R. to prioritize its efforts in building a solid foundation for digital transformation. By focusing on enhancing stakeholder engagement, market rules, good governance, regional and international cooperation, and legal instruments, Lao P.D.R. could accelerate its journey towards a more robust digital ecosystem that aligns with the rapidly advancing digital landscape of the Asia-Pacific region and the world.

## E.3 Benchmark 1: National Digital Policy Agenda

Benchmark 1 "National Digital Policy Agenda" has 15 targets, of which 7 have been met with maximum points. 1 target achieves a score of 1, and 6 targets have a score of 0 points. The total achievement to-date stands at **47 per cent**.

Table E1: Unified framework Benchmark 1 Gaps



#### B1: National Digital Policy Agenda – 47%

Target	Unified framework score
National plan that involves broadband	0
Is the digital strategy SDG-oriented OR has mention of SDGs or other international development goals (e.g., MDGs, WSIS goals, EU Strategic objectives)?	0
Is there a developed and operationalized global strategy for youth employment and to implement the Global Jobs Pact of the ILO?	1
Strategy design and implementation: The digital strategy has mechanisms for implementation/operational objectives?	0
<b>Strategies for targeted groups:</b> Broadband plan/initiative includes to promote the provision of broadband services to <b>youth people</b>	0
Strategies for targeted groups: Broadband plan/initiative includes to promote the provision of broadband services to persons with disabilities?	0
<b>Strategies for targeted groups:</b> Broadband plan/initiative includes to promote the provision of broadband services to <b>women and girls</b>	0
Digital Skills: Has the Fund financed projects for connecting schools (primary, secondary, post-secondary, universities, specialized training, institutions, etc.) or Multi-purpose telecenters?	0

## E.4 Benchmark 2: Regulatory Capacity

Benchmark 2 "National Digital Policy Agenda" has 17 targets, of which 1 has attained a maximum score of 2, 10 show a score of 1, and 6 have attained a score of 1.5. The total achievement to-date stands at 35 per cent.

Table E2: Unified framework Benchmark 2 Gaps



#### B2: Regulatory Capacity - 35%

Unified framework score
0
0
0
0
0
0
1
1
1
1
1
1
1
1
1
1

## State of play and priorities

The development of the telecommunications and internet industries, as well as digital transformation, offer major opportunities for our organization, the Lao Telecommunications Regulatory Authority (LTRA), to strengthen our regulatory capacity. As a result, the priority goal of our duty and work is to govern policies, legislation and principles to assist regulators, stakeholders and telecom providers in managing the telecommunications and internet sector, such as the policy of approving licensing and numbering for telecommunications and internet providers, the rule for the standard of consideration for the parameters of KPR for QoS and QoE works, and the principle for pricing design and so on. Referring to the economic master plan of Lao PDR, we have urgent short-term goals until the year 2025 such as: completing the decree on telecommunication development and digital transformation funds; the strategic plan in order to develop the telecommunication and internet sectors; and creating he system for number registration.

## Challenges to addressing gaps

The main challenges to developing and strengthening our regulatory capacity are lack of human resources and technical issues, a limited budget for improving service quality in the telecommunications and internet industries, and documents regarding references from national and international organizations.

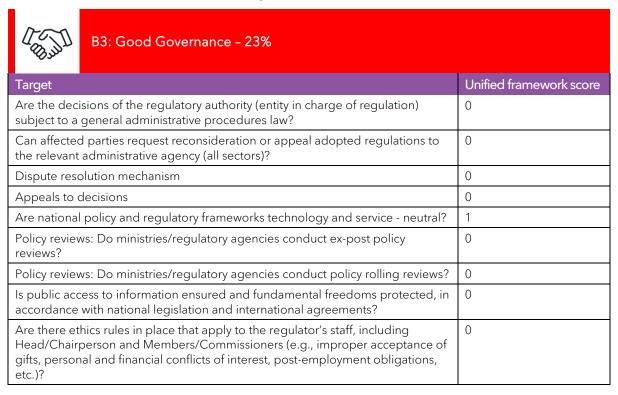
Lao P.D.R. sees most room for maneuver in improving the current gaps on:

- New Mandate: Entity in charge of Internet content
- Traditional Mandate: Entity in charge of interconnection rates and price regulation
- Traditional Mandate: Entity in charge of Quality of Service Obligations measures and service quality monitoring.

#### E.5 Benchmark 3: Good Governance

Benchmark 3 "Good Governance" has 11 targets, of which 2 targets have attained the maximum score of 2, 1 shows a score of 1, and 8 show a score of 0. The total achievement to-date stands at **23 per cent**.

Table E3: Unified framework Benchmark 3 Gaps



#### E.6 Benchmark 4: Collaborative Governance

Benchmark 4 "Good Governance" has 16 targets, of which 7 targets realize the maximum score of 2, 7 attain a score of 1, and 2 show a score of 0. The total achievement to-date stands at **66 per cent**.

Table E4: Unified framework Benchmark 4 Gaps



## B4: Collaborative Governance - 66%

Target	Unified framework score
Collaboration with (Independent) Spectrum Authority	1
Collaboration with Cyber security agency	1
Collaboration with (Independent) Data Protection Authority	1
Collaboration between ICT ministry OR ICT regulator AND Information Society Agency	1



#### B4: Collaborative Governance - 66%

Target	Unified framework score
Collaboration with (Independent) Finance Regulator	0
Collaboration with Energy regulatory Authority	0
Collaboration with (Independent) Competition Authorities	1
Collaboration with Postal regulation Authority	1
Collaboration with (Independent) Consumer Protection Authority	1

## E.7 Benchmark 5: Stakeholder Engagement

Benchmark 5 "Stakeholder Engagement" has 5 targets, of which 1 target has attained the maximum score of 2,1 achieves a score of 1, and 3 score 0 points. The total achievement to-date stands at **30 per cent**.

Table E5: Unified framework Benchmark 5 Gaps

	B5: Stakeholder Engagement - 30%	
Target		Unified framework score
Public consu	ıltations mandatory before decisions	0
Are public consultations designed as a tool to gather feedback from national stakeholders and guide regulatory decision-making?		1
Do codes of	conduct exist (voluntary or enforceable/required by regulator)?	0
Regulatory e inclusion?	experimentation: Are there regulatory sandboxes for digital financial	0

## E.8 Benchmark 6: Legal Instruments for ICT/Telecom Markets

Benchmark 6 "Legal Instruments for ICT/Telecom Markets" has 17 targets, of which 7 targets attain a maximum score of 2, 2 achieves a score of 1, and 8 show a score of 0. The total achievement to-date stands at 47 per cent.

Table E6: Unified framework Benchmark 6 Gaps



#### B6: Legal Instruments for ICT/Telecom Markets - 47%

Target	Unified framework score
Does a regulatory framework exist for ICT accessibility for persons with disabilities?	0
Does a National Emergency (Telecommunications) Plan exist?	0
Infrastructure sharing: Does an official register or a mapping exist in your country of all telecommunication/ICT infrastructure?	0
Types of licenses provided	1
Licenses exempt	0
Infrastructure sharing mandated	0



#### B6: Legal Instruments for ICT/Telecom Markets - 47%

Target	Unified framework score
Co-location/site sharing mandated	0
Secondary trading allowed	0
Number portability available to consumers and required from fixed-line operators	1
Individual users allowed to use VoIP	0

## E.9 Benchmark 7: Legal Instruments for Digital Markets

Benchmark 7 "Legal Instruments for Digital Markets" has 16 targets, of which 3 targets show the maximum score of 2, one shows a score of 1, and 12 show a score of 0. The total achievement to-date stands at 22 per cent.

Table E7: Unified framework Benchmark 7 Gaps

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## B7: Legal Instruments for Digital Markets - 22%

<b>—</b>			
Target	Unified framework score	Ongoing initiatives to address gap/s	
Has your country adopted any policy/legislation/regulation related to e-apps and/or m-apps linked to Agriculture/Science/Financial Services?	0	Work in progress	
Industry 4.0: Does it includes a strategy, policy or initiative focusing on IoT? Or applied any measure regarding spectrum management and availability for IoT?	0		
Industry 4.0: Has your country adopted any policy/legislation/regulation related to cloud computing?	0		
Industry 4.0: Has your country adopted a national strategy, policy or initiative focusing on AI?	0		
Has your country adopted a forward-looking or innovative national strategy, policy or initiative focusing on spectrum (e.g., IMT-2000, 5G, FWA, satellite, HAPS, 6 GHz)?	0		
Is there a digital identity framework in place?	0	Currently there is none. But it was defined in one of the initiatives in the National Economic Development Plan and the digital government centre have proposed to the Minister of Technology and communications to approve the appointment of a committee responsible for researching the Digital ID Development Plan of the Lao PDR.	
Is there an e-gov/Digital first government National e-government strategy or equivalent?	1	Strategic plan of digital government development is already available, which is part	



## B7: Legal Instruments for Digital Markets - 22%

Target	Unified framework score	Ongoing initiatives to address gap/s
		of the national digital economy development plan and is currently drafting a specific digital government master plan which is expected to be completed by the end of 2023.
Has your country adopted e-waste regulations or e- waste management standards?	0	Work in progress
Is there a legislation/regulation for child online protection?	0	
Public services: Has your country adopted any policy/legislation/regulation related to Smart Cities?	0	
Public services: Has your country adopted any policy/legislation/regulation related to e-Health or Smart Health?	0	
Public services: Has your country adopted any policy/legislation/regulation related to eapplications and/or m-applications on Education and Learning?	0	
Are there any cross-sector (ICT and other) infrastructure sharing or fibre co-deployment regulations/agreements/promotion initiatives in your country?	0	

## E.10 Benchmark 8: Market Rules

Benchmark 8 "Market Rules" has 17 targets, of which 1 target shows the maximum score of 2, 7 show a score of 1, 1 shows a score of 0.6, and 8 show a score of 0. The total achievement to-date stands at **28 per cent**.

Table E8: Unified framework Benchmark 8 Gaps

B8: Market Rules - 28%	
Target	Unified framework score
Level of competition in local and long distance (domestic and international) fixed line services	1
Level of competition in IMT (3G, 4G, etc.) services	1
Level of competition in cable modem, DSL, fixed wireless broadband	0.67
Level of competition in leased lines	0
Level of competition in International Gateways	0
Status of the main fixed line operator	1
Criteria used in determining dominance or SMP	1
Foreign participation/ownership in facilities-based operators	0
Foreign participation/ownership in spectrum-based operators	0
Foreign participation/ownership in local service operators/long-distance service	1



## B8: Market Rules - 28%

Target	Unified framework score
operators	
Foreign participation/ownership in international service operators	1
Foreign participation/ownership in Internet Service Providers (ISPs)	0
Foreign participation/ownership in value-added service providers	0
Is there a forward-looking competition policy, law or regulation applied to digital markets?	0
Are telecom/digital sector players and Internet services exempt from specific taxes?	0
Are there regulatory incentives targeted at network operators or other digital market players?	1

## E.11 Benchmark 9: Regional and International Cooperation

Benchmark 9 "Regional and International Cooperation" has 5 targets, of which 1 target shows the maximum score of 2, and 4 achieve a score of 0. The total achievement to-date stands at **20 per cent**.

Table E9: Unified framework Benchmark 9 Gaps



## B9: Regional and International Cooperation - 20%

Target	Unified framework score
Has your country have made commitment to facilitate trade in telecommunications services?	0
Has your country signed or ratified a regional or international instrument related to cybersecurity?	0
Has your country signed on international agreements determining jurisdiction and/or managing cross border flows on data privacy?	0
Has your country signed or ratified the Tampere convention for communications in emergency situations?	0

## E.12 Proposed target areas to addressing regulatory and policy gaps

This Section sets out proposed target areas identified based on unified framework 2022 data and updates made based on self-reported information from the questionnaire response to addressing the regulatory gaps.

Figure 21: Overview of proposed target areas to address unified framework gaps

Lowest scoring unified framework Benchmark

## Proposed target areas

B9: Regional International Cooperation (20%)

- Ratification of a regional or international instrument related to cybersecurity?
- Ratification of Tampere Convention for communications in emergency situations

Lowest scoring unified framework Benchmark	Proposed target areas	
	<ul> <li>Advance commitments to facilitate trade in telecommunication services</li> <li>Consider signing on and implementing international cross-border data management agreements</li> <li>Advance the introduction of cross-sector (ICT and other)</li> </ul>	
B7: Legal Instruments for Digital Markets (22%)	<ul> <li>infrastructure sharing or fibre co-deployment regulations/agreements/promotion initiatives in your country</li> <li>Consider developing Child Online Protection policy/Regulation/legislation</li> <li>Assess the development of policy/legislation/regulation related to public service e-applications and/or m-applications on Education and Learning</li> <li>Evaluate the development of policy for e-Health or Smart Health, and for Smart Cities</li> <li>Assess the development of e-waste regulations or management standards</li> </ul>	
	<ul> <li>Advance on the e-government strategy</li> <li>Consider the development and introduction of a digital identity framework</li> <li>Consider the introduction of a forward looking or innovative national spectrum strategy/policy</li> <li>Consider developing legislation in relation to IoT, AI and Cloud Computing</li> <li>Consider the adoption of policy/legislation/regulation related to e-apps and/or m-apps linked to Agriculture/Science/Financial Services</li> </ul>	
B8: Market Rules (28%)	<ul> <li>Development/Implementation of a forward-looking competition policy for digital markets</li> <li>Introducing regulatory incentives targeted at network operators or other digital market players</li> <li>Review of rules concerning foreign participation for all types of services</li> <li>Review of the ownership status of the fixed line operator</li> <li>Rules to improve the level of competition for different services</li> <li>Review and develop criteria for dominance or SMP</li> <li>Review taxes imposed on the telecom/digital sector or Internet services</li> </ul>	

Lowest scoring unified framework Benchmark	Proposed target areas
B3: Good Governance (23%)	<ul> <li>Review rules for public access to information</li> <li>Consider the implementation of rights to appeal decisions</li> <li>Review policies and the regulatory framework regarding aspect of technology and service neutrality</li> <li>Consider introducing ethics rules that apply to the regulator's staff, including Head/Chairperson and Members/Commissioners (e.g., improper acceptance of gifts, personal and financial conflicts of interest, post-employment obligations, etc.)</li> <li>Assess how public access to information is ensured and fundamental freedoms protected, in accordance with national legislation and international agreements</li> <li>Conduct ex-post and rolling policy reviews</li> <li>Introduce a formal requirement for Regulatory Impact Assessment</li> <li>Subject regulatory decisions to general administrative procedures law</li> <li>Allow for appeals of adopted regulations by affected parties to a relevant administrative agency (all sectors)</li> </ul>
B5: Stakeholder Engagement (30%)	<ul> <li>Consider making public consultations mandatory before regulatory decisions</li> <li>Review the design of public consultations to be a tool to gather feedback from national stakeholders and guide regulatory decision-making</li> <li>Assess the implementation of regulatory experimentation in the area of regulatory sandboxes for financial services</li> <li>Consider the introduction of Codes of Conduct</li> </ul>
B2: Regulatory Capacity (35%)	<ul> <li>Consider the development of an official register or mapping of all telecommunications/ICT infrastructure</li> <li>Consider the creation of a national Emergency Telecommunications Plan</li> <li>Review the types of licenses available</li> <li>Consider the development of a regulatory framework for ICT accessibility for persons with disabilities</li> <li>Consider the possibility of secondary trading</li> <li>Address fixed and mobile number portability</li> <li>Review status of telecom/ICT regulator</li> <li>Assess existing autonomy in decision making, accountability and enforcement power</li> <li>Review the percentage of diversified funding/regulatory budget</li> <li>Consider the introduction of sanctions or penalties by the regulator</li> <li>Review and consider revising the traditional and new regulatory mandates</li> </ul>

## E.13 Key priorities for achieving the ASEAN Digital Masterplan 2025

This section outlines the key priorities that Lao P.D.R. has identified for digital transformation towards achieving the ASEAN Digital Masterplan 2025.

Table E10: Country priority and/or initiatives corresponding to ADM 2025 DOs and High Priorities EAs

Country priority and/or specific country initiatives linked to ADM DOs and EAs

#### DO1: Actions of ADM 2025 prioritized to speed ASEAN's recovery from COVID-19

DO<sub>1</sub>

HP EA 1.1: Make the economic case for prioritizing ADM 2025 actions

• No information provided

#### DO2: Increase in the quality and coverage of fixed and mobile broadband infrastructure

DO2

HP EA 2.1: Encouraging investment in the digital

and ICT field

ITU unified Framework: B1, B7, B5

No information provided

DO2

HP EA 2.2: Moving towards best practices in permits and access rights for local and national infrastructure including submarine cable repair

ITU unified Framework: B6, B1

No information provided

DO2

HP EA 2.6: Ensuring increased and harmonized spectrum allocation across the region

ITU unified Framework: B6, B7

No information provided

DO<sub>2</sub>

HP EA 2.9: Establishing a centre of excellence for

best practice rural connectivity ITU unified Framework: B1

No information provided

#### DO3: The delivery of trusted digital services and the prevention of consumer harm

DO<sub>3</sub>

HP EA 3.1: Enabling trust through greater and broader use of online security technologies

ITU unified Framework: B4, B7

No information provided

DO3

HP EA 3.3: Identifying improvements in legal and regulatory measures on the management and protection of data and other data-related activities that could be harmful

ITU unified Framework: B7

No information provided

DO<sub>3</sub>

HP EA 3.4: Improve coordination and cooperation for regional computer incident response teams

ITU unified Framework: B4

No information provided

DO3

HP EA 3.5: Promote consumer protection and rights in relation to e-commerce

ITU unified Framework: B2, B3, B7

No information provided

Country priority and/or specific country initiatives linked to ADM DOs and EAs

#### DO4: A sustainable competitive market for the supply of digital services

DO4

HP EA 4.1: Continue to identify opportunities to harmonise digital regulation to facilitate cross-border data flows

ITU unified Framework: B9

• No information provided

#### DO5: Increase in the quality and use of e-government services

DO<sub>5</sub>

HP EA 5.1: Establish ASEAN wide reporting on the level of use of e-government services in line with ITU requirements

ITU unified Framework: B7

DO<sub>5</sub>

HP EA 5.2: Helping make key government departments more productive through their internal use of ICT and e-services

ITU unified Framework: B7

DO5

HP EA 5.3: Explore how to introduce digital identities in each AMS in a way which safeguards civil liberties

ITU unified Framework: B7

• No information provided

No information provided

No information provided

#### DO6: Digital services to connect business and to facilitate cross-border trade

#### DO6

HP EA 6.1: Facilitate compliance and secure the benefits of telecommunications services and electronic commerce in line with relevant ASEAN trade agreements

ITU unified Framework: B9

The government has committed to the ASEAN Work Programme on Electronic Commerce (AWPEC) 2017-2025, which will facilitate cross-border e-commerce in the region and connect Laos to larger markets. 65

• No information provided

#### DO6

HP EA 6.2: Support trade digitalisation through seamless and efficient flow of electronic trade documents (e.g. invoices) and goods within ASEAN

ITU unified Framework: B9

#### DO7: Increased capability for business and people to participate in the digital economy

DO7

HP EA 7.3: Develop a framework that encourages the development and growth of digital start-ups in ASEAN

ITU unified Framework: B7

No information provided

<sup>65</sup> https://thedocs.worldbank.org/en/doc/c01714a0bc2ca257bdfe8f3f75a64adc-0070062022/original/Positioning-The-Lao-PDR-for-a-Digital-Future-11-10-22.pdf

Country priority and/or specific country initiatives linked to ADM DOs and EAs

#### DO8: A digitally inclusive society in ASEAN

DO8

HP EA 8.1: Ensuring citizens and businesses have the skills and motivation to use digital services

ITU unified Framework: B1

No information provided

Source: ADM 2025 pp. 16-18, based on desk research.

## Appendix F: Malaysia

This section presents the country's policy and regulatory landscape, priorities and challenges as stated during the stakeholder interviews and the stakeholder questionnaire response. It analyses the ITU unified framework targets achieved by benchmark, where Malaysia has achieved less than the maximum of points attainable and outlines the proposed target areas based on lowest scores achieved to addressing the identified gaps.

## F.1 Policy and regulatory landscape, priorities, and challenges

#### Landscape

The ICT (Information and Communications Technology) policy and regulatory landscape in Malaysia is characterized by a comprehensive framework aimed at fostering the growth and development of the ICT sector. It covers a wide range of areas, including telecommunications, broadcasting, internet services, cybersecurity, data protection, e-commerce, and intellectual property.

The government has actively promoted ICT development through various initiatives and programs, with the Malaysia Digital Economy Blueprint 2021-2030 (MyDigital)<sup>66</sup> serving as a key policy document that provides clear direction on key priority areas for Malaysia's digital economy. MyDigital is under the purview of the Ministry of Economy, enabling cross ministerial and agencies collaboration on the implementation of the blueprint. It outlines strategies for leveraging ICTs to drive economic growth and digital transformation across sectors and the economy and society as a whole and aims to accelerate Malaysia's digital economy by building a more robust digital infrastructure, upskilling the workforce, and promoting the adoption of digital technology across various sectors.

## Other key initiatives include:

- Twelfth Malaysia Plan (12<sup>th</sup> MP) policy enabler that will accelerate Malaysia's adoption and application of digital and advanced technology
- National Fourth Industrial Revolution (4IR) Policy (2021–2030) a broad and overarching policy that drives coherence in transforming the socioeconomic development through 4IR technologies
- National Entrepreneurship Policy (NEP) 2030 long-term strategy that prepares entrepreneurs to be equipped with digitalisation of business operations in order to thrive in the digital environment
- Licensing Framework for Digital Banks framework by Bank Negara Malaysia (2020) to offer banking products and services to underserved or unserved market through digital or electronic means
- Jalinan Digital Negara (JENDELA) (2020-2025) initiative aims to improve the quality and coverage of Malaysia's digital infrastructure, specifically on broadband and mobile networks

<sup>66</sup> https://www.epu.gov.my/sites/default/files/2021-02/malaysia-digital-economy-blueprint.pdf

The regulatory framework for digital and ICT policy in Malaysia is multifaceted and is built on collaboration between various Government agencies and stakeholders to enable a balanced, inclusive, and equitable digital transformation of the economy and society. The Malaysia Digital Economy Corporation (MDEC) acts as a one-stop agency, driving digital economy policy coordination and development, and leading digital economy initiatives for the economy and society through direction that has been provided by the government. MDEC has led the country's digital economy agenda since 1996 through the establishment of the Multimedia Super Corridor (MSC) Malaysia, which has laid the foundation for driving Malaysia's digital transformation. With the introduction of Malaysia Digital (MD) in July 2022, MDEC is leading initiatives to accelerate Malaysia's digital economy by driving digital adoption, supporting local tech companies and attract high value digital investments. MDEC is actively involved in advocating the enablers and driving investment for digital infrastructure which is also one of the pillars identified under the MyDigital Blueprint. Digital infrastructure which includes telco, submarine cables, data centres and hyperscale cloud providers are crucial enablers to spur the digital economy.

Regulation of the ICT industry is overseen primarily by the Malaysian Communications and Multimedia Commission (MCMC) in the areas of telecommunications, broadcasting, and internet services, which ensures fair competition, consumer protection, and efficient allocation of ICT resources. Malaysia's approach to the sector is marked by substantial liberalization, encouraging competition and investments to foster innovation, improve service quality, and drive down prices for consumers. Intellectual property is regulated by the Intellectual Property Corporation of Malaysia (MyIPO) under the Intellectual Property Corporation of Malaysia Act 2002.

The country has placed significant emphasis on improving broadband infrastructure and connectivity nationwide, with initiatives such as the National Fiberisation and Connectivity Plan (NFCP) aimed at expanding high-speed internet coverage to underserved areas. Efforts to enhance e-government services have streamlined government-citizen interactions, with the MyGovernment portal and various e-services providing convenient access to public services online.

To improve connectivity, Malaysia has introduced the JENDELA plan. For instance, as of the end of 2022, significant progress has been made, with 96.92 percent of 4G coverage and 54.7 per cent of 5G coverage in populated areas. 7.74 million premises have now access to fibre connectivity and the average mobile broadband speed has reached of 116.03 Mbps. Moreover, under the CMA 1998, on the Universal Service Provision obligation, USP Regulations 2002 on the USP implementation and Commission Determination to complement the implementation of USP, that helped in bringing digital transformation which is more inclusive (in terms of socio economic of community in underserved areas and groups).

To target the unconnected in underserved areas, there have been 911 Pusat Ekonomi Digital (PEDi) completed, with 186 new PEDi to be developed. These PEDi cover 18.9 million of the population in Malaysia in underserved areas, targeting rural, urban, and urban poor. PEDi has also launched the Program Pemerkasaan Pendigitalan Usahawan Kecil (PUPUK), an entrepreneurship programme to provide guidance and training to micro-entrepreneurs in digital marketing so that they can expand their market and increase sales; and strengthen relationships between entrepreneurs' branded marketing platforms like Shopee and Aeon. The implementation of programmes under PUPUK is through smart partnership with the participating agencies and via collaboration with the private sectors, telecommunications companies, and e-commerce platform providers.

To safeguard individuals' personal data, Malaysia has enacted the Personal Data Protection Act (PDPA), which imposes obligations on organizations handling such data. Additionally, the government recognizes the importance of cybersecurity and has established the National Cyber Security Agency (NACSA) to coordinate efforts and enhance the country's resilience against cyber threats. In this regard, the Personal Data Protection Commission (PDPC) oversees personal data protection and E-commerce is regulated by various laws, including the Electronic Commerce Act 2006 and the Consumer Protection Act 1999. Cybersecurity is governed by several laws, including the Computer Crimes Act 1997, the Communications and Multimedia Act 1998, and the National Cybersecurity Policy and Strategy 2020-2024.

<sup>67</sup> https://mdec.my/malaysiadigital

Furthermore, Malaysia places a strong emphasis on ICT education and skill development to ensure a skilled workforce. Various ICT education and training programs are promoted to foster the growth of a tech-savvy talent pool in the country.

#### **Priorities**

As per the MyDigital blueprint, there are 6 key thrusts and 22 strategies which drive the development of Malaysia's digital economy. The key priority at national level by 2025 is to ensure inclusive digital transformation of the economy and society achieved through three phases of implementation by 2030. Under the JENDELA plan which is driven by MCMC, the targets to be achieved by 2025 are 100 per cent Internet coverage in populated areas, 9 million premises passed with gigabit access, and 100Mbps mobile broadband speed.

To date, several ongoing national plans spanning from 2021 - 2030, such as MyDIGITAL and the National Fourth Industrial Revolution (4IR) Policy, are set to catalyze the digitalization process, unlocking transformative potential and driving Malaysia's growth in the digital era beyond 2025.

#### Challenges

Within the regulatory and policy frameworks, some challenges and areas for improvement have been identified by MDEC and MCMC. MDEC emphasizes the potential negative impact that changes to governance and administrative processes or alterations to existing policies on the development and implementation of frameworks could have. They advocate for progressive policies and regulations that address the requirements of a digital economy. For MCMC, deploying digital infrastructure involves numerous stakeholders and traverses multiple jurisdictions, presenting unique challenges. These challenges include ensuring broadband availability in rural and remote areas, addressing infrastructure deployment and access issues, creating a conducive regulatory environment for private sector investment in digital infrastructure, and keeping up with fast-paced technological advancements while future-proofing regulations. Additionally, meeting the rising consumer expectations for Quality of Experience adds to the complexity.

## F.2 Overview of regulatory and policy gaps in the ITU unified framework

Malaysia's digital policy, legal, and governance frameworks have demonstrated a **high level of readiness for digital transformation** with an overall **ITU unified framework score of 84 per cent**, surpassing both the Asia-Pacific region and global averages by far (respectively 46% and 50%).

Based on unified framework analysis, Benchmarks such as B4 Collaborative Governance (91%), Benchmark 5 Stakeholder Engagement (90%), Benchmark 2 Regulatory Capacity (88%), Benchmark 7 Legal Instruments for Digital Markets (86%), Benchmark 8 Market Rules (82%), and Benchmark 1 National Digital Policy Agenda (81%) take the lead and have showcased advanced levels of development. These benchmarks are closely followed by Benchmark 3 Good Governance with a score of 77 per cent. The benchmarks with the lowest score include Benchmark 6 Legal Instruments for ICT/Telecom Markets (74%) and Benchmark 9 Regional and International Cooperation with a score of 70 per cent.

## F.3 Benchmark 1: National Digital Policy Agenda

Benchmark 1 "National Digital Policy Agenda" has 15 targets, of which 12 have been met with maximum points, one target shows a score of 1, and 2 targets have scored 0 points. The current unified framework score for Benchmark 1 stands at **81 per cent**.

Table F1: Unified framework Benchmark 1 Gaps



# B1: National Digital Policy Agenda - 81%

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Target	Unified framework score	Ongoing initiatives to address gap
Is there a developed and operationalized global strategy for youth employment and to implement the Global Jobs Pact of the ILO?	1	Launched in 2019, the National Entrepreneurship Policy (NEP) 2030 is a long-term strategy for Malaysia to become an outstanding entrepreneurial nation by 2030. One of its initiatives is to promote entrepreneurship as career of choice among youth, women and B40 especially amongst Bumiputera. This is stated under the NEP 2030 Strategic Thrust 1: Fostering Entrepreneurship Culture Across All Segments of Malaysian Society; Strategy A1: Building Critical Mass of Entrepreneurs. This will be achieved through the implementation of entrepreneurship education and development programs, access to financing and including structured programs.
Strategies for targeted groups: Broadband plan/initiative includes to promote the provision of broadband services to persons with disabilities?	0	Malaysia has launched "Unity Packages", a government initiative together with the telcos. The packages offer lower price internet package for youth (12 to 30 years old), those in B40 groups (household income of RM4, 850 and lower), and people with disabilities residents living in government's funded housing projects. These people are at are most impacted by the rising cost of living.  With RM30, the Mobile Unity Package offers internet connectivity for 6 months at 3Mps with 30GB data. For Home Internet Package, at RM69 which is 25 per cent lower than current retail price. The package offers unlimited data at 30 Mbps and 100 Mpbs.  The initiatives are part of KKD's strategic plan to develop country's digital economy and narrowing the socio-economic gap among the people.
Strategies for targeted groups: Broadband plan/initiative includes to promote the provision of broadband services to women and girls	0	As informed, most of Malaysia's initiative is open for all layers of society, targeting to assist those who are most impacted by the rising cost of living, and not women and girls in specific.  Other than the "Unity Packages" initiative opened for people are at are most impacted by the rising cost of living, the eUsahawan Programme is an initiative which aims to build a more inclusive culture towards digital technology use and support the development of digital entrepreneurship skills, focusing on digital marketing and e-commerce.

	B1: National Digital Policy Agenda - 81%		
Target		Unified framework score	Ongoing initiatives to address gap
			The programme provides a variety of digital skills training that is carried out online and onsite nationwide, targeting individuals, graduates, entrepreneurs and MSMEs, including youth and women, to accelerate their careers, earn income and grow their businesses.
			Since the programme started in 2015, over 278,000 women (over 59% of the total participants) have participated and recorded sales of over RM420 million.

## State of play and priorities

To drive and develop the "National Digital Policy Agenda", Malaysia through MDEC and MCMC focuses on the implementation of strategies under Malaysia Digital (MD)<sup>68</sup> through its initiatives and programmes, in addition to driving several high-impact catalytic programmes such as NESR and DERantau (Digital Nomad Pass initiative) and initiatives under the Malaysia Digital Economy Blueprint ("MyDigital")<sup>69</sup> to accelerate digital transformation efforts.

#### Ongoing initiatives to address gaps

To address targets that currently score 0, with the MyDigital Blueprint, the National Digital Network Plan (JENDELA) was established to increase broadband connectivity throughout the nation. To achieve the objectives for the JENDELA initiative, there are several pertinent areas which need further attention. These include sustainability in digital infrastructure rollout, digital infrastructure sharing among industry players in deploying the network, coordinating with local authority and local Government, encouraging public-private partnership such as providing incentives to customers. Moreover, there is a need to ensure that policies are inclusive, such as providing affordable broadband plans to all citizens. In addition, MDEC also has launched MD Climate Action Pledge (MDCAP) that has been integrated into Malaysia Digital guideline that aims to build capacity and increase the adoption of sustainability and climate action by businesses across the digital economy. <sup>70</sup>

As regards the targets for which information was not provided, the following activities are undertaken: On **Digital Skills and Talent targeting youth**, MDEC has been leading several initiatives in partnership with the Ministry of Education with the aim to transform students from consumers to producers, mainly through the **MyDigitalMaker initiative**<sup>71</sup>. This initiative highlights the importance of future-proofing the youth to develop skills related to the digital economy. MDEC has also been leading several other programmes/initiatives on **enhancing and increasing the capabilities of** 

<sup>&</sup>lt;sup>68</sup> <a href="https://mdec.my/malaysiadigital">https://mdec.my/malaysiadigital</a> - The Government has introduced Malaysia Digital as the new national strategic initiative to encourage and attract companies, talents and investment while enabling Malaysian businesses and Rakyat to play a leading part in the global digital economy.

<sup>&</sup>lt;sup>69</sup> MyDIGITAL sets out the consolidated initiatives and targeted outcomes as it pertains to the rakyat, business and the government, across three phases of implementation up to 2030. Benefits arising from "MYDGITAL" will be delivered through 6 strategic thrusts, 22 strategies, 48 national initiatives and 28 sectoral initiatives via the Malaysia Digital Economy Blueprint. Please referred to the following link:

https://www.epu.gov.my/sites/default/files/2021-02/malaysia-digital-economy-blueprint.pdf. MCMC's contribution under MyDIGITAL is mainly focused on the **Jalinan Digital Negara (JENDELA)** (under Strategic Thrust 3) **plan** which was formulated to provide wider coverage and better quality of broadband experience for the Malaysian public, whilst preparing the country for 5G technology.

<sup>&</sup>lt;sup>70</sup> Further information can be obtained by the Malaysian Communications and Multimedia Commission (MCMC) on this as the responsible agency for the initiative.

<sup>71</sup> https://mdec.my/ms/mydigitalmaker

## employment, skills and talents in digital ecosystem such as:

- Premier Digital Tech Institutions (PDTI) are universities and polytechnics which are recognised for offering exceptional digital tech education, with a focus on industry-oriented curriculum and programmes align with the needs of digital tech sector. Being recognised as PDTI enables these institutions to position themselves as providers of top-tier digital and tech talent, offering their students a significant advantage in the digital ecosystem and enhancing their employment prospects upon graduation.<sup>72</sup>
- E-Rezeki program<sup>73</sup> enables citizens, especially low-income groups, generate additional income by doing digital assignments via online sharing economy platform. The participants will be matched with digital work in line with their respective skills.
- Global Online Workforce (GLOW) $^{74}$  is a programme for aspiring Malaysians to take up freelancing as a career and become digital freelancers. It has helped thousands of digital freelancers to secure freelancing jobs via international platforms.

## F.4 Benchmark 2: Regulatory capacity

Benchmark 2 "Regulatory Capacity" has 17 targets, of which 14 targets indicate a maximum score of 2, 2 indicate a score of 1, and 1 shows a score of 0. The total achievement to-date stands at **88 per cent**.

Table F2: Unified framework Benchmark 2 Gaps

B2: Regu	B2: Regulatory Capacity - 88%			
Indicator	Score	Ongoing initiatives to address gap/s		
Accountability	1			
New mandate: entity in charge of Internet content	0	Consumer Complaints Bureau:  In Malaysia, MCMC is responsible in taking down contents from the Internet based on the reports received form the enforcement agencies such as PDRM (Royal Malaysia Police) or from the public. The general public can file report against certain content posted online to MCMC's Consumer Complaints Bureau, to investigate for its facts or to complaint content that is deemed harmful or inappropriate or offensive.  The complaint can be done through <a href="http://aduan.skmm.gov.my/">http://aduan.skmm.gov.my/</a> or any complaint channel provided by MCMC. MCMC will investigate the complaint and assist to solve issues.  Reports can also be lodge to relevant authorities like PDRM, KPDNKK, BNM and other related enforcement agencies. MCMC is not the only agency with the authority to investigate complaints regarding content in the Internet. Content provision in the Internet is bound by all relevant laws in the country and reports/complaints can be made to relevant enforcement agencies in relation to matters that fall within their own jurisdictions. <a href="https://www.mcmc.gov.my/en/faqs/online-content-problems/whatare-the-steps-required-for-me-to-lodge-compla">https://www.mcmc.gov.my/en/faqs/online-content-problems/whatare-the-steps-required-for-me-to-lodge-compla</a>		

<sup>&</sup>lt;sup>72</sup> Further information can be obtained by Malaysia Digital Economy Corporation (MDEC) on this as the responsible agency for the initiative. <a href="https://mdec.my/mydigitalmaker/tech-tertiary-pathways">https://mdec.my/mydigitalmaker/tech-tertiary-pathways</a>

<sup>73</sup> https://mdec.my/erezekl

<sup>74</sup> https://mdec.my/glowmalaysia



### B2: Regulatory Capacity - 88%

<del>HHHH</del>		
Indicator	Score	Ongoing initiatives to address gap/s
		Other than that, Malaysia also have other online safety initiatives, such as the Klik Dengan Bijak (Click Wisely). This initiative aims to educate and raise public awareness about Internet safety and security. The Internet is a virtual world with limitless resources and boundaries, but without sufficient knowledge and precaution, it could pose threats to us in real life. That is why every individual should play a part in promoting positive use of the Internet by being more responsible, sensitive and ethical. With Klik Dengan Bijak, we aspire to create a safer and more rewarding online experience for all.
		https://klikdenganbijak.my/en/about.php Other than that, Malaysia also have The Content Code which is a set of guidelines outlining best practices and ethical standards of content disseminated to audiences by service providers in the communications and multimedia industry in Malaysia. Since the coming into effect of the Content Code in 2004, it has been reviewed once in 2020 with minor amendments.
		However, with the significant changes in the communications and multimedia industry, there is a need for a more substantial review to address policy gaps on content related issues that are new within the industry as well as those that were not fully addressed in the revised Content Code 2020.
		In 2021, the Content Forum embarked on a mission to review and revamp the entire Content Code to ensure it remains aligned with global best practices for the benefit of both the local content industry and all Malaysians.
		The Content Code 2022 <sup>75</sup> was officially registered by MCMC and came into effect on 30 May 2022. The updated Content Code provides guidance on self-regulation that provides the platform for creativity, innovation, and healthy growth of a fast-evolving industry whilst aligning it with Malaysian culture, harmony, and values.
		https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/Content-Code-2022.pdf
		https://contentforum.my/wp-content/uploads/2022/08/Content- Code-2022.pdf
		Communications and Multimedia Act 1998 The Ministry of Communications and Digital Malaysia (KKD) and the Malaysian Communications & Multimedia Commission (MCMC) are currently in the process of finalizing the reviewing of the Communications and Multimedia Act (CMA) 1998.
		In general, the review is intended to promote the growth of the communications and multimedia industry, and strengthen the network security due to the increasing dependence on digital services by the public and to ensure the law remains relevant with the emergence of the new media.
		Amendments to the Communications and Multimedia Act 1998 [Act 588] including section 233 is still in the process of refinement. The presentation of Act 588 as a whole will be made as soon as the process is completed.

<sup>75</sup> https://contentforum.my/wp-content/uploads/2022/08/Content-Code-2022.pdf

	B2: Regu	B2: Regulatory Capacity - 88%		
Indicator		Score	Ongoing initiatives to address gap/s	
	New mandate: entity in charge of IT		Malaysian Administrative Modernisation and Management Planning Unit (MAMPU) is tasked in facilitating the modernization of the public administrative system and driving economic growth in Malaysia by helping public sector agencies adopt innovative technologies.  MAMPU also act as a consultant in management organisation and ICT for the public service sector, a facilitator in the implementation of modernisation and transformation programmes in the public sector delivery system as well as a researcher in administrative modernisation and management planning for the public sector. MAMPU also plays the role of being the promoter of government services to the public.	

#### State of play and priorities

MCMC's priorities for Benchmark 2 revolve around improving service coverage and quality, strengthening network security, and addressing regulatory requirements for DTT. To ensure the coverage and quality of 4G services, routine audits are conducted to monitor the performance of service providers. These audits compare the actual mobile broadband speeds with the reports provided by the service providers, ensuring compliance with the Mandatory Standard of Quality of Service (MS QoS). The MCMC also recognizes the need to review and update the MS QoS regularly to align it with technological advancements and industry best practices, as well as address the evolving expectations of customers.

To strengthen network security and combat scams effectively, the commission collaborates with the Royal Malaysian Police (PDRM), the Central Bank of Malaysia, and the National Anti-Financial Crime Centre (NFCC). This partnership aims to curb fraudulent activities and ensure a secure network environment. Additionally, the MCMC is assessing the regulatory requirements for digital terrestrial television (DTT). This assessment includes the need for regulatory oversight to maintain the quality of service for DTT. By evaluating these requirements, the MCMC seeks to address any potential gaps in the regulatory framework.

Malaysia's regulatory and policy landscape for digital and ICT covers various areas, including telecommunications, broadcasting, internet services, cybersecurity, data protection, e-commerce, and intellectual property. Different government agencies and laws govern these areas:

- Malaysian Communications and Multimedia Commission (MCMC): Oversees telecommunications, broadcasting, and internet services.
- Department of Personal Data Protection: Responsible for personal data protection.
- E-commerce: Regulated by various laws, such as the Electronic Commerce Act 2006 and the Consumer Protection Act 1999.
- Intellectual Property Corporation of Malaysia (MyIPO): Regulates intellectual property under the Intellectual Property Corporation of Malaysia Act 2002.
- Cybersecurity: Governed by laws such as the Computer Crimes Act 1997, the Communications and Multimedia Act 1998, and the National Cybersecurity Policy and Strategy 2020-2024.

#### Challenges to addressing gaps

MCMC acknowledges the challenges it faces in building and strengthening its regulatory capacity. The rapid pace of technological advancements poses a continuous challenge, requiring the commission to stay updated and adapt to emerging technologies. Striking a balance between fostering innovation and protecting consumer rights is also crucial. As new business models and services emerge, the MCMC aims to develop regulatory frameworks that encourage innovation while safeguarding the interests of consumers. Additionally, ensuring the relevance and effectiveness of existing regulations in the current landscape is a priority, enabling the Commission to address new challenges and facilitate the introduction of new services. Adequate resources, including skilled

personnel, funding, and infrastructure, are essential for the MCMC to carry out its regulatory functions effectively. By focusing on infrastructure development, stakeholder collaboration, consumer empowerment and protection, and sustaining the USP Fund, the MCMC aims to address these challenges and enhance its regulatory capacity to align with the industry's evolving needs and consumers' expectations.

#### Ongoing initiatives to address gaps

To address challenges and gaps, the MCMC has identified potential actions with the most room for maneuver. Infrastructure development is emphasized to promote investments and facilitate the deployment of robust and high-quality networks. Collaboration with stakeholders, such as industry players, consumer groups, and government agencies, is actively pursued to share best practices and co-create solutions. Consumer empowerment and protection are prioritized through the implementation of measures to enhance service quality, establish effective dispute resolution mechanisms, and ensure transparency and affordable pricing.

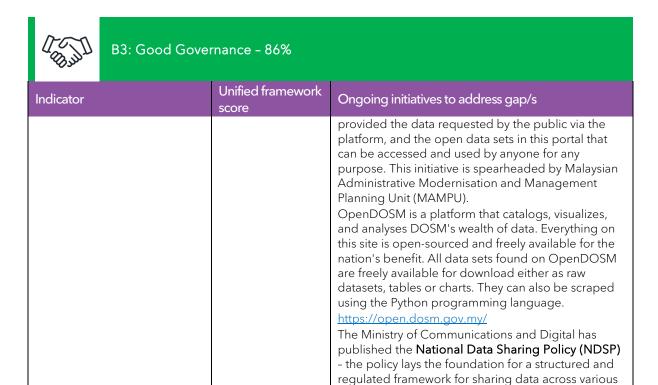
#### F.5 Benchmark 3: Good Governance

Benchmark 3 "Good Governance" has 11 targets, of which 9 targets indicate the maximum score of 2, 1 indicates a score of 1, and 1 shows a score of 0. The total achievement to-date stands at **86 per cent**.

Table F3: Unified framework Benchmark 3 Gaps

B3: Good Gove	B3: Good Governance - 86%		
Indicator	Unified framework score	Ongoing initiatives to address gap/s	
Are national policy and regulatory frameworks technology and service-neutral?	1	As the communications and multimedia industry evolves towards convergence, licenses under the Communications and Multimedia Act 1998 are formulated to be both technology and service neutral. The licensing regime as provided for under the Communications and Multimedia Act 1998 allows a licensee to undertake activities that are market specific.	
Is public access to information ensured and fundamental freedoms protected, in accordance with national legislation and international agreements?	0	At present, public access to information is subject to the relevant legislation that governs a particular subject matter, for example, under the Communications and Multimedia Act 1998 [Act 588] ("CMA 1998"), public access to information is provided through the register that MCMC is required to maintain under section 81 of the CMA 1998. As for fundamental freedom, the Federal Constitution ("FC") itself has provided its guarantee under Part II of the FC, including the right to freedom of speech and expression [Article 10 of the FC], which is subject to restrictions put in place by the federal law in the interest of, among others, the security of the country or any part thereof, friendly relations with other countries, public order or morality.  The Portal Data Terbuka Malaysia To the Malaysian Open Data Portal is a one-service-centre portal for citizens to access and download Government's open data datasets. Through this portal, many ministries and agency has actively	

<sup>&</sup>lt;sup>76</sup> https://www.data.gov.my/



#### State of play and priorities

Malaysia through MCMC has been focusing on improving governance and regulatory practices. This includes the adoption of measures to enhance the quality of new and existing regulations, such as utilizing Regulatory Impact Analysis (RIA) as a tool. The aim is to establish a strong compliance and governance foundation within MCMC, with a short-term goal of strengthening internal controls. This effort is complemented by the Business Process Improvement (BPI) initiative, driven by the Geospatial and Data Management Division (GDMD), which aims to enhance existing processes throughout MCMC. To ensure transparency and accountability in decision-making, Malaysia conducts public inquiries and consultations to gather input from industry players, interested parties, and stakeholders regarding specific regulatory matters. Malaysia has also established the Tribunal Rayuan Komunikasi dan Multimedia (TRKM)<sup>77</sup>, an independent body responsible for reviewing appeals related to MCMC's decisions or directives. This ad hoc tribunal operates in accordance with Sections 17 and 18 of the Communications and Multimedia Act 1998 (Act 588). Malaysia follows a structured governance approach for initiatives like JENDELA, involving various platforms such as steering and implementation committees with participation from government ministries, agencies, and industry players. These collaborations drive the initiatives forward.

sectors and stakeholders

#### Challenges in addressing gaps

Key challenges for MCMC include resistance to change due to existing working culture and weaknesses in enforcing accountability. Risk management efforts are focused on addressing these challenges and ensuring effective governance within the organization.

#### Ongoing initiatives to address gaps

Regarding targets that currently show a score of 0, public access to information and fundamental freedom are addressed through relevant legislation in place. Public access to information is provided through a register maintained by MCMC under the Communications and Multimedia Act 1998. Fundamental freedom, including freedom of speech and expression, is guaranteed under the Federal Constitution but subject to restrictions outlined by federal law, such as national security and public order.

<sup>&</sup>lt;sup>77</sup> The TRKM was established in 2019.

The conduct of **policy rolling reviews** is mandated by the Communications and Multimedia Act 1998, which requires rules and regulations to be reviewed every three years or as directed by the Minister.

MCMC actively participates in policy review exercises, including the 12<sup>th</sup> MP Mid Term Review and MED4IR intervention workshops organized by the Economic Planning Unit and the Ministry of Communications and Digital. MCMC also conducts periodic regulatory reviews pursuant to S122 of CMA 98 to adapt its approach to changing industry dynamics, technology advancements, market conditions, and stakeholder interests.

#### F.6 Benchmark 4: Collaborative Governance

Benchmark 4 "Collaborative Governance" has 16 targets, of which 13 targets indicate the maximum score of 2, and 3 indicate a score of 1. The total achievement to-date stands at **91 per cent**.

Table F4: Unified framework Benchmark 4 Gaps

	B4: Collabora	ative Governance - 91%		
Indicator		Unified framework score	Ongoing initiatives to address gap/s	
Collaboration regulatory A	on with Energy Authority	1	MCMC together with the Ministry of Communications and Digital are part of the Utility Cluster under the National Action Council on Cost of Living (NACCOL) 2020-2025. This platform is to discuss national cost of living matters encompassing 6 clusters i.e.:  Education Enforcement Food Housing Utilities (Led by Ministry of Natural Resources, Environment and Climate Change) Transportation Finance E-waste and energy Malaysian Technical Standards Forum Bhd (MTSFB) is a designated technical standards forum by the Malaysian Communications and Multimedia Commission (MCMC) under the Communications and Multimedia Act 1998 (CMA 1998) to develop technical codes. This Technical Code provides the minimum requirements for green data centres for the purpose of establishing policies, systems and processes to improve the energy efficiency of data centres and at the same time reducing the carbon footprint of the industry. https://mtsfb.org.my/ https://www.mcmc.gov.my/skmmgovmy/media/ General/pdf/MCMC-Green Data Centres.pdf	



#### B4: Collaborative Governance - 91%

Indicator	Unified framework score	Ongoing initiatives to address gap/s
Collaboration with Transport regulatory Authority	1	Collaboration between MCMC, Civil Aviation Authority Malaysia (CAAM), Department of Survey and Mapping Malaysia (JUPEM), PDRM, Malaysia Office of the Chief Government Security Officer (CGSO) and SIRIM to monitor and approve spectrum, frequency and airspace for flight paths of drones, helicopters and airplanes.
Collaboration with (Independent) Consumer Protection Authority	1	<ul> <li>Consumer Forum Malaysia (CFM) was established in February 2001 as a society with representation from all relevant parties, including the "supply and demand" side of the communications and multimedia industry. It was designated by MCMC as the Communications and Multimedia Consumer Forum in 2002 to protect the rights of consumers of that sector. This is in line with the requirements of the CMA which facilitates industry self-regulation with the functions of:</li> <li>To facilitate and promote self-advocacy among the consumers through the dissemination of information</li> <li>To strengthen the positive bond between service providers and consumers</li> <li>To establish a conducive environment in promoting a high level of consumer confidence in the service delivery of the C&amp;M providers</li> <li>To nurture the culture of mutual respect amongst service providers and consumers in generating guidelines and code of ethics through mutual understanding/agreement</li> <li>As a designated forum, CFM is tasked with, among others, the preparation of consumer Codes that would be used as a base guideline for the provisioning of services by the communications and multimedia service providers. The General Consumer Code (GCC) was accepted by MCMC as an industry Code in 2002 along with the Internet Access Code.</li> </ul>

#### State of play and priorities

Malaysia through MDEC<sup>78</sup> and the MCMC work actively together to drive a safe and secure digital economy and to ensure the smooth functioning of the telecommunications and digital sectors. Both organizations prioritize collaboration and engagement with various stakeholders, including government ministries, agencies, law enforcement, service providers, and industry forums. Collaborative efforts focus on combatting scams and fraud, improving emergency services, enhancing consumer protection, and promoting the growth and innovation of various sectors in Malaysia's digital landscape.

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<sup>&</sup>lt;sup>78</sup> MDEC focuses on developing and implementing policies and frameworks for the digital economy. They report their progress to a national council comprising relevant ministries and government agencies to ensure effective monitoring. However, potential changes to governance, administration, or existing policies in the country may pose challenges to MDEC's efforts.

Malaysia through MCMC takes on several priorities under the umbrella of "Collaborative Governance." In the area of telecommunication scams and frauds, MCMC collaborates with government agencies, financial institutions, and telecommunications service providers through the National Scam Response Centre (NSRC). Its involvement includes monitoring, investigating, and acting against scam-related activities on communication and multimedia platforms. Malaysia through the Ministry of Communications and Digital (KKD) and MCMC also work together to minimize false emergency calls to the Malaysian Emergency Response Services 999 (MERS 999) in collaboration with the Ministry of Communications and Digital (KKD) and the service providers. It establishes the False Emergency Call Committee (FEC Committee) to terminate telephone lines engaged in crank calls, ensuring smooth emergency operations. Moreover, MCMC established two task forces with law enforcement agencies and service providers to identify and take immediate actions against scams and frauds, including the Cybercrime Task Force (CTF) involving MCMC and PDRM, and the Telecommunications Fraud Industry Task Force (TFITF) involving MCMC, PDRM, BNM, and the service providers. Malaysia through MCMC also raises awareness for consumers about scams and frauds, provides advice to consumers on protection measures, and collaborates with service providers to disseminate information via social media platforms.

MCMC also works with the **National Registration Department (NRD)** to ensure the legitimacy of prepaid SIM card registration data. They aim to combat various fraud and criminal issues related to fake prepaid SIM card registration activities. Through collaboration with the NRD, MCMC implements a customer data verification process to verify the integrity of prepaid customer data registered by service providers. This collaboration helps measure service providers' compliance with the Prepaid Public Cellular Service User Registration Guidelines issued by MCMC and enables actions to be taken against non-compliance cases.

Furthermore, MCMC collaborates with multiple agencies, including the PDRM, the Ministry of Domestic Trade and Costs of Living, Bank Negara Malaysia, and the Ministry of Communications and Digital, to handle consumer issues and improve the resolution rate of public complaints. They participate in the review of the Consumer Protection Act and the tribunal process related to consumer policy. MCMC conducts awareness programs under the National Digital Network initiatives and works on consumer digital literacy in collaboration with the Ministry of Communications and Digital. They monitor service quality standards and complaints handling by service providers and hold regular meetings with the industry to improve compliance with regulations and resolve consumer complaints effectively.

In addition to these priorities, MCMC engages with various stakeholders, including government ministries and agencies, law enforcement agencies, regulators, service providers, technology providers, academic institutions, and industry forums. They collaborate to ensure effective planning, implementation, and monitoring of national plans and strategies. MCMC also facilitates the regulation of e-Money services, ensuring there is no duplication of regulation for licensees offering e-Money services. Additionally, they collaborate with the Ministry of Health to promote the adoption of digital signatures for the Poison Act 2021, ensuring awareness and clarity of usage.

MCMC's network security division (NSD) plays a crucial role in providing technical assistance for investigations and prosecutions carried out by authorities in the fields of environment, transport, energy, and finance. They support the authorities in removing and restricting access to online content that contravenes the laws within these domains when requested.

Under MDEC's purview, stakeholder engagements are conducted with regulatory authorities involved in digital economy projects. These engagements facilitate coordination and collaboration among key players in the industry. MDEC's focus is on driving the growth and innovation of the ecommerce ecosystem in Malaysia through National E-Commerce Strategic Roadmap (NESR) where the roadmap is led by MDEC, specifically leading "Programme 4: Develop performance and operational standards for postal and courier service firms" under Strategic Thrust 3: Strengthen eCommerce fulfillment capabilities. MCMC collaborates with MDEC in this initiative and is assigned the key performance indicator (KPI) of ensuring domestic courier parcel service reliability, with a target of 90 per cent (D+3) by 2025.

#### Challenges in addressing gaps

Malaysia through MDEC highlights potential challenges related to changes in governance and administration or existing policies that could hinder policy and framework development and implementation. Collaborative governance is important, but challenges include convincing policymakers, aligning collaborative practices with existing laws and regulations, and garnering support from diverse stakeholders.

In terms of maneuverability, MDEC welcomes collaborative efforts from relevant ministries and government agencies to drive the digital economy forward. MCMC emphasizes inclusiveness in regulatory activities by collaborating closely with stakeholders for reviewing and developing new instruments, enforcement actions, and consumer education.

#### Ongoing initiatives to address gaps

Ongoing initiatives regarding targets showing a score of 0 include **collaborations with the Finance** Regulator and the Energy Regulatory Authority. Here, MCMC is involved in facilitating the regulation of e-Money services to avoid duplication of regulation. Additionally, MCMC **collaborates** with the Energy Regulatory Authority through the Utility Cluster under the National Action Council on Cost of Living, discussing various matters related to cost of living.

#### F.7 Benchmark 5: Stakeholder Engagement

Benchmark 5 "Stakeholder Engagement" has 5 targets, of which 4 indicate the maximum score of 2, and 1 indicates a score of 1. The total achievement to-date stands at **90 per cent**.

Table F5: Unified framework Benchmark 5 Gaps

***************************************	B5: Stakeholder Engagement - 90%			
Indicato		Unified framework score	Ongoing initiatives to address gap/s	
designe feedbac stakehol	ic consultations d as a tool to gather k from national ders and guide ry decision-making?	1	The exercise of public consultations is the best practice adopted in gathering the stakeholders' feedback.  The exercise of Public Inquiry is stipulated in sections 55(2), 55(4) and 61 of the Communications and Multimedia Act 1998 for MCMC to make a determination on any matter specified in the CMA Public consultations are also one of the tools adopted by the Malaysian government to gather inputs and feedback from national stakeholders as well as to guide regulatory decision-making in preparing the Mid-Term Review of the Twelfth Malaysia Plan (MTR 12 <sup>th</sup> MP).  The consultations took place in various formats. They include special cabinet meetings on MTR 12 <sup>th</sup> MP, inter-agencies planning groups, technical working groups, focus groups and roadshows. All types of stakeholders such as public agencies, private companies, international bodies, academia, civil society organizations, local leaders and public at large were consulted. Leveraging technologies by adopting an online platform for the public to submit their views and suggestions was also used to ensure greater coverage for the consultancy	

#### State of play and priorities

The ministry and various agencies in Malaysia, including MCMC, conduct stakeholder engagement activities with relevant ministries, government agencies, regulatory authorities and relevant industry associations, as well as experts which are involved in projects or matters related to the digital economy. Priorities pertain to the promotion of widespread adoption of cashless payment in targeted communities. To create a favorable regulatory environment for financial inclusion, the Financial Inclusion Framework 2023 - 2026 has been put into place.

#### Ongoing initiatives to address gaps

Ongoing initiatives regarding targets showing a score of 0 include a regulatory sandbox and corresponding framework on financial inclusion introduced in 2016 by Malaysia's central bank **Bank Negara of Malaysia** ("BNM"). The Work in progress includes the introduction of an innovation green lane sandbox. Activities relating to the sandbox since January 2023 include 111 applications submitted to date, of which 31 are from the insurance sector, 24 for money services, 21 for payments services, 17 for banking and lending and 18 others.

#### Challenges in addressing gaps

When it comes to regulatory stakeholder engagements, it is crucial to address the key challenges of aligning expectations and collaborating towards a common goal.

#### F.8 Benchmark 6: Legal Instruments for ICT/Telecom Markets

Benchmark 6 "Legal Instruments for ICT/Telecom Markets" has 17 targets, of which 12 targets indicate a maximum score of 2, 1 indicates a score of 1, and 4 show a score of 0. The total achievement todate stands at **74 per cent**.

Table F6: Unified framework Benchmark 6 Gaps

B6: Legal Instruments for ICT/Telecom Markets - 74%				
Target	Unified framework score	Ongoing initiatives to address gap/s		
Does a regulatory framework exist for ICT accessibility for persons with disabilities?	0	Among the ministries and agencies offering services to assist PWD's are those under the Ministry of Women, Family and Community Development (KPWKM) and agencies under them such as Social Welfare Department (JKM). Other related services are provided by Ministry of Human Resources (MOHR) and these include Persons with Disabilities (PWD) registration, job coach, disability equality training (DET), registration and status of PWD registration and placement of PWD.  Other than that, there are also initiatives or programs offered that targets PWD. Examples are such as:  1) MY Lifetime Special Rate for PWD Customers (50% off)  2) MY Domain Benefits For Differently Abled (OKU)  3) Trainings in ICT to benefit the disabled  4) Empowerment of Persons with Disabilities Outreach Program		

<sup>&</sup>lt;sup>79</sup> https://www.bnm.gov.my/-/financial-technology-regulatory-sandbox-framework-2; www.bnm.gov.my/-/ed-sandbox-2023

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<sup>80</sup> https://www.bnm.gov.my/sandbox



## B6: Legal Instruments for ICT/Telecom Markets - 74%

	I list0 and	
Target	Unified framework score	Ongoing initiatives to address gap/s
Target	Unified framework score	Ongoing initiatives to address gap/s  Some of the program in Malaysia does not have a specific regulatory framework to govern or promote the participation of persons with disabilities, however we encourage all Malaysians to participate in its existing programmes such as DE Dagang, e-Usahawan, e-Rezeki and GLOW.  Other than that, another strategies in the Persons with Disabilities (PWDs) Policy is to "Promote the provision of facilities and access to Information and Communication Technology (ICT)".  Meanwhile, in the PWDs Action Plan 2016-2022, one of the objectives in the Strategic Core 1 (Increasing accessibility for People with Disabilities) is to "Increase PWDs level of accessibility to information and communication".  Examples of initiatives is such as the Malaysia "Unity Packages", a government initiative together with the telcos, which targets people with disabilities residents living in government's funded housing projects. These people are at are most impacted by the rising cost of living.  In addition, as of 31 May 2023, there are 911 Digital Economy Centers (PEDi) under the management of MCMC operating throughout the country where the disabled and elderly can use the facilities and services offered at PEDi including internet access.  KKD through Department of Information Malaysia (JAPEN) has established the Communication Branch for the Empowerment of the Disabled (CKPOKU) and conduct 57 MyCEKAP programs in August 2021 to December 2022.  Under the MyCEKAP Belia program, a Digital Empowerment Workshop was conducted face-to-face at Universiti Teknologi Malaysia Skudai, Johor; University of Malaysia Terengganu; Sarawak Kuching Polytechnic; and Klang Power Workshop in 2022. This workshop involved the participation of PWDs in the Hearing, Vision, Speech, Learning and Physical categories and provides the following benefits:  i) Youth with disabilities will have basic Microsoft Office skills which are important in helping them when they want to continue their studies to higher education or find work;  ii) Dis
		iii) Disabled youth will have important skills to compete in finding jobs in industry 4.0;
		<ul><li>iv) Disabled youth who have worked have digital skills in improving the quality of work.</li></ul>



#### B6: Legal Instruments for ICT/Telecom Markets - 74%

Target	Unified	Ongoing initiatives to address gap/s
	framework score	In ensuring the provision of more support and assistance facilities for the disabled (such as sign language interpreters, audio description and augmentative alternative communication - AAC) to ensure PWDs access to information, MCMC was also involved in the effort to add support facilities for the disabled through the provision of functional aids and accessibility widgets for the visually impaired on the MCMC website as follows:  • dyslexia friendly font • visually impaired • ADHD • color-blind • screen reader • etc  Apart from the initiatives reported by KKD as above, other agencies provide facilities for the PWDs as below:  a) The National Planetarium provides free planetarium screenings to PwD. Braille text facilities are also available at some exhibition locations.  b) MOSTI also provides easy access to information for the PWDs through the addition of icons with special features in the MOSTI Portal. For example, features to increase/decrease text size, highlight link, screen contrast level and etc.
License exempt	0	
Infrastructure sharing: Does an official register or a mapping exist in your country of all telecommunication/ICT infrastructure?	0	<ul> <li>JENDELA MAP by MCMC:         <ul> <li>To provide information on the current state of digital infrastructure and availability of digital connectivity for the Government, Regulator, SPs and the Rakyat</li> <li>To coordinate measures to address coverage and speed gaps for fixed and mobile services</li> </ul> </li> <li>To optimise use of resources including planning of infrastructure sharing and reducing duplication</li> <li>Link to JENDELA Map:         <ul> <li>https://jendela.my/map/?network-coverage=show</li> </ul> </li> </ul>
Secondary trading allowed	0	
Number portability available to consumers and required from fixed-line operators	1	Number portability is required from fixed-line operators but not yet available to subscribers.

#### State of play and priorities

The benchmark "Legal Instruments for ICT/Telecom Markets" is fairly advanced in Malaysia. The current regulatory framework adequately handles the licensing aspect, ensuring effective regulation. Similarly, the Numbering and Electronic Addressing Plan (NEAP) in place is sufficient for regulating numbering assignment. For spectrum management, revising relevant legal instruments and policies depends on the development, revision, and adoption of regulatory frameworks at national, regional,

and international levels, as developed by, e.g., the International Telecommunication Union (ITU). To implement these instruments and policies, the relevant national frameworks such as the Spectrum Plan, Standard Radio System Plan (SRSP), and associated guidelines will be amended or revised accordingly.

#### Challenges in addressing gaps

In relation to the above, there are several challenges encountered while addressing the need to implement necessary revisions to the relevant regulatory framework, including:

- Lack of consensus and varying motivation in revising instruments and policies at the ITU and national levels, given the diverse interests and priorities of different administrations and spectrum users;
- Addressing the technical and regulatory complexities which require a deep understanding of the technology involved, legal and regulatory frameworks as well as industry knowledge;
- External influence and change of high-level strategic direction; and
- Limited resources in revising regulatory frameworks which can be a time-consuming and resource-intensive process; and
- Ensuring that legal instruments are future-proof and keep up with the evolution of technology.

#### Ongoing initiatives to address gaps

To address challenges encountered, the following measures can be taken:

- Encourage stakeholders participation through various engagements and consultation processes to facilitate any requirements and achieve a balanced outcome while ensuring that the regulatory frameworks are effective and inclusive;
- Building technical and regulatory capacity to address the complexity of spectrum management elements through training programs, partnerships with academic institutions and collaboration with industry experts;
- Ensuring independence of regulatory bodies to mitigate external influence or political interference;
- Make available adequate resources (e.g. financial support, manpower, infrastructure, expertise) to undertake revisions to regulatory frameworks through outsourcing and collaboration with other parties; and
- Conducting regular monitoring and evaluation process to ensure that the necessary revisions to regulatory frameworks are effective and gaps/challenges can be addressed as well as strategies can be adjusted accordingly.

#### F.9 Benchmark 7: Legal Instruments for Digital Markets

Benchmark 7 "Legal Instruments for Digital Markets" has 16 targets, of which 13 targets indicate the maximum score of 2, 1 target shows a score of 1, 1 indicates a score of 0.7, and 1 shows a score of 0. The total achievement to-date stands at **86 per cent**.

Table F7: Unified framework Benchmark 7 Gaps

	B7: Legal Instruments for Digital Markets - 86%		
Target		Unified framework score	Ongoing initiatives to address gap/s
Is there a legislation/regulation for child online protection?		1	Yes, there are legislation/regulation for child online protection. The Child Act 2001 covers all children who need protection. However, the Act does not have a specific provision on child online protection.



## B7: Legal Instruments for Digital Markets - 86%

Target	Unified framework score	Ongoing initiatives to address gap/s
		Nonetheless, the Government has developed the Plan of Action (POA) on Child Online Protection 2015-2020 which emphasizes four (4) key aspects of advocacy:  i) raising awareness and also knowledge about child online protection especially among children and families;  ii) prevention;  iii) intervention; and  iv) support services.  The POA on Child Online Protection 2015-2020 also underlines the role and responsibility of government agencies, industry players, parents, caregivers, teachers, communities and civil society.  Since the POA has expired in 2020, Malaysia intends to incorporate aspects of children's rights in the digital environment into the comprehensive National Child Policy and accompanying POA that is currently being developed. The new National Child Policy and POA must address gaps in support system that might result in harm to children, especially with respect to juvenile justice, bullying, mental health, child exploitation, child marriage, climate change and child online protection.  The new National Child Policy is expected to align with recent law reforms pertaining to children. It is also expected to coordinate with other domestic government policies in the context of child online protection in terms of:  i) Recovery program for children in the cyber world (recovery for the victims, perpetrators, and users);  ii) Developing a comprehensive recovery program (including the personality) for children involved in cyber-related social ills;  iii) Expanding and improving recovery and support services for the victims, perpetrators, families, and local communities; and  iv) Improving network between the government and NGOs that provide protection services (treatment and recovery) to affected individuals.



# B7: Legal Instruments for Digital Markets - 86%

Target		Unified framework score	Ongoing initiatives to address gap/s
			Once the new National Child Policy and POA is introduced, the POA on Child Online Protection will no longer be renewed and all the strategies will be subsumed into new Policy and POA.  Meanwhile, in the broader policy direction on the issue of online protection, the government has specific strategies for cyber safety such as advocacy/awareness, school curriculum, legislation, industry collaboration, capacity building of enforcement and etc. in the National Cyber Security Policy (NSCP) and Malaysia Cyber Security Strategy 2020 – 2024 under the NACSA (The National Cyber Security Agency).  Other than that, Malaysia also has the Sexual Offences against Children Act 2017 which addresses online child sexual exploitation such as pornography, sexual grooming and sexual assault. This Act is a proactive step to address online child sexual exploitation. It has widened the definition of sexual abuse in Malaysian law and has truly been a landmark piece of legislation in this region.  The Parliament has also approved the Sexual Offences Against Children (Amendment) Bill 2023, which aims to better protect children against all forms of sexual exploitation and abuse.  In an effort to overcome child sexual crimes, the communications and digital ministry and telco companies also play a role in monitoring and removing pornographic content found online.  Under the Communications and Multimedia Act 1998, Section 211 (Prohibition on provision of offensive content) and Section 233 (Improper use of network facilities or network services) provides fine or imprisonment or both for the providers or users of online applications which are indecent, obscene, false, menacing or offensive in character with intent to annoy, abuse, threaten or harass any person.
other) infra co-deployn regulations	ny cross-sector (ICT and structure sharing or fibre nent /agreements/promotion nyour country?	0	Yes, there are cross-sector (ICT and other) infrastructure sharing or fibre codeployment regulations/agreements/promotion initiatives in our country



#### B7: Legal Instruments for Digital Markets - 86%

Target	Unified framework score	Ongoing initiatives to address gap/s
		MCMC issued Mandatory Standard of Access (MSA) which imposes obligations on access providers to provide facilities and services contained in the access list to access seekers. This is followed by the implementation of Mandatory Standard of Access Pricing (MSAP) which is a legal instrument to regulate wholesale access prices by access service providers.
		Government is also developing policy on infrastructure sharing to improve QoS and QoE nationwide whether through MOCN, domestic roaming or other technologies.  (Note: the MSAP does not include a mention of other sectors (see p. 2-5)

#### State of play and priorities

Benchmark 7 "Legal Instruments for Digital Markets" is the least developed benchmark in Malaysia. However, progress is being made in areas spanning 4IR policies including cloud services, Al and Blockchain. Many of the targets are being worked on by different stakeholders. Malaysia through MDEC works on different programmes, initiatives and efforts, which drive the digital economy are reported to a national council involving relevant ministries and government agencies to ensure structured monitoring of progress. This also involves collaborating with other ministries and government agencies in the development of policies related to the digital economy. Malaysia through MOSTI has prepared the National Al roadmap and Al policy<sup>81</sup> with help of the National Blockchain and Al Committee (NBAIC) to carry out relevant initiatives. Moreover, policies are in place for cloud services and providers<sup>82</sup>.

In the area of infrastructure access, Malaysia through MCMC mandates access to bottleneck or essential facilities which cannot be feasibly duplicated, as well as facilities or services that serve as inputs to promote downstream competition, for the long-term benefits of end users. There are currently 20 regulated services on the Access List, comprising passive infrastructure (e.g. towers, in building common antenna systems, street furniture, ducts and manholes), fixed services (e.g. wholesale broadband services, transmission services, interconnection services, access to submarine cable landing services) and mobile services (e.g. interconnection services, domestic roaming, MVNO access and wholesale 5G services). Where services are not regulated, for example MOCAN and MORAN arrangements, service providers have entered into commercial arrangements.

#### Challenges in addressing gaps

Key challenges that stakeholders face includes the design of legal instruments for digital markets, in particular during the drafting phase itself, but also in relation to gathering all the inputs coming from the Digital Players and accommodating those needs in a comprehensive framework. In a second step, obtaining market acceptance of new regulations and frameworks is a challenge. Areas that are most promising to address gaps with regards to legal instruments for digital markets include smart cities and Al.

<sup>81 &</sup>lt;u>www.airmap.my/wpcontent/uploads/2022/08/AIRMap-Playbook-final-s.pdf</u>

<sup>82</sup> https://www.mcmc.gov.my/skmmgovmy/media/General/pdf2/Info-Paper-Regulating-Cloud-Service.pdf

Other key challenges that faced in establishing and enforcing Legal Instruments for Digital markets includes the advancement of technology itself which creates new crimes or loopholes that requires the law/act to be relooked/revisited from time to time. Moreover, when it comes to revisiting the law or acts, it can be time consuming, and a lot of Ministries/Agencies has to be involved before the law or act can be considered to be revised.

#### Ongoing initiatives to address gaps

One of the key ongoing initiatives to address gaps is the National Fourth Industrial Revolution (4IR) Policy led by Ministry of Economy and the Industry4WRD led by Ministry of Investment, Trade and Industry (MITI).<sup>83</sup>

Other ongoing initiative to address current gaps in the short term in addressing issues related to the children is the new National Child Policy and Plan of Action. This Plan of Action aims to identify and address gaps in support systems that might result in harm to children, especially with respect to juvenile justice, bullying, mental health, child exploitation, child marriage, climate change, including child online protection. The policy will also cover all children until 2025.

#### F.10 Benchmark 8: Market Rules

Benchmark 8 "Market Rules" has 17 targets, of which 12 targets indicate a maximum score of 2, 4 indicate a score of 1, and 1 shows a score of 0. The total achievement to-date stands at **82 per cent**.

Table F8: Unified framework Benchmark 8 Gaps

	P8: Market Rules - 82%			
Indicator		Unified framework score	Ongoing initiatives to address gap/s	
	ticipation/ownership -based operators	1	Foreign participation is limited through a shareholding restriction in the Licensee imposed via special licence condition in the Individual licences issued.  For NFP (I) and NSP (I) licence, foreign shareholding is limited to 49 per cent. However, as this is imposed via a special licence condition declared by the Minister, the Minister has the power to decide otherwise.	
in local serv	ticipation/ownership ice operators/long- vice operators	1	Foreign participation is limited through a shareholding restriction in the Licensee imposed via special licence condition in the Individual licences issued.  For NFP (I) and NSP (I) licence, foreign shareholding is limited to 49 per cent. However, as this is imposed via a special licence condition declared by the Minister, the Minister has the power to decide otherwise.	
	ticipation/ownership nal service operators	1	Foreign participation is limited through a shareholding restriction in the Licensee imposed via special licence condition in the Individual licences issued.	

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https://www.epu.gov.my/sites/default/files/2021-09/4IRvol2 FA ENG.pdf



#### P8: Market Rules - 82%

Indicator	Unified framework score	Ongoing initiatives to address gap/s
		For NFP (I) and NSP (I) licence, foreign shareholding is limited to 49 per cent. However, as this is imposed via a special licence condition declared by the Minister, the Minister has the power to decide otherwise.
Foreign participation/ownership in value-added service providers	1	For ASP (C) licence, there is no foreign shareholding restriction imposed on the licensee. Fully liberalised to ensure participation.
Is there a forward-looking competition policy, law or regulation applied to digital markets?	0	The existing framework for assessment of dominance and anti-competitive conduct is only applicable to licensees. Many businesses that operate in digital markets are not licensed under the CMA or Postal Services Act 2012. These businesses will fall under the Competition Act 2010. However, in so far as these businesses affect the communications, it would cut across both jurisdictions.  MCMC and the Malaysia Competition Commission work closely to address competition issues related to digital markets that cut across both jurisdictions. In such circumstances, the current regulatory framework is still relevant to handle competition issues in the digital market.

#### State of play and priorities

The Benchmark "Market Rules" is fairly advanced. Regulators are faced with various challenges in the area of digital markets such as the proliferation of digital markets, impact of global markets, unavailability of data for non-regulated OTT services, and other. With regards to competition law, MCMC has jurisdiction over licensees only. It does not have jurisdiction over most participants in digital markets located outside Malaysia. MCMC currently relies on the existing competition framework and takes into account the impact that digital markets have on the communications market when defining markets, carrying out assessment of dominance and anti-competitive conducts.

#### Ongoing initiatives to address gaps

As regards targets that are currently showing 0, MCMC is working closely with the competition regulator, MyCC to deal with issues related to Digital Markets. At this point in time, there is no digital markets competition framework in place nationally or regionally comparable to the EU Digital Markets Act. 84

#### F.11 Benchmark 9: Regional and International Cooperation

Benchmark 9 "Regional and International Cooperation" has 5 targets, of which 3 targets indicate a maximum score of 2, 1 shows a score of 1, and 1 indicates a score of 0. The total achievement to-date stands at **70 per cent**.

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<sup>&</sup>lt;sup>84</sup> https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/digital-markets-act-ensuring-fair-and-open-digital-markets en

Table F9: Unified framework Benchmark 9 Gaps



### B9: Regional and International Cooperation - 70%

1117		
Indicator	Unified framework score	Ongoing initiatives to address gap/s
Has your country signed or ratified a regional or international instrument related to cybersecurity?	0	To date, Malaysia has yet to ratify the Budapest Convention. However, Malaysia is currently participating in the Ad Hoc Committee to Elaborate a Comprehensive International Convention on Countering the Use of Information and Communications Technologies for Criminal Purposes (AHC) to negotiate and elaborate on a comprehensive convention to combat cybercrimes. NACSA, NSC is the lead agency for Malaysia on this AHC process. The Budapest Convention is a criminal justice treaty that provides States with (i) the criminalization of a list of attacks against and by means of computers; (ii) procedural law tools to make the investigation of cybercrime and the securing of electronic evidence in relation to any crime more effective and subject to rule of law safeguards; and (iii) international police and judicial cooperation on cybercrime and e-evidence.
Has your country signed on international agreements determining jurisdiction and/or managing cross border flows on data privacy?	1	Malaysia has its own law on data privacy namely, the Personal Data Protection Act 2010 (PDPA), which regulates the processing of personal data in regard to commercial transactions.  Under the ASEAN Digital sector - ASEAN Digital Senior Officials Meeting, there is also related project that has been endorsed and ongoing, namely - the ASEAN Data Protection and Privacy Forum as well as the ASEAN Cross Border Data Flow Mechanism.  The ASEAN Data Protection and Privacy Forum serves as a platform to discuss on matters and harmonies legal and regulatory landscapes in ASEAN (Including personal data protection), and to develop and adoption of best practices.  The ASEAN Model Contractual Clauses (ASEAN MCCs) on the other hand, are model data protection clauses that can be incorporated by data exporters and importers in their contractual arrangements as a basis to allow the transfer of personal data across borders.  https://asean.org/wp-content/uploads/2012/05/6B-ASEAN-Framework-on-Digital-Data-Governance Endorsedv1.pdf  Malaysia is also currently in the process of participating in the APEC CBPR. Malaysia is observing the progress of Global CBPR including the participation process (i.e porting of APEC CBPR participation into Global CBPR).  Additionally, Malaysia has also signed Memorandums of Understanding for cooperation in the area of data protection with Brunei and Singapore, as part of our bilateral relationships.

#### State of play and priorities

With regards to Benchmark 9 "Regional and International Cooperation", progress is being made and priorities are focused on Trade (Digital Economy), merging technology in ICT, Regulatory Policy and Best Practices and Cybersecurity.

#### Challenges in addressing gaps and ongoing initiatives

Regional and international cooperation face significant challenges, many of which are rooted in geopolitical factors. These challenges manifest in the form of varying priorities, visions, and governance structures, which hinder the seamless integration of different countries' efforts. One prominent hurdle lies in the realm of cybersecurity, where each country holds distinct perspectives and policies. Negotiations and consensus-building become necessary prerequisites before establishing any collaborative initiatives, resulting in time-consuming processes.

Most room for maneuver in this area is seen in developing and driving connectivity and closing existing infrastructure gaps. Moreover, regular dialogues, engagement as well as informal sessions among ASEAN member states and relevant stakeholders to share and exchange information on each other's policies and practices can drive a common understanding on various issues between states and ultimately pave the way for mutually beneficial outcomes.

## F.12 Proposed country target areas to addressing unified framework regulatory and policy gaps

This Section sets out proposed target areas identified based on unified framework 2022 data and updates made based on self-reported information from the questionnaire response to addressing the regulatory gaps. Note should be taken that some gaps exist in other, higher-scoring benchmarks as well. The proposed target areas have been selected based on the lowest scores achieved by benchmark.

Figure 22: Overview of proposed target areas to address unified framework gaps

Lowest scoring unified framework Proposed target areas **Benchmark** Consider ratifying the Budapest Convention **B9: Regional and** Assess how to improve on international agreements determining International jurisdiction and/or managing cross-border data privacy and Cooperation (70%) management Consider developing a distinct regulatory framework for ICT accessibility for persons with disabilities B6: Legal Develop an official register mapping all Instruments for telecommunications/ICT infrastructure ICT/Telecom Markets Consider introducing License exemptions (74%)Assess the introduction of secondary spectrum trading Review status of fixed line number portability Consider developing a forward-looking competition policy, law or regulation applied to digital markets **B8: Market Rules** Review foreign participation in spectrum based, local service and (82%)long-distance, international services and value-added service operators

#### F.13 Key priorities for achieving the ASEAN Digital Masterplan 2025

Malaysia has identified key priorities for digital transformation in order to achieve the ASEAN Digital Masterplan 2025. These priorities are aligned with the Malaysia Digital (MD) initiative spearheaded by MDEC (Malaysia Digital Economy Corporation). The strategies outlined by MD are as follows:

- 1) **Drive high-value investments:** Malaysia aims to attract significant investments in the digital sector, positioning itself as a preferred destination for tech companies looking to expand into ASEAN and beyond.
- 2) Provide a launchpad for tech companies into ASEAN and beyond: The country seeks to establish itself as a regional hub for technology companies, offering them the necessary infrastructure and support to expand their operations within ASEAN member states and global markets.
- 3) **Drive digital adoption to grow local businesses:** Malaysia recognizes the importance of digital adoption for the growth and competitiveness of local businesses. Efforts are focused on encouraging and supporting businesses in their digital transformation journey.
- 4) Create a digitally savvy society: Malaysia aims to foster a digitally literate and empowered society by promoting digital literacy and skills development among its citizens. This includes initiatives such as Saya Digital, which focuses on enhancing digital literacy.
- 5) Facilitate a business-friendly and sustainable digital economy ecosystem: Malaysia is committed to creating an environment that is conducive to digital business growth, with policies and regulations that promote innovation, entrepreneurship, and sustainability.
- 6) **Build a high-performing and efficient organization:** As part of its digital transformation journey, Malaysia seeks to build a high-performing and efficient organization by adopting digital technologies and optimizing its operations.

These priorities are implemented through various initiatives and programs aligned with the ASEAN Digital Masterplan 2025. Some of these initiatives include:

- 1) **National E-Commerce Strategic Roadmap (NESR)**: This roadmap focuses on accelerating the growth of e-commerce in Malaysia, providing a framework for businesses to leverage digital platforms for online trade.
- 2) **100 Go Digital:** A program targeted at supporting small and medium-sized enterprises (SMEs) in their digitalization efforts, enabling them to adapt and thrive in the digital economy.
- 3) Saya Digital: An initiative aimed at improving digital literacy and skills among Malaysians, empowering them to navigate the digital landscape effectively.
- 4) **Global Online Workforce:** This program focuses on developing digital talent and fostering a skilled workforce to meet the demands of the digital economy.

The Malaysian government has launched several initiatives to support digital transformation and promote the adoption of ICT across various sectors. These initiatives include:

- Twelfth Malaysia Plan (12<sup>th</sup> MP): This policy enabler accelerates Malaysia's adoption and application of digital and advanced technology.
- Malaysia Digital Economy Blueprint (MyDIGITAL) (2021-2030): This initiative aims to accelerate Malaysia's digital economy by building a robust digital infrastructure, upskilling the workforce, and promoting the adoption of digital technology across sectors.
- National Fourth Industrial Revolution (4IR) Policy (2021-2030): This policy focuses on leveraging 4IR technologies to drive socioeconomic development and transformation.
- National Entrepreneurship Policy (NEP) 2030: This long-term strategy prepares entrepreneurs for digital business operations to thrive in the digital environment.
- Licensing Framework for Digital Banks: The framework enables digital or electronic banking services to reach underserved or unserved markets.
- **Jalinan Digital Negara (JENDELA) (2020-2025):** This initiative aims to improve the quality and coverage of Malaysia's digital infrastructure, particularly broadband and mobile networks.

Table F10: Country priority and/or initiatives corresponding to ADM 2025 DOs and High Priorities EAs

Country priority and/or specific country initiatives linked to ADM DOs and EAs

#### DO1: Actions of ADM 2025 prioritized to speed ASEAN's recovery from COVID-19

#### DO1

HP EA 1.1: Make the economic case for prioritizing ADM 2025 actions

 Most of Malaysia's priority and initiatives are in line with the Enabling actions as per listed in the ADM2025.

#### DO2: Increase in the quality and coverage of fixed and mobile broadband infrastructure

#### DO2

HP EA 2.1: Encouraging investment in the digital and ICT field

ITU unified Framework: B1, B7, B5

- Drive high-value investments
- Malaysia Digital Economy Blueprint (MyDIGITAL)
- Digital Investments Future5 (DIF5) strategy
- Malaysia Digital Status
- JENDELA
- National Entrepreneurship Policy (NEP) 2030

#### DO2

HP EA 2.2: Moving towards best practices in permits and access rights for local and national infrastructure including submarine cable repair ITU unified Framework: B6, B1

DO<sub>2</sub>

HP EA 2.6: Ensuring increased and harmonized spectrum allocation across the region

ITU unified Framework: B6, B7

#### DO2

HP EA 2.9: Establishing a centre of excellence for best practice rural connectivity ITU unified Framework: B1

- Malaysia Digital Economy Center (Pusat Ekonomi Digital Keluarga Malaysia - PEDi)
- Small Entrepreneur Digitization Empowerment Program (Program Pemerkasaan Pendigitalan Usahawan Kecil - PUPUK)

#### DO3: The delivery of trusted digital services and the prevention of consumer harm

#### DO3

HP EA 3.1: Enabling trust through greater and broader use of online security technologies

ITU unified Framework: B4, B7

- Malaysia Cyber Security Strategy (MCSS) 2020-2024
- Critical National Information Infrastructure

#### DO<sub>3</sub>

HP EA 3.3: Identifying improvements in legal and regulatory measures on the management and protection of data and other data-related activities that could be harmful

ITU unified Framework: B7

Personal Data Protection Act 2010

#### DO3

HP EA 3.4: Improve coordination and cooperation for regional computer incident response teams ITU unified Framework: B4

- Malaysia Cyber Security Strategy (MCSS) 2020-2024
- National Cyber Crisis Management Plan National Cyber Coordination and Command Centre (NC4)

## Country priority and/or specific country initiatives linked to ADM DOs and EAs

#### DO<sub>3</sub>

HP EA 3.5: Promote consumer protection and rights in relation to e-commerce

ITU unified Framework: B2, B3, B7

 Malaysian Electronic Commerce Act 2006 Personal Data Protection Act 2010

#### DO4: A sustainable competitive market for the supply of digital services

#### DO4

HP EA 4.1: Continue to identify opportunities to harmonise digital regulation to facilitate cross-

border data flows

ITU unified Framework: B9

#### DO5: Increase in the quality and use of e-government services

#### DO<sub>5</sub>

HP EA 5.1: Establish ASEAN wide reporting on the level of use of e-government services in line with ITU requirements

ITU unified Framework: B7

#### DO<sub>5</sub>

HP EA 5.2: Helping make key government departments more productive through their internal use of ICT and e-services

ITU unified Framework: B7

#### DO<sub>5</sub>

HP EA 5.3: Explore how to introduce digital identities in each AMS in a way which safeguards civil liberties

ITU unified Framework: B7

#### DO6: Digital services to connect business and to facilitate cross-border trade

#### DO6

HP EA 6.1: Facilitate compliance and secure the benefits of telecommunications services and electronic commerce in line with relevant ASEAN trade agreements

ITU unified Framework: B9

 National E-Commerce Strategic Roadmap (NESR) (E-Commerce)

#### DOA

HP EA 6.2: Support trade digitalisation through seamless and efficient flow of electronic trade documents (e.g. invoices) and goods within ASEAN

ITU unified Framework: B9

 National E-Commerce Strategic Roadmap (NESR) (E-Commerce)

#### DO7: Increased capability for business and people to participate in the digital economy

#### DO7

HP EA 7.3: Develop a framework that encourages the development and growth of digital start-ups in ASEAN

ITU unified Framework: B7

#### Priority:

 Provide a launchpad for tech companies into ASEAN and beyond

#### Initiatives:

- 100 Go Digital (SME Digitalization)
- National E-Commerce Strategic Roadmap (NESR) (E-Commerce)

#### DO8: A digitally inclusive society in ASEAN

#### **DO8**

HP EA 8.1: Ensuring citizens and businesses have the skills and motivation to use digital services ITU unified Framework: B1

## Country priority and/or specific country initiatives linked to ADM DOs and EAs

#### Priorities:

- Drive digital adoption to grow local businesses
- Create a digitally savvy society
- Facilitate business friendly and sustainable digital economy ecosystem
- Build a high-performing and efficient organization

#### Initiatives:

- Saya Digital (Digital Literacy)
- Global Online Workforce (Digital Talent)

Source: ADM 2025 pp. 16-18, based on responses to the stakeholder country questionnaire.

#### Appendix G: Myanmar

This section presents Myanmar's policy and regulatory landscape, priorities and challenges as stated in the questionnaire response, and analyses the unified framework targets achieved by benchmark, where Myanmar has achieved less than the maximum of points attainable and outlines the proposed target areas to addressing the identified gaps.

#### G.1 Policy and regulatory landscape, priorities, and challenges

#### Landscape

While Myanmar initiated ICT sector reforms in 2013, the country is still in the early stages of these reforms. Although progress has been made in certain areas such as market entry and resource management, various aspects of digital and ICT regulatory and policy frameworks still require development. The current landscape does not sufficiently support a balanced, inclusive, and equitable digital transformation.

#### **Priorities**

In the short term, Myanmar's priorities include the development of digital infrastructure, enabling regulatory frameworks, digital skills and human resource development, cyber security, personal data protection, and inclusive digital financial sector development. These priorities align with the Myanmar Digital Economy Roadmap, which identifies nine priority areas: education, health, agriculture, tourism, SMEs, financial services, startups, digital trade, and transportation and logistics. Key partners in Myanmar's digital transformation efforts include local associations such as the Myanmar Computer Federation, as well as regional and international organizations like ASEAN, ITU, and APT.

#### Challenges

The biggest challenges in Myanmar's digital transformation journey involve fostering collaboration among relevant regulatory agencies, creating appropriate legal frameworks to support inclusive digital economy development, and establishing comprehensive implementation plans for the digital economy roadmap.

#### G.2 Overview of regulatory and policy gaps

Myanmar achieves an overall unified framework score of 49 per cent, which is higher than the Asia-Pacific region average of 46 per cent and just below the world average of 50 per cent, suggesting a transitional level of readiness of digital policy, legal and governance frameworks for digital transformation.

Based on the ITU unified framework analysis, the most advanced Benchmarks include Benchmark 8: Market Rules (85%) and Benchmark 1: National Digital Policy Agenda (67%), scoring in the lower

advanced category. Benchmark 6: Legal Instruments for ICT/Telecom Markets (56%) and Benchmark 2: Regulatory Capacity (51%) are just above mid-point, and Benchmark 4: Collaborative Governance (47%) and Benchmark 3: Good Governance (36%) have moved well into the transitional state of readiness. The least developed Benchmarks include Benchmark 5: Stakeholder Engagement and Benchmark 9: Regional and International Cooperation both at 30 per cent. Benchmark 7: Legal Instruments for Digital Markets (9%) to-date lags behind and shows limited progress.

#### G.3 Benchmark 1: National Digital Policy Agenda

Benchmark 1 "National Digital Policy Agenda" has 15 targets, of which 10 have been met with maximum points. 5 targets have scored 0 points. The overall target achieved for the benchmark todate is at 67 per cent.

Table G1: Unified framework Benchmark 1 Gaps

B1: National Digital Pol	icy Agenda - 67%	
Target	Unified framework score	Ongoing initiatives to address gap/s
Are there policy instruments aimed at supporting the shift to sustainable consumption and production, or coordination mechanism for sustainable consumption and production?	0	Not yet, under consideration and consultation
Is there a developed and operationalized global strategy for youth employment and to implement the Global Jobs Pact of the ILO?	0	
Strategy design and implementation: The digital strategy has mechanisms for implementation/operational objectives?	0	
Is there a holistic innovation policy or one tailored to the ICT/digital sector?	0	
Digital Skills: Has the Fund financed projects for connecting schools (primary, secondary, post-secondary, universities, specialized training, institutions, etc.) or multi-purpose telecenters?	0	

#### State of play and priorities

Regarding Benchmark 1 "National Digital Agenda", Myanmar is currently working on a number of **short-term priorities** including digital infrastructure development, development of enabling regulatory frameworks, digital skills and human resource development, cyber security and personal data protection, and the development of an inclusive digital financial.

#### Challenges to addressing gaps

The biggest challenges that Myanmar faces with regards to developing the Digital National Policy Agenda include collaboration among relevant regulatory agencies (collaborative regulation), developing appropriate legal frameworks especially for supporting inclusive digital economy development, and the lack of comprehensive plans for implementation of digital economy roadmap. To address the challenges, Myanmar sees most room for maneuver in developing appropriate legal frameworks especially for supporting inclusive digital economy development, and developing comprehensive implementation plan for Digital Economy Roadmap.

#### G.4 Benchmark 2: Regulatory capacity

Benchmark 2 "Regulatory Capacity" has 17 targets, of which 7 indicate a maximum score of 2, 7 targets indicate a score of 0, and 3 show a score of 1 or 1.5. The total achievement to-date stands at **51 per cent**.

Table G2: Unified framework Benchmark 2 Gaps

B2: Regulatory Capacity	B2: Regulatory Capacity - 51%			
Targets	Unified framework score	Ongoing initiatives to address gap/s		
Separate telecom/ICT regulator	0	The independent regulator (Commission) is stipulated to be established in the Telcommunications law. A draft law has been prepared and is under consideration by the national parliament. The Commission is expected to be established in 1-2 years. Please refer to Article 86 of the Telecommunications Law (https://www.ptd.gov.mm/Uploads/Service s/Attach/22018/2096121422018 2.%20Tel ecom%20Law(Eng).pdf)		
Autonomy in decision making	0	According to the draft law for independent regulatory body, the commission will have autonomy in decision making.		
Accountability	0	According to the draft law for independent regulatory body, the commission will have accountability in its actions.		
Percentage of diversified funding	0			
Enforcement power	0			
Sanctions or penalties imposed by regulator	0			
New mandate: entity in charge of broadcasting (radio and TV transmission)	1	Ministry of Information		
New mandate: entity in charge of broadcasting content	1			
New mandate: entity in charge of Internet content	0			
Consumer issues: entity responsible for comparative tariff information, consumer education and handling consumer complaints	1.5	Myanmar Consumer Protection Commission		

#### Challenges to addressing gaps

Myanmar faces a number of challenges in progressing Regulatory Capacity building, which include lack of buy-in from policy makers, and insufficient funding and difficulty in developing comprehensive and sustainable capacity building program. To address this shortfall, Myanmar is focusing its efforts on the development of appropriate short-term capacity building programs with the support of regional and international partners.

#### G.5 Benchmark 3: Good Governance

Benchmark 3 "Good Governance" has 11 indicators, of which 3 targets achieve the maximum points attainable, 6 targets indicate a score of 0, and 2 indicate a score of 1. The total achievement to-date stands at 36 per cent.

Table G3: Unified framework Benchmark 3 Gaps



#### B3: Good Governance - 36%

Target	Unified framework score	Ongoing initiatives to address gap/s
Is there a formal requirement for Regulatory Impact Assessment (RIA) before regulatory decisions are made?	0	Not yet working on addressing gaps
Are the decisions of the regulatory authority (entity in charge of regulation) subject to a general administrative procedures law?	0	
Can affected parties request reconsideration or appeal adopted regulations to the relevant administrative agency (all sectors)?	1	Appeal mechanism (to both Ministry and to a General Court; Chapter 17 of the Law).  Dispute resolution mechanism (Chapter 14 of the Law)
Are national policy and regulatory frameworks technology and service-neutral?	1	Licenses issued under the Law are technology neutral, and the regulatory framework is also technology neutral to great extent.
Policy reviews: Do ministries/regulatory agencies conduct ex-post policy reviews?	0	Not yet, working on addressing gaps
Policy reviews: Do ministries/regulatory agencies conduct policy rolling reviews?	0	
Is public access to information ensured and fundamental freedoms protected, in accordance with national legislation and international agreements?	0	
Are there ethics rules in place that apply to the regulator's staff, including Head/Chairperson and Members/Commissioners (e.g., improper acceptance of gifts, personal and financial conflicts of interest, postemployment obligations, etc.)?	0	

#### State of play and priorities

The key priority with regards to Good Governance is the development of an appropriate dispute resolution mechanism.

#### Challenges to addressing gaps

The key challenge in addressing the identified gaps is lack of understanding and stakeholder participation.

#### G.6 Benchmark 4: Collaborative Governance

Benchmark 4 "Good Governance" has 16 indicators, of which one target achieves the maximum points attainable, 3 targets indicate a score of 0, and 11 indicate a score of 1. The total achievement to-date stands at **47 per cent**.

Table G4: Unified framework Benchmark 4 Gaps



#### B4: Collaborative Governance - 47%

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Target	Unified framework score	Ongoing initiatives to address gap/s		
Collaboration with (Independent) Spectrum Authority	0	There is no separate (independent or non-independent) spectrum authority in Myanmar. By the Law (Art. 19), Ministry of Transport and Communications has the sole authority to manage national frequency spectrum and Posts and Telecommunications department is authorized to allocate spectrum (Art. 20)		
Collaboration with (Independent) Broadcasting (content) Authority	1	Collaboration with Ministry of Information (as content regulator) for developing Internet content regulatory practice and industry COP		
Collaboration with Cyber security agency	1	Yes. Regulatory body responsible for cyber-security -Information Technology and Cybersecurity Department is under the same ministry. PTD and ITCSD are co-developing cybersecurity legal framework.		
Collaboration with CERT	1	Yes, CERT is under the umbrella of the same ministry and PTD has intensive collaboration with ITCSD and Myanmar Computer Federation (www.mcf.org.mm), the non-profit.		
Collaboration with (Independent) Data Protection Authority	1	Currently, ITCSD is also the regulator responsible for data protection. Data protection legal framework is being codeveloped by ITCSD and PTD.		
Collaboration between ICT ministry OR ICT regulator AND Information Society Agency	0	Ministry of Transport and Communications is the ministry responsible for ICT and PTD is under MOTC.		



#### B4: Collaborative Governance - 47%

Target	Unified framework score	Ongoing initiatives to address gap/s
Collaboration with (Independent) Finance Regulator	1	Digital inclusion collaboration with the independent financial regulator - Central Bank of Myanmar (CBM) (eg., PTD provides technical support to CBM in reviewing application for digital financial services license; the requirement to provide mobile financial service is included in MNO license requirement.
Collaboration with Energy regulatory Authority	1	Has working relationship with ministry of energy in developing the Draft Framework on cross-sector infrastructure Sharing mechanism.
Collaboration with Transport regulatory Authority	1	Both regulatory agencies belong to the same ministry - Ministry of Transport and Communications. Cooperate with transport authorities in infrastructure Sharing
Collaboration with Postal regulation Authority	1	There is no separate postal regulator. PTD is also responsible for regulating postal sector.
Collaboration with Ministry of Health (e-health)	1	Though there is no formal collaboration with the MoH, collaboration exists under the activities of Myanmar Digital Economy Development Committee
Collaboration with Ministry of Education (e-education)	1	Though there is no formal collaboration with the MoE, collaboration exists under the activities of Myanmar Digital Economy Development Committee
Collaboration with Ministry of Environment (e-waste)	0	Not yet working on addressing gaps
Collaboration with Ministry of Economic development OR similar focusing on a single or a subset of economic sector/s, e.g., Industry, Agriculture, Fishery)	1	Though there is no formal collaboration with the Ministry of Planning and Finance, Ministry of Agriculture and Fishery, and Ministry of Industry, collaboration exists with those ministries under the activities of Myanmar Digital Economy Development Committee

#### State of play and priorities

Key priorities in driving collaborative governance include collaboration with the content regulator, the consumer protection authority and with competition authority.

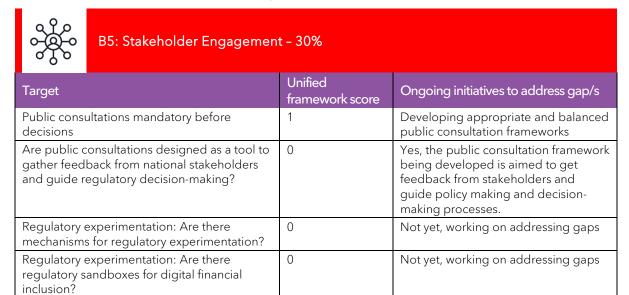
#### Challenges to addressing gaps

The main challenge with regards to improving collaborative governance is the lack of awareness and stakeholder engagement. This is an area where Myanmar is focusing its efforts, developing appropriate stakeholder engagement activities.

#### G.7 Benchmark 5: Stakeholder Engagement

Benchmark 5 "Stakeholder Engagement" has 5 indicators, of which 1 target achieves the maximum points attainable, 3 targets indicate a score of 0, and 1 indicates a score of 1. The total achievement to-date stands at **30 per cent**.

Table G5: Unified framework Benchmark 5 Gaps



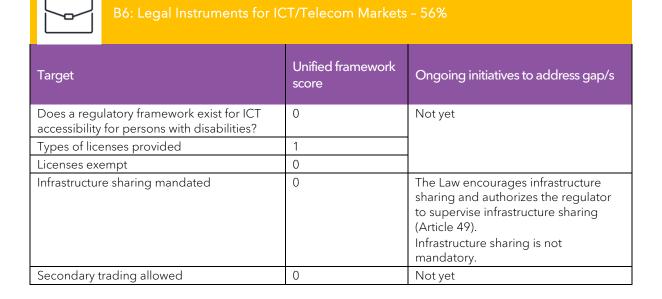
#### State of play and priorities

The key priority to advance stakeholder engagement is the development of appropriate and balanced public consultation frameworks.

#### G.8 Benchmark 6: Legal Instruments for ICT/Telecom Markets

Benchmark 6 "Legal Instruments for ICT/Telecom Markets" has 17 targets, of which 9 targets indicate a maximum score of 2, 1 indicates a score of 1, and 6 targets currently score 0 points. The total achievement to-date stands at **56 per cent.** 

Table G6: Unified framework Benchmark 6 Gaps





#### B6: Legal Instruments for ICT/Telecom Markets - 56%

Target	Unified framework score	Ongoing initiatives to address gap/s
Number portability available to consumers and required from fixed-line operators	0	
Number portability available to consumers and required from mobile operators	0	

#### State of play and priorities

Current priorities in the area of Legal Instruments for ICT/Telecom Markets include the development and implementation of the interconnection regime, the development of appropriate infrastructure sharing and enforcement mechanisms, and developing a QoS monitoring and enforcement mechanism.

#### Challenges to addressing gaps

The challenges that Myanmar is face with in advancing appropriate Legal Instruments for ICT/Telecom Markets include capacity building and appropriate cooperation with the industry. Myanmar is therefore focusing its efforts on capacity building to advance progress.

#### G.9 Benchmark 7: Legal Instruments for Digital Markets

Benchmark 7 "Legal Instruments for Digital Markets" has 16 targets, of which 14 targets indicate a score of 0, 1 shows a score of 1, and 1 indicates a score of 2. The total achievement to-date stands at 9 per cent.

Table G7: Unified framework Benchmark 7 Gaps

B7: Legal Instruments for Digital Markets - 9%		
Target	Unified framework score	Ongoing initiatives to address gap/s
Has your country adopted any policy/legislation/regulation related to e-apps and/or m-apps linked to Agriculture/Science/Financial Services?	0	Not yet
Industry 4.0: Does it includes a strategy, policy or initiative focusing on IoT? Or applied any measure regarding spectrum management and availability for IoT?	0	
Industry 4.0: Has your country adopted any policy/legislation/regulation related to cloud computing?	0	
Industry 4.0: Has your country adopted a national strategy, policy or initiative focusing on AI?	0	



### B7: Legal Instruments for Digital Markets - 9%

Target	Unified framework score	Ongoing initiatives to address gap/s
Has your country adopted a forward-looking or innovative national strategy, policy or initiative focusing on spectrum (e.g., IMT-2000, 5G, FWA, satellite, HAPS, 6 GHz)?	0	
Is there a digital identity framework in place?	0	
Is there an e-gov/Digital first government National e- government strategy or equivalent?	0	A draft national e-government strategy has been prepared and is under review.
Has your country adopted e-waste regulations or e-waste management standards?	0	Not yet
Is there a legislation/regulation for child online protection?	0	
Public services: Has your country adopted any policy/legislation/regulation related to Smart Cities?	0	
Public services: Has your country adopted any policy/legislation/regulation related to e-Health or Smart Health?	0	
Public services: Has your country adopted any policy/legislation/regulation related to eapplications and/or m-applications on Education and Learning?	0	
Are there any cross-sector (ICT and other) infrastructure sharing or fibre co-deployment regulations/agreements/promotion initiatives in your country?	1	Yes, informal cooperation exits with other utility regulators (energy, power, transports) and municipal authorities for cross-sector infrastructure sharing initiatives.

#### State of play and priorities

Key priorities in the area of Legal Instruments for Digital Markets include the implementation of cross-sector infrastructure sharing, the development of appropriate e-commerce policy and regulatory frameworks as well as appropriate data protection legal framework and the implementing national e-government programs.

#### Challenges to addressing gaps

The key challenge in addressing existing gaps in Legal Instruments for Digital Markets is cooperation among relevant agencies.

#### G.10 Benchmark 8: Market Rules

Benchmark 8 "Market Rules" has 17 targets, of which 14 targets indicate a score of 2, 1 indicates a score of 1, and 2 indicate a score of 0. The total achievement to-date stands at **85 per cent**.

Table G8: Unified framework Benchmark 8 Gaps



#### B8: Market Rules - 85%

Target	Unified	Ongoing initiatives to address gap/s
Is there a forward-looking competition policy, law or regulation applied to digital markets?	framework score 0	Not yet. The Competition Rules for Telecommunications sector mainly focus on infrastructure and still needs to be further developed to cover other components of digital markets.
Are telecom/digital sector players and Internet services exempt from specific taxes?	0	No
Are there regulatory incentives targeted at network operators or other digital market players?	1	Not yet

#### State of play and priorities

In the area of Market Rules, Myanmar focuses on developing appropriate competition safeguard regulation and creating incentives for increased investment and competition in fixed line/fixed wireless services.

#### Challenges to addressing gaps

The key challenges in driving priorities forward include lack of cooperation from the licensees, the maturity of relevant regulatory frameworks and regulatory capacity development, the latter being an area that Myanmar perceives most progress to be achieved in.

#### G.11 Benchmark 9: Regional and International Cooperation

Benchmark 9 "Regional and International Cooperation" has 5 targets, of which 1 target indicates a score of 2, 1 target shows a score of 1, and 3 indicate a score of 0. The total achievement to-date stands at 30 per cent.

Table G9: Unified framework Benchmark 8 Gaps



#### B9: Regional and International Cooperation - 30%

Target		Unified framework score	Ongoing initiatives to address gap/s
Has your country have made commitment to facilitate trade in telecommunications services?		1	Implementation of national commitments under relevant regional and international treaties (AEC, RCEP, etc.)
Has your country signed or ratified a regional or international instrument related to cybersecurity?		0	Not yet, working on addressing gaps
Has your country signed on international agreements determining jurisdiction and/or managing cross border flows on data privacy?		0	Not yet, working on addressing gaps
Has your country signed or ratified the Tampere convention for communications in emergency situations?		0	Not yet, working on addressing gaps

#### State of play and priorities

To advance regional and international cooperation, Myanmar is prioritizing the implementation of national commitments under relevant regional and international treaties (e.g., AEC, RCEP etc.,)

#### Challenges to addressing gaps

The key challenge to furthering regional and international cooperation is lack of experience.

#### G.12 Proposed target areas to addressing regulatory and policy gaps

This section sets out priority areas identified based on unified framework 2022 data and updates made based on self-reported information from the questionnaire response to addressing the regulatory gaps on the timeline 2023-2025.

Figure 23: Overview of proposed target areas to address unified framework gaps

Lowest scoring unified framework Benchmark	Proposed target areas
B7: Legal Instruments for Digital Markets (9%)	<ul> <li>Advance the introduction of cross-sector (ICT and other) infrastructure sharing or fibre co-deployment regulations/ agreements/promotion initiatives in your country</li> <li>Consider developing Child Online Protection policy/Regulation/legislation and the development of formal data protection rules/law/regulations</li> <li>Develop cybersecurity regulation/legislation</li> <li>Assess the development of policy/legislation/regulation related to e-applications and/or m-applications on Education and Learning</li> <li>Evaluate the development of policy for e-Health or Smart Health, and for Smart Cities</li> <li>Assess the development of e-waste regulations or management standards</li> <li>Advance on the e-government strategy</li> <li>Consider the development and introduction of a digital identity framework</li> <li>Consider the introduction of a forward looking or innovative national spectrum strategy/policy</li> <li>Consider developing legislation in relation to IoT, AI and Cloud Computing</li> <li>Consider the adoption of policy/legislation/regulation related to e-apps and/or m-apps linked to Agriculture/Science/Financial Services</li> </ul>
B9: Regional and International Cooperation (30%)	<ul> <li>Ratification of a regional or international instrument related to cybersecurity?</li> <li>Ratification of Tampere Convention for communications in emergency situations</li> <li>Advance commitments to facilitate trade in telecommunication services</li> <li>Consider signing on and implementing international cross-border data management agreements</li> </ul>

Lowest scoring unified framework Benchmark

B5: Stakeholder Engagement (30%)

#### Proposed target areas

 Develop appropriate consultation design and mechanisms that enable feedback gathering from relevant stakeholders

- Consider the introduction of Codes of Conduct
- Assess the implementation of regulatory experimentation, also in the area of regulatory sandboxes for financial services

 Consider introducing ethics rules that apply to the regulator's staff, including Head/Chairperson and Members/Commissioners (e.g., improper acceptance of gifts, personal and financial conflicts of interest, post-employment obligations, etc.)

- Assess how public access to information is ensured and fundamental freedoms protected, in accordance with national legislation and international agreements
- Conduct ex-post and rolling policy reviews
- Introduce a formal requirement for Regulatory Impact Assessment
- Subject regulatory decisions to general administrative procedures law
- Allow for appeals of adopted regulations by affected parties to a relevant administrative agency (all sectors)

B4: Collaborative Governance (47%)

Governance (36%)

• Consider the implementation of formal collaborative mechanisms that span different sector regulators/agencies/ministries

#### G.13 Key priorities for achieving the ASEAN Digital Masterplan 2025

This section outlines the key priorities that Myanmar has identified for digital transformation towards achieving the ASEAN Digital Masterplan 2025.

The high-priority ADM 2025 DOs that Myanmar envisages to be making most progress by 2025 are: encourage inward investment in digital and ICT, identify improvements in legal and regulatory measures on the management of protection of data and other data-related activities that could be harmful, ensure citizens and businesses have the skills and motivation to use digital services, help make key government departments more productive through their internal use of ICT and e-services.

No specific country initiatives were provided that align with any of the DOs or EAs. Areas that Myanmar prioritizes are highlighted in green in the table below.

Table G10: Country priority and/or initiatives corresponding to ADM 2025 DOs and High Priorities EAs

ADM 2025 DOs and High Priority EAs

Country priority and/or specific country initiatives linked to ADM DOs and EAs

DO1: Actions of ADM 2025 prioritized to speed ASEAN's recovery from COVID-19

DO1

HP 1.1: Make the economic case for prioritizing ADM 2025 actions

Country priority and/or specific country initiatives linked to ADM DOs and EAs

#### DO2: Increase in the quality and coverage of fixed and mobile broadband infrastructure

#### DO<sub>2</sub>

HP 2.1: Encouraging investment in the digital and ICT field

ITU unified Framework: B1, B7, B5

Country priority - no specific initiative provided.

#### DO<sub>2</sub>

HP 2.2: Moving towards best practices in permits and access rights for local and national infrastructure including submarine cable repair ITU unified Framework: B6, B1

#### DO<sub>2</sub>

HP 2.6: Ensuring increased and harmonized spectrum allocation across the region ITU unified Framework: B6, B7

#### DO<sub>2</sub>

HP 2.9: Establishing a centre of excellence for best practice rural connectivity ITU unified Framework: B1

#### DO3: The delivery of trusted digital services and the prevention of consumer harm

#### DO3

HP 3.1: Enabling trust through greater and broader use of online security technologies

ITU unified Framework: B4, B7

#### DO<sub>3</sub>

HP 3.3: Identifying improvements in legal and regulatory measures on the management and protection of data and other data-related activities that could be harmful

ITU unified Framework: B7

Country priority - no specific initiative provided.

#### DO<sub>3</sub>

HP 3.4: Improve coordination and cooperation for regional computer incident response teams

ITU unified Framework: B4

#### DO<sub>3</sub>

HP 3.5: Promote consumer protection and rights in relation to e-commerce

ITU unified Framework: B2, B3, B7

#### DO4: A sustainable competitive market for the supply of digital services

#### DO<sub>4</sub>

HP 4.1: Continue to identify opportunities to harmonise digital regulation to facilitate crossborder data flows

ITU unified Framework: B9

Country priority and/or specific country initiatives linked to ADM DOs and EAs

#### DO5: Increase in the quality and use of e-government services

#### DO<sub>5</sub>

HP 5.1: Establish ASEAN wide reporting on the level of use of e-government services in line with ITU requirements

ITU unified Framework: B7

#### DO<sub>5</sub>

HP 5.2: Helping make key government departments more productive through their internal use of ICT and e-services

ITU unified Framework: B7

• Country priority - no specific initiative provided.

#### DO<sub>5</sub>

HP 5.3: Explore how to introduce digital identities in each AMS in a way which safeguards civil liberties

ITU unified Framework: B7

#### DO6: Digital services to connect business and to facilitate cross-border trade

#### DO6

HP 6.1: Facilitate compliance and secure the benefits of telecommunications services and electronic commerce in line with relevant ASEAN trade agreements

ITU unified Framework: B9

#### DO6

HP 6.2: Support trade digitalisation through seamless and efficient flow of electronic trade documents (e.g. invoices) and goods within ASEAN

ITU unified Framework: B9

#### DO7: Increased capability for business and people to participate in the digital economy

#### DO7

HP 7.3: Develop a framework that encourages the development and growth of digital start-ups in ASEAN

ITU unified Framework: B7

 Developing the law on ICT industries (strengthening the number of digital start-ups, creating R@D and Innovation Center)

#### DO8: A digitally inclusive society in ASEAN

#### DO8

HP 8.1: Ensuring citizens and businesses have the skills and motivation to use digital services

ITU unified Framework: B1

• Country priority - no specific initiative provided.

Source: ADM 2025 pp. 16-18, response to the stakeholder country questionnaire.

# Appendix H: Philippines

This section presents the Philippine's policy and regulatory landscape, priorities and challenges as stated during the stakeholder interview, a spart of the questionnaire response and based on some complementary desk research. It also analyses the ITU unified framework targets achieved by benchmark, where the Philippines have achieved less than the maximum of points attainable and outlines the proposed target areas to addressing the identified gaps.

## H.1 Policy and regulatory landscape, priorities, and challenges

#### Landscape

Although there are still gaps in the regulatory and policy landscape in the Philippines, the Department of Information and Communications Technology (DICT) is actively working to address and advance these issues. Their focus lies in enhancing digital infrastructure, promoting digital literacy, supporting local ICT industry growth, and facilitating the deployment of telecommunications infrastructure. The ultimate goal of these initiatives is to create a conducive environment that fosters a strong digital economy and improves access to digital services for all segments of society. Additionally, the DICT collaborates with development programs to institute policies that tackle emerging challenges and harness the potential of ICT. These policies encompass areas such as cybersecurity, data privacy, ecommerce, digital government services, and ICT industry regulation. By formulating and implementing such policies, the DICT aims to establish a policy and regulatory framework that encourages innovation, safeguards consumer rights, and promotes fair competition in the ICT sector.

Similarly, the Philippine government has established guiding principles for its short, medium, and long-term agendas, exemplified by Ambisyon Natin 2040, which aims to provide Filipinos with a "strong rooted, comfortable, and secure life." Moreover, the administration's medium-term goal advocates for a national approach to utilizing digital technologies to expedite the country's social and economic development while ensuring inclusivity and narrowing the digital divide. In light of these objectives, the DICT, as the lead agency responsible for ICT development in the country, continually strives to address the challenges arising from rapid digitalization. In 2023, the DICT will issue the midterm plan for the ICT sector following the government's change in administration. Presently, during the early stages of President BBM's administration, the DICT, in coordination with the NIPPSB, is in the process of formulating the midterm plan for the ICT sector.

In our pipeline is the development of:

- National Cybersecurity Plan ensuring a trusted, secured and reliable cyberspace for every Filipino (to be released in Q3 of 2023)
- National ICT Development Agenda creating a vibrant ICT ecosystem (to be released in Q4 of 2023)
- **Digital Government Master Plan** transforming the Government to thrive in the Digital Future (to be released in Q4 of 2023)
- National Broadband Plan expanding access to digital connectivity infrastructure through strategic partnerships and innovation (to be released in 2024)
- National Emergency Communications Plan facilitating Interoperable Emergency Communications through ICT (to be released in Q3 of 2023)

#### **Priorities**

The country is currently focusing on several key priority policies to enhance its governance and infrastructure while ensuring the safety and security of its citizens. These policies aim to create a digitally empowered government, promote electronic commerce, and improve connectivity across various sectors. One of the primary initiatives is the **E-Governance Bill**, which is currently pending in the Senate. This bill aims to establish a digitally empowered and integrated government that offers secure, responsible, and transparent services to citizens. It also seeks to leverage the potential of open data to foster economic growth and enhance the country's global competitiveness. Another essential policy, the **Internet Transactions Act**, also awaits Senate approval. This act aims to foster a robust

electronic commerce environment in the country by building trust between online merchants and consumers.

In the area of infrastructure development, the DICT is implementing the Department Circular (DC) No. 008, series of 2020, entitled: "Prescribing the Policy Guidelines on the Co-Location and Sharing of Passive Telecommunications Tower Infrastructure for Macro Cell Sites", that expedites the deployment of ICT infrastructure, particularly in underserved areas, to meet the increasing demand for connectivity and enhance the quality of ICT services. The DICT will be issuing amendments to the said Circular to lengthen the validity period of certification for the independent tower companies, among others.

## Furthermore, the country is developing the following Cross-Sector Infrastructure Policies:

- The Dig Once Policy will streamline the processes and guidelines for excavation and construction activities related to fiber optics and other utility infrastructure in major roads and national highways. This approach minimizes restoration and resurfacing works after utility projects, optimizing government resources and accelerating the rollout of telecommunication infrastructure.
- The Common Pole Policy **will** set guidelines for the installation and sharing of utility poles, specifically for information and communications technology infrastructure networks. This measure aims to improve telecommunications coverage and network deployment efficiency.

## Regarding cybersecurity, the country is in the process of finalizing several policies as follows:

• The Information Security Guidelines for Public Telecommunication Entities will provide valuable guidance to efficiently use resources, manage risks, and deliver critical services while ensuring the protection of vital information's confidentiality, integrity, an availability.

Additionally, the Policy establishing Government Computer Emergency Response Teams (GCERTs) will outline the roles, responsibilities, composition, and structure of these teams. The GCERTs will be responsible for handling computer security incidents and safeguarding the confidentiality, integrity, and availability of data processed through information and communications technology infrastructures.

In the area of data privacy, the **National Privacy Commission Strategic Plan** (2023-2028) is targeting the following strategic objectives:

- SO1: Intensified regulatory and enforcement services
- SO2: Broadened reach of data privacy compliance
- SO3: Ensured world class data privacy policy and standards established in the country
- SO4: Empowered data subjects
- SO 5: Efficient and effective delivery of service
- SO 6: Ensured effective and efficient financial resources management
- SO7: Empowered, competent, motivated, recognized, and rewarded NPC workforce

Moreover, the DICT currently has several **ongoing programs**, **policies and frameworks** that target key priorities in the short term such as:

- National Broadband Plan (NBP),
- National ICT Ecosystem Framework (NICTEF),
- E-Government Digital Masterplan (EGMP), National ICT Household Survey (NICTHS),
- Women and ICT Development Index (WIDI) Survey Data,
- NGA-LGU Survey.

Currently, the **DICT** is formulating the National ICT Development Agenda (NICTDA) which **will** serve as the country's blueprint for creating a vibrant ICT ecosystem. It has a medium-term vision of transforming the nation into an emerging digital nexus with ICT as a driver of inclusive growth, sustainable development, good governance, and global competitiveness.

The Digital Government Master Plan serves as the successor to the EGMP with the aim to address the challenges of the latter plan. These policies and frameworks are derived from the long-term agenda of the government which is the **Philippine Development Plan 2023-2028**. The 8-point Socio-Economic Agenda and the Philippine Development Plan 2023-2028 lays the key priorities of the current administration for the ICT/Telecommunication sector that evolves in the following themes:

Theme	8-point Socio-economic Agenda/ Philippine Development Plan	
Digital Government	Practice Good Governance and Improve Bureaucratic Efficiency	
Digital Investments and Innovation	Revitalize Industry and Reinvigorate Services - Promote Trade and Investments - Advance R&D, Technology and Innovation - Enhance Inter-industry Linkages - Promote Competition and Improve Regulatory Efficiency	
Digital Skills/Literacy	Promote Human and Social Development  - Improve Education and Lifelong Learning Increase Income-Earning Ability  - Increase Employability  - Expand Employment Opportunities	
Digital Connectivity	Expand and Upgrade Infrastructure	
Digital Resilience	Accelerate Climate Action and Strengthen Disaster Resilience	

#### Challenges

Despite the significant advances towards digital transformation, some challenges and gaps have hindered progress in the regulatory and policy frameworks across various domains. One major obstacle is the struggle to keep up with the rapid advancements in technology. With the emergence of artificial intelligence (AI), blockchain, the Internet of Things (IoT), Big Data, and other cutting-edge technologies, there is a pressing need for updated regulations. However, developing and implementing appropriate regulations in a timely manner can be quite demanding, as these technologies often evolve faster than the regulatory development process.

Furthermore, the most significant challenges and gaps in crafting and implementing regulatory and policy frameworks lie in addressing outdated regulations that require amendment or the introduction of new laws. Additionally, establishing monitoring and evaluation mechanisms to support data-driven policymaking is essential for bridging these gaps.

## H.2 Overview of regulatory and policy gaps

The Philippines has achieved an impressive overall unified framework score of 77 per cent, surpassing the Asia-Pacific region's average of 46 per cent and the global average of 50 per cent. This achievement indicates a high level of preparedness in terms of digital policy, legal, and governance frameworks for digital transformation.

Based on detailed ITU unified framework analysis, the Philippines has excelled in various benchmarks. Benchmark 9: Regional and International Cooperation has achieved a perfect score of 100 per cent, followed closely by Benchmark 5: Stakeholder Engagement at 90 per cent. Moreover, Benchmark 1:

National Digital Policy Agenda has achieved an impressive score of 85 per cent, while Benchmark 4: Collaborative Governance and Benchmark 2: Regulatory Capacity have attained 84 per cent and 81 per cent, respectively. Additionally, Benchmark 7: Legal Instruments for Digital Markets has scored 75 per cent, while Benchmark 8: Market Rules is close behind at 70 per cent. Notably, Benchmark 6: Legal Instruments for ICT/Telecom Markets has just entered the advanced category with a score of 68 per cent. The only benchmark still in a transitional stage is Benchmark 3: Good Governance, achieving a score of 64 per cent.

# H.3 Benchmark 1: National Digital Policy Agenda

Benchmark 1 "National Digital Policy Agenda" has 15 targets, of which 13 have been met with maximum points. 2 targets have scored 0 points. The total achievement to-date stands at **85 per cent**.

Table H1: Unified framework Benchmark 1 Gaps

	B1: National Digital Policy Agenda - 85%		
Target Unified framework score		Unified framework score	Ongoing initiatives to address gap/s
plan/initiativ	or targeted groups: Broadband e includes to promote the broadband services to persons cies?	0	It may not be specified yet, but schools will probably cover it through the Free Wifi program.
plan/initiativ	or targeted groups: Broadband e includes to promote the broadband services to youth	0	It may not be specified yet, but schools will probably cover it through the Free Wifi program.

## State of play and priorities

As envisaged in the President's First SONA, the National Digital Policy Agenda will be focusing on (a) transforming the government to an agile bureaucracy and (b) deploying of digital infrastructure across the country, including the Geographically Isolated and Disadvantaged Areas (GIDAs). This will be embodied in the national ICT plans that will be developed by the DICT, specifically the National ICT Development Agenda (NICTDA) and the Digital Government Masterplan (DGMP).<sup>85</sup>

The NICTDA will include six agendas and will be aligned accordingly to national and international commitments. These agenda comprise of the following:

- Digital Connectivity
- Digital Transformation
- Digital Inclusivity
- ICT Resiliency and Sustainability
- Strategic Partnership
- ICT Ecosystems Development

With this agenda, the NICTDA will leverage the power of Information and Communications Technology as a driver of inclusive growth, sustainable development, good governance, and global competitiveness.

<sup>85</sup> Updating statements referring from the President's first state of the nation address (SONA) to the second SONA, stating the national policy agenda will be primarily embracing digitalization. Promoting the ease of doing business through the adoption of digital platforms and services. This will then be embodied in the national plans that will be developed by the DICT, specifically the National ICT Development Agenda (NICTDA) and the Digital Government Masterplan (DGMP).

On the other hand, the DGMP will harmonize and coordinate all ICT initiatives to optimize available government ICT resources, encourage information and resource-sharing and database-building, and ensure the development and protection of an integrated government ICT infrastructure. Further, the DGMP will focus on the convergence programs intended to equip the national government with the necessary technologies and skills to achieve a digitally-enabled administration capable of delivering efficient, fast and quality basic services which cut across the whole-of-government.

## Challenges to addressing gaps

The main challenge in creating a national digital policy agenda is how to make sure that these national policies encompass all sectors of society so that no one is left behind or overlooked and harmonize and integrate in the strategy the initiatives with other development objectives set forth by public and private stakeholders.

# H.4 Benchmark 2: Regulatory Capacity

Benchmark 2 "National Digital Policy Agenda" has 17 targets, of which 11 have attained a maximum score of 2, 4 show a score of 1, 1 has attained a score of 1.5, and one shows a score of 0. The total achievement to-date stands at **81 per cent**.

Table H2: Unified framework Benchmark 2 Gaps

	B2: Regulatory C	ulatory Capacity - 81%			
Indicator		Unified framework score	Ongoing initiatives to address gap/s		
Autonomy in c	decision making	1	The National Telecommunications Commission (NTC) is a government agency responsible for the regulation, supervision, adjudication and control of all Telecommunication, Broadcast and Radio Communication facilities and services in the country and attached to the DICT for policy and program coordination by virtue of §15 of RA 10844.  https://issuances-library.senate.gov.ph/sites/default/files/2023-02/ra%252010844.pdf The autonomy in decision-making of the National Telecommunications Commission (NTC) (especially in exercising its adjudication and quasi-legislative functions) is enshrined in Executive Order 546, s. 1979 and Republic Act 7925. NTC operates and functions in accordance with the relevant characters, laws or orders that created, however it is attached to the DICT for program and policy coordination (Sec. 15(b), RA 10844).		
Accountability	,	1			
Percentage of funding	diversified	1			



# B2: Regulatory Capacity - 81%

Indicator	Unified framework score	Ongoing initiatives to address gap/s	
New mandate: entity in charge of Internet content	0	By law, there is no apex agency that handles the regulation of internet content. But in the case of malicious and pirated content, the DICT in coordination with the National Telecommunications Commission, Cybercrime Investigation and Coordination Center and Intellectual Property Office of the Philippines provide policies and regulations and block/filter the aforementioned contents.	
New mandate: entity in charge of IT	1	The Department of Information and Communications Technology (DICT) is responsible for regulating the national ICT development agenda in the Philippines. As the primary policy, planning, coordinating, implementing, and administrative entity of the Executive Branch of the government, it plans and develops the national ICT development agenda.	
Consumer issues: entity responsible for comparative tariff information, consumer education and handling consumer complaints	1.5	Inclusion of Republic Act 10844, Section 4 Consumer Protection and Industry Development to the portion of initiatives to address the gap that are ongoing, providing a substantive description on consumer protection in response to indicator consumer issues.	

## H.5 Benchmark 3: Good Governance

Benchmark 3 "Good Governance" has 11 targets, of which 7 targets have attained the maximum score of 2, 2 show a score of 1, and 2 show a score of 0. The total achievement to-date stands at **73 per cent**.

Table H3: Unified framework Benchmark 3 Gaps



#### B3: Good Governance - 73%

Target	Unified framework score
Can affected parties request reconsideration or appeal adopted regulations to the relevant administrative agency (all sectors)?	1
Are national policy and regulatory frameworks technology and service-neutral?	1
Policy reviews: Do ministries/regulatory agencies conduct ex-post policy reviews?	0
Policy reviews: Do ministries/regulatory agencies conduct policy rolling reviews?	0

## State of play and priorities

As mentioned in Chapter 10 of the Philippine Development Plan: Promote Competition and Improve Regulatory Efficiency and PDP Chapter 14: Practice and Governance and Improve Bureaucratic Efficiency, Digitalization of Government aims to transform the government into an agile bureaucracy that is responsive to information or the needs of the public, provides good and solid data to ensure informed decision-making, allows secure and seamless access to public services, and digitalizes government data and sharing. Currently, the government is focusing its efforts on the passage of the

e-governance act, the development of the e-gov app, the integrated financial management system, and government digital payments (EO 170). Further, drafting MOAs with NGAs and GOCCs to facilitate digitalization in the government.

In addition, the government was able to promulgate landmark policy measures that promote ease of doing business and uphold competition in the ICT/Telecommunications industry, specifically the Republic Act No. 11032 or the Ease of Doing Business and Efficient Government Service Delivery Act of 2018 and Administrative Order No. 44: Directing the Adoption and Implementation of the National Competition Policy.

The authorities, including NPA, are currently working on institutionalizing the conduct of Regulatory Impact Assessments.

## Ongoing initiatives to address gaps

Currently, the DICT has on-going initiatives to conduct regulatory and competition impact assessments, in coordination with **the** Anti-Red Tape Authority and the Philippine Competition Commission, **respectively**, as part of the process in developing policies, and guidelines, among others. Likewise, the DICT also conducts evaluation/impact studies to determine the outcomes of a particular policy/program.

## H.6 Benchmark 4: Collaborative Governance

Benchmark 4 "Good Governance" has 16 targets, of which 13 targets have attained the maximum score of 2, and 3 show a score of 1. The total achievement to-date stands at **84 per cent**.

Table H4: Unified framework Benchmark 4 Gaps

B4: Collaborative	B4: Collaborative Governance - 84%			
Target	Unified framework score	Ongoing initiatives to address gap/s		
Collaboration between ICT ministry OR ICT regulator AND Information Society Agency	0	The function of an Information Society Agency is inherent to the current mandate of the DICT as envisaged in §6 (IV) of RA 10844.		
Collaboration with Transport regulatory Authority	1	The DICT is currently working with the Department of Transportation (DOTr) on their Automatic Fare Collection System (AFCS) project. The DOTr seeks to issue a Department Order adopting the AFCS National Standards which paves the way for the establishment of a new scheme that allows and encourages multiple Fare Media Users (FMI) and AFC Providers to participate so that fare media will be acceptable to all transport modes. The AFCS NS aims to level the playing field for AFC market players who intend to participate in cashless, multimodal, open, interoperable, and integrated transit environments. Furthermore, the DICT is in collaboration to use the transportation-facilities in the construction of digital info (RA 10929; RA 11311).		



# B4: Collaborative Governance - 84%

Target	Unified framework score	Ongoing initiatives to address gap/s
Collaboration with Postal regulation Authority	1	The DICT serves as the regulatory authority over the postal delivery services industry and is responsible for the issuance of authority to operate for PEMEDES operators. The Postal Regulation Division performs the regulatory function of the Department related to the operation and maintenance of a nationwide postal system. Part of this function is the regulation of Private Express and/or Messengerial Delivery Service (PEMEDES). Meanwhile, the mandate on the planning, developing, promoting and operating a nationwide postal system is currently lodged to the Philippine Postal Corporation under the Office of the President.  In 2023, the DICT issued Department Order No. 48 which mandates the Creation of a Technical Working Group (TWG) for Postal Regulation. The TWG was constituted to lead the development and institutionalization of departmental measures to improve and enhance governmental regulation of the postal delivery services industry and those engaged in domestic postal commerce.  The TWG in coordination with relevant organizational units shall develop and spearhead the reconstitution/amendment/proposal of Portal Regulation laws, rules and regulations, and issuances such as: the procedure for the processing of applications for Private Express and/or Messengerial Delivery Services (PEMEDES) government; inclusion of cloud-based delivery services; use drop-off and pick-up points; franchising business models; expansion to digital goods; implementation of Messenger Work License; fixing of postal rates; and parcel specifications and measurements.
Collaboration with Ministry of Environment (e-waste)	1	In 1990, the Republic Act (RA) 6969 or the Toxic Substances and Hazardous and Nuclear Waste Control Act was passed into law to provide the national policy and regulatory framework for the management of electronic waste or e-waste. This mandate on e-waste is under the purview of the Department of Environment and Natural Resources (DENR)-Environmental Management Bureau (EMB), as part of our commitment as a party to the Basel Convention.  On another note, consistent with the e-waste policy of the government, the DICT is also embarking on the development of the ASEAN Action Plan for the Promotion of Green Digital Initiatives.

# State of play and priorities

As highlighted in the First State of the Nation Address, the President urges the Congress for the passage of the e-Government/e-Governance Act. This proposed measure aims to establish an

integrated, interconnected, and interoperable information and resource sharing and communications network spanning the entirety of the national and local government, an internal records management information system, an information database, and digital portals for the delivery of public services. It likewise pushes for the digitization of paper-based and other traditional modes of workflows for a more efficient and transparent public service. Likewise, this measure is considered as one of the priority legislative bills endorsed in the 1st and 2nd Legislative-Executive Development Advisory Council (LEDAC) meetings held in 2022 and 2023.

Moreover, the DICT, in collaboration with other NGAs, launched the eGov PH application under the "Single Operating System" concept on 02 June 2023. The application aims to unify multi-sectoral government transactions and services and to provide the public with a secure online one-stop shop platform for availing permits, clearances, job applications, tourism and travel, healthcare, and e-payments. As a step towards the onboarding, inclusion, and integration of the different government services into the eGov PH platform, the DICT established inter-agency partnerships with 37 government institutions from December 2022 to June 2023.

Overall, the multistakeholder collaboration in both the public and private sectors is perceived as key to creating meaningful policies and regulations to achieve digital transformation in the country. Here are the key counterparts and interlocutors in the Department's efforts to build an enabling policy and regulatory environment for digital transformation.

- The National Telecommunications Commission (NTC) is primarily responsible for the regulation and quasi-judicial functions relative to the supervision, adjudication, and control of the country's radio communications, telecommunications, and broadcast, including cable television (CATV) facilities and services.
- The National Privacy Commission (NPC) is committed to fully protecting your personal data privacy in compliance with Republic Act No. 10173, otherwise known as the Data Privacy Act of 2012 (DPA).
- The Cybercrime Investigation and Coordinating Center (CICC) is responsible for all functions related to cybersecurity, including the formulation of the Philippines National Cybersecurity Plan, the establishment of the National Computer Emergency Response Team (CERT), and the facilitation of international cooperation on intelligence regarding cybersecurity matters.
- National Government agencies comprise the entire machinery of the central government, as distinguished from the different forms of local governments.
- Local Government Units are political subdivisions established by or in accordance with the Constitution.
- Industry and development partners comprise both in public and private companies that may help in the development of DICT's ICT initiatives and policy formulation. This may be done through collaborative partnerships including MOA and MOU.
  - Technical/Professional Organizations (e.g., Institute of Electronics Engineers of the Philippines, Analytics Association of the Philippines)
  - Industry Associations (e.g., IT and Business Process Association of the Philippines, Game Developers Association of the Philippines, Healthcare Information Management Association of the Philippines, Creative Economy Council of the Philippines, Contact Center Association of the Philippines, among others)
  - ICT Councils (e.g., National ICT Confederation of the Philippines)
- The Academia stimulates the DICT in the development, policy formulation, and support of ICT, especially in technology and innovation.
- Cybercrime Investigation and Coordinating Center is responsible for all functions related to cybersecurity including the formulation of the Philippines National Cybersecurity Plan, the establishment of the National Computer Emergency Response Team (CERT), and the facilitation of international cooperation on intelligence regarding cybersecurity matters.
- The Legislative Branch (Senate and House of Representatives) is responsible for making enabling laws to make sure the spirit of the Constitution is upheld in the country and, at times, amend or change the Constitution itself.

- The Infrastructure Agencies are responsible for planning, designing, controlling, maintaining, and managing different sectors that focus on the economy, public works and highways, energy, transportation, and social and urban development.
  - National Economic and Development Authority (NEDA)
  - Department of Public Works and Highways (DPWH)
  - Department of Energy (DOE)
  - Department of Transportation (DOTr)
  - Department of Human Settlement and Urban Development (DHSUD)

## Challenges to addressing gaps

Some of the key challenges that the DICT is facing in relation to establishing Collaborative Governance are the frequent change of focal point per agency or organization, budgetary constraints (limited fiscal space), buy-in to collaborate, and limited guidelines and mechanisms for collaboration.

# H.7 Benchmark 5: Stakeholder Engagement

Benchmark 5 "Stakeholder Engagement" has 5 targets, of which 4 targets have attained the maximum score of 2 and 1 shows a score of 1. The total achievement to-date stands at **90 per cent**.

Table H5: Unified framework Benchmark 5 Gaps

<del>)</del>	B5: Stakeholder Engagement - 90%		
Target		Unified framework score	Ongoing initiatives to address gap/s
to gather fe	consultations designed as a tool edback from national s and guide regulatory decision-	1	The DICT incorporates the inputs from public consultations as long as they are compelling and relevant to the plans and policies. Public consultations are part of the policy development process, wherein relevant stakeholders from the government, industry, professional associations, academia, and civil society are involved and requested to provide their insights, comments, and recommendations for the policy being developed.

## State of play and priorities

The DICT's current priorities regarding "Stakeholder Engagement" include the conduct of regional and national multi-stakeholder consultations for plans and policies being developed. There is a need to involve stakeholders in all stages of regulatory or policy development in order to issue a communications plan and activate stakeholder groups, e.g., ICT councils: CIO council, etc.

## Challenges to addressing gaps

Some of the key challenges that the DICT is facing in engaging stakeholders are the frequent change of focal point per agency or organization and getting their buy-in; suggestions are not feasible given limited fiscal resources. To overcome this challenge, establishing a database containing updated information about relevant stakeholders is where the DICT sees the most room for maneuver to address current gaps in the short term (until 2025).

# H.8 Benchmark 6: Legal Instruments for ICT/Telecom Markets

Benchmark 6 "Legal Instruments for ICT/Telecom Markets" has 17 targets, of which 11 targets attain a maximum score of 2, 1 achieves a score of 1, and 5 show a score of 0. The total achievement to-date stands at **68 per cent.** 

Table H6: Unified framework Benchmark 6 Gaps

B6: Legal Instruments for ICT/Telecom Markets - 68%			
Target	Unified framework score	Ongoing initiatives to address gap/s	
Infrastructure sharing: Does an official register or a mapping exist in your country of all telecommunication/ICT infrastructure?	0	Efforts have been initiated to harmonize data on infrastructure in the Philippines through the assistance of DICT, PhilSA, and telcos/ISPs. The DICT has been working on a common tower policy since 2018 to speed up the deployment of internet across the country by allowing and encouraging telcos and ISPs to share cell towers.  Currently, the DICT has policies that address several indicators that scored a 0, such as the common tower policy, which mandates telcos to share common infrastructure such as towers. The National Broadband Plan has data on the majority of ICT infrastructures in the country.	
Operators required to publish Reference Interconnection Offer (RIO)	0	The DICT has already done so on a bilateral basis; EO S9, s. 1993 commercial arrangement	
Infrastructure sharing mandated	0	The DICT has already passed DICT DC 008, s. 2021 (PTTI): Revised JMC No. 1, s. 2021 (PTTI Permits) JMC No. 1, s. 2021 (Fiber Permits) in relation to infrastructure sharing for mobile operators' permission. Currently, the DICT has policies that address several indicators that scored a 0, such as the common tower policy, which mandates telcos to share common infrastructure such as towers. The National Broadband Plan has data on the majority of ICT infrastructures in the country.	
Unbundled access to the local loop required	0		
Number portability available to consumers and required from fixed-line operators	0	This may not be available yet but may be referred to the National Telecommunications Commission (NTC).	
Number portability available to consumers and required from mobile operators	1	The DICT has already passed this law, RA 11202, or An Act Requiring Mobile Service Providers to Provide Nationwide Mobile Number Portability to Subscribers, in relation to the number of portability options available to consumers and requirements from mobile operators.	

## State of play and priorities

Here are some of our current priorities regarding "Legal Instruments for ICT and Telecom Markets," aspects that the DICT is currently working on. And the short-term goals that the department is targeting are:

- National Telecommunications Commissions (NTC) Strengthening
- Open Access to data transmission act
- Implementation of competition laws
- Spectrum management law or act
- National Broadband Act
- Amendment to the Building Code to include ILT and telecom requirements

# H.9 Benchmark 7: Legal Instruments for Digital Markets

Benchmark 7 "Legal Instruments for Digital Markets" has 16 targets, of which 6 targets show the maximum score of 2, and 3 show a score of 0. The total achievement to-date stands at **75 per cent**.

Table H7: Unified framework Benchmark 7 Gaps

	B7: Legal Instruments for Digital Markets - 75%			
Target		Unified framework score	Ongoing initiatives to address gap/s	
or initiative f	Does it includes a strategy, policy ocusing on IoT? Or applied any garding spectrum management lity for IoT?	0	The proposed House Bill No. 00896 or the "Philippine Spectrum Management Act" filed by Rep. Christian Tell A. Yap, seeks to ensure the proper, efficient, and equitable distribution of frequency spectrum by mandating the National Telecommunications Communication (NTC) to make the spectrum allocation, assignment, and reclassification, re-call and reassignment transparent in order to protect the rights and general interest of consumers.	
or innovative initiative foc	untry adopted a forward-looking e national strategy, policy or using on spectrum (e.g., IMT- WA, satellite, HAPS, 6 GHz)?	0	To ensure universal coverage, Republic Act No. 10929 provides that Internet Service Providers (ISPs) shall be allowed to acquire and utilize internet connectivity directly from satellites and other emerging technologies. In addition, the DICT's National Broadband Plan (NBP) published in 2017, considers the deployment of satellite receivers to cater broadband services in the countryside, where other terrestrial and submarine broadband technologies are not feasible.	

https://www.pna.gov.ph/articles/1073392, https://legacy.senate.gov.ph/lis/bill\_res.aspx?congress=18&g=SBN-793



# B7: Legal Instruments for Digital Markets - 75%

Target	Unified framework score	Ongoing initiatives to address gap/s
		Executive Order No. 127, s. 2021 otherwise known as the Expanding The Provision Of Internet Services Through Inclusive Access To Satellite Services) states that enfranchised telecommunication entities duly authorized by the NTC and Value-Added Service (VAS) Providers and Internet Service Providers (ISPs) duly registered with the NTC shall be allowed direct access to all satellite systems to build and operate broadband facilities to offer Internet services. Broadcast Service Providers may also be allowed to directly access satellite systems subject to NTC rules, regulations, and authorizations.  DICT's Department Circular No. 002, s. 2021 provides the Implementing Rules and Regulations on the national policy for expanding the provision of internet services through inclusive access to satellite services.  Republic Act 3846, Republic Act 7925, Executive Order 546, and NTC MC 3-3-96 to the portion initiatives to address gap ongoing providing existing policies and guidelines in relation to spectrum management.
Is there a digital identity framework in place?	0	Republic Act No. 11055 or the Philippine Identification System Act in relation to the target.

# State of play and priorities

The department is working on aspects such as the support of the spectrum management act and the development of cross-sector infrastructure policies. These are short-term goals that the department is targeting up to 2025.

## Challenges to addressing gaps

One of the key challenges is the rapid progress of technologies and the digital market in which legal instruments were not able to keep up. To address these challenges, capacity building and international benchmarking on legal instruments for digital markets are seen as having the most room for maneuver to address current gaps in the short term (until 2025).

#### H.10 Benchmark 8: Market Rules

Benchmark 8 "Market Rules" has 17 targets, of which 6 targets show the maximum score of 2, 9 show a score of 1, and 2 show a score of 1.3. The total achievement to-date stands at **70 per cent.** 

Table H8: Unified framework Benchmark 8 Gaps



# B8: Market Rules - 70%

Target	Unified framework score	Ongoing initiatives to address gap/s
Level of competition in local and long distance (domestic and international) fixed line services	1.3	
Level of competition in IMT (3G, 4G, etc.) services	1	The largest telecom providers in the Philippines include PLDT, Smart Communications, Globe Telecom, DITO Telecommunity, and NOW Telecom.
Level of competition in cable modem, DSL, fixed wireless broadband	1.3	There are many providers; however, major PTEs have substantial participation in international gateway leased lines.
Level of competition in leased lines	1	
Level of competition in International Gateways	1	
Foreign participation/ownership in facilities- based operators	1	These are the following laws including the investment facilitation that the
Foreign participation/ownership in spectrum-based operators	1	DICT is undertaking in relation to market rules and participations:
Foreign participation/ownership in local service operators/long-distance service operators	1	<ul> <li>Republic Act No. 11337 - Innovative Startup Act</li> <li>Republic Act No. 11534 - Corporate Recovery and Tax</li> </ul>
Foreign participation/ownership in international service operators	1	Incentives for Enterprises  • (CREATE) Act
Foreign participation/ownership in Internet Service Providers (ISPs)	1	Republic Act No. 11595     Amendments to Retail Tra-
Foreign participation/ownership in value-added service providers	1	Liberalization Act  Republic Act No. 11647 - Amendments to Foreign Investments Act  Republic Act No. 11659 - Amendments to Public Service Act  Administrative Order No. 44, s. 2021 - Directing the Adoption and Implementation of the National Competition Policy  Amended 2022 Implementing Rules and Regulations (IRR) of the  Build-Operate-Transfer (BOT) Law  DICT DC, 008, s.2020 (PTTI)  RA 11647 (Foreign Investment Act)

# Challenges to addressing gaps

Some of the key challenges that the DICT is facing in establishing and enforcing Market Rules are legal challenges from the dominant players and obsolete or archaic laws; e.g., RA 7925/RA 3846.

## H.11 Benchmark 9: Regional and International Cooperation

Benchmark 9 "Regional and International Cooperation" has 5 targets, of which 5 targets achieve the maximum score of 2. The total achievement to-date stands at **100 per cent**.

Table H9: Unified framework Benchmark 9 Gaps



B9: Regional and International Cooperation - 100%

## State of play and priorities

The DICT remains committed to its international and regional corporations such as the commitment to achieving UN SDGs, ADM 2025, ITU and Connect 2030 to name a few by integrating sectoral objectives to its formulation of policies and regulations.

In the area of data protection, the National Privacy Commission ("NPC") has agreements with data protection authorities for cooperation and managing/affecting cross-border data flows. Existing agreements are with the Singapore Personal Data Protection Commission (PDPC), UK Information Commissioner's Office (ICO), and Hong Kong Office of the Privacy Commissioner for Personal Data (PCPD), while agreements in process this year are with the Office of the Data Protection Commissioner of the Dubai International Financial Centre Office (DIFC), the Office of the Privacy Commissioner of Canada, and Turkiye Kişisel Verileri Koruma Kurumu (Personal Data Protection Authority.

The Philippines, through the NPC, is a Member of the following international fora for data privacy:

- Global Privacy Assembly (GPA)<sup>87</sup>
- Global Privacy Enforcement Network (GPEN)<sup>88</sup>
- Global Forum Assembly (GFA), establishing the Global Cross Border Privacy Rules (Global CBPR) system<sup>89</sup>
- APEC CBPR system<sup>90</sup>
- APEC Cross-border Privacy Enforcement Arrangement (CPEA)<sup>91</sup>
- Asia Pacific Privacy Authorities' Forum (APPA)<sup>92</sup>
- Association of Southeast Asian Nations (ASEAN) Digital Data Governance Working Group (WG-DDG) and Data Protection and Privacy Forum (ADPPF)

Lastly, the NPC is also an Observer in the Consultative Committee of the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (Convention 108).<sup>93</sup>

The NPC is in the preliminary steps in assessing possible accession to Convention 108 and thereafter, assess and plan for possibly obtaining EU adequacy decision.

Challenges to addressing gaps

The country needs to strike a balance with the opportunities offered by international parties and its independent foreign policy.

<sup>87</sup> https://globalprivacyassembly.org/

<sup>88</sup> https://www.privacyenforcement.net/content/home-public

<sup>89</sup> https://www.globalcbpr.org/

<sup>90</sup> http://cbprs.org/

<sup>&</sup>lt;sup>91</sup> https://www.apec.org/groups/committee-on-trade-and-investment/digital-economy-steering-group/cross-border-privacy-enforcement-arrangement

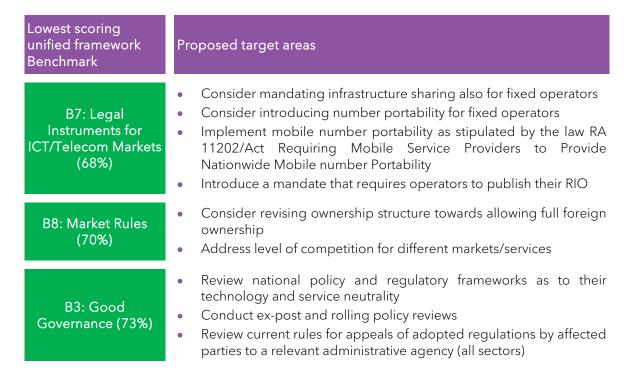
<sup>92</sup> https://www.appaforum.org/

<sup>93</sup> https://www.coe.int/en/web/data-protection/consultative-committee-tpd

# H.12 Proposed target areas to addressing regulatory and policy gaps

This Section sets out proposed target areas identified based on unified framework 2022 data and updates made based on self-reported information from the questionnaire response to addressing the regulatory gaps.

Figure 24: Overview of proposed target areas to address unified framework gaps



## H.13 Key priorities for achieving the ASEAN Digital Masterplan 2025

This section outlines the key priorities that the Philippines have identified for digital transformation towards achieving the ASEAN Digital Masterplan 2025.

As regards areas of most progress, in the Philippine's context, the country envisages the following ADM 2025 priorities will have the most progress, as a result of continuous support from the current administration:

- Make the economic case for prioritizing ADM 2025 actions
- Establish ASEAN wide reporting on the level of use of e-government services in line with ITU requirements
- Help make key government departments more productive through their internal use of ICT and e-services
- Ensure citizens and businesses have the skills and motivation to use digital services

These priorities/areas are seen to be realized through the issuance of national ICT plans such as National Development Agenda and Digital Government Masterplan, passage of critical policies such as e-Governance Act, Open Access in Data Transmission Industry Act, and Spectrum Management Act, among others.

Table H10: Country priority and/or initiatives corresponding to ADM 2025 DOs and High Priorities EAs

Country priority and/or specific country initiatives linked to ADM DOs and EAs

## DO1: Actions of ADM 2025 prioritized to speed ASEAN's recovery from COVID-19

#### DO1

HP EA 1.1: Make the economic case for prioritizing ADM 2025 actions

 No specific initiative provided. This DO and EA will be supported by different policies more broadly.

## DO2: Increase in the quality and coverage of fixed and mobile broadband infrastructure

#### DO2

HP EA 2.1: Encouraging investment in the digital and ICT field

ITU unified Framework: B1, B7, B5

Passage of the following legislative/administrative issuances:

- Republic Act No. 11534 Corporate Recovery and Tax Incentives for Enterprises Act
- Republic Act No. 11647 Amendments to Foreign Investments Act
- Republic Act No. 11659 Amendments to Public Service Act
- DICT Department Circular No. 8, s. 2020 Policy Guidelines on the Co-Location and Sharing of Passive Telecommunication Tower Infrastructure for Macro Cell Sites
- DICT Department Circular No. 2, s. 2021 -Implementing Rules and Regulations on the National Policy for Expanding the Provision of Internet Services Through Inclusive Access to Satellite Services

#### DO<sub>2</sub>

HP EA 2.2: Moving towards best practices in permits and access rights for local and national infrastructure including submarine cable repair ITU unified Framework: B6, B1

#### DO<sub>2</sub>

HP EA 2.6: Ensuring increased and harmonized spectrum allocation across the region ITU unified Framework: B6, B7

## DO2

HP EA 2.9: Establishing a centre of excellence for best practice rural connectivity ITU unified Framework: B1

 Establishment of Technology for Education, Employment, Entrepreneurs, and Economic Development (Tech4ED)/Digital Transformation Centers (DTCs)

## DO3: The delivery of trusted digital services and the prevention of consumer harm

#### DO3

HP EA 3.1: Enabling trust through greater and broader use of online security technologies ITU unified Framework: B4, B7

 Institutionalization of certification scheme for digital signatures and its use in e-government services

#### DO3

HP EA 3.3: Identifying improvements in legal and regulatory measures on the management and protection of data and other data-related activities that could be harmful

# Country priority and/or specific country initiatives linked to ADM DOs and EAs

#### ITU unified Framework: B7

#### DO<sub>3</sub>

HP EA 3.4: Improve coordination and cooperation for regional computer incident response teams

ITU unified Framework: B4

DICT Department Circular No. 003, s. 2020 prescribes the creation of the National
Computer Emergency Response Team division
of the DICT, Sectoral CERTs, Government
CERTs, and Organizational CERTS in the private
sector. The Circular also provides for the use of
Escalation Protocol as issued by CERT-PH.

#### DO<sub>3</sub>

HP EA 3.5: Promote consumer protection and rights in relation to e-commerce

ITU unified Framework: B2, B3, B7

• Republic Act No. 11934 - SIM Registration Act

#### DO4: A sustainable competitive market for the supply of digital services

#### DO4

HP EA 4.1: Continue to identify opportunities to harmonise digital regulation to facilitate cross-border data flows

ITU unified Framework: B9

• Signing of APEC Cross-border Privacy Rules

#### DO5: Increase in the quality and use of e-government services

#### DO<sub>5</sub>

HP EA 5.1: Establish ASEAN wide reporting on the level of use of e-government services in line with ITU requirements

ITU unified Framework: B7

 e-Government/Digital Government Masterplan; e-Governance bills

#### DOF

HP EA 5.2: Helping make key government departments more productive through their internal use of ICT and e-services

ITU unified Framework: B7

 No specific initiative provided. This DO and EA will be supported by different policies more broadly.

#### DO5

HP EA 5.3: Explore how to introduce digital identities in each AMS in a way which safeguards civil liberties

ITU unified Framework: B7

Republic Act No. 11055 - PhilSys Act

### DO6: Digital services to connect business and to facilitate cross-border trade

#### DO6

HP EA 6.1: Facilitate compliance and secure the benefits of telecommunications services and electronic commerce in line with relevant ASEAN trade agreements

ITU unified Framework: B9

## DO6

HP EA 6.2: Support trade digitalisation through seamless and efficient flow of electronic trade documents (e.g. invoices) and goods within ASEAN TradeNet/ASEAN Single Window

Country priority and/or specific country initiatives linked to ADM DOs and EAs

#### ITU unified Framework: B9

## DO7: Increased capability for business and people to participate in the digital economy

#### DO7

HP EA 7.3: Develop a framework that encourages the development and growth of digital start-ups in ASEAN

ITU unified Framework: B7

- Republic Act No. 11293 Philippine Innovation Act
- Republic Act No. 11337 Innovative Startup Act

Republic Act No. 11927 - Philippine Digital

Workforce Competitiveness Act

#### DO8: A digitally inclusive society in ASEAN

#### DO8

HP EA 8.1: Ensuring citizens and businesses have the skills and motivation to use digital services ITU unified Framework: B1

Source: ADM 2025 pp. 16-18, based on response to stakeholder questionnaire.

# **Appendix I: Singapore**

This section presents Singapore's policy and regulatory landscape, priorities and challenges as stated in the questionnaire response, and analyses the unified framework targets achieved by benchmark, where Singapore has achieved less than the maximum of points attainable and outlines the proposed target areas to addressing the identified gaps.

# I.1 Policy and regulatory landscape and priorities

#### Landscape

Singapore's ICT policy and regulatory landscape positions the country as a global leader in the digital domain. The nation's approach centers on fostering innovation, developing a robust digital infrastructure, and promoting a thriving digital ecosystem. Singapore's leading position can be attributed to several key factors. One of the pivotal drivers is the Smart Nation Vision<sup>94</sup>, an ambitious initiative undertaken by the government. Through this visionary approach, Singapore aims to leverage cutting-edge technology and data to elevate the quality of life for its citizens, enhance efficiency across various sectors, and propel economic growth.

To nurture innovation and stay at the forefront of technological advancements, Singapore's government actively implemented pro-innovation policies. These initiatives included providing grants, funding, and collaboration opportunities to startups, businesses, and research institutions. By incentivizing the development and adoption of state-of-the-art technologies, Singapore fostered a thriving ecosystem of innovation.

A crucial pillar of Singapore's digital performance lies in its world-class digital infrastructure. The nation continues to make significant investments in building robust networks, such as high-speed broadband and 5G connectivity, alongside advanced data centers. This solid foundation facilitates seamless digital services and attracts international businesses and investment.

Data privacy and cybersecurity stand as paramount concerns in Singapore's ICT policy. The nation maintains a steadfast focus on protecting data and ensuring cybersecurity measures are in place. Comprehensive data privacy laws and robust cybersecurity practices instill trust among businesses and consumers alike, providing a secure and responsible technology environment.

<sup>94</sup> https://www.smartnation.gov.sg/about-smart-nation/vision-mission/

The country's excellence in e-government initiatives further reinforces its standing. By pioneering user-friendly platforms for accessing public services online, Singapore has streamlined administrative processes, increased transparency, and improved public service delivery, driving convenience and efficiency for its citizens.

Singapore's dedication to nurturing talent and fostering collaboration plays a vital role in its success. The nation invests in educational programs to develop a skilled ICT workforce and actively promote public-private partnerships. This collaborative approach encourages fruitful alliances between the government, academia, and the private sector, propelling innovation and driving progress.

Internationally, Singapore's ICT policies and initiatives have garnered widespread recognition. Consistently ranking high in global indices related to digital readiness, innovation, and ease of doing business, Singapore proved itself as a standout player on the global stage.

While embracing technology, Singapore remains committed to digital inclusion and citizen participation. Striving to bridge the digital divide, the country ensures that all citizens can benefit from the digital transformation. Initiatives aim at promoting digital literacy and accessibility catered especially to the elderly and less privileged segments of society, fostering a more inclusive digital society overall.

#### **Priorities**

With the COVID-19 pandemic as a catalyst, Singapore recognized the importance of locking in the gains achieved through digitalization and swiftly adapting to the "new normal." It aims to leverage the insights and advances gained during the crisis to solidify its digital economy, future-proof its industries, enhance resilience against crises, and maintain relevance in an ever-evolving digital world.

The Infocomm Media Development Authority (IMDA) has been playing a crucial role in Singapore's digital journey. They continue to invest on multiple fronts, including aiding small and medium-sized enterprises (SMEs) in their digital transformation efforts, building and fortifying digital infrastructure, providing training and upskilling opportunities for the tech workforce, implementing progressive regulations, and fostering a digital society. These efforts reflect Singapore's commitment to harnessing the power of technology and digital innovation for the benefit of their economy and society.

As Singapore moves forward, its digital prowess has become a beacon of inspiration for countries around the world. With its strong foundation, strategic investments, and comprehensive approach to digitalization, Singapore has positioned itself as a global leader in the digital landscape, poised to thrive in the ever-accelerating digital age.

## I.2 Overview of regulatory and policy gaps

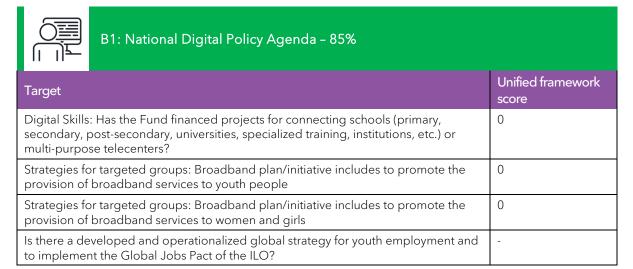
In the realm of digital transformation, Singapore has emerged as a frontrunner, surpassing both regional and global averages. With an overall unified framework score of 89 per cent, Singapore showcases its high level of readiness in terms of digital policy, legal frameworks, and governance. This achievement signals the country's strong position in embracing the opportunities of the digital age.

An analysis of Singapore's unified framework scoring revealed that all benchmarks are advanced, with scores equal to or above 80 per cent. Some benchmarks excel even further, with Benchmark 7: Legal Instruments for Digital Markets achieving a perfect score of 100 per cent. Benchmark 8: Market Rules secured an impressive 94 per cent, while Benchmark 2: Regulatory Capacity obtained a commendable 93 per cent. Benchmark 4: Collaborative Governance stood at a respectable 88 per cent, and Benchmark 1: National Digital Policy Agenda obtained a solid 85 per cent. Benchmark 6: Legal Instruments for ICT/Telecom Markets achieved a score of 85 per cent and Benchmark 3: Good Governance held steady at 82 per cent. Both Benchmark 5: Stakeholder Engagement and Benchmark 9: Regional and International Collaboration scored at 80 per cent.

# I.3 Benchmark 1: National Digital Policy Agenda

Benchmark 1 "National Digital Policy Agenda" has 15 targets, of which 11 have been met with maximum points. 3 targets have scored 0 points and for 1 target, no information was provided. The total achievement to-date stands at **85 per cent.** 

Table I1: Unified framework Benchmark 1 Gaps



State of play and priorities and ongoing initiatives to address gaps

Demand for tech talent has grown exponentially as the world digitalizes, and there are exciting economic and job-creation opportunities for countries poised to seize these talents. IMDA has been helping the Singaporian workforce, both current and future, prepare for this through upskilling and re-skilling to meet current demands, while growing a pipeline of future-ready next-generation talent. Besides renewal through upskilling for existing tech workers and mid-career professionals, IMDA is also preparing the next generation of workers for the digital economy of tomorrow, including enhancing opportunities for students from universities, polytechnics and the Institute of Technical Education (ITE) to kickstart and develop their tech careers.

In addition, IMDA's Digital for Life movement was launched in February 2021 to galvanize the community and focus on driving digital adoption to help Singaporeans embrace digital as a lifelong pursuit and to enrich their lives. The Digital for Life movement will build on the momentum of many community efforts we have seen during COVID-19, and mobilize more community partners and resources to help all Singaporeans feel excited, empowered, and enriched by digital technologies.

To help build a digital inclusive society, the Digital for Life movement has been established to support projects and activities that promote:

- Digital Technology and Inclusion which will focus on building digital resilience, and excite different segments of society on how new digital technologies can enrich their daily lives.
  - The **Senior Go Digital programme** aims to help seniors lead engaged, informed and fulfilled lives, by improving their digital capabilities
  - Code@SG aims to develop computational thinking and making as a national capability in Singapore. Of which, it includes a Code For Fun Enrichment Programme that aims to increase primary and secondary school students' knowledge of computational thinking, coding and making, as well as the Infocomm Media Clubs Programme that supports the community of Infocomm and media-related clubs across primary, secondary schools, and junior colleges to provide an enriching Co-Curricular Activities (CCA) experience for Infocomm Media Club members.
- Digital Literacy and Wellness which will focus on promoting good digital habits as society engages in the digital domain, including areas of cyber wellness and safety, media literacy, and mitigating the risks of online harms

- The **Better Internet Campaign** as the Media Literacy Council's annual flagship programme that champions digital and media literacy in Singapore.
- In 2021, we have >110 People-Private-Public (3P) Partners supporting the Digital for Life movement and \$8.4 million was raised for ground-up digital inclusion initiatives. We have also enabled 22 ground-up projects including educating youths on digital wellness, cybersecurity and digital tech skills; and empowering seniors and persons with disabilities to navigate and embrace digitalization.

In April 2023, IMDA has also launched the DigitalAccess@Home scheme to provide subsidized broadband and digital devices (laptop or tablet) to low-income Singaporean households to strengthen digital inclusion. About \$80 million has been set aside over the next four years to fund this new scheme. 95

## I.4 Benchmark 2: Regulatory Capacity

Benchmark 2 "Regulatory Capacity" has 17 targets, of which 15 targets have attained a maximum score of 2, 1 shows a score of 1.5, and 1 has attained a score of 0. The total achievement to-date stands at 93 per cent.

Table I2: Unified framework Benchmark 2 Gaps

	B2: Regulatory Capacity - 93%	
Target		Unified framework score
Accountability		0
Consumer Issues: Entity responsible for comparative tariff information, consumer education and handling consumer complaints		1.5

State of play and ongoing initiatives

IMDA regularly reviews the policies and regulations safeguarding consumers' and businesses' interests to ensure they are **progressive**, balancing consumer safety alongside reasonable business needs. 96

These include the Personal Data Protection Act (PDPA) amendments, which took effect in phases from February 2021, to enhance protection of consumers' personal data, balanced with facilitating businesses' need for data use.

In addition, as part of the measures announced by IMDA in October 2022 to promote cyber wellness and combat online scams in Singapore, all organizations that send SMS using alphanumeric Sender IDs are required to register with the Singapore SMS Sender ID Registry (SSIR). This registration is to better protect consumers against non-registered SMS that may be online scams.

From January 2023, non-registered SMS will also be labelled as "Likely-SCAM", functioning similarly to a "spam filter and spam bin". Consumers may receive non-registered SMS labelled as "Likely-SCAM". Consumers are advised to exercise caution. If unsure, consumers are encouraged to check with family and friends. Collectively, this will enhance our resilience against online scams in Singapore.

Despite ongoing efforts that service providers and agencies have undertaken to protect our online users, there is also another rising concern - the ease with which harmful content is disseminated online. To raise the standards of online safety for vulnerable youths, IMDA, together with Ministry of Communications and Information (MCI), have passed the Online Safety (Miscellaneous Amendments)

 $<sup>^{95}</sup>$  Extracted from IMDA's Annual Report FY2021 – 2022 and IMDA's website & Press Releases.

<sup>&</sup>lt;sup>96</sup> For information see IMDA's Annual Report FY2021 - 2022 & IMDA's website.

Act in Parliament in November 2022, and will take effect from February 2023. To enhance online safety for Singapore users, the amendments were made after extensive consultation with multiple stakeholders including parents, youth, community group representatives, academics, and industry.

With this Act in force, IMDA can issue directions to disable access by Singapore users to egregious content found on online communication services. Egregious content includes content advocating or instructing on suicide or self-harm, physical or sexual violence and terrorism; content depicting child sexual exploitation; content posing public health risks in Singapore; and content likely to cause racial and religious disharmony in Singapore.

The Act calls for greater accountability on the part of social media platforms. This is one of IMDA's key policy and regulatory focuses ahead, given the rapid pace at which the dissemination of such content is evolving.

### 1.5 Benchmark 3: Good Governance

Benchmark 3 "Good Governance" has 11 targets, of which 9 targets have attained the maximum score of 2, and 2 show a score of 0. The total achievement to-date stands at **82 per cent**.

Table I3: Unified framework Benchmark 3 Gaps

There	B3: Good Governance - 82%	
Largot		Unified framework score
Is <b>public access to information</b> ensured and fundamental freedoms protected, in accordance with national legislation and international agreements?		0
Policy reviews: Do ministries/regulatory agencies conduct policy rolling reviews?		0

State of play and priorities

As an industry regulator, IMDA has put in place a number of regulations and frameworks that bring clarity to the industry as well as provide more informed choices for consumers.

These regulatory frameworks by IMDA range from spectrum management that relate to telecom operators as well as media choices and protection for the young in terms of media content. The conducive and clear regulatory frameworks aim to encourage innovation and promote fair competition while providing more consumer options.

IMDA also regularly reviews its policies and regulations to keep pace with technological developments as well as evolving social norms and values.

For more information, you can refer to IMDA's website for the list of all frameworks and policies.<sup>97</sup>

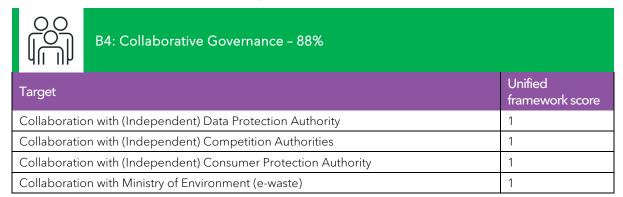
## I.6 Benchmark 4: Collaborative Governance

Benchmark 4 "Collaborative Governance" has 16 targets, of which 12 targets have attained the maximum score of 2, and 4 show a score of 1. The total achievement to-date stands at **88 per cent**.

-

<sup>97</sup> https://www.imda.gov.sg/regulations-and-licences/regulations/frameworks-and-policies

Table I4: Unified framework Benchmark 4 Gaps



# 1.7 Benchmark 5: Stakeholder Engagement

Benchmark 5 "Stakeholder Engagement" has 5 targets, of which 3 targets attain the maximum score of 2, and 2 achieve a score of 1. The total achievement to-date stands at **80** per cent.

Table I5: Unified framework Benchmark 5 Gaps

	B5: Stakeholder Engagement - 80%	
Target	Target Unified framework score	
Are public consultations designed as a tool to gather feedback from national stakeholders and guide regulatory decision-making?		1
Public consultations mandatory before decisions		1

## State of play and priorities

IMDA engages multiple stakeholders from the public to industry players to seek their views on a wide range of issues that impact the sector.

In line with the emphasis on public engagement, IMDA regularly conducts consultation sessions with the public and industry. This process helps IMDA to ensure that its guidelines, codes, and standards remain relevant and aligned with community standards and social norms in compliance with IMDA regulations. 98

# I.8 Benchmark 6: Legal Instruments for ICT/Telecom Markets

Benchmark 6 "Legal Instruments for ICT/Telecom Markets" has 17 targets, of which 14 targets attain a maximum score of 2, and 3 show a score of 0. The total achievement to-date stands at **82 per cent**.

<sup>&</sup>lt;sup>98</sup> For more information, you can refer to <u>IMDA's website</u> to find out more about IMDA's consultations.

Table I6: Unified framework Benchmark 6 Gaps



## I.9 Benchmark 7: Legal Instruments for Digital Markets

Benchmark 7 "Legal Instruments for Digital Markets" has 16 targets, of which 16 targets achieve the maximum score of 2. The total achievement to-date stands at 100 per cent.

## State of play and priorities

Besides legal instruments for digital markets, Singapore has developed the Singapore Digital Utility (DU) Stack.<sup>99</sup>

The Singapore DU Stack was designed for people and enterprises to perform functions core to digital transactions - starting with identity, payments and invoicing, then extending to the verification of documents and exchange of data. The DUs will deliver greater value to people and enterprises through enhanced functionality and extension of global linkages, to deepen interoperability and broaden the network effect.

As digital landscape evolves, we will explore new use cases and sectors that will benefit from our current DUs. We will also identify emergent DUs to further enrich the Singapore DU Stack.

For the next bound, we are driving greater adoption and cross-border usage. As a hub for international trade and finance, Singapore recognizes the importance of seamless digital interactions that transcend borders, especially when international counterparts may have different established systems. Singapore will continue to work with international partners in support of cross-border recognition and interoperability of our DUs with overseas systems, to unlock network effects beyond our shores, through:

- Exploring cross-border use cases for digital identity
- Increasing the number of PayNow cross-border e-payment linkages
- Working with international partners to expand the use of TradeTrust documents
- Working with international standards bodies and technical experts to develop standards for Verifiable Credentials, to support broader compatibility of OpenAttestation and its associated utilities, with other Verifiable Credentials solutions
- Improving international connectivity of SGTraDex with other data sharing platforms.

## I.10 Benchmark 8: Market Rules

Benchmark 8 "Market Rules" has 17 targets, of which 15 targets attain a maximum score of 2, and 2 have a score of 1. The total achievement to-date stands at **94 per cent**.

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<sup>&</sup>lt;sup>99</sup> Extracted from Singapore's Digital Connectivity Blueprint

Table I7: Unified framework Benchmark 8 Gaps

	B8: Market Rules - 94%	
Target		Unified framework score
Are there regulatory incentives targeted at network operators or other digital market players?		1
Status of the main fixed line operator		1

## State of play and priorities

In Singapore, IMDA ensures that licensees comply with the relevant Codes of Practice, such as the Telecom and Media Competition Code. The Code maintains fair and effective competition and ensures a comprehensive range of choices for the consumers in the sectors.

Besides Codes of Practice, IMDA also issues guidelines, and minimum Quality of Service standards, reviews mergers and acquisitions involving licensees. They serve the similar purpose of encouraging market competition and enhancing consumer choice. 100

## I.11 Benchmark 9: Regional and International Collaboration

Benchmark 9 "Regional and International Cooperation" has 5 targets, of which 4 targets indicate a maximum score of 2, and 1 shows a score of 0. The total achievement to-date stands at **80 per cent**.

Table I8: Unified framework Benchmark 9 Gaps

	B9: Regional and International Cooperation - 80%	
Target		Unified framework score
Has your country signed or ratified a regional or international instrument related to cybersecurity?		0

## State of play and priorities

As befitting Singapore's hub status, Singapore sees itself as connectors, helping businesses both within and outside Singapore connect with one another; or by bringing in the right international minds to help further drive, develop and discuss the difficult questions technology brings to the fore of society.

In the first area, Singapore is working on establishing Digital Economy Agreements (DEAs) - which forge the recognition of digital technologies and cross border data flows between countries. <sup>101</sup> This is vital as the digital global trade rules are nascent and need consensus, and allows Singapore to help set the agenda of the international digital economy space, especially against the backdrop of shifting geopolitical dynamics in recent years.

<sup>&</sup>lt;sup>100</sup> For more information, you can refer to <u>IMDA's website</u> on Competition Management.

<sup>&</sup>lt;sup>101</sup> The United Kingdom and Singapore, for example, have reached an agreement in principle on a DEA for mutual open access to the digital economy, enabling countries to invest and operate freely and in fair competition in their partner economy. The agreement covers digital trading systems, data, financial services, digital identity, consumer protection and cybersecurity. UK Government. 2021. UK-Singapore Digital Economy Agreement: agreement in principle explainer.

There are still other areas, however, where consensus has yet to be fully forged. And thus, Singapore brings its value as a trusted, neutral party to host such global discussions. The annual ATxSG creates a unique opportunity for government and industry to have in-depth conversations with global and Asian perspectives, covering topics to shape our shared digital future, including policy, data flows, sustainability and emerging technologies and ecosystems. This helps lay the foundation for cooperation with like-minded partners to advance common interests on an international stage. 102

# I.12 Proposed country target areas to addressing regulatory and policy gaps

This Section sets out proposed target areas identified based on unified framework 2022 data and updates made based on self-reported information from the questionnaire response to addressing the regulatory gaps.

Figure 25: Overview of proposed target areas to address unified framework gaps



## I.13 Key priorities for achieving the ASEAN Digital Masterplan 2025

This section outlines the key priorities that Singapore has identified for digital transformation towards achieving the ASEAN Digital Masterplan 2025.

Singapore generally prioritizes all of the ADM 2025 DOs by continuing to invest on multiple fronts, supporting SMEs to digitally transform, building and strengthening digital infrastructure, training and upskilling the tech workforce, rolling out progressive regulations and nurturing a digital society. The new I&C Industry Transformation Map (ITM) 2023, which supports many of the ADM 2025 DOs, aims to develop a strong and resilient I&C sector to power the growth of Singapore's Digital Economy and strengthen Singapore's position as a hub for leading tech companies and talent. It has three main thrusts, namely (1) targeting the Ecosystem as a whole by strengthening the global interconnectedness of Singapore's Digital Economy, (2) supporting multinational and local tech enterprises to capture higher value add and, increasing investments in technology innovation to support R&D and translation efforts, and (3) targeting ICT professionals through upskilling initiatives to ensure that Singaporeans benefit from the growth of the Digital Economy. 103

<sup>&</sup>lt;sup>102</sup> IMDA's Annual Report FY2021 - 2022.

<sup>&</sup>lt;sup>103</sup> https://www.imda.gov.sg/resources/press-releases-factsheets-and-speeches/press-releases/2023/transforming-singapores-information-and-communications-industry-to-power-a-global-asia-digital-hub

Table 19: Country priority and/or initiatives corresponding to ADM 2025 DOs and High Priorities EAs

Country priority and/or specific country initiatives linked to ADM DOs and EAs

#### DO1: Actions of ADM 2025 prioritized to speed ASEAN's recovery from COVID-19

#### DO1

HP EA 1.1: Make the economic case for prioritizing ADM 2025 actions

### DO2: Increase in the quality and coverage of fixed and mobile broadband infrastructure

#### DO<sub>2</sub>

HP EA 2.1: Encouraging investment in the digital and ICT field

ITU unified Framework: B1, B7, B5

 The new I&C Industry Transformation Map (ITM) 2023 includes strategies to building up the network of subsea cables and investing in 5G networks that will power the next generation of digital products and services. To this end, Singapore is well ahead of schedule to achieve nationwide 5G deployment by 2025.

#### DO<sub>2</sub>

HP EA 2.2: Moving towards best practices in permits and access rights for local and national infrastructure including submarine cable repair ITU unified Framework: B6, B1

## DO2

HP EA 2.6: Ensuring increased and harmonized spectrum allocation across the region ITU unified Framework: B6, B7

#### DO<sub>2</sub>

HP EA 2.9: Establishing a centre of excellence for best practice rural connectivity ITU unified Framework: B1

## DO3: The delivery of trusted digital services and the prevention of consumer harm

#### DO3

HP EA 3.1: Enabling trust through greater and broader use of online security technologies ITU unified Framework: B4, B7

## DO3

HP EA 3.3: Identifying improvements in legal and regulatory measures on the management and protection of data and other data-related activities that could be harmful

ITU unified Framework: B7

#### DO3

HP EA 3.4: Improve coordination and cooperation for regional computer incident response teams

ITU unified Framework: B4

Country priority and/or specific country initiatives linked to ADM DOs and EAs

#### DO<sub>3</sub>

HP EA 3.5: Promote consumer protection and rights in relation to e-commerce

ITU unified Framework: B2, B3, B7

#### DO4: A sustainable competitive market for the supply of digital services

#### DO<sub>4</sub>

HP EA 4.1: Continue to identify opportunities to harmonise digital regulation to facilitate cross-border data flows

ITU unified Framework: B9

 The new I&C Industry Transformation Map (ITM) 2023 includes strategies to expand Singapore's network of Digital Economy Agreements (DEA) to promote cross-border data flows, establish data norms and encourage other forms of digital collaboration 104

#### DO5: Increase in the quality and use of e-government services

#### DO<sub>5</sub>

HP EA 5.1: Establish ASEAN wide reporting on the level of use of e-government services in line with ITU requirements

ITU unified Framework: B7

#### DO<sub>5</sub>

HP EA 5.2: Helping make key government departments more productive through their internal use of ICT and e-services

ITU unified Framework: B7

## DO5

HP EA 5.3: Explore how to introduce digital identities in each AMS in a way which safeguards civil liberties

ITU unified Framework: B7

## DO6: Digital services to connect business and to facilitate cross-border trade

#### **DO6**

HP EA 6.1: Facilitate compliance and secure the benefits of telecommunications services and electronic commerce in line with relevant ASEAN trade agreements

ITU unified Framework: B9

#### DO6

HP EA 6.2: Support trade digitalisation through seamless and efficient flow of electronic trade documents (e.g. invoices) and goods within ASEAN

ITU unified Framework: B9

Deepening digital integration and connectivity in Southeast Asia, building on existing work to advance the ASEAN Digital Framework Agreement<sup>105</sup>

https://www.imda.gov.sg/resources/press-releases-factsheets-and-speeches/press-releases/2023/transforming-singapores-information-and-communications-industry-to-power-a-global-asia-digital-hub

 $<sup>\</sup>frac{105}{\text{https://seads.adb.org/report/understanding-asean-digital-economy-framework-agreement-means-support-asean-integration}$ 

Country priority and/or specific country initiatives linked to ADM DOs and EAs

#### DO7: Increased capability for business and people to participate in the digital economy

#### DO7

HP EA 7.3: Develop a framework that encourages the development and growth of digital start-ups in ASEAN

ITU unified Framework: B7

The new I&C Industry Transformation Map (ITM) 2023 aims to develop a strong and resilient I&C sector to power the growth of Singapore's Digital Economy and strengthen Singapore's position as a hub for leading tech companies and talent. 106

#### DO8: A digitally inclusive society in ASEAN

#### DO8

HP EA 8.1: Ensuring citizens and businesses have the skills and motivation to use digital services ITU unified Framework: B1 In the new I&C Industry Transformation Map (ITM) 2023 upskilling initiatives remain a key focus to ensure that Singaporeans benefit from the growth of the Digital Economy<sup>107</sup>

Source: ADM 2025 pp. 16-18, based on desk research and responses to the stakeholder country questionnaire.

# Appendix J: Thailand

This section presents Thailand's policy and regulatory landscape, priorities and challenges based on the ITU unified framework and some desk research. It analyses the ITU unified framework targets achieved by benchmark, where Thailand has achieved less than the maximum of points attainable and outlines the proposed target areas to addressing the identified gaps.

# J.1 Policy and regulatory landscape, priorities, and challenges

## Landscape

Thailand has been actively shaping its ICT policy and regulatory environment to embrace the digital revolution and drive inclusive growth. Guided by national plans and strategies, the government is committed to leveraging technology for economic advancement, social progress, and efficient governance.

Thailand's ICT Policy Framework has been an exemplary model for the development of an effective telecommunications/ICT Regulatory environment. During its first phase, from 2001 to 2010, the policy framework guided the development and application of ICTs for enhancing Thailand's digital economy and quality of life. In the second phase, the ICT2020 Policy Framework took off with 'Smart Thailand 2020', a vision with clear and tangible objectives recognizing ICTs as the key building blocks of a sustainable information society offering equal opportunities for all of its citizens.

#### **Priorities**

At the forefront of the government's priorities is the development of digital infrastructure. Efforts to expand and enhance broadband connectivity aim to bridge the digital divide, ensuring that both urban and rural areas have access to the internet and its opportunities. Promoting a robust digital economy is another key focus. The government nurtures a favorable environment for innovation and entrepreneurship through digital innovation hubs, startup incubators, and supportive regulatory frameworks. In line with its vision for improved public services, the government is actively implementing e-government initiatives. By integrating digital solutions, they aim to enhance service delivery efficiency, transparency, and accessibility across various public sectors.

<sup>&</sup>lt;sup>106</sup> Ibid.

<sup>107 1 ...</sup> 

<sup>107</sup> https://www.imda.gov.sg/resources/press-releases-factsheets-and-speeches/press-releases/2023/transforming-singapores-information-and-communications-industry-to-power-a-global-asia-digital-hub

Recognizing the growing cyber threats in the digital era, Thailand places great importance on cybersecurity and data protection. Robust measures are being implemented to safeguard citizens' data and protect critical infrastructure.

A critical aspect of Thailand's digital transformation is the development of digital skills. The government is committed to equipping its workforce with the necessary competencies through targeted skill development and digital literacy programs.

#### Challenges

However, the journey towards a thriving digital landscape comes with challenges. Bridging the digital divide between urban and rural areas remains a priority to ensure that all citizens can participate in and benefit from the digital revolution.

Cybersecurity risks continue to grow as ICT usage expands. To safeguard against cyber threats and attacks, the government is constantly working to enhance its cybersecurity capabilities.

The regulatory environment poses challenges as well. Striking the right balance between encouraging innovation and ensuring effective regulation is crucial to foster ICT development while safeguarding consumer rights and privacy.

Moreover, protecting intellectual property rights is paramount to promote innovation and attract investment in the ICT sector.

Lastly, data privacy concerns have emerged with the increasing collection and use of personal data. Developing comprehensive data protection laws and implementing them effectively are vital challenges that the government is addressing.

# J.2 Overview of regulatory and policy gaps

In a notable achievement, Thailand emerges as a leader in digital policy and governance, surpassing both the Asia-Pacific region and the global averages. The country's overall unified framework score stands at 75 per cent, indicating a high level of preparedness for digital transformation. This accomplishment highlights Thailand's advanced stance in shaping legal, regulatory, and governance frameworks in the digital realm.

A closer examination reveals specific benchmarks where Thailand excels. Benchmark 2, focused on Regulatory Capacity, secures an outstanding score of 91 per cent. This indicates the country's robust ability to enact and enforce regulations that facilitate a thriving digital ecosystem. Following closely is Benchmark 8, Market Rules, which obtain a score of 84 per cent, demonstrating Thailand's commitment to fostering fair and competitive digital markets.

Stakeholder Engagement, represented by Benchmark 5, stands at 80 per cent. Thailand's ability to involve various stakeholders in shaping digital policies and initiatives showcases a cooperative approach to decision-making and a dedication to inclusivity. Benchmark 6, which assesses the Legal Instruments for ICT/Telecom Markets, achieves a commendable score of 76 per cent, indicating a solid legal foundation to support the growth of information and communication technologies.

Although slightly lower, several other benchmarks show significant progress. Benchmark 3, focused on Good Governance, achieves a score of 73 per cent, reflecting Thailand's efforts to establish transparent and accountable digital governance practices. Benchmark 9, Regional and International Cooperation, garners a respectable score of 70 per cent, showcasing Thailand's commitment to collaborating with neighboring countries and the international community to address digital challenges collectively.

While transitioning toward their targets, Benchmarks 4, 1, and 7 display promising results. Benchmark 4, Collaborative Governance, achieves a score of 66 per cent, indicating Thailand's efforts to foster collaboration between the government, private sector, and civil society in shaping digital policies. Benchmark 1, National Digital Policy Agenda, attains a score of 65 per cent, reflecting Thailand's commitment to developing a comprehensive and forward-thinking digital policy framework. Benchmark 7, Legal Instruments for Digital Markets, achieves a score of 63 per cent, illustrating the country's progress in establishing legal mechanisms to govern digital markets effectively.

Thailand's exceptional performance across these benchmarks underscores its commitment to embracing digital transformation and creating an environment conducive to innovation, investment, and inclusive growth. With a robust digital policy framework in place, Thailand is poised to lead the way in the digital age, serving as an example for other countries aspiring to achieve similar levels of readiness and effectiveness in the digital realm.

## J.3 Benchmark 1: National Digital Policy Agenda

Benchmark 1 "National Digital Policy Agenda" has 15 targets, of which 10 have been met with maximum points. For 1 target a score of 1 was achieved, and 4 targets have scored 0 points. The total achievement to-date stands at 65 per cent.

Table J1: Unified framework Benchmark 1 Gaps



#### B1: National Digital Policy Agenda - 65%

Target	Unified framework score
Is the digital strategy SDG-oriented OR has mention of SDGs or other international development goals (e.g., MDGs, WSIS goals, EU Strategic objectives)?	0
Is there a developed and operationalized Global Strategy for youth employment and to implement the Global Jobs Pact of the ILO?	1
Strategies for targeted groups: Broadband plan/initiative includes to promote the provision of broadband services to youth people	0
Strategies for targeted groups: Broadband plan/initiative includes to promote the provision of broadband services to persons with disabilities?	0
Strategies for targeted groups: Broadband plan/initiative includes to promote the provision of broadband services to women and girls	0

# J.4 Benchmark 2: Regulatory Capacity

Benchmark 2 "National Digital Policy Agenda" has 17 targets, of which 14 have attained a maximum score of 2, and 3 show a score of 1. The total achievement to-date stands at **91 per cent.** 

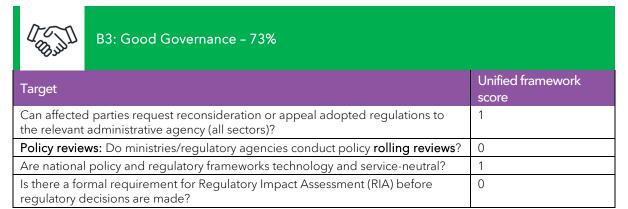
Table J2: Unified framework Benchmark 2 Gaps

	B2: Regulatory Capacity - 91%	
Target Unified framework score		
Accountability 1		1
New mandate: entity in charge of IT		1
New mandate: entity in charge of Internet content		1

## J.5 Benchmark 3: Good Governance

Benchmark 3 "Good Governance" has 11 targets, of which 7 targets have attained the maximum score of 2, 2 show a score of 1, and 2 show a score of 0. The total achievement to-date stands at **73 per cent**.

Table J3: Unified framework Benchmark 3 Gaps



#### J.6 Benchmark 4: Collaborative Governance

Benchmark 4 "Good Governance" has 16 targets, of which 9 targets have attained the maximum score of 2, 3 show a score of 1, and 4 show a score of 0. The total achievement to-date stands at **66 percent**.

Table J4: Unified framework Benchmark 4 Gaps

	B4: Collaborative Governance - 66%		
Target		Unified framework score	
Collaboration with (Independent) Data Protection Authority 0			
Collaboration	Collaboration with Cyber security agency 1		
Collaboratio	Collaboration with CERT 1		
Collaboration	Collaboration with Energy regulatory Authority 0		
Collaboration with Transport regulatory Authority 0		0	
Collaboration with (Independent) Competition Authorities 1		1	
Collaboration	on with Postal regulation Authority	0	

## J.7 Benchmark 5: Stakeholder Engagement

Benchmark 5 "Stakeholder Engagement" has 5 targets, of which 4 targets have attained the maximum score of 2, and 1 shows a score of 0. The total achievement to-date stands at **80 per cent**.

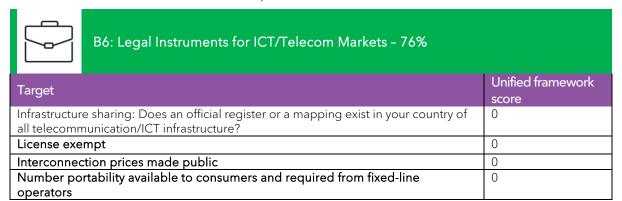
Table J5: Unified framework Benchmark 5 Gaps

<del>}</del>	B5: Stakeholder Engagement - 80%		
Target		Unified framework score	
Do codes o	Do codes of conduct exist (voluntary or enforceable/required by regulator)? 0		

# J.8 Benchmark 6: Legal Instruments for ICT/Telecom Markets

Benchmark 6 "Legal Instruments for ICT/Telecom Markets" has 17 targets, of which 13 targets attain a maximum score of 2, and 4 show a score of 0. The total achievement to-date stands at **76 per cent**.

Table J6: Unified framework Benchmark 6 Gaps



# J.9 Benchmark 7: Legal Instruments for Digital Markets

Benchmark 7 "Legal Instruments for Digital Markets" has 16 targets, of which 10 targets show the maximum score of 2, and 6 show a score of 0. The total achievement to-date stands at **63 per cent**.

Table J7: Unified framework Benchmark 7 Gaps

B7: Legal Inst	truments for Digital Markets - 63%	
Target		Unified framework score
Has your country adopted an m-apps linked to Agriculture/	y policy/legislation/regulation related to e-apps and/or 'Science/Financial Services?	0
Industry 4.0: Has your country focusing on AI?	adopted a national strategy, policy or initiative	0
Is there a legislation/regulation	on for child online protection?	0
Public services: Has your cour to Smart Cities?	ntry adopted any policy/legislation/regulation related	0
Public services: Has your coul to e-Health or Smart Health?	ntry adopted any policy/legislation/regulation related	0
-	ntry adopted any policy/legislation/regulation related	0

## J.10 Benchmark 8: Market Rules

Benchmark 8 "Market Rules" has 17 targets, of which 12 targets show the maximum score of 2, 1 show a score of 1.5, and 1 attains a score of 0. The total achievement to-date stands at **84 per cent.** 

Table J8: Unified framework Benchmark 8 Gaps

	B8: Market Rules - 84%	
Target		Unified framework score
Status of the main fixed line operator		0
Foreign participation/ownership in facilities-based operators		1
Foreign participation/ownership in spectrum-based operators		1
Foreign participation/ownership in local service operators/long-distance service operators		1.5
Foreign par	ticipation/ownership in international service operators	1

# J.11 Benchmark 9: Regional and International Cooperation

Benchmark 9 "Regional and International Cooperation" has 5 targets, of which 3 targets show the maximum score of 2, 1 indicates a score of 1, and 1 achieves a score of 0. The total achievement todate stands at **70 per cent**.

Table J9: Unified framework Benchmark 9 Gaps

	B9: Regional and International Cooperation - 70%	
Target		Unified framework score
Has your country signed or ratified a regional or international instrument related to cybersecurity?		0
Has your country signed on international agreements determining jurisdiction and/or managing cross border flows on data privacy?		0

# J.11 Proposed country target areas to addressing regulatory and policy gaps

This Section sets out proposed target areas identified based on unified framework 2022 data to addressing the regulatory gaps.

Figure 26: Overview of proposed target areas to address unified framework gaps

Lowest scoring unified framework Benchmark	Proposed target areas
B7: Legal Instruments for Digital Markets (63%)	<ul> <li>Consider developing and adopting a national policy for AI</li> <li>Consider the adoption of policy/legislation/regulation related to eapps and/or m-apps linked to Agriculture/Science/Financial Services</li> <li>Develop policy/legislation/regulation for Child Online Protection</li> <li>Consider introducing regulation/policy for Smart Cities, e-Health or smart health</li> <li>Assess the introduction of policy or regulation in regard to eapplications and/or m-applications for Education and Learning</li> </ul>
B1: National Digital Policy Agenda (65%)	<ul> <li>Align the Digital Strategy with the SDGs or other international development goals (e.g., MDGs, WSIS goals, EU Strategic objectives)</li> <li>Consider advancing on the development and operationalization of a global strategy for youth employment and to implement the Global Jobs Pact of the ILO</li> <li>Consider including strategies for targeted groups such as women and girls, youth and persons with disabilities as part of the National Broadband PlanConsider ratifying the Budapest Convention</li> </ul>

Lowest scoring unified framework Benchmark

# Proposed target areas

B4: Collaborative Governance (66%)

- Develop mechanisms of collaboration with the Data Protection Authority, the Energy Regulator, the Transport Regulator and the Postal regulator.
- Consider formalizing the collaboration with the competition authority.

# J.12 Key priorities for achieving the ASEAN Digital Masterplan 2025

No information was provided as part of the stakeholder consultation based on a stakeholder questionnaire regarding the key priorities that Thailand has identified for digital transformation towards achieving the ASEAN Digital Masterplan 2025.

Table J10: Country priority and/or initiatives corresponding to ADM 2025 DOs and High Priorities EAs

## ADM 2025 DOs and High Priority EAs

Country priority and/or specific country initiatives linked to ADM DOs and EAs

## DO1: Actions of ADM 2025 prioritized to speed ASEAN's recovery from COVID-19

DO1

NA

HP EA 1.1: Make the economic case for prioritizing ADM 2025 actions

### DO2: Increase in the quality and coverage of fixed and mobile broadband infrastructure

DO2

NA

HP EA 2.1: Encouraging investment in the digital and ICT field

and ici neid

ITU unified Framework: B1, B7, B5

DO2

NA

HP EA 2.2: Moving towards best practices in permits and access rights for local and national infrastructure including submarine cable repair

ITU unified Framework: B6, B1

DO2

• NA

HP EA 2.6: Ensuring increased and harmonized spectrum allocation across the region ITU unified Framework: B6, B7

DO2

NA

HP EA 2.9: Establishing a centre of excellence for best practice rural connectivity

ITU unified Framework: B1

#### DO3: The delivery of trusted digital services and the prevention of consumer harm

DO3

NA

HP EA 3.1: Enabling trust through greater and broader use of online security technologies

ITU unified Framework: B4, B7

Country priority and/or specific country initiatives linked to ADM DOs and EAs

DO<sub>3</sub>

• NA

HP EA 3.3: Identifying improvements in legal and regulatory measures on the management and protection of data and other data-related activities that could be harmful ITU unified Framework: B7

DO3 • NA

HP EA 3.4: Improve coordination and cooperation for regional computer incident response teams

ITU unified Framework: B4

DO3 • NA

HP EA 3.5: Promote consumer protection and rights in relation to e-commerce ITU unified Framework: B2, B3, B7

# DO4: A sustainable competitive market for the supply of digital services

DO4 • NA

HP EA 4.1: Continue to identify opportunities to harmonise digital regulation to facilitate cross-border data flows

ITU unified Framework: B9

#### DO5: Increase in the quality and use of e-government services

DO5 • NA

HP EA 5.1: Establish ASEAN wide reporting on the level of use of e-government services in line with ITU requirements

ITU unified Framework: B7

DO5 • NA

HP EA 5.2: Helping make key government departments more productive through their internal use of ICT and e-services ITU unified Framework: B7

HP EA 5.3: Explore how to introduce digital identities in each AMS in a way which safeguards

civil liberties

DO<sub>5</sub>

ITU unified Framework: B7

## DO6: Digital services to connect business and to facilitate cross-border trade

DO6 • NA

HP EA 6.1: Facilitate compliance and secure the benefits of telecommunications services and electronic commerce in line with relevant ASEAN trade agreements.

trade agreements

ITU unified Framework: B9

NA

Country priority and/or specific country initiatives linked to ADM DOs and EAs

D<sub>0</sub>6

NA

HP EA 6.2: Support trade digitalisation through seamless and efficient flow of electronic trade documents (e.g. invoices) and goods within ASEAN

ITU unified Framework: B9

#### DO7: Increased capability for business and people to participate in the digital economy

DO7 • NA

HP EA 7.3: Develop a framework that encourages the development and growth of digital start-ups in ASEAN

ITU unified Framework: B7

#### DO8: A digitally inclusive society in ASEAN

DO8 • NA

HP EA 8.1: Ensuring citizens and businesses have the skills and motivation to use digital services

ITU unified Framework: B1

Source: ADM 2025 pp. 16-18, no information was provided regarding country priorities or initiatives.

# Appendix K: Viet Nam

This section presents the Viet Nam's policy and regulatory landscape, priorities and challenges as stated in the questionnaire response, and analyses the unified framework targets achieved by benchmark, where Viet Nam has achieved less than the maximum of points attainable and outlines the proposed target areas to addressing the identified gaps.

# K.1 Policy and regulatory landscape, priorities, and challenges

#### Landscape

Viet Nam has made significant strides in developing its ICT sector, recognizing its potential for economic growth and development. The Viet Nam Government has implemented various initiatives to promote digital transformation and expand ICT infrastructure, leading to increased internet penetration, mobile phone usage, and the development of e-commerce platforms. Emphasizing the importance of cybersecurity and data protection, the government has introduced laws and regulations to safeguard digital information and combat cyber threats. Commitment to building a digital economy and fostering innovation is evident through policies supporting startups, entrepreneurship, and research and development in the ICT sector. Additionally, investments in telecommunications infrastructure have been encouraged to improve connectivity and bridge the digital divide, particularly in rural areas.

The success of digital transformation in Viet Nam relies on the active participation of different counterparts. Citizens play a crucial role in this process, as their perception and adoption of digital technologies are decisive factors. Businesses and associations contribute by leveraging digital platforms for growth and development. Government agencies play a vital role in implementing key legal and policy instruments to support and regulate the ICT sector.

Key legal and policy instruments in Viet Nam include the Law on Telecommunication, the Law on Spectrum Management, the Law on ICT, the Law on Tax Collection, the Law on electronic transaction, and the Law on the ICT industry. These instruments provide a framework for the functioning of the ICT sector and ensure its growth and regulation.

Several lessons have been learned through Viet Nam's digital transformation journey. Firstly, perception plays a decisive role, highlighting the importance of shaping a positive mindset towards digital technologies. Secondly, people are at the center of digital transformation, emphasizing the need to prioritize their skills development and digital literacy. Institutions and technology act as drivers, enabling the transformation process. Digital platform development emerges as a breakthrough solution, facilitating digital transformation, reducing costs, and enhancing efficiency.

Cybersecurity and safety are identified as key elements for successful and sustainable digital transformation. They must be ingrained in all IT projects, information systems, software, products, and equipment, starting from the design stage. The participation of the entire political system, synchronized actions at all levels, and involvement of all citizens are recognized as critical success factors. A harmonious combination of centralization and decentralization, with a common regulatory body, ensures effective coordination and governance throughout the transformation process.

#### **Priorities**

In order to foster progress and growth in the digital landscape, several key priorities have been identified. These priorities encompass the development of a digital government, the advancement of the digital economy, and the promotion of a digital society while addressing the digital divide. By focusing on these areas, significant improvements in efficiency, performance, competitiveness, and inclusion can be achieved.

- 1) Development of the Digital Government: Efforts will be directed towards establishing a digital government that opeates with enhanced efficiency and performance. Specific targets include:
  - Making 80 per cent of level 4 online public services accessible on multiple devices, including mobile phones.
  - Enabling electronic processing for 90 per cent of ministerial- and provincial-level work dossiers, 80 per cent of district-level work dossiers, and 60 per cent of commune-level work dossiers (excluding those involving state secrets).
  - Digitally connecting, integrating, and sharing 100 per cent of reports and socioeconomic statistical indicators used by the Government and the Prime Minister.
  - Completing and connecting all national databases relevant to e-Government, such as
    those pertaining to residential matters, land, business registration, finance, and
    insurance. These databases will be shared nationwide, and data from state agencies will
    gradually be published for public service provision, one-time declaration, and socioeconomic development.
  - Conducting 50 per cent of inspections by state agencies through electronic means and the information systems of supervisory authorities.
- 2) Digital Economy Development and Enhancement of Competitiveness: Emphasis will be placed on cultivating the digital economy and increasing the competitiveness of the overall economy. Goals include:
  - The digital economy accounting for 20 per cent of the Gross Domestic Product (GDP).
  - Ensuring that the digital economy comprises at least 10 per cent of each sector.
  - Achieving an annual productivity growth rate of at least 7 per cent to drive economic advancement.
- 3) Digital Society Development and Bridging the Digital Divide: Efforts will be made to promote the development of a digital society while addressing the digital divide. Key targets include:
  - Expanding the coverage of fiber optic internet infrastructure to encompass more than 80 per cent of households and all communes.
  - Ensuring nationwide availability of 4G/5G services and smartphones.
  - Encouraging digital financial inclusion by aiming for over 50 per cent of the population to possess a digital checking account.

By prioritizing these areas, the government aims to create a digital ecosystem that fosters efficiency, economic growth, and social inclusion. These initiatives will contribute to improved public services, increased competitiveness, and a more digitally connected society, enabling individuals and businesses to thrive in the digital age.

## Challenges

Despite progress, Viet Nam faces some key challenges in creating an effective ICT policy and regulatory environment. These challenges include keeping up with the fast pace of technology development, adapting to new cross-border business models, ensuring information security, and combating internet scamming. To address these challenges, Viet Nam needs agile policies that promote innovation while protecting consumer rights, develop regulations that support new business models while addressing concerns related to consumer protection and intellectual property rights, establish robust cybersecurity regulations and infrastructure, and enhance law enforcement capabilities to combat online scams. By overcoming these challenges, Viet Nam can foster a thriving ICT ecosystem that promotes innovation, economic growth, and digital inclusivity.

# K.2 Overview of regulatory and policy gaps

In the realm of digital policy and governance, Viet Nam emerges at mid-point, surpassing not only the Asia-Pacific region but also the global average. With an overall unified framework score of 57 per cent, the country showcases a transitional level of readiness for digital transformation. This achievement highlights the increasing effectiveness of Viet Nam's digital policy, legal, and governance frameworks.

A closer look at the different benchmarks of the unified framework unveils interesting insights. Among them, Benchmark 6, focusing on Legal Instruments for ICT/Telecom Markets, demonstrates the highest level of advancement, with a notable score of 82 per cent. This benchmark showcases Viet Nam's strong legal foundation, ensuring a conducive environment for information and communication technology markets.

Following closely behind, Benchmark 3, which pertains to Good Governance, secures a solid score of 64 per cent. This indicated the country's commitment to establishing efficient and transparent mechanisms for digital governance. Additionally, Benchmark 2, which focuses on Regulatory Capacity, earns a commendable score of 63 per cent, showcasing Viet Nam's ability to regulate the digital landscape increasingly effectively.

Meanwhile, Benchmark 7, Legal Instruments for Digital Markets, and Benchmark 8, Market Rules, stand at respectable scores of 57 per cent. These benchmarks indicate Viet Nam's efforts to create a fair and competitive digital marketplace, promoting innovation and consumer protection. Furthermore, Benchmark 5 achieves a score of 50 per cent, signifying moderate progress in the development of digital skills and access to digital technologies across the country.

However, not all benchmarks showcase equal progress. Benchmark 4, Collaborative Governance, has achieved only limited advancement with a score of 44 per cent. This suggests room for improvement in fostering collaboration between different stakeholders involved in the digital ecosystem. Moreover, the Benchmarks with the least progress include Benchmark 1, National Digital Policy Agenda, and Benchmark 9, Regional and International Cooperation, scoring 32 per cent and 30 per cent respectively. These results indicate the need for enhanced strategic planning at the national level and increased cooperation on a regional and global scale.

Viet Nam's overall achievement in the unified framework demonstrates its dedication to digital transformation and its commitment to establishing a robust digital ecosystem. By addressing the areas with lower scores, the country could further bolster its digital policy, legal, and governance frameworks, paving the way for continued progress and innovation in the digital realm.

# K.3 Benchmark 1: National Digital Policy Agenda

Benchmark 1 "National Digital Policy Agenda" has 15 targets, of which 5 have been met with maximum points. One target has achieved a score of 1, and 8 targets have scored 0 points. The total achievement to-date stands at **32 per cent**.

Table K1: Unified framework Benchmark 1 Gaps



# B1: National Digital Policy Agenda - 32%

Target	Unified framework score	Ongoing initiatives to address gap/s
Is the digital strategy SDG-oriented OR has mention of SDGs or other international development goals (e.g., MDGs, WSIS goals, EU Strategic objectives)?	0	
Policies for specific sectors: Does the digital strategy include multiple sectors of the economy?	0	
Are there policy instruments aimed at supporting the shift to sustainable consumption and production, or coordination mechanism for sustainable consumption and production?	0	
Is there a developed and operationalized global strategy for youth employment and to implement the Global Jobs Pact of the ILO?	1	
Strategy design and implementation: The digital strategy has mechanisms for implementation/operational objectives?	0	
Strategies for targeted groups: Broadband plan initiative includes to promote the provision of broadband services to women and girls	0	Initiative to promote the provision of broadband services to women and girls is being developed
Strategies for targeted groups: Broadband plan/initiative includes to promote the provision of broadband services to persons with disabilities?	0	Under consideration
Strategies for targeted groups: Broadband plan/initiative includes to promote the provision of broadband services to youth people	0	
Is there a holistic innovation policy or one tailored to the ICT/digital sector?	0	
Digital Skills: Does the digital strategy include the educational sector?	0	

# State of play and priorities

Viet Nam is focusing its efforts to further develop its National Digital Policy Agenda through a number of key priorities. These include the alignment of the digital transformation strategy with the SDGs, developing a toolkit for measuring the national digital economy, improving digital infrastructure, prioritizing data protection, promoting digital literacy, and implementing the Universal Service Obligation (USO). These priorities set the stage for a vibrant and inclusive digital future in Viet Nam.

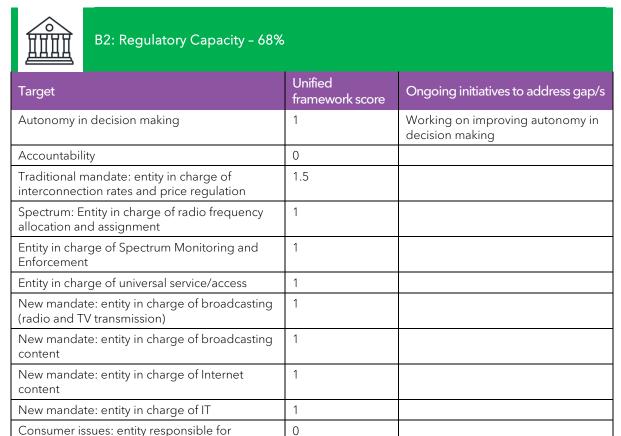
## Challenges to addressing gaps

Viet Nam faces a number of challenges in addressing the gaps in its National Digital Policy Agenda. Challenges include finding a balance between stakeholder interests, addressing non-traditional issues, like cyber threats and emerging technology impacts, and ensuring predictable technology development and integration. A comprehensive and inclusive approach, involving stakeholders and continuous evaluation, is vital to shape a robust policy agenda that adapts to the ever-changing digital landscape. Through these efforts, Viet Nam can harness the digital age while safeguarding citizens' rights and well-being.

# K.4 Benchmark 2: Regulatory Capacity

Benchmark 2 "National Digital Policy Agenda" has 17 targets, of which 9 attain a maximum score of 2. Seven targets show a score of 1, 1 has attained a score of 1.5, and 2 show a score of 0. The total achievement to-date stands at **68 per cent**.

Table K2: Unified framework Benchmark 2 Gaps



#### State of play and priorities

comparative tariff information, consumer education and handling consumer complaints

To progress its Regulatory Capacity, Viet Nam is improving a number of legal documents, ensuring that they are fit for purpose. These include amending the Law on Telecommunications, the Law on Spectrum Management, the Law on Electronic Transactions, and the Law on ICTs. Furthermore, Viet Nam is in the process of developing a new law on data protection and a new law on the ICT industry.

## Challenges to addressing gaps

A key challenge that Viet Nam faces in addressing the gaps in Regulatory Capacity is the lack of digital policy and corresponding regulations in particular sectors.

#### K.5 Benchmark 3: Good Governance

Benchmark 3 "Good Governance" has 11 targets, of which 6 targets have attained the maximum score of 2, 2 show a score of 1, and 3 show a score of 0. The total achievement to-date stands at **64 per cent**.

Table K3: Unified framework Benchmark 3 Gaps



## B3: Good Governance - 64%

Target	Unified framework score
Is there a formal requirement for Regulatory Impact Assessment (RIA) before regulatory decisions are made?	1
Can affected parties request reconsideration or appeal adopted regulations to the relevant administrative agency (all sectors)?	0
Are national policy and regulatory frameworks technology and service-neutral?	1
Policy reviews: Do ministries/regulatory agencies conduct ex-post policy reviews?	0
Policy reviews: Do ministries/regulatory agencies conduct policy rolling reviews?	0

# State of play and priorities

To improve on the Good Governance target, Viet Nam is focusing its efforts in the area of digital Government. Efforts include the re-design of the operational model based on digital technology and data to provide more targeted services, improve and speed-up decision-making, promulgate policies more efficiently, optimize resources better, promote development, lead the national digital transformation and address major issues in socio-economic management and development more effectively. To this effect, Viet Nam has set priorities in the short term (2025) in the areas of (1) quality services provision for society, (2) encouraging digital participation of society, and (3) optimizing operations of state agencies.

# Challenges to addressing gaps

Key challenges Viet Nam faces in improving the target score for Good Governance include the integration of the Center Governance system with the Local Provincial System and Developing a National Data Center.

## K.6 Benchmark 4: Collaborative Governance

Benchmark 4 "Good Governance" has 16 targets, of which 5 targets have attained the maximum score of 2, 4 show a score of 1, and 7 show a score of 0. The total achievement to-date stands at **38 per cent**.

Table K4: Unified framework Benchmark 4 Gaps



#### B4: Collaborative Governance - 38%

Target	Unified framework score	Ongoing initiatives to address gap/s
Collaboration with CERT	0	
Collaboration with (Independent) Data Protection Authority	0	
Collaboration between ICT ministry OR ICT regulator AND Information Society Agency	0	
Collaboration with Energy regulatory Authority	1	
Collaboration with Transport regulatory Authority	0	



#### B4: Collaborative Governance - 38%

Target	Unified framework score	Ongoing initiatives to address gap/s
Collaboration with (Independent) Competition Authorities	1	There is a new Competition Commission in Viet Nam (https://insightplus.bakermckenzie.com /bm/industrials-manufacturing- transportation/vietnam-new-decree-on- the-establishment-of-the-vietnam- competition-commission)
Collaboration with Postal regulation Authority	0	
Collaboration with (Independent) Consumer Protection Authority	0	
Collaboration with Ministry of Health (e-health)	1	Collaboration with Ministry of Health - no additional information provided on type of collaboration (formal or informal)
Collaboration with Ministry of Education (e-education)	1	Collaboration with Ministry of Education - no additional information provided on type of collaboration (formal or informal)
Collaboration with Ministry of Economic development OR similar focusing on a single or a subset of economic sector/s, e.g., Industry, Agriculture, Fishery)	0	

#### State of play and priorities

To improve the score on Collaborative Governance, Viet Nam is working on the comprehensive development of the digital economy and digital society collaboratively across all fields and sectors as follows:

- Agriculture and rural areas: Develop digital economy and digital society towards association
  of digital agriculture with ecological agriculture, circular agriculture, modern rural areas,
  professional and civilized farmers
- **Health:** Develop digital economy and digital society towards connection between the people and the system of health facilities from central to commune level
- Education and training: Develop the digital economy and digital society by encouraging educational and training institutions to play the leading role in application of digital technology, creating an environment to form the next generation of digital citizens and digital entrepreneurs
- Labor, employment and social security: Develop the digital economy and digital society by
  accelerating implementation of electronic transactions in the fields of labor, employment and
  social security; create and maintain a complete and timely database of workers and policy
  beneficiaries nationwide
- Trade: Develop the digital economy and digital society in trade by streamlining and increasing
  efficiency of the supply chain, contributing to modernizing the business cycle and improving
  the competitiveness of enterprises; promote development of domestic market and export
  markets
- Industry and energy: Develop the digital economy and digital society in the industry and energy sector by establishing the right environment for innovation, strengthening strategic direction, and flexibly use of financial resources for digital transformation support

- Tourism: Develop the digital economy and digital society by providing adequate information and online experience for tourists before and during the trip in real time
- Resources and environment: Develop and organize the implementation of an action plan for development of digital economy and digital society in the resources and environment sector; develop green economy, circular economy using renewable, low-carbon and eco-friendly energy

# Challenges to addressing gaps

The key challenge faced in furthering Collaborative Governance is the lack of awareness of digital transformation and digital skills.

# K.7 Benchmark 5: Stakeholder Engagement

Benchmark 5 "Stakeholder Engagement" has 5 targets, of which 2 targets have attained the maximum score of 2, 1 indicates a score of 1, and 2 shows a score of 0. The total achievement to-date stands at 50 per cent.

Table K5: Unified framework Benchmark 5 Gaps



#### B5: Stakeholder Engagement – 50%

Target	Unified framework score
Are public consultations designed as a tool to gather feedback from national stakeholders and guide regulatory decision-making?	1
Do codes of conduct exist (voluntary or enforceable/required by regulator)?	0
Regulatory experimentation: Are there regulatory sandboxes for digital financial inclusion?	0

#### State of play and priorities

Regarding Stakeholder Engagement, to improve it score, Viet Nam focuses its efforts on engaging all relevant stakeholders in the development of the digital legal framework (public hearing in law and regulation), as well as engaging all relevant stakeholders in the assessment of particular policy implementations related to ICT, Telecommunication, and other.

## Challenges to addressing gaps

The key challenge that Viet Nam faces with regards to improving Stakeholder Engagement is balancing the benefits of all stakeholders to achieve beneficial outcomes for all.

# K.8 Benchmark 6: Legal Instruments for ICT/Telecom Markets

Benchmark 6 "Legal Instruments for ICT/Telecom Markets" has 17 targets, of which 13 targets attain a maximum score of 2, 2 achieve a score of 1, and 2 show a score of 0. The total achievement to-date stands at **82 per cent**.

Table K6: Unified framework Benchmark 6 Gaps



## State of play and priorities

With regards to Legal Instruments for ICT/Telecom Markets, Viet Nam's priorities include:

- Auction the 5G spectrum
- USO implementation
- Creating the competitive market on Telecom services
- SIM garbage, Spam message

# Challenges to addressing gaps

The key challenge to developing appropriate Legal Instruments for ICT/Telecom Markets is the advent of new telecom and ICT services, such as OTT, data transmission, icloud, Data Centers, and other. Here, more room for maneuver is seen in improving policy and regulation and capacity building.

# K.9 Benchmark 7: Legal Instruments for Digital Markets

Benchmark 7 "Legal Instruments for Digital Markets" has 16 targets, of which 8 targets show the maximum score of 2, one has a score of 1, 1 shows a score of 1.3, and 6 show a score of 0. The total achievement to-date stands at **57 per cent**.

Table K7: Unified framework Benchmark 7 Gaps



#### B7: Legal Instruments for Digital Markets - 57%

Target	Unified framework score	Ongoing initiatives to address gap/s
Has your country adopted any policy/legislation/regulation related to e-apps and/or m-apps linked to Agriculture/Science/Financial Services?	1.3	
Industry 4.0: Has your country adopted any policy/legislation/regulation related to cloud computing?	0	Working on policy for Cloud computing
Industry 4.0: Has your country adopted a national strategy, policy or initiative focusing on AI?	0	Working on policy for Al
Has your country adopted a forward-looking or innovative national strategy, policy or initiative focusing on spectrum (e.g., IMT-2000, 5G, FWA, satellite, HAPS, 6 GHz)?	0	



#### B7: Legal Instruments for Digital Markets - 57%

Target	Unified framework score	Ongoing initiatives to address gap/s
Is there an e-gov/Digital first government National e- government strategy or equivalent?	1	
Has your country adopted e-waste regulations or e-waste management standards?	0	
Is there a legislation/regulation for child online protection?	0	Working on policy for Child online protection
Are there any cross-sector (ICT and other) infrastructure sharing or fibre co-deployment regulations/agreements/promotion initiatives in your country?	0	

# State of play and priorities

Priorities in the area of Legal Instruments for Digital Markets include

- Amending the law on tax collection (update the tax for cross border digital platform)
- Developing the law on ICT industries (strengthening the number of digital start-ups, creating R@D and Innovation Center)

#### Challenges to addressing gaps

Currently, Viet Nam does not have an appropriate legal framework to address challenges arising from Digital markets and associated activities, and could benefit from improving the digital legal framework.

## K.10 Benchmark 8: Market Rules

Benchmark 8 "Market Rules" has 17 targets, of which 6 targets show the maximum score of 2, 7 show a score of 1, 1 shows a score of 1.3, and 3 attain a score of 0. The total achievement to-date stands at **60 per cent**.

Table K8: Unified framework Benchmark 8 Gaps



## **B8: Market Rules - 60%**

Target	Unified framework score	Ongoing initiatives to address gap/s
Level of competition in local and long distance (domestic and international) fixed line services	1.3	
Level of competition in cable modem, DSL, fixed wireless broadband	1	
Level of competition in leased lines	1	
Status of the main fixed line operator	0	
Foreign participation/ownership in facilities-based operators	1	
Foreign participation/ownership in spectrum-based operators	1	



#### B8: Market Rules - 60%

Target	Unified framework score	Ongoing initiatives to address gap/s
Foreign participation/ownership in local service operators/long-distance service operators	1	
Foreign participation/ownership in international service operators	1	
Is there a forward-looking competition policy, law or regulation applied to digital markets?	1	Regulation on competitive policy for digital market is in the process of being drafted
Are telecom/digital sector players and Internet services exempt from specific taxes?	0	
Are there regulatory incentives targeted at network operators or other digital market players?	0	

# State of play and priorities

Priorities in relation to Market Rules include developing regulations for Competition Policy and for Cybersecurity and cybercrime.

## Challenges to addressing gaps

The key challenge is the lack of policy and regulation for digital markets.

# K.11 Benchmark 9: Regional and International Cooperation

Benchmark 9 "Regional and International Cooperation" has 5 targets, of which 1 target shows the maximum score of 2, one achieves a score of 1, and 3 show a score of 0. The total achievement todate stands at 30 per cent.

Table K9: Unified framework Benchmark 9 Gaps



# B9: Regional and International Cooperation - 30%

Target	Unified framework score
Has your country have made commitment to facilitate trade in telecommunications services?	0
Has your country signed or ratified a regional or international instrument related to cybersecurity?	0
Has your country signed on international agreements determining jurisdiction and/or managing cross border flows on data privacy?	1
Has your country signed or ratified the Tampere convention for communications in emergency situations?	0

# State of play and priorities

In the area of Regional and International Cooperation, Viet Nam's efforts are focused on exchanging views on the Digital legal framework, creating an expert network in the region and engaging in the MoU.

# Challenges to addressing gaps

The biggest challenge with regards to Regional and International Cooperation is the lack of resources.

# K.12 Proposed target areas to addressing regulatory and policy gaps

This Section sets out priority areas identified based on unified framework 2022 data and updates made based on self-reported information from the questionnaire response to addressing the regulatory gaps on the timeline 2023-2025.

Figure 27: Overview of proposed target areas to address unified framework gaps

rigure 27. Overview or prop	oosed target areas to address unified framework gaps
Lowest scoring unified framework Benchmark	Proposed target areas
B9: Regional and International Cooperation (30%)	<ul> <li>Ratification of a regional or international instrument related to cybersecurity?</li> <li>Ratification of Tampere Convention for communications in emergency situations</li> <li>Commitments to facilitate trade in telecommunication services and cross-border data management</li> </ul>
B1: National Digital Policy agenda (32%)	<ul> <li>Digital Strategy: extension of Digital Strategy to include all economic sectors (including education), alignment of Digital Strategy with SDGs, development of mechanisms for implementation/operational objectives</li> <li>Development of policy instruments that support the shift to sustainable consumption and production</li> <li>Introduction of a holistic innovation strategy</li> <li>Targeted Broadband initiatives for youth, women and girls, and persons with disabilities</li> </ul>
B4: Collaborative Governance (44%)	<ul> <li>Implementation of collaborative mechanisms that span different sector regulators/agencies/ministries (e.g., Transport, Postal, Consumer Protection, CERT)</li> </ul>
B5: Stakeholder Engagement (50%)	<ul> <li>Consultation design and mechanisms, Codes of Conduct, Regulatory experimentation</li> </ul>
B7: Legal Instruments for Digital Markets (57%)	<ul> <li>Assess the introduction of cross-sector (ICT and other) infrastructure sharing or fibre co-deployment regulations/agreements/promotion initiatives in your country</li> <li>Consider developing Child Online Protection policy/Regulation/legislation</li> <li>Assess the development of e-waste regulations or management standards</li> <li>Advance on the e-government strategy</li> <li>Consider the introduction of a forward looking or innovative national spectrum strategy/policy</li> <li>Consider developing legislation in relation to Al and Cloud Computing</li> </ul>

# K.13 Key priorities for achieving the ASEAN Digital Masterplan 2025

This section outlines the key priorities that Viet Nam has identified for digital transformation towards achieving the ASEAN Digital Masterplan 2025.

The high-priority ADM 2025 DOs that Viet Nam envisages to be making most progress by 2025 are: encouraging inward investment in digital and ICT, improving digital infrastructure, enabling trust through greater and broader use of online security technologies, developing digital economy and society, and fostering the digital start-ups.

Table K10: Country priority and/or initiatives corresponding to ADM 2025 DOs and High Priorities EAs

## ADM 2025 DOs and High Priority EAs

Country priority and/or specific country initiatives linked to ADM DOs and EAs

#### DO1: Actions of ADM 2025 prioritized to speed ASEAN's recovery from COVID-19

DO<sub>1</sub>

HP 1.1: Make the economic case for prioritizing ADM 2025 actions

### DO2: Increase in the quality and coverage of fixed and mobile broadband infrastructure

DO<sub>2</sub>

HP 2.1: Encouraging investment in the digital and ICT field

ITU unified Framework: B1, B7, B5

DO2

HP 2.2: Moving towards best practices in permits and access rights for local and national infrastructure including submarine cable repair ITU unified Framework: B6, B1

DO<sub>2</sub>

HP 2.6: Ensuring increased and harmonized spectrum allocation across the region ITU unified Framework: B6, B7

#### DO2

HP 2.9: Establishing a centre of excellence for best practice rural connectivity ITU unified Framework: B1

- Under the Digital National Transformation Programme, Digital society development and digital divide bridging is targeted through:
  - Fiber optic internet infrastructure covers more than 80 per cent of households and 100 per cent of communes;
  - 4G/5G service and smart phones are available nationwide;
  - More than 50 per cent of the population have a digital checking account

## DO3: The delivery of trusted digital services and the prevention of consumer harm

## DO3

HP 3.1: Enabling trust through greater and broader use of online security technologies

ITU unified Framework: B4, B7

Country priority and/or specific country initiatives linked to ADM DOs and EAs

#### DO<sub>3</sub>

HP 3.3: Identifying improvements in legal and regulatory measures on the management and protection of data and other data-related activities that could be harmful ITU unified Framework: B7

#### DO3

HP 3.4: Improve coordination and cooperation for regional computer incident response teams ITU unified Framework: B4

#### DO<sub>3</sub>

HP 3.5: Promote consumer protection and rights in relation to e-commerce

ITU unified Framework: B2, B3, B7

#### DO4: A sustainable competitive market for the supply of digital services

#### DO<sub>4</sub>

HP 4.1: Continue to identify opportunities to harmonise digital regulation to facilitate cross-border data flows

ITU unified Framework: B9

#### DO5: Increase in the quality and use of e-government services

#### DO<sub>5</sub>

HP 5.1: Establish ASEAN wide reporting on the level of use of e-government services in line with ITU requirements

ITU unified Framework: B7

#### DO<sub>5</sub>

HP 5.2: Helping make key government departments more productive through their internal use of ICT and e-services ITU unified Framework: B7

- Development of the digital Government with enhanced efficiency and performance, including many targets, see <a href="https://www.vietnam-briefing.com/news/vietnams-digital-transformation-plan-through-2025.html/">https://www.vietnams-briefing.com/news/vietnams-digital-transformation-plan-through-2025.html/</a>
- Integrating the Center Governance system with Local Provincial System
- Developing National Data Centre

#### DO<sub>5</sub>

HP 5.3: Explore how to introduce digital identities in each AMS in a way which safeguards civil liberties

ITU unified Framework: B7

#### DO6: Digital services to connect business and to facilitate cross-border trade

#### DO6

HP 6.1: Facilitate compliance and secure the benefits of telecommunications services and electronic commerce in line with relevant ASEAN trade agreements

ITU unified Framework: B9

Country priority and/or specific country initiatives linked to ADM DOs and EAs

#### DO6

HP 6.2: Support trade digitalisation through seamless and efficient flow of electronic trade documents (e.g. invoices) and goods within ASEAN

ITU unified Framework: B9

DO7: Increased capability for business and people to participate in the digital economy

#### DO7

HP 7.3: Develop a framework that encourages the development and growth of digital start-ups in ASFAN

ITU unified Framework: B7

 Developing the law on ICT industries (strengthening the number of digital start-ups, creating R@D and Innovation Center)

DO8: A digitally inclusive society in ASEAN

#### DO8

HP 8.1: Ensuring citizens and businesses have the skills and motivation to use digital services

ITU unified Framework: B1

Source: ADM 2025 pp. 16-18, response to the stakeholder country questionnaire.

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ISBN: 978-92-61-38341-1

9 789261 383411

Published in Switzerland Geneva, 2024

Photo credits: Adobe Stock