COVID-19 Response and Recovery Guidelines for Resilient and Sustainable International Road Freight Transport Connectivity in ASEAN

Revision 1
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April 2022

The ASEAN Secretariat
Jakarta

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The ASEAN Secretariat is based in Jakarta, Indonesia.

For inquiries, contact:
The ASEAN Secretariat
Community Relations Division (CRD)
70A Jalan Sisingamangaraja
Jakarta 12110, Indonesia
Phone: (62 21) 724-3372, 726-2991
Fax: (62 21) 739-8234, 724-3504
E-mail: public@asean.org

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1. INTRODUCTION AND BACKGROUND

As a non-legally binding document, the ***COVID-19 Response and Recovery Guidelines for Resilient and Sustainable International Road Freight Transport Connectivity in ASEAN*** ("Guidelines") was initially developed by the ASEAN Transport Facilitation Working Group (TFWG) with joint assistance from the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and the International Transport Forum (ITF), following the outcomes of the ESCAP-ASEAN-ITF joint webinar on "Preserving Transport Connectivity and Building Freight Transport Resilience in ASEAN" in July 2020. The Guidelines were designed to support ASEAN Member States in establishing their regional and national transport connectivity recovery plans with a focus on resilience and sustainability, as well as developing regional COVID-19 recovery guidelines on cross-border road freight transport. The Guidelines also contribute to the implementation of initiatives under the ASEAN Comprehensive Recovery Framework adopted at the 37th ASEAN Summit[1].

The update of the Guidelines was initiated in the 41st ASEAN Transport Facilitation Working Group (TFWG) Meeting held on 11-12 October 2021 to consider the recent developments of the COVID-19 pandemic situation and adjust the recommended measures and actions. This first revised edition of the Guidelines is developed by the ASEAN TFWG with the support from ESCAP and ITF. In particular, as discussed in the 1st and 2nd ESCAP-ASEAN-ITF regional capacity building webinars held on 7-8 April 2021 and 6-7 May 2021, the following issues encountered during the pandemic are addressed, namely, 1) measures to mitigate increase in transport costs and fees; 2) vaccination programmes for frontline transport workers; 3) railway transport under multimodal connectivity, in addition to road transport; 4) worldwide container shortage; 5) deepening the collaboration and coordination among relevant agencies (e.g., customs and transport authorities).

Cross-border transport connectivity is vulnerable to disruptions ranging from congestion and accidents to extreme weather conditions and global pandemics, such as the on-going COVID-19 crisis. As countries start to develop their respective COVID-19 recovery pathways, it is also critical to consider the long-term impacts of recovery measures on the overall resilience and sustainability of relevant transport systems as a whole, and how well they can address future disruptive events. The Guidelines suggested that while the immediate response to COVID-19 disruptions was driven by pragmatic concerns due to social distancing related to managing cross-border freight operations in the light of the new constraints, as countries start contemplating recovery, ASEAN Member States should focus on greater and better connectivity to strengthen cross-border connectivity, building on increased transport workers' safety, digitalization, resilience and, overall, greater sustainability. The balance between containing the virus and maintaining transport services was also recognized as the top challenge in ASEAN Member States and this ultimate objective will continue to guide recovery pathways for ASEAN.

[1] ASEAN Comprehensive Recovery Framework and its Implementation Plan are available on: https://asean.org/storage/2020/11/2-FINAL-ACRF_adopted-37th-ASEAN-Summit_12112020.pdf and https://asean.org/storage/2020/11/3-FINAL-Implementation-Plan-ACRF_adopted-37th-ASEAN-Summit_121120.pdf.

Resilience is commonly defined as the ability of a system to prepare for, absorb, recover from, and adapt to disturbances or shocks to the system[2]. For transport systems, resilience often refers to the ability of the system to maintain its services or to restore itself to that level of service in a specified timeframe [3] Greater resiliency in transport connectivity, including associated supply chain networks and cross-border freight transport, will also lead to higher levels of efficiency in the system, especially with the deployment of information and communication technology (ICT) and real-time data sharing across a supply chain in the long term [4], as well as increases in competitiveness in the region.

On the other hand, the sustainability of transport connectivity refers to transport development that possesses a balance of economic growth, social equity and environmental protection. Efficiency is often positively correlated with sustainability. For example, efficiency improvements that reduce energy consumption will lead to lower emissions. The elements of sustainable transport development, i.e. its economic, social and environmental aspects, are especially relevant during and after the COVID-19 pandemic as they refer to the maintenance of the movement of freight transport and system performance for continuous economic benefits, health and safety of transport workers, as well as the environmental impact of transport connectivity activities. These concerns have all been indicated as key priorities for various counties. Resilient transport connectivity infrastructure through appropriate design and planning will also ensure that it continues to operate under a range of meteorological conditions and weather phenomena as a result of climate change despite significant disruption[5].

ASEAN Member States may identify their own definitions of resilient transport connectivity, based on their respective existing freight transport connectivity patterns, constraints and goals[6]. The development of the Guidelines supports the creation of a resilient and sustainable transport connectivity recovery pathway in ASEAN during and post COVID-19 by providing regional guiding principles to help the region "build back better". The Guidelines identify resilient and sustainable measures for transport connectivity on a system, infrastructure and modal level. In addition, associated institutional arrangements and regional cooperation are also included, as such factors have been identified to be crucial in providing coordinated, timely and effective responses to disruptions[7].

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[2] . I. Linkov, T. Bridges, F. Creutzig, J. Decker, C. Fox-Lent, W. Kröger, J. H. Lambert, A. Levermann, B. Montreuil, J. Nathwani, R. Nyer, O. Renn, B. Scharte, A. Scheffler, M. Schreurs, T. Thiel-Clemen. (2014) Changing the resilience paradigm. *Nature Climate Change* 4, 407–409.

[3] D. Freckleton, K. Heaslip, W. Louisell, J. Collura. (2012) Evaluation of transportation network resiliency with consideration for disaster magnitude, *Transportation Research Record: Journal of the Transportation Research Board*, No. 2284, 1 09-116, Transportation Research Board of the National Academies, Washington, D.C.

[4] McKinnon, A. (2018) *Balancing Efficiency and Resilience in Multimodal Supply Chains*, International Transport Forum Discussion Papers, OECD Publishing, Paris.

[5] ITF (2016), *Adapting Transport to Climate Change and Extreme Weather: Implications for Infrastructure Owners and Network Managers*, ITF Research Reports, OECD Publishing, Paris.

[6] For example, for some countries, greater resiliency implies the diversification of freight transport modes, while for others, it could include retrofitting transport infrastructure to adapt to the digitalization of transport procedures or to better prepare its transport workforce for future disruptions through capacity building and training.

[7] ESCAP (2020), *Policy Reponses to Covid-19: Transport Connectivity in Asia and the Pacific*, United Nations Economic and Social Commission for Asia and the Pacific, Bangkok.
https://www.unescap.org/sites/default/files/ESCAP%20POLICY%20BRIEF_TD-24april.pdf

The Guidelines seeks to foster the collection and sharing of knowledge, lessons learned and experience from the COVID-19 pandemic directly or indirectly related to transport connectivity and road freight transport resiliency. These include categorizing specific policy and responses formulated by ASEAN Member States, the private sector, intergovernmental and non-governmental organizations. The Guidelines also determine and provide guiding principles on the implementation of future polices and recommendations based on information collected, in order to build more resilient transport connectivity and freight transport. In addition, the Guidelines will assist in the formulation of a communication mechanism to ensure the exchange of relevant information and instructions in a timely manner, to keep all stakeholders well-informed for effective, efficient and enhanced cooperation in ASEAN, and provide insights to support the creation of an effective monitoring tool that can extract real time information to gauge the impact of any policy intervention in relation to enhancing transport connectivity, increasing capacity and building resilience.

2. STRATEGIC CONSIDERATIONS

In addition to conducting a survey on "Freight Transport Policy Responses to COVID-19" in June and July 2020 to the Asia Pacific countries, ESCAP and ITF have conducted one-on-one technical interview with each ASEAN Member State in September and October 2020, as well as representatives from the private sector. The findings from both the survey and interviews on ASEAN Member States' opinion and views were included in the original Guidelines, and used as basis for providing recommendations to support the creation of a resilient and sustainable transport connectivity recovery pathway in ASEAN during and post COVID-19. For the update of the Guidelines, an additional survey was conducted in November and December 2021 with the ASEAN Member States and representatives of the private sector to re-examine the contents of the original Guidelines and collect further policy measures. In addition, the compilation of the policy responses to COVID-19 pandemic from ASEAN Member States in eight ASEAN meetings[8] were considered as an additional source to update the Guidelines. The textual data have been analyzed and the results are presented in the subsequent sections, complemented with the data and policy recommendations available from ESCAP and ITF.

2.1. Sustainable and resilient transport connectivity in support of pandemic response and socio-economic recovery plan for ASEAN

The impact of COVID-19 on road freight transport in ASEAN includes short- and long-term impact on costs and delays of cross-border transport operations, which will ultimately affect the freight transport industry. A decrease in global economic activity will ultimately lead to less freight transport demand and in the case of COVID-19, a decrease in supply has also been observed due to lockdowns, quarantine, and the suspension of production and border closures. In the long term, freight demand will grow at a slower pace than previously estimated but global demand (in

[8] The eight ASEAN transport meetings are (i) 41st ASEAN Transport Facilitation Working Group (TFWG) Meeting, 11-12 October 2021, (ii) 11th ASEAN-ROK Transport Cooperation Forum (TCF), 7 September 2021, (iii) 17th ASEAN-Japan Expert Group Meeting on Logistics (AJEGML), 15 December 2020, (iv) 26th ASEAN Transport Ministers (ATM) Meeting, 24 November 2020, (v) 12th ASEAN Transit Transport Coordinating Board (TTCB) Meeting, 1 October 2020, (vi) 18th ASEAN-Japan Senior Transport Officials Leaders Conference, 15 September 2020, (vii) ATM+China Special Meeting on COVID-19, 16 July 2020, and (viii) 49th ASEAN Senior Transport Officials Meeting (STOM), 17 June 2020.

tkm) will still more than double by 2050[9]. The decrease in global freight activities is due to the fall in GDP and drop in trade, as a result of the COVID-19 pandemic. According to the ITF's analysis, the annual compound growth rate in freight activity between 2015 and 2050 is 2.7% in its Recover (business as usual) scenario[10], instead of the pre-pandemic 3.4% projection[11]. The regionalization of trade will also lead to slower freight growth.

Existing transport policy responses to COVID-19 are similar between ASEAN Member States. In general, transport policy responses to COVID-19 were comprehensive and they can be broadly categorized into six different types, namely, 1) infrastructure facilities; 2) border crossing procedures; 3) mode operations; 4) transport crew; 5) cargo, and 6) recovery measures. Some examples of such policy responses are shown in Table 1. These policy responses have enabled freight transport movement to continue in the ASEAN region despite the pandemic crisis. In fact, the disruption on freight transport seems to be moderate for half of the ASEAN Member States who participated in the survey on "Freight Transport Policy Responses to COVID-19" (Figure 1). However, almost 80% of the participants agreed that cross-border freight operations have become more costly or time consuming due to COVID-19 (Figure 2). The issue associated with high logistics costs remains challenging in ASEAN even after the COVID-19 pandemic has been relatively stabilized, according to the additional survey at the end of 2021. Some local operational measures have been taken to improve the availability and utilization of transport equipment and facilitate the flows of goods, but the global-scale issues such as shipping container shortage and surging shipping rate continue to hamper supply chain operations and trade activities in the region.

Table 1. Examples of Transport Connectivity Policy Responses to COVID-19

Category	Policy Measure Example
Infrastructure Facilities	Temporary suspension or reduced operational hours for cross-border freight transport
	Extension/limitation of operating hours for border controls
	Restrictions on number of staff working in ports of entry
	Development of social distancing and safety guidelines at ports of entry for both employees and users
	Availability of personal protective equipment for customs inspectors
	Development or establishment of health and sanitation facilities at border-crossings or at mode interchange area point of entry/point of exit
Border Crossing Procedures	Changes in customs and border-crossing procedures (e.g. increase in flexibility, relaxation of rules)
	Acceptance of electronic transport documents
	Creation of rapid and priority customs clearance lanes for specific goods (e.g. via green lanes)
	Adopting or employment of advance electronic border-crossing booking

[9] ITF (2021), *ITF Transport Outlook 2021*, OECD Publishing, Paris.
[10] The ITF's Recover scenario is based on the world's current trajectory of implemented and announced policies. It assumes that the international community adheres to its current climate initiatives, but will base economic recovery from the COVID-19 pandemic largely on the economic practices of past decades. It can also be described as a "business as usual" scenario.
[11] ITF (2021), *ITF Transport Outlook 2021*, OECD Publishing, Paris.

Category	Policy Measure Example
Mode Operations	Authorization of vehicles, vessels or aircrafts for border crossing
	Disinfection of vehicles, vessels or aircrafts
	Restrictions on vehicles, vessels or aircrafts transiting to third countries
	Waivers for vehicle certificates and other requirements
	Strengthen the imposition of travel pass and travel tracking requirements
Transport Crew	Restrictions on the access of transport crew members (e.g. changes in the number of crew members allowed entry)
	New health and other medical checks on transport crew members, i.e. temperature checks, health declaration, virology test results, the length of quarantine or self-isolation, if any, waivers, other measures.
	Change of crew (to local crew) in foreign vehicles or vessels
	Requirements of personal protective equipment
	Restrictions on time spent in destination country
	Strengthen transport crew origin/destination tracking, monitoring and reporting system
Cargo	Suspension of exports of medical items or other goods
	Identification of goods that are not restricted (e.g. essential goods)
	Disinfection of goods
	No charges or penalties for storing the cargo
	Ensure availability of suitable cargo storage facilities at border-crossings or at mode interchange area point of entry/point of exit
Recovery	Continuous investments or new initiatives for building back better
	Digitalization for better pandemic adaptation and smoother evolvement to the new normal
	Reconfiguration or preservation of global supply chains
	Fiscal and other measures to support road transport (*e.g.*, tax and fee exemptions, subsidies, loans, and stimulus packages)
	Strengthen supply chain and logistics system

Source: ESCAP Survey on Freight Transport Policy Responses to COVID-19 (July 2020), ESCAP (https://www.unescap.org/covid19/policy-responses) and the compilation of member states' policy responses in ASEAN meetings

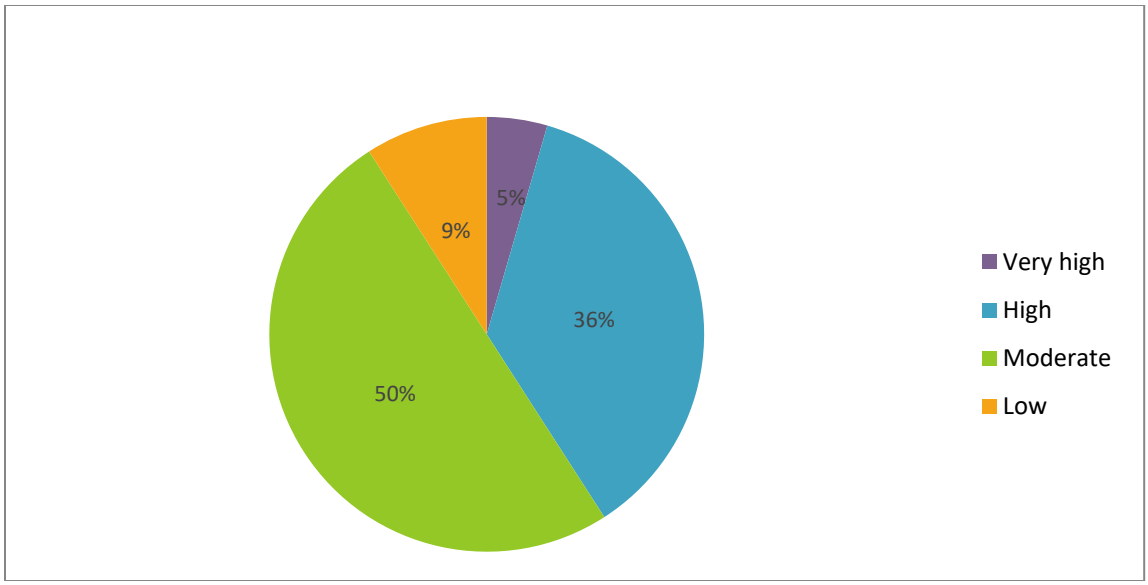


Figure 1. Estimated level of disruption on freight transport services caused by COVID-19 in ASEAN Member States.
Source: ESCAP Survey on Freight Transport Policy Responses to COVID-19 (July 2020)

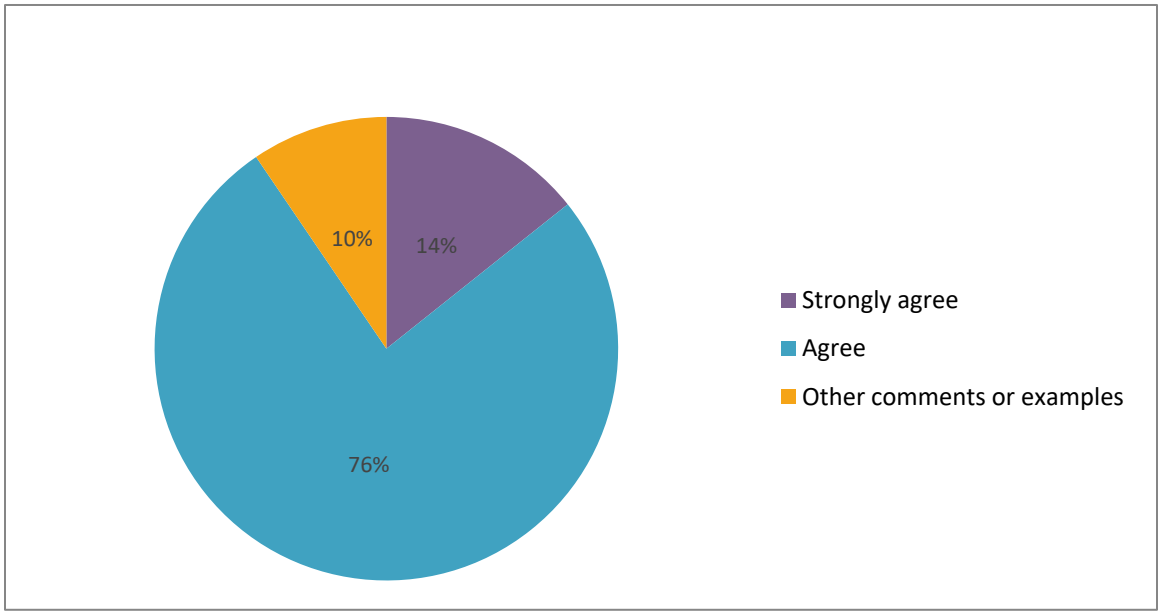


Figure 2. Survey question on whether ASEAN Member States agree that cross-border freight operations have become more costly and / or time consuming due to COVID-19.
Source: ESCAP Survey on Freight Transport Policy Responses to COVID-19 (July 2020)

The need to increase the resiliency of freight transport was one of the top three priorities identified by ASEAN Member States, after the need to strengthen cross-border connectivity and to improve digitalization of transport. These are therefore elements that would need to be included in recovery guidelines as countries start to rebuild and redesign their transport infrastructure and systems. Other priorities can be found in Figure 3.

Value		Percent	Count
Balancing between containing the virus and maintaining transport services		63.6%	14
Transport operators' safety		36.4%	8
Licensing and certifications		4.5%	1
Maintaining the supply chain and logistics activities		45.5%	10
Changes in transport corridors		9.1%	2
Suspension of maritime traffic		4.5%	1
Inter-city travel ban		18.2%	4
Social distancing		40.9%	9
Restriction of non-essential activities		40.9%	9
Cross-border connectivity		50.0%	11
Other (please specify)		4.5%	1

Figure 3. Policy priorities for the recovery stage for ASEAN Member States.
Source: ESCAP Survey on Freight Transport Policy Responses to COVID-19 (July 2020)

2.2. Mobilizing ASEAN platform to coordinate and improve transport responses to COVID-19 and future disruptions

ASEAN has an established cooperation platform and partnerships that can be further utilised to effectively coordinate and respond to the ongoing and future disruptions. ASEAN, ESCAP and ITF co-organised a webinar on "Preserving Transport Connectivity and Building Freight Transport Resilience in ASEAN" in July 2020, which provided a platform for ASEAN Member States to exchange information on transport policy response to the COVID-19 pandemic crisis, with a focus on cross-border freight transport operations. Discussion outcomes have guided the identification of priority areas for regional cooperation among ASEAN Member States that could be further supported by ESCAP, the rest of the UN system and the ITF. In addition, it was recognized that greater resilience in transport connectivity is necessary.

The outcomes of the joint webinar led to the development of the Guidelines, which is part of the initiative under the Implementation Plan of the ASEAN Comprehensive Recovery Framework (ACRF). The ACRF serves as ASEAN's whole-of-community exit strategy from the COVID-19 crisis, through the period of reopening, recovery, and towards the pursuit of long-term resilience. It focuses on key sectors that are most affected by the pandemic, and identifies broad strategies and measures for recovery in line with sectoral and regional priorities. Transport facilitation and connectivity are thus recognized as supporting elements to economic recovery, where digitalization can be used to further improve operational efficiently. The Guidelines presented in Section 3 can therefore support the development of specific measures and activities on road freight transport that can help ASEAN Member States achieve their recovery goals.

2.2.1. Interviews with ASEAN Member States and representatives of the private sector

The initial interviews with transport officials from ASEAN Member States, representatives from ASEAN Trucking Federation (ATF) and the ASEAN Federation of Forwarders Associations (AFFA) were conducted virtually in September and October 2020. The list of questions included

in the interviews can be found in **ANNEX I**, and the findings from the interviews are as follows. For the addition survey conducted in November and December 2021, the online survey form is provided in **ANNEX II**. The results in general were consistent with the existing contents, and digitalisation, regional cooperation and integration, and cross-sectoral and inter-agency coordination were particularly emphasized by respondents.

Scope of the guidelines

The need to maintain connectivity during the COVID-19 pandemic crisis was a major concern for all ASEAN Member States. Inter-ministerial collaboration seemed to be the norm across ASEAN Members States and such arrangements pre-existed prior to COVID-19. Capacity building was identified to be a significant issue for many countries and representatives from the private sector. ASEAN Member States also highlighted the need and benefits of creating standardized procedures especially under disruptive circumstances, such as the COVID-19 pandemic crisis.

Best practices or lessons learned from the region

Freight transport policy responses to COVID-19 in the majority of the countries interviewed have been successful in balancing freight movements and the spread of the virus. Although there was a slight time delay in establishing certain measures in maintaining freight movements or the need to extend restrictions, due to uncertainties in taking actions to respond to the unprecedented event of COVID-19 pandemic, best practices that were specifically highlighted and could be drawn from the region include the following.

- Increase in digitalization to limit human contact and paperwork for cross-border trade facilitation
- Management of cross-border management (including the change of drivers at borders and establishment of COVID-19 guidelines for foreign drivers)
- Implementation of quarantine measures to control the spread of the virus
- Freight transport sites are required to comply with preventative measures (e.g. wearing of masks, washing hands, checking temperatures)
- Flexible supply chain management
- Strong leadership and commitment in governments
- Cross-sectoral and multi-ministerial support and collaboration

Feedback on proposed recommendations based on global experience

Global experience has shown that an increase in the resilience of freight transport connectivity requires changes in three (3) areas, namely, (i) infrastructure, (ii) system and (iii) modes (vehicles). In addition, the United Nations (UN) has identified contactless solutions, seamless connectivity and collaborative solutions as priority transport and trade policy responses to the COVID-19 crisis[12]. Most of the ASEAN Member States did not identify additional priority areas to those

[12] Contactless solutions aim at minimizing physical contact among people in cross-border supply chains by facilitating the flow of goods without spreading the virus. This will be done by implementing UN conventions and standards for the seamless harmonized electronic exchange of data in digital transport corridors, border crossings without physical inspection of goods and vehicles and trade operations, as well as developing smart rail and road connectivity. Seamless connectivity focuses on eliminating obstacles to cross-border trade and transport operations arising from the COVID-19 crisis. It aims at promoting synergies among border agencies by empowering national

already identified by the UN and agreed with the main areas to increase resilience of freight transport connectivity and further emphasized the importance of digitalization. Capacity building was highlighted as a significant issue by most of ASEAN Member States, together with the need to create harmonized standards in the region and to create a collaborative regional platform for information and data sharing. A regional platform can be used between sectors (e.g. between governments and businesses) or among governments in ASEAN. Some ASEAN Member States also highlighted the need to improve infrastructure in order to increase resiliency and to improve vehicle fleet efficiency to increase sustainability of the sector.

Technical assistance and capacity building needs

The need for cross-border training for greater facilitation, training of staff at border control and the need for capacity building focusing on the implementation of the Guidelines were highlighted by most of ASEAN Member States. In addition to that, training on digitalization and its application to standardize procedures, multi-modal freight transport and city level responses were also highlighted. Private sectors also emphasized the need to increase the competitiveness of ASEAN logistics companies through collaboration and mutual learning.

2.2.2. Common themes and linkages for government

Common and interrelating themes were identified as shown below, based on the findings from the interviews.

a) Exchange of information, knowledge, best practice, lessons learned, and data

A regional communication platform was identified by almost every ASEAN Member State as a priority in response to the COVID-19 pandemic crisis. This platform should provide real time information and contain an online database, especially for cross-border facilitation, as actions on cross-border movements need to be communicated with countries in the region. A regional communication platform will help countries increase transport efficiency and reduce cost, while protecting public health. Information collected from the private sector can also be made available in this regional platform, which could facilitate the engagement and coordination between governments and the private sector. On the other hand, a strong sense of horizontal integration within countries also exists, with strong collaboration across different ministries pre- and during COVID-19. Existing framework for collaboration enhances cooperation and allows decisions to be made quicker during COVID-19.

b) Accelerated implementation of existing ASEAN Agreements and regional and transport cooperation instruments

The four (4) ASEAN transport facilitation agreements, namely, the ASEAN Framework Agreement on the Facilitation of Goods in Transit (1998); ASEAN Framework Agreement on the Facilitation of Inter-state Transport (2009); ASEAN Framework Agreement on Multimodal transport (2005), and the ASEAN Framework Agreement on the Facilitation of Cross Border Transport of Passenger by Road Vehicles (2017) were highlighted as examples of how ASEAN

trade facilitation committees, improving customs automation and identifying non-tariff barriers. Collaborative solutions seek to strengthen regional and sectoral cooperation on transport, trade and logistics operations to facilitate joint actions and solutions in responding to the COVID-19 pandemic.

already has a comprehensive set of frameworks that can help support more resilient and sustainable COVID-19 recovery. Implementation of these ASEAN transport facilitation agreements will increase transport resilience during and after COVID-19 pandemic. Transport facilitation and digitalization tools available from UNESCAP, ITF and other relevant institutions, which are in accordance with global and regional standards, as well as best practices from other countries, may also help ASEAN member States to implement these agreements.

c) Digitalization as a recovery tool

Most ASEAN Member States highlighted that digitalization is the key to a better recovery pathway. Digitalization could increase the resiliency of freight transport, through cashless payments, digitalization of processes, including paperless processes and online transactions, such as, permits, certificates and licenses, and to also facilitate cross-border transport (trucks and drivers) to increase efficiency. However, in order to ensure mutual recognition of digital processes, a coherent plan may be required to create standardized procedures across all ASEAN Member States.

d) The key role of capacity building and training

Existing ASEAN or international agreements could have made a difference during the pandemic if they had been implemented, and capacity building would help ASEAN Member States to implement such agreements. Capacity building and training would be one of the top priorities for ASEAN Member States to recover and to increase the efficiency of the road freight transport sector, especially for cross-border connectivity. Identification of appropriate and relevant capacity building and training needs for government officials, technical and on the ground staff or even for logistics companies and other workers in the sector is important. Such measures are key to improving drivers' competence and increasing industry's confidence.

2.2.3. Common themes and linkages specific to the private sector

e) Diverse impact of COVID-19 on cross-border movements

The changes in freight transport movement during the COVID-19 pandemic crisis are complex, as they have been driven by both supply-and demand-side factors, and in the latter, by the need to keep essential services operating. Some countries have experienced an increase in trucking expenses and operating cost. ATF highlighted that operation for some trucking companies decreased by up to 80% during lockdown periods. However, not every country experienced dramatic changes in freight transport movement or cost, though transport policy measures to COVID-19 pertaining to restrictions in cross-border movements will ultimately increase trucking expenses and operating cost. In fact, only one country during the interviews with ASEAN Member States stated the impact of COVID-19 leading to higher transport costs as a result of border closures, which resulted in limited routes and drivers not being able to cross borders. The increase in transport costs will ultimately affect Small and Medium-sized Enterprises (SMEs), as many of them are one-driver companies with self-employed drivers who are now facing the challenges of unemployment due to the reduction in production and hence, the hiring of truck drivers.

In general, freight transport movement continued in the ASEAN region throughout the pandemic and the measures shown in Table 1 have successfully balanced the spread of the virus and the

maintenance of freight flows but could have resulted in higher transport costs and delivery time in some cases. Almost every country responded positively to the COVID-19 policy measures implemented by its government in the interviews apart from two ASEAN Member States that mentioned that a central body to address COVID-19 related issues could have been established sooner and a prolonged restricted period or lockdown could have prevented a second wave and given more time for the transport sector to be more prepared.

f) Improvement of transport efficiency is a priority

There are a few different ways to improve transport efficiency. For example, trucking companies have sought to maximize load factor to reduce costs and the environmental impact of freight transport. During the pandemic, there has been an increase in e-commerce and the home deliveries sector, which affected cross-border transport more than domestic freight. E-Commerce has been a major driver of supply-chain changes in the past two decades, and COVID-19 has led to a faster adaptation of e-commerce, which is driven by changing customers' behavior trends. This would ultimately lead to a significant growth in ASEAN's e-commerce industry.

The COVID-19 pandemic crisis has revealed serious limitations in ASEAN transport policies or agreements when it comes to facing exceptional circumstances. The ASEAN Framework Agreement on Multimodal Transport (AFAMT) has rightly focused on eliminating restrictions to the provision of transport services. Yet, less attention has been devoted to the coordination of restrictions that were implemented during the pandemic, despite the fact that the objective of the AFAMT is the creation of a regional environment to facilitate the movement of goods being transported within ASEAN and with third-party countries by different modes of transport, whether by air, sea, road, rail or internal waterways. The AFAMT also does not include any components related to sustainability, resilience or emergency responses.

A greater harmonization of services and standards in the region will also help transport and logistics companies improve their efficiency and increase their competitiveness. An assessment of the current balance between regulation and the free market can also be conducted to ensure that existing regulations are not hindering growth in the freight transport sector. A well-functioning and agile freight transport system is key to guaranteeing the uninterrupted movement of goods, while supporting economic and social activities in general. In light of this, safeguarding the financial viability of the transport industry will be paramount to economy recovery.

g) Regional standards are critical

Regional standards on COVID-19 recovery are critical to enable increased collaboration and partnership, as well as to create greater resiliency. Such standards include simple and unified cross-border freight transport connectivity, border closure notification, health protocols, standards on the operation of road transport and logistics, as well as standards on vehicles on an ASEAN regional level. Specific agreements at the sub-regional and regional-level listed below could serve as mechanisms to include such standards on a regional level.

- ASEAN Framework Agreement on the Facilitation of Goods in Transit (1998)
- ASEAN Framework Agreement on the Facilitation of Interstate Transport (2009)
- ASEAN Framework Agreement on Multi-modal transport (2005)

- ASEAN Framework Agreement on the Facilitation of Cross Border Transport of Passenger by Road Vehicles (2017)
- Greater Mekong Subregion Cross-Border Transport Facilitation Agreement (GMS-CBTA)

ATF and AFFA highlighted that uncoordinated border closures or restrictions among ASEAN Member States have resulted in a need for a more collaborative and better planned approach to disruptions in general. Enhanced coordination will be required among transport operators when it comes to the implementation of protective measures for social distancing. Currently, there are huge discrepancies in the measures adopted across and within ASEAN Member States, as well as across transport modes. Resiliency should also be made more prominent in regional standards. It would be necessary to review relevant transport regulations and initiatives with the aim of introducing instruments to address COVID-19 and other disruptions in a more harmonized way.

h) Importance of constant dialogue with the government:

Stakeholder engagement, especially between the public and private sectors, is an important element of the recovery pathway of ASEAN Member States, as the lessons learned from the private sector could help guide the development of policy responses. On the other hand, the public sector would need to share any relevant plans, vision and real time information with the private sector, so as to ensure that the private sector will be able to follow the general guidance with subsequent measures. Both sectors have the same priority to increase transport efficiency and reduce cost while protecting public health and should work closer together. Mutual learning between the public and private sectors will help strengthen partnerships to increase the resiliency of the freight transport sector as a whole, as governments better understand the needs and challenges of the private sector. In addition, as the support to local SMEs has also been highlighted in the recovery framework, it would be necessary to create incentives for them to improve their sustainability and resiliency. COVID-19 has shown that the improvement of infrastructure is not enough and existing networks of transport services are delicate and require preservation. ASEAN Member States have listed the following key areas as examples, many of which would require greater stakeholder engagement.

- Improve infrastructure to strengthen the region's global hub strategy
- Develop multi-modal fleet transport
- Develop a monitoring and reporting data framework and a supply chain analytic system
- Develop information sharing systems to increase accountability
- Improve infrastructure and port management to increase connectivity
- Improve transport system as well as infrastructure
- Increase digitalization to facilitate procedures

i) Necessity of capacity building and training at regional level:

Private sector representatives have identified three main areas of improvement in capacity building and training. They include (i) providing training of standardised operational procedures (SOP) for operators, (ii) building upon existing courses to create synergies (e.g. through the AFFA Logistics Institute) and (iii) increasing competency as the market changes. Different operators often follow different operating procedures but when there are standard operating procedures, they can be designed to achieve specific results that are uniform across ASEAN Member States and help facilitate on-site operations. The AFFA Logistics Institute was established with the goal of

educating government officials to better understand logistics industry's operations. The contents of its modules are customized according to fluctuating needs. Future capacity building and training programmes should therefore be aligned with existing courses, which are also increasingly available online. Even before COVID-19, the region already experienced changes in freight transport demand and supply. As the market changes over time, it would be critical for ASEAN transport and logistics companies to maintain or increase their competencies in the region. Disruptions such as international competition, rapid technology expansion, high levels of risk, high employee turnover, and a turbulent external environment, such as the COVID-19 pandemic crisis will continue to change the market. Hence, appropriate capacity building and training can enhance knowledge, skill, self-efficacy (including confidence), changes in practice and policies, behavior change, application, and system-level capacity.

3. RESPONSE AND RECOVERY GUIDELINES FOR RESILIENT AND SUSTAINABLE INTERNATIONAL ROAD FREIGHT TRANSPORT CONNECTIVITY IN ASEAN

The core components of the Guidelines are the main guiding principles and policy actions, articulated around three priorities:

- Priority 1: Ensuring Transport Workers' Safety and Training,
- Priority 2: Preserving Connectivity for Efficient and Resilient Supply Chains
- Priority 3: Building Back Better through Digital, Resilient and Decarbonized Transport Connectivity.

These three priority areas were derived from the findings of the interviews in September and October 2020 and affirmed by 94% of the respondents in the additional round of surveys in November and December 2021 with the ASEAN Member States and representatives of the private sector.

The timeline of the implementation of priority measures can be immediate or current, medium-term or long-term responses. The timing of implementation is subject to the effectiveness of a measure and the costs involved and depends on the situations during and post the pandemic in member states.

The following sections detail each priority area, its guiding principles and actions, and offer a timeline for the implementation in Table 2, whose items were also examined in the additional round of surveys in the late 2021.

3.1. PRIORITY 1: Ensuring Transport Workers' Safety and Training

Road transport workers have been affected by COVID-19 policy responses, such as border closures, travel bans, export restrictions, physical distancing, lockdowns and closures of non-essential businesses in all ASEAN Member States. These measures have affected transport workers' working conditions through various ways. For example, the closure of commercial vehicle rest areas, welfare facilities and non-essential businesses, including restaurants and repair shops affects drivers' physical and mental well-being. Restrictions or closures at border crossings can also have a negative impact on working conditions by increasing terms of waiting times, forced quarantine, mandatory testing and discrimination. In addition, restricted entry to neighboring countries in ASEAN Member States could also lead to longer travel time and higher transport

costs. Independent and informal drivers and SMEs may be particularly affected as they do not have the capacity for contingency planning, to manage or quickly adapt their operations to pandemics or other types of disruptions.

3.1.1. Road transport workers' safety and health

Existing international labor standards have ensured decent working conditions for transport workers but in times of disruptions, such as the COVID-19 pandemic, the following guidelines based on international standards will help improve road transport workers' safety and health.

Main guiding principles and actions:

1. Declare road transport a key service and road transport workers key workers.
2. Establish harmonized preparedness contingency plans and protocols, through bilateral and multi-lateral mechanisms (potentially via the ASEAN common platform in Section 3.2), - to ensure road freight service continuity and crossing procedures during emergency situations.
3. Promote the safety and well-being of drivers through the development and implementation of standard practice[13] in cross-border logistics, including visa facilitation measures for international truck drivers.
4. Provide clear, real time and transparent information, including the required test result or the approved vaccination certificate for COVID-19, on publicly accessible platforms[14] to enable truck drivers and crew members to carry out the necessary planning and follow protocols and recommendations.
5. Strengthen occupational safety and health measures:
    - Provide good quality personal protective equipment to workers and training on utilization;
    - Provide access to health care and testing, including mental health, for all;
    - Improve occupational measures, including access to decent sanitation facilities and safe parking infrastructure; and
    - Prioritize driver fatigue management.
6. Improve working conditions and promote gender equality for women workers[15] with gender responsive policies and programs.
7. Launch national vaccination programmes to systematically give an appropriate priority to frontline workers in transport and logistics sectors and

[13] EU's 'green lane' (https://ec.europa.eu/commission/presscorner/detail/en/IP_20_510) serves as a good example to illustrate how standardized border crossing facilitates movement of people and goods.

[14] The examples may include US-ASEAN Business Council's COVID-19 ASEAN Digital Dashboard (https://covid19.usasean.org/) and UNECE's COVID-19 Border Crossing Observatory (https://wiki.unece.org/display/CTRBSBC/Observatory+on+Border+Crossings+Status+due+to+COVID-19+Home),

[15] COVID-19 policy responses have to consider the specific needs of women workers in the sector, especially since the road transport sector is a highly male-dominated sector, where the global average of women's participation is 12% in 2018. Women workers in the transport sector are also more at risk to the negative effects of COVID-19, given the existing gender inequality in the transport workforce that is lacking adequate measures to support women and the tendency for women to be in lower paid jobs. For additional recommendations, please see ILO (2021) *Building Forward Fairer: Women's rights to work and at work at the core of the COVID-19 recovery*: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---gender/documents/publication/wcms_814499.pdf.

avoid compromised effectiveness due to discrepant local arrangements. In addition, consider a mutually recognized vaccination certificate[16].

3.1.2. Capacity and adaptability of road transport work force

The requirement of new skill sets for COVID-19 recovery makes it necessary to train both policy makers and transport workers, including those who work in cross-border points, in areas pertaining to their own safety and security, as well as the impending digitalization and ultimate decarbonization of the sector. Contactless terminals, contactless delivery and automated transport minimize the risk of COVID-19 transmission through contaminated surfaces and protect the health of all workers involved. Hence, relevant training and capacity building will be necessary.

Main guiding principles and actions:

1. Identify appropriate and relevant capacity building and training needs, including the establishment of training and licensing standards.
2. Provide specific support for formalization, reskilling and vocational training for those most affected by the immediate crisis and longer-term digitalization and decarbonization of the sector.
3. Synergize regional courses with existing programs.
4. Encourage cross-sectoral integration, e.g. with customs and immigration, labor and police inspection, through integrated training programs.

3.2. PRIORITY 2: Preserving Connectivity for Efficient and Resilient Supply Chains

The balance between the preservation of transport connectivity and the protection of workers' safety is a top priority for all ASEAN Member States. The preservation of transport connectivity is critical to enable the continuation of freight flow in the ASEAN region during the COVID-19 pandemic crisis. Cross-border freight should continue with as little disruption as possible at all circumstances to ensure the efficiency and resilience of supply chains. In addition, possible measures should be exercised to prevent high logistics costs from becoming obstacles for freight flows even though infrastructure and services may be still in place. Surging shipping rate and prolonged shipment delay had led to significant direct and indirect cost increase to the shippers in the region and jeopardize the integrity of global supply chains.

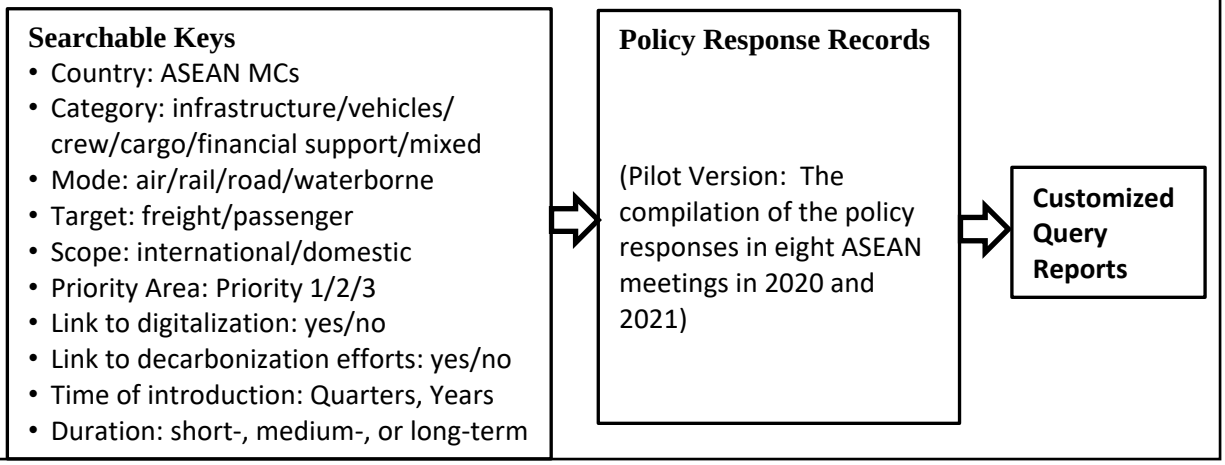
Main guiding principles and actions:

1. Cross-border freight should continue with as little disruption as possible at all circumstances.
2. Cross-sectoral cooperation and coordination among relevant functional agencies must be prioritized to ensure the efficiency and resiliency of supply chain networks.
3. Emergency planning and risk management should be integrated into freight transport connectivity planning.
4. At the initial stage, ASEAN Member States may consider setting up a common digital catalogue of measures applicable to international transport operations

[16] For additional recommendations, please see IRU (2021) *WHO chief supports IRU call on COVID vaccinations*: https://www.iru.org/resources/newsroom/who-chief-supports-iru-call-covid-vaccinations.

during and post the pandemic situation. [17] An example structure and its key features of such a catalogue are shown below (Box 1), and the further illustration of the digital catalogue can be found in **ANNEX III**.

Box 1. Sample Digital Catalogue of Measures applicable to cross-border transport in ASEAN during and post the pandemic situation. To facilitate the maintenance and exchange of information and help disseminate best practices, ASEAN Member States may share the searchable digital catalogue of measures applied to cross-border freight transport.



5. In a longer term, a common platform for ASEAN Member States could be set up to
    - Exchange information and share best practice on freight transport policy responses;
    - Share real time information and send notifications on cross-border freight restrictions and cross-border movements through a common regional platform;
    - Design collaborative solutions for strong cross-sectoral cooperation through horizontal integration among different ministries;
    - Facilitate joint actions and solutions on transport, trade and logistics operations;
    - Consider adopting a regional instrument on best or harmonized practices on transport policy response to pandemic or disruptive situations.
6. Ensure the availability and reliability of alternative transport modes (such as railways transport to road transport) to provide flexible and comprehensive multimodal connectivity.
7. Promote transparency and encourage collaboration among the players of supply chains to achieve cost saving jointly.

[17] Such a repository was established during the pandemic by the International Transport Forum and its Working group on Road Transport https://www.itf-oecd.org/road-transport-group/covid-19-road-group). Other examples include UNECE Observatory on Border Crossings Status due to COVID-19 Home: https://wiki.unece.org/display/CTRBSBC/Observatory+on+Border+Crossings+Status+due+to+COVID-19+Home

8. Consider implementing a Logistics Information System as a public platform providing effective and efficient national information services [18]
9. Improve port efficiency and container circulation to alleviate the problem with high freight costs through information exchange and sharing among stakeholders via digitalization platforms, such as a Port Community System[19].
10. Monitor freight rate and market behavior and provide appropriate regulatory oversight to prevent unfair competition.[20]

3.3. PRIORITY 3: Building Back Better through Digital, Resilient and Decarbonized Transport Connectivity

The building of more resilient and sustainable transport connectivity can be achieved through digitalization and decarbonization measures. The COVID-19 pandemic has also presented an opportunity to fully digitalize freight transport connectivity, as well as to start shifting to decarbonizing measures aligned with the Sustainable Development Goals and the Paris Agreement. A greater resiliency to COVID-19 will also help ASEAN Member States develop climate resilient pathways to prepare for future disruptions to the transport sector.

3.3.1. Digitalization

Digitalization can be used as a tool to drive economic recovery during and post COVID-19, as it supports contactless solutions aimed at minimizing physical contact in cross-border supply chains by facilitating the flow of goods without transmitting the virus. The pandemic has provided an opportunity to develop seamless harmonized electronic exchange of data in digital transport corridors, border crossings without physical inspection of goods and vehicles and trade operations, as well as developing smart transport connectivity.

Main guiding principles and actions:

1. Promote greater digitalization and automation in freight sector.
2. Set up an inventory of the implemented digitalization solutions, including the integration with digital health information such as the contact tracing apps and digital vaccination certificates, as part of the COVID-19 response.
3. Create a common capacity building program on transport and logistics digitalization for ASEAN.
4. Identify priority areas and harmonize institutional arrangements through the cooperation and coordination among relevant agencies to digitalize cross-border transport services, e.g., electronic certification, license and registration processes, and remote monitoring of transport operations.

[18] UNESCAP, "Standard Model of Logistics Information Systems", https://www.unescap.org/sites/default/d8files/knowledge-products/Model%20Logistics%20Information%20Systems.pdf

[19] UNECE, Port Community Systems, Trade Facilitation Implementation Guide, https://tfig.unece.org/contents/port-community-systems.htm

[20] See examples, European Commission urged to act amid record box freight rates (https://splash247.com/european-commission-urged-to-act-amid-record-box-freight-rates/) and FMC vows to get to the bottom of the ongoing container crunch hammering US supply chains (https://splash247.com/fmc-vows-to-get-to-the-bottom-of-the-ongoing-container-crunch-hammering-us-supply-chains/).

5. Facilitate the information sharing and data interoperability of freight operations among global supply chain activities by the digitalization of trade processes and procedures[21].

3.3.2. Resilience

Transport resilience is commonly defined as the ability for a system to absorb impacts from a disruption and maintain freight mobility. The ways to enhance resiliency could hence vary accordingly by country, as they depend on the type of disruptions experienced and the pre-existing capacity for resilience in the physical infrastructure, freight transport and supply chain networks and the capacity of relevant authorities to respond. From the financial, economic, operational, and social aspects of resilience, the following guidelines are derived based on what most ASEAN Member States have experienced since the beginning of the pandemic crisis.

Main guiding principles and actions:

1. Consider financial actions targeted to the road transport industry, including:
    - Direct cash grants;
    - Facilitate access to loans;
    - Facilitate extensions for loan repayments;
    - Reduction of taxes and charges;
    - Insurance flexibility;
    - Worker's unemployment support.

2. Strengthen adaptation measures for transport connectivity:
    - Conduct vulnerability and reliability assessments of transport connectivity networks;
    - Incorporate risk management in transport connectivity policy decisions
    - Expand stakeholder involvement in infrastructure planning, including infrastructure owners, asset managers, planners, designers, and operators.

3. Encourage seamless multimodality: (*also a decarbonization action*)
    - Introduce clear and harmonized rules and aligned procedures for multimodal transport through the cooperation and coordination among relevant agencies;
    - Design incentives for road haulers to take part in multimodal transport;
    - Ensure safe quality of services throughout the entire multimodal chain.

4. Design economic recovery packages with a focus on ways to enhance resiliency, digitalization and decarbonization of the sector, through:
    - Design stimulus measures building upon existing international development commitments, such as the Sustainable Development Goals or Paris Agreement, or relevant regional agreements;
    - Consider the longer-term implications of stimulus packages;

[21] See examples, UNCTAD (2019), Digitalization in maritime transport: Ensuring opportunities for development, Policy brief No. 75 (https://unctad.org/webflyer/digitalization-maritime-transport-ensuring-opportunities-development)

- Prioritize actions that combine benefits for workers, improving the quality of working conditions and reducing inequality with greater resiliency implications;
- Select cross-sectoral, cross-government approaches that can trigger long-term systematic changes.

5. Implement structural policies to enable SMEs to formalize and adopt new working methods and technologies, and to identify new markets and sales channels.

3.3.3. Decarbonization

Freight transport has been growing exponentially since the 1950s leading to increasing carbon dioxide (CO_2) emissions from global freight transport. For surface freight, Asia has the greatest demand, which could triple under the current policies by 2050[22]. Road freight is currently the second largest contributor of global transport CO_2 emissions after passenger road transport and has significantly higher emission levels than aviation, rail and marine bunkers combined[23]. Decarbonization measures hence refer to the shift to less carbon intensive fuel or modes, more energy efficient vehicles or more efficient networks that will reduce travel distance, empty runs, congestion, and time delays, which will all reduce transport carbon emissions[24,25]. The guidelines described below are based on these main principles.

Main guiding principles and actions:

1. Increase road transport network efficiency:
   - Improve truck routing schemes through route optimization;
   - Manage network traffic and provide traffic flow information;
   - Simplify procedures at cross-border checkpoints to reduce waiting and travel time delays;
   - Strengthen the last mile network through greater collaboration of freight operators.
2. Increase vehicle optimization:
   - Minimize empty loads;
   - Optimize fleet utilization.
3. Support the shift to less carbon intensity modes, e.g. rail:
   - Promote infrastructure investment in alternative modes;
   - Provide modal transfer grants.
4. Increase fuel efficiency of road freight vehicles:
   - Enhance the understanding of vehicle efficiency policy options (e.g. vehicle fuel efficiency and emission standards, market-based approach and fiscal measures);
   - Improve vehicle size and weight regulations;
   - Prevent overloading and overweighting of vehicles;

[22] ITF (2021), *ITF Transport Outlook 2021*, OECD Publishing, Paris.
[23] ITF (2021), *ITF Transport Outlook 2021*, OECD Publishing, Paris.
[24] ITF (2021), *ITF Transport Outlook 2021*, OECD Publishing, Paris.
[25] GFEI (2022), *Low Carbon Global Road Freight: Moving Beyond Fuel Economy Standards*, GFEI Working Paper 23, Global Fuel Economy Initiative.

- Incentivize improvements in vehicle design through the adoption of technology improvements;
- Support switch to cleaner alternative fuels[26];
- Participate in green freight programs with a goal of creating better access to financing mechanisms and information about fuel-saving technologies, strategies, and fleet performance;
- Develop fuel economy standards roadmap for heavy duty vehicles.

[26] Clean alternative fuels refer to advanced biofuels, which include residues and waste-based ethanol, biodiesel (FAME) and synthetic diesel (HVO).

Table 2. Timeline of Policy Responses

	Immediate/Current Response	Medium term response	Long term response
Priority 1: Ensure Transport Workers' Safety and Training	▪ Declare freight road transport a key service and road transport workers key workers ▪ Provide clear, real time and transparent information to enable truck drivers and crew members to carry out the necessary planning and follow protocols and recommendations ▪ Strengthen occupational safety and health measures ▪ Provide good quality personal protective equipment to workers and training on utilization ▪ Provide access to health care and testing, including mental health, for all ▪ Improve occupational measures, including access to decent sanitation facilities and safe parking infrastructure ▪ Prioritize driver fatigue management ▪ Launch national vaccination programmes and give an appropriate priority to frontline workers in transport and logistics sectors	▪ Establish harmonized preparedness contingency plans and protocols between countries to ensure road freight service continuity and crossing procedures during emergency situations ▪ Develop and implement standard practices in cross-border logistics, including visa facilitation measures for international truck drivers ▪ Adapt an international standard vaccination certificate or implement a mutually recognized arrangement for international truck drivers, based on international standards[27] ▪ Improve gender equality for women workers with gender responsive policies and programs	▪ Identify appropriate and relevant capacity building and training needs, including the establishment of training and licensing standards ▪ Provide specific support for formalization, reskilling and vocational training for those most affected by the immediate crisis and longer-term digitalization and decarbonization of the sector ▪ Synergize regional courses with existing programs ▪ Encourage cross-sectoral integration, e.g. with customs and immigration, labor and police inspection, through integrated training programs ▪ Provide education and training to women and girls to prepare them for careers in the transport connectivity sector ▪ Improve working conditions and facilities to increase the hiring and retention of women workers in the transport sector ▪ Implement national policies that are aligned with the best practices on gender equality and eliminating workplace violence and harassment.

[27] See, for example, WHO's documents/recommendations about the international standards of digital vaccination certificates https://www.who.int/publications/i/item/WHO-2019-nCoV-Digital_certificates-vaccination-2021.1

	Immediate/Current Response	Medium term response	Long term response
Priority 2: Preserving Connectivity	▪ Keep borders open for freight and, ensure, as much as possible, the continuity of cross-border freight operations for different modes ▪ Prioritize internal and external cooperation and coordination to ensure the efficiency and resiliency of supply chain networks. ▪ Exchange information and share best practice on freight transport policy responses ▪ Promote transparency and encourage collaboration among the players of supply chains to achieve cost saving jointly.	▪ Set up a common digital catalogue of measures applicable to cross-border road transport operations during pandemic situation ▪ Improve port efficiency and container circulation to alleviate the problem with high freight costs through information exchange and sharing via digitalization platforms. ▪ Monitor freight rate and market behavior and provide appropriate regulatory oversight to prevent unfair competition. ▪ Set up a common platform for sharing real time information and send notifications on cross-border freight restrictions and cross-border movements through a common regional platform ▪ Design collaborative solutions for strong cross-sectoral cooperation through horizontal integration among different ministries ▪ Facilitate joint actions and solutions on transport, trade and logistics operations	▪ Ensure the availability and reliability of alternative transport modes to provide flexible and comprehensive multimodal connectivity ▪ Integrate emergency planning and risk management into freight transport connectivity planning ▪ Consider adopting a regional instrument on best/harmonized practices and transport responses to pandemic/disruptive situations

	Immediate/Current Response	Medium term response	Long term response
Priority 3: Building Back Better	▪ Promote greater digitalization and automation in road freight sector ▪ Exchange on or identify priority areas for digitalization of cross-border transport services, e.g. electronic certification, license and registration processes, and remote monitoring of transport operations. ▪ Expand stakeholder involvement in infrastructure planning, including infrastructure owners, asset managers, planners, designers, and operators ▪ Consider financial actions targeted to the road transport industry, including direct cash grants, facilitated access to loans, facilitated extensions for loan repayments, reduced taxes and charge, greater insurance flexibility and road worker's unemployment support ▪ Encourage seamless multimodality (also a decarbonization action) ▪ Introduce clear and harmonized rules and aligned procedures through the cooperation and coordination among relevant agencies. ▪ Design incentives for road haulers to take part in multimodal transport	▪ Set up an inventory of the digitalization solutions implemented as part of the COVID-19 response ▪ Conduct vulnerability and reliability assessments of transport connectivity networks ▪ Incorporate risk management in transport connectivity policy decisions ▪ Introduce clear and harmonized rules and aligned procedures for multimodal transport ▪ Design incentives for road haulers to take part in multimodal transport ▪ Ensure safe quality of services throughout the entire multimodal chain ▪ Design economic recovery packages with a focus on ways to enhance resiliency, digitalization and decarbonization of the sector ▪ Design stimulus measures building upon existing international development commitments, such as the Sustainable Development Goals or Paris Agreement, or relevant regional agreements ▪ Consider the longer-term implications of stimulus packages ▪ Implement structural policies to enable SMEs to formalize and adopt new working methods and technologies, and to identify new markets and sales channels. ▪ Prioritize actions that combine benefits for workers, improving the quality of working conditions and reducing inequality with greater resiliency implications ▪ Select cross-sectoral, cross-government approaches that can trigger long-term systematic changes ▪ Improve truck routing schemes through route optimization ▪ Manage network traffic and provide traffic flow information ▪ Simplify procedures at cross-border checkpoints to reduce waiting and travel time delays ▪ Strengthen the last mile network through greater collaboration of freight operators ▪ Minimize empty loads ▪ Optimize fleet utilization	▪ Create a common capacity building program on transport and logistics digitalization for ASEAN ▪ Facilitate the information integration between freight operations and global supply chain activities. ▪ Support the shift to less carbon intensity modes, e.g. rail ▪ Promote infrastructure investment in alternative modes ▪ Provide modal transfer grants ▪ Increase fuel efficiency of road freight vehicles ▪ Understand vehicle efficiency policy options (e.g. vehicle fuel efficiency and emission standards, market-based approach and fiscal measures) ▪ Improve vehicle size and weight regulations ▪ Prevent overloading and overweighting of vehicles ▪ Incentivize improvements in vehicle design through the adoption of technology improvements[28] ▪ Support switch to cleaner alternative fuels ▪ Participate in green freight programs with a goal of creating better access to financing mechanisms and information about fuel-saving technologies, strategies, and fleet performance ▪ Develop fuel economy standards roadmap for heavy duty vehicles

[28] Clean alternative fuels refer to advanced biofuels, which include residues and waste-based ethanol, biodiesel (FAME) and synthetic diesel (HVO)

4. RECOMMENDATIONS FOR THE IMPLEMENTATION OF THE GUIDELINES

Successful implementation of the guidelines depends on the structure of the governance of COVID-19 policy responses and the capacity within governments to implement relevant guidelines during or post-COVID-19. The following actions would be instrumental in the implementation of the Guidelines.

4.1. Carry out stakeholder assessment and mapping

Pandemic policy response and new control or facilitation measures involve many stakeholders going beyond the freight transport sector. To ensure adequate implementation of the guidelines, the implementation team would need to start by carrying out or updating its stakeholder assessment and mapping, i.e., through:

1. Identifying/confirming key stakeholders involved in the freight transport sector and relevant policies.
2. Identifying the different roles of various stakeholders.
3. Creating stakeholder map.
4. Determining the intensity, frequency and type of engagement with different stakeholder groups.

4.2. Define governance structure for implementation

To the extent possible, the existing cooperation platforms, at the domestic, bilateral or regional level and among relevant functional agencies should be mobilized, adjusting and retrofitting them as need for the new challenges. This entails:

1. Identifying relevant existing regional or bilateral agreements on cross-border transport cooperation.
2. Identifying the existing platforms and mechanisms for joining actions.
3. Define governance structure for effective implementation of the Guidelines
4. Develop timeline of implementation.

4.3. Maintain the multiple stakeholder groups engaged throughout the implementation process

Different stakeholders, including the private sector and transport worker representatives, through the dialogue for more inclusive and comprehensive policy making processes, must be kept continuously involved in the implementation. Multi-stakeholder engagement will be key for cross-sectoral collaboration and exploring synergies and resource mobilization opportunities.

4.4. Secure a sufficient capacity building support

Capacity building is an integral component of the implementation of the guidelines. In addition to addressing the training needs in the freight transport sector, cross-sectoral cooperation with ministries other than transport, such as immigration and customs, labor, police, and roadside

inspection authorities can be significantly strengthened through common or existing capacity building programmes. From the outset, the implementation team would need to:

1. Identify appropriate and relevant capacity building and training needs covering the three priority areas of the guidelines.
2. Approach national and international partners, which could support the delivery of the training.
3. Ensure a comprehensive coverage by providing training for policy makers, the implementers on the ground and SMEs to increase the competitiveness of the domestic freight transport sector.

The above recommendations are provided for ASEAN Member States to implement the Guidelines. Details of actions may vary between countries, as priorities and conditions of COVID-19 pandemic in each country are different and could also evolve from time to time.

The capacity building activities scheduled in 2021 and 2022 should be supported by ESCAP and ITF and must address the three priority areas in a balanced manner, while considering national needs and current capacities. ASEAN Member States may select the most appropriate actions to implement the measures in the Guidelines based on the respective priorities and status of the COVID-19 pandemic in their countries.

4.5. Prepare for the post-pandemic adjustments in transport policy responses

As the ASEAN Member States progress towards easing pandemic restrictions gradually, considering the transition to an endemic stage or for other reasons, the following principles may guide the adjustments of their transport policy response.

1. To the highest extent possible, the policy measures with a positive impact on digitalization, facilitation of cross-border procedures and decarbonizations, should be retained, becoming the new normal of the freight transport operations. In particular, the digital practices such as cashless payments, paperless processes, and online transactions (e.g., permits, certificates, and licenses) should be considered.

2. In line with the established principles of trade and transport facilitation, countries should regularly review the remaining restrictions to freight transport operations with the view to remove them if no longer required by the circumstances, especially for those significantly interrupting the movement of cross-border goods. In doing so, the relevant suggestions from the private sector should be considered and private-public cooperation encouraged as a way to enhance resiliency.

3. In easing the restrictions, the countries should ensure the transparency and necessary flow of information and transparency to enable transport operators fully benefit from these positive changes. [29]

[29] For example, the Global Trade Facilitation agreement of the World Trade Organization stipulates that each Member shall promptly publish the import, export and transit related information in a non-discriminatory and

4. The capacity building needs for the implementation of the Guidelines should be addressed as much as possible, given the priority to the needs for cross-border training on transport facilitation for the staff of the border control agencies and other stakeholders.

5. The existing transport agreements and arrangements should be revised or amended, if applicable, to guarantee the resilience during the future crisis. To that end, ASEAN Member States who are parties to bilateral or multilateral treaties are encouraged to consider a minimum set of provisions to be included in a force majeure clause in their new agreements. In case of a new agreement, an article can be included in the text of the agreement, with the title "Force Majeure". In case of revising an existing agreement, the Annex will have to be referred to in the agreement, by including an article titled "Force Majeure" indicating that "the procedures in force majeure cases are detailed in Annex XYZ to the present agreement."[30]

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easily accessible manner in order to enable governments, traders, and other interested parties to become acquainted with them. **https://www.wto.org/english/docs_e/legal_e/tfa-nov14_e.htm#art1**

[30] Further information on a Model Annex on Force Majeure clause in transport agreement is available in ESCAP, "Proposals for crisis-response provisions in regional and bilateral transport agreements of the ESCAP member States", June 2021: **https://www.unttc.org/documents/proposals-crisis-response-provisions-regional-and-bilateral-transport-agreements-escap**

ANNEX I

COVID-19 Recovery Guidelines for Resilient and Sustainable International Road Freight Transport Connectivity in ASEAN

Interview Guide

Interviewee (Name and Title):
_____

Department/Office:
_____

Ministry:
_____

Date:
_____

Start Time: _____ End Time: _____

Post Interview Comments and/or Observations:

_____

_____

_____

_____

_____

Introductory Protocol

Thank you for agreeing to be interviewed. This interview will last no more than 45 minutes and there will be no audio or video recording, though I will be taking notes.

Introduction

The ESCAP-ASEAN-ITF joint webinar on "Preserving Transport Connectivity and Building Freight Transport Resilience in ASEAN" held on 9 July 2020 led to the request from ASEAN Member States to support the development and establishment of regional and national transport connectivity recovery plans with a focus on resilience and sustainability, as well as the development of regional COVID-19 recovery guidelines on cross-border transport. These two points serve as concrete follow-up actions based on the discussions conducted in the ESCAP-ASEAN-ITF joint webinar. Hence, the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and the International Transport Forum (ITF) have jointly developed a project on "Recovery Guidelines for Resilient and Sustainable International Road Freight Transport Connectivity in ASEAN".

The purpose of this interview is to collect a rich source of information on your opinion and knowledge of what is required for your country and ASEAN Member States in order to "build back better". The responses collected will then help us better understand the challenges and preferences of ASEAN Member States, which will contribute to the development of the guidelines that can support the creation of a resilient and sustainable transport connectivity recovery pathway in ASEAN during and post COVID-19.

Interview Questions

Part One: Interviewee's Background and Experiences

1. How long have you been …
   _____ in your present position?
   _____ at your Ministry?

2. Could you give me a brief overview of what you do in your work?
   _____
   _____

   Probes: Is your work focused on passenger or freight transport? Do you focus on a specific mode? Have you been involved in the development of COVID-19 policy responses? If yes, how so? How has cross-border transport connectivity been affected by COVID-19 in your country?

3. Could you describe some of the road freight challenges that your Ministry has experienced or is currently still experiencing due to COVID-19?
   _____
   _____

Probes: For example, the survey on "Freight Transport Policy Responses to COVID-19" conducted by ESCAP showed that balancing between containing the virus and maintaining transport services, cross-border connectivity and maintaining the supply chain and logistics activities are the three top challenges experienced by transport authorities in Southeast Asia. Do you think these challenges still exist? How have they been addressed over the past six months?

4. Could you tell me how the concepts of sustainability and resilience have been applied to freight transport connectivity prior to COVID-19?

   _____

   _____

   Probes: Are there any measures focusing on the environmental and social sustainability of freight transport? For example, fuel efficiency of existing vehicle fleet, fuel quality and standards, use of alternative fuel, standards on local air pollution and carbon dioxide emissions? Has the impact of climate change on freight transport infrastructure, services and operations been evaluated? Are there measures to increase freight transport safety and security? Including working environments? Are there training or educational programmes for employees? Road-side clinics or rest areas for truckers? Are there measures to improve gender equality in the freight transport sector?

5. Could you tell me if the concepts of sustainability and resilience have been applied to existing COVID-19 transport policy responses?

   _____

   _____

6. Does your job require you to work closely with other Ministries or agencies, either before or during the COVID-19 pandemic crisis? If so, which other Ministries?

   _____

   _____

   Probes: For example, the Ministries of Tourism, Trade, Urban Development, Environment, or Public Health. Are there existing platforms for coordination and the sharing of knowledge and information across ministries (e.g. regular meetings, common digital storage of data and information, regular updates of policy changes)? Who are the key stakeholders involved in the development and implementation of COVID-19 policy responses? What is the role of the private sector?

Part Two: Scope of the Guidelines

7. What are some priority areas that should be included in the guidelines for your government's recovery phase? And for ASEAN as a region?

   _____

   _____

   Probes: For example, topics that showed that balancing between containing the virus and maintaining transport services, cross-border connectivity and maintaining the supply chain and logistics activities. Other areas include responses to facilitate connectivity, address

transboundary and other risks, and support a green and resilient recovery. On a regional level, the harmonization of standards and measures could help facilitate cross-border crossing and decrease travel and waiting time. The development of regional certificates will also ensure compliance of emissions and safety in the region.

8. The successful implementation of the guidelines will depend on the structure of the governance of COVID-19 policy responses. Is there capacity within your Ministry to implement relevant guidelines during or post-COVID-19?

   _____

   _____

   Probes: For example, is there an existing task force within your government that is consisted of multiple ministries? How are existing COVID-19 policy responses being implemented? What additional governance capacity is required?

Part Three: Best Practices (or Lessons Learned) from the Region

9. What are some of the COVID-19 freight transport policy responses that have been successful in containing the virus and maintain transport services in your country? And how about in other countries in the region?

   _____

   _____

   Probes: These could also be relevant to cross-border connectivity and maintaining the supply chain and logistics activities, or transport operators' safety, social distancing, inter-city ban, and licensing and certifications. Have there been efforts to improve the digitalization of transport services, such as licensing? Have there been new measures in place to increase the resilience of transport? How has ASEAN in general worked together to ensure cross-border connectivity?

10. What do you think your government could have done differently over the past six months to respond to COVID-19?

    _____

    _____

    Probes: For example, some countries and transport operators wished that they had acted sooner. What are some of your lessons learned? Are there measures in place to minimalize future disruptions in the freight transport system in your country?

Part Four: Feedback on Proposed Recommendations based on Global Experiences

11. An increase in the resilience of freight transport connectivity requires changes in measures on infrastructure, system and modes (vehicles). In which area(s) does your government require the most improvement based on existing measures?

    _____

    _____

    Probes: For example, such measures include the support of institutional and human capacity-building to identify and manage climate risks to transport systems and networks, promote

interconnectivity and facilitate efficient, temporary modal shift during periods of disruption, coordinate with stakeholders (including at regional and international levels) to identify opportunities for improved integration, interconnectivity and efficiency. Review legal, governance and institutional framework for effective climate-risk assessment and adaptation planning for transport; integrate into national adaptation plans and into processes for implementation of international agreements, and support long-term investment in skills and resources through education and training programmes.

12. The UN has identified three priorities in the areas of transport and trade due to the COVID-19 crisis. These are contactless solutions, seamless connectivity and collaborative solutions. Are there any other priority areas that would apply to your country and ASEAN as a region?

    _____

    _____

    Probes: For example, stronger cooperation and vertical cooperation between cities (or regions) and national governments or horizontal coordination across ministries?

    Contactless solutions aim at minimizing physical contact among people in cross-border supply chains by facilitating the flow of goods without spreading the virus. This will be done by implementing UN conventions and standards for the seamless harmonized electronic exchange of data in digital transport corridors, border crossings without physical inspection of goods and vehicles and trade operations, as well as developing smart rail and road connectivity.

    Seamless connectivity focuses on eliminating obstacles to cross-border trade and transport operations arising from the COVID-19 crisis. It aims at promoting synergies among border agencies by empowering national trade facilitation committees, improving customs automation and identifying non-tariff barriers. Collaborative solutions seek to strengthen regional and sectoral cooperation on transport, trade and logistics operations to facilitate joint actions and solutions in responding to the COVID-19 pandemic.

13. What are some priority areas that you believe regional or sub-regional collective measures should focus on?

    _____

    _____

    Probes: For example, establishment of green lanes or corridors; mutual recognition or waiver of transport documents and other appropriate actions.

Part Five: Technical Assistance and Capacity Building Needs

14. In what areas would regional cooperation be most helpful for your government in the COVID-19 recovery phase?

    _____

    _____

    Probes: Regional cooperation could be beneficial when countries respond to COVID-19 and other types of disruption, including emerging (e.g. digitalization, extreme weather conditions, climate change) or temporary (e.g. congestion) disruptions. Or social impact of freight

transport activities concerning working conditions and gender inequality in the transport workforce?

15. What kind of technical assistance and capacity building will be most relevant to your government?

    _____

    _____

    Probes: For example, setting up a centralized source of information on the national measures affecting regional transport connectivity or training of standardized cross-border freight transport procedures and formalities under special circumstances similar to COVID-19? Or the application of sustainability and resilience concepts on the development of COVID-19 recovery pathway?

PRIVATE SECTOR

COVID-19 Recovery Guidelines for Resilient and Sustainable International Road Freight Transport Connectivity in ASEAN

Interview Guide

Interviewee (Name and Title):
_____

Department/Office:
_____

Company/Organisation:
_____

Date:
_____

Start Time: _____ End Time: _____

Post Interview Comments and/or Observations:
_____

_____

_____

_____

_____

Introduction

The ESCAP-ASEAN-ITF joint webinar on "Preserving Transport Connectivity and Building Freight Transport Resilience in ASEAN" held on 9 July 2020 led to the request from ASEAN Member States to support the development and establishment of regional and national transport connectivity recovery plans with a focus on resilience and sustainability, as well as the development of regional COVID-19 recovery guidelines on cross-border transport. These two points serve as concrete follow-up actions based on the discussions conducted in the ESCAP-ASEAN-ITF joint webinar. Hence, the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and the International Transport Forum (ITF) have jointly developed a project on "Recovery Guidelines for Resilient and Sustainable International Road Freight Transport Connectivity in ASEAN".

The purpose of this interview is to collect a rich source of information on your opinion and knowledge from the perspective of the private sector of what is required for ASEAN Member States to "build back better". The responses collected will then help us better understand the challenges and preferences of the private sector in ASEAN Member States, which will contribute to the development of the guidelines that can support the creation of a resilient and sustainable transport connectivity recovery pathway in ASEAN during and post COVID-19.

Interview Questions

Part One: Interviewee's Background and Experiences

16. How long have you been …
    _____ in your present position?
    _____ at your company / organisation?

17. Could you give me a brief overview of what you do in your work?
    _____
    _____

    Probes: Is your work focused on passenger or freight transport? Do you focus on a specific mode? Have you been involved in the development of COVID-19 policy responses in your company or organisation? If yes, how so? How has cross-border transport connectivity been affected by COVID-19 in your country? How was COVID-19 affected your business operations?

18. Could you describe some of the key road freight challenges that the transport sector has experienced or is currently still experiencing due to COVID-19?
    _____
    _____

    Probes: For example, the survey on "Freight Transport Policy Responses to COVID-19" conducted by ESCAP showed that balancing between containing the virus and maintaining transport services, cross-border connectivity and maintaining the supply chain and logistics activities are the three top challenges experienced by transport authorities in Southeast Asia. What are the challenges specific to the private sector? How have they been addressed over the past six months?

19. Could you tell me how the concepts of sustainability and resilience have been applied to freight transport connectivity prior to COVID-19 in your business operations?

    _____

    _____

    Probes: Are there any measures focusing on the environmental and social sustainability of freight transport? For example, fuel efficiency of existing vehicle fleet, fuel quality and standards, use of alternative fuel, standards on local air pollution and carbon dioxide emissions? Has the impact of climate change on freight transport infrastructure, services and operations been evaluated? Are there measures to increase freight transport safety and security? Including working environments? Are there training or educational programmes for employees? Road-side clinics or rest areas for truckers? Are there measures to improve gender equality in the freight transport sector?

20. Could you tell me if the concepts of sustainability and resilience have been applied to existing transport operations in response to COVID-19?

    _____

    _____

21. Does your job require you to work closely with other sectors, e.g. Ministries or transport authorities, either before or during the COVID-19 pandemic crisis? If so, who are the stakeholders you work closely with?

    _____

    _____

    Probes: For example, the Ministries of Tourism, Trade, Urban Development, Environment, or Public Health. Are there existing platforms for coordination and the sharing of knowledge and information (e.g. regular meetings, common digital storage of data and information, regular updates of policy changes)? Who are the key stakeholders involved in the development and implementation of COVID-19 policy responses? What is the role of the private sector?

Part Two: Scope of the Guidelines

22. What are some priority areas that should be included in the guidelines for ASEAN's recovery phase?

    _____

    _____

    Probes: For example, topics that showed that balancing between containing the virus and maintaining transport services, cross-border connectivity and maintaining the supply chain and logistics activities. Other areas include responses to facilitate connectivity, address transboundary and other risks, and support a green and resilient recovery. On a regional level, the harmonization of standards and measures could help facilitate cross-border crossing and decrease travel and waiting time. The development of regional certificates will also ensure compliance of emissions and safety in the region.

23. The successful implementation of the guidelines will depend on the structure of the governance of COVID-19 policy responses. What do you think is the role of the private sector?

_____

_____

Probes: How can the private sector help governments implement the guidelines? How are existing COVID-19 policy responses being implemented? What additional capacity is required?

Part Three: Best Practices (or Lessons Learned) from the Region

24. What are some of the COVID-19 freight transport policy responses that have been successful in containing the virus and maintain transport services in your country? And how about in other countries in the region?

_____

_____

Probes: These could also be relevant to cross-border connectivity and maintaining the supply chain and logistics activities, or transport operators' safety, social distancing, inter-city ban, and licensing and certifications. Have there been efforts to improve the digitalization of transport services, such as licensing? Have there been new measures in place to increase the resilience of transport? How has ASEAN in general worked together to ensure cross-border connectivity?

25. What do you think governments or businesses could have done differently over the past six months to respond to COVID-19?

_____

_____

Probes: For example, some countries and transport operators wished that they had acted sooner. What are some of your lessons learned? Are there measures in place to minimalize future disruptions in the freight transport system in your country?

Part Four: Feedback on Proposed Recommendations based on Global Experiences

26. An increase in the resilience of freight transport connectivity requires changes in measures on infrastructure, system and modes (vehicles). In which area(s) does ASEAN require the most improvement based on existing measures?

_____

_____

Probes: For example, such measures include the support of institutional and human capacity-building to identify and manage climate risks to transport systems and networks, promote interconnectivity and facilitate efficient, temporary modal shift during periods of disruption, coordinate with stakeholders (including at regional and international levels) to identify opportunities for improved integration, interconnectivity and efficiency. Review legal, governance and institutional framework for effective climate-risk assessment and adaptation planning for transport; integrate into national adaptation plans and into processes for

implementation of international agreements, and support long-term investment in skills and resources through education and training programmes.

27. The UN has identified three priorities in the areas of transport and trade due to the COVID-19 crisis. These are contactless solutions, seamless connectivity and collaborative solutions. Are there any other priority areas that would apply to ASEAN? What are the priorities for the private sector?

    _____

    _____

    Probes: For example, stronger cooperation and vertical cooperation between cities (or regions) and national governments or horizontal coordination across ministries?
    Contactless solutions aim at minimizing physical contact among people in cross-border supply chains by facilitating the flow of goods without spreading the virus.
    This will be done by implementing UN conventions and standards for the seamless harmonized electronic exchange of data in digital transport corridors, border crossings without physical inspection of goods and vehicles and trade operations, as well as developing smart rail and road connectivity.
    Seamless connectivity focuses on eliminating obstacles to cross-border trade and transport operations arising from the COVID-19 crisis. It aims at promoting synergies among border agencies by empowering national trade facilitation committees, improving customs automation and identifying non-tariff barriers.
    Collaborative solutions seek to strengthen regional and sectoral cooperation on transport, trade and logistics operations to facilitate joint actions and solutions in responding to the COVID-19 pandemic.

28. What are some priority areas that you believe regional or sub-regional collective measures should focus on that will bring value to the private sector, including local businesses along the supply chain network?

    _____

    _____

    Probes: For example, establishment of green lanes or corridors; mutual recognition or waiver of transport documents and other appropriate actions.

Part Five: Technical Assistance and Capacity Building Needs

29. In what areas would regional cooperation be most helpful for ASEAN in the COVID-19 recovery phase?

    _____

    _____

    Probes: Regional cooperation could be beneficial when countries respond to COVID-19 and other types of disruption, including emerging (e.g. digitalization, extreme weather conditions, climate change) or temporary (e.g. congestion) disruptions. Or social impact of freight transport activities concerning working conditions and gender inequality in the transport workforce?

30. What kind of technical assistance and capacity building would be required for the private sector?

_____

_____

Probes: For example, setting up a centralized source of information on the national measures affecting regional transport connectivity or training of standardized cross-border freight transport procedures and formalities under special circumstances similar to COVID-19? Or the application of sustainability and resilience concepts on the development of COVID-19 recovery pathway?

ANNEX II

Additional Survey for Revising the COVID-19 Recovery Guidelines for Resilient and Sustainable International Road Freight Transport Connectivity in ASEAN

Introduction

The COVID-19 Recovery Guidelines for Resilient and Sustainable International Road Freight Transport Connectivity in ASEAN ("Guidelines") was developed by the ASEAN Transport Facilitation Working Group (TFWG) with joint assistance from the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and the International Transport Forum (ITF), following the outcomes of the ESCAP-ASEAN-ITF joint webinar on "Preserving Transport Connectivity and Building Freight Transport Resilience in ASEAN" in July 2020. Since the publication of the Guidelines in February 2021, the situation of the COVID-19 pandemic has significantly evolved, and ASEAN Member States have subsequently requested to update the Guidelines. Although the structure of the Guidelines remains valid and pertinent, the policy responses and guiding principles of the priority areas, initially based on the survey responses collected in June and July 2020 and the interviews in September and October 2020, need to be further examined and revised. Hence, a new survey is developed to collect any updates on COVID-19 policy responses in ASEAN Member States.

The purpose of this new survey is to collect information based on your opinion and knowledge related to your country and to help us better understand the challenges and countermeasures during and post COVID-19. The ultimate goal of updating the Guidelines is to facilitate the creation of a recovery pathway to resilient and sustainable transport connectivity in ASEAN based on current situation and development of the pandemic. Responses collected will be used for research purposes under ASEAN-ESCAP-ITF cooperation only.

Link to the Guidelines: https://asean.org/wp-content/uploads/2021/02/asean-covid-19-guidelines.pdf

1. Country

2. Please select your primary work areas (you can select multiple answers).

- ☐ Domestic freight transport
- ☐ International freight transport
- ☐ Multimodal transport
- ☐ COVID-19 policy response in transport
- ☐ Other:

3. Do the current three priority areas set out in the Guidelines:
   1: Ensuring transport workers' safety and training,
   2: Preserving connectivity for efficient and resilient supply chains,
   3: Building back better through digital, resilient and decarbonized transport connectivity
   remain appropriate given the evolving pandemic situation and the needs and objectives of your country?

   - ☐ Yes
   - ☐ No

4. Please elaborate:

Lessons learned in Priority 1: Ensure Transport Workers' Safety and Training

5. Immediate/Current Response

   Please select the measures that have proven to be particularly effective in COVID-19 response? [Select all that applies]

   - ☐ Declare freight road transport a key service and road transport workers key workers
   - ☐ Provide clear, real time and transparent information to enable truck drivers and crew members to carry out the necessary planning and follow protocols and recommendations
   - ☐ Strengthen occupational safety and health measures
   - ☐ Provide good quality personal protective equipment to workers and training on utilization
   - ☐ Provide access to health care and testing, including mental health, for all
   - ☐ Improve occupational measures, including access to decent sanitation facilities and safe parking infrastructure
   - ☐ Prioritize driver fatigue management

6. Medium term response (6 months)

   Please select the measures that have proven to be particularly effective in COVID-19 response? [Select all that applies]

   - ☐ Establish harmonized preparedness contingency plans and protocols between countries to ensure road freight service continuity and crossing procedures during emergency situations

- Develop and implement standard practices in cross border logistics, including visa facilitation measures for international truck drivers
- Improve gender equality for women workers with gender responsive policies and programs

7. Long term response (6-12 months)

   Please select the measures that have proven to be particularly effective in COVID-19 response? [Select all that applies]

   - Identify appropriate and relevant capacity building and training needs, including the establishment of training and licensing standards
   - Provide specific support for formalization, reskilling and vocational training for those most affected by the immediate crisis and longer-term digitalization and decarbonization of the sector
   - Synergize regional courses with existing programs
   - Encourage cross-sectoral integration, e.g. with customs and immigration, labor and police inspection, through integrated training programs

8. Please share an example of success story or best practices available from your country experience in Priority 1: Ensure Transport Workers' Safety and Training.

Lessons learned in Priority 2: Preserving connectivity for efficient and resilient supply chains

9. Immediate/Current Response

   Please select the measures that have proven to be particularly effective in COVID-19 response? [Select all that applies]

   - Keep borders open for freight and, ensure, as much as possible, the continuity of cross-border freight operations
   - Prioritize internal and external cooperation and coordination to ensure the efficiency and resiliency of supply chain networks.
   - Exchange information and share best practice on freight transport policy responses

10. Medium term response (6 months)

    Please select the measures that have proven to be particularly effective in COVID-19

response? [Select all that applies]

- ☐ Set up a common platform for sharing real time information and send notifications on cross-border freight restrictions and cross-border movements through a common regional platform
- ☐ Set up a common catalogue of measures applicable to cross-border road transport operations during pandemic situation
- ☐ Design collaborative solutions for strong cross-sectoral cooperation through horizontal integration among different ministries
- ☐ Facilitate joint actions and solutions on transport, trade and logistics operations

11. Long term response (6-12 months)

Please select the measures that have proven to be particularly effective in COVID-19 response? [Select all that applies]

- ☐ Integrate emergency planning and risk management into freight transport connectivity planning
- ☐ Consider adopting a regional instrument on best/harmonized practices I the transport response to pandemic/disruptive situation

12. Please share an example of success story or best practices available from your country experience in Priority 2: Preserving connectivity for efficient and resilient supply chains.

Lessons learned in Priority 3: Building back better through digital, resilient and decarbonized transport connectivity

13. Immediate/Current Response

Please select the measures that have proven to be particularly effective in COVID-19 response? [Select all that applies]

- ☐ Promote greater digitalization and automation in road freight sector
- ☐ Exchange on or identify priority areas for digitalization of cross-border transport services, e.g. electronic certification, license and registration processes, and remote monitoring of transport operations.
- ☐ Expand stakeholder involvement in infrastructure planning, including infrastructure owners, asset managers, planners, designers, and operators
- ☐ Encourage seamless multimodality (also a decarbonization action)

- Introduce clear and harmonized rules and aligned procedures
- Design incentives for road haulers to take part in multimodal transport

14. Medium term response (6 months)

Please select the measures that have proven to be particularly effective in COVID-19 response? [Select all that applies]

- Set up an inventory of the digitalization solutions implemented as part of the COVID-19 response
- Consider financial actions targeted to the road transport industry, including direct cash grants, facilitated access to loans, facilitated extensions for loan repayments, reduced taxes and charge, greater insurance flexibility and road worker's unemployment support
- Conduct vulnerability and reliability assessments of transport connectivity networks
- Incorporate risk management in transport connectivity policy decisions
- Introduce clear and harmonized rules and aligned procedures for multimodal transport
- Design incentives for road haulers to take part in multimodal transport
- Ensure safe quality of services throughout the entire multimodal chain
- Design economic recovery packages with a focus on ways to enhance resiliency, digitalization and decarbonization of the sector
- Design stimulus measures building upon existing international development commitments, such as the Sustainable Development Goals or Paris Agreement, or relevant regional agreements
- Consider the longer-term implications of stimulus packages
- Prioritize actions that combine benefits for workers, improving the quality of working conditions and reducing inequality with greater resiliency implications
- Select cross-sectoral, cross-government approaches that can trigger long-term systematic changes
- Improve truck routing schemes through route optimization
- Manage network traffic and provide traffic flow information
- Simplify procedures at cross-border checkpoints to reduce waiting and travel time delays
- Strengthen the last mile network through greater collaboration of freight operators
- Minimize empty loads
- Optimize fleet utilization

15. Long term response (6-12 months)

Please select the measures that have proven to be particularly effective in COVID-19

response? [Select all that applies]

- ☐ Create a common capacity building program on transport and logistics digitalization for ASEAN
- ☐ Support the shift to less carbon intensity modes, e.g. rail
- ☐ Promote infrastructure investment in alternative modes
- ☐ Provide modal transfer grants
- ☐ Increase fuel efficiency of road freight vehicles
- ☐ Understand vehicle efficiency policy options (e.g. vehicle fuel efficiency and emission standards, market-based approach and fiscal measures)
- ☐ Improve vehicle size and weight regulations
- ☐ Prevent overloading and overweighting of vehicles
- ☐ Incentivize improvements in vehicle design through the adoption of technology improvements
- ☐ Support switch to cleaner alternative fuels
- ☐ Participate in green freight programs with a goal of creating better access to financing mechanisms and information about fuel-saving technologies, strategies, and fleet performance
- ☐ Develop fuel economy standards roadmap for heavy duty vehicles
- ☐ Provide education and training to women and girls to prepare them for careers in the transport connectivity sector
- ☐ Improve working conditions and facilities to increase the hiring and retention of women workers in the transport sector
- ☐ Implement national policies that are aligned with the best practices on gender equality and eliminating workplace violence and harassment

16. Please share an example of success story or best practices available from your country experience in Priority 3: Building back better through digital, resilient and decarbonized transport connectivity.

17. What are some new COVID-19 freight transport policy responses that are not included in above tables but have been successfully implemented or are potentially useful for the three priority areas? At which stage (short, medium, and longer-term) are they associated?

18. Has your government launched any vaccination programme specifically for frontliner workers in the transport and logistics sectors? How has the programme helped preserve the

efficiency and resilience of transport systems? Please explain.

19. Was the problem of high logistics cost observed during and post the pandemic in your country? What policies and actions were taken by the Government to resolve or alleviate the problem? Please explain.

20. Was the problem of container shortage observed during and post the pandemic in your country? What policies and actions were taken by the Government to resolve or alleviate the problem? Please explain.

21. Please select the recommendations of the Guidelines that remain valid in the effective implementation of the COVID-19 policy responses:

- Carrying out stakeholder assessment and mapping
- Defining governance structure for implementation
- Maintaining the multiple stakeholder groups engaged throughout the implementation process
- Securing a sufficient capacity building support

22. Please identify what kind of technical assistance and capacity building will be the most relevant to your government at the current stage of the pandemic:

23. Please use the space below to include any other information that you would like to share.

ANNEX III

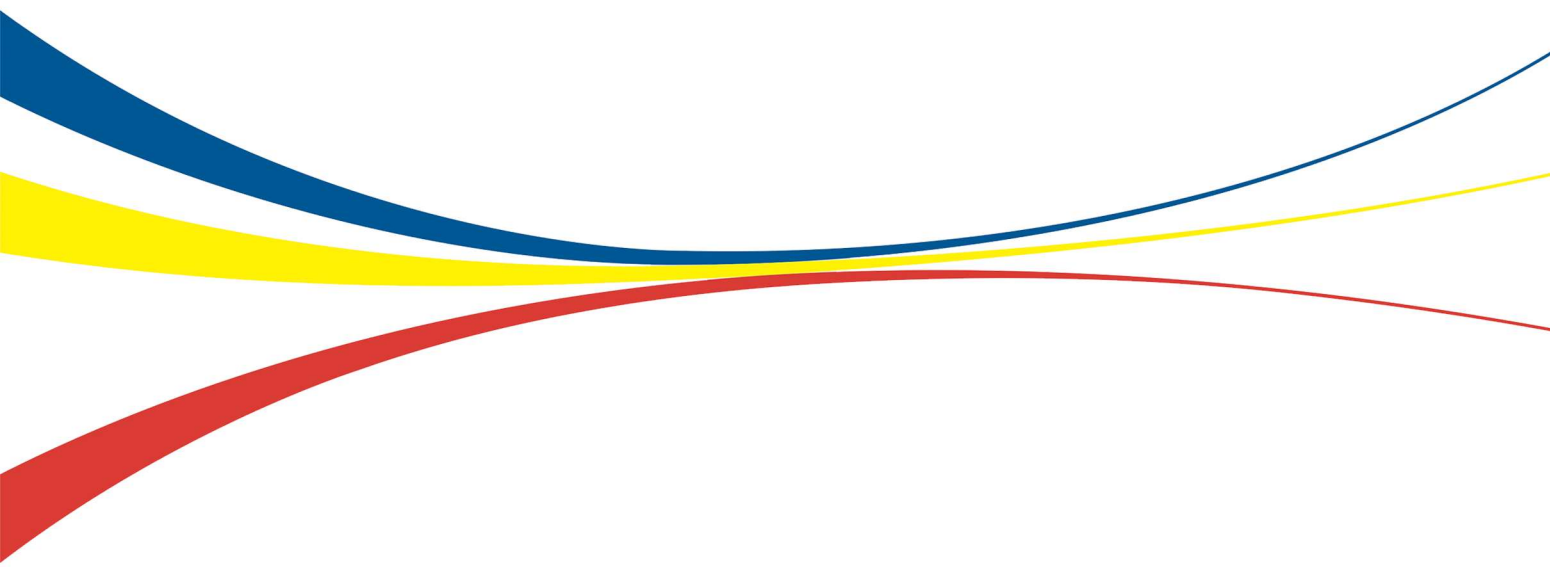
Concept Illustration of the Digital Catalogue

Potential Search Keys

Country	Category	Target	Link to digitalization	Time of introdu	Duration
Brunei Darussalam	Infrastructure	Freight	Yes	2020 Q1	Short-term
Cambodia	Vehicles	Passenger	No	2020 Q2	Medium-term
Indonesia	Crew	Both	n/a	2020 Q3	Long-term
Lao PDR	Cargo			2020 Q4	
Malaysia	Financial support			2021 Q1	
Myanmar	Mixed			2021 Q2	
Philippines	Travelers (persons)			2021 Q3	
Singapore	Information			2021 Q4	
Thailand				2022 Q1	
Viet Nam				2022 Q2	
				2022 Q3	
Priority Area	**Mode**	**Scope**	**Link to decarbonization efforts**	2022 Q4	
#1	Air	International	Yes	2023 Q1	
#2	Rail	Domestic	No	2023 Q2	
#3	Road	Both	n/a	2023 Q3	
	Waterborne			2023 Q4	
	Mixed				

Policy Response Inventory

Country	Category	Mode	Target	Scope	Priority Areas	Link to digitalization	Link to decarbonization efforts	Time of introduction	Duration	Policy Response	Source
Brunei Darussalam	Vehicles	Road	Passenger	Internationa	#1	n/a	n/a	2021 Q3	Short-term	60(i). Brunei Darussalam presented updates on latest situation for cross-border transport during COVID-19 pandemic, particularly that mandatory Antigen Rapid Testing (ART) programme for transport operators and other essential travelers at all land border control posts have commenced since 26 July 2021 while cross-border transport to deliver imported agriculture and fisheries goods are only allowed for 3 times in a week and must be escorted by the relevant agency from the checkpoints to designated points.	**41st ASEAN Transport Facilitation Working Group (TFWG) Meeting, 11-12 October 2021**
Brunei Darussalam	Mixed	Mixed	Passenger	Internationa	#2	Yes	n/a		Short-term	Brunei Darussalam introduced digital contact tracing (BruHealth), mandatory temperature checks at all entry terminals, encouraged contactless payment for all transport services, and introduced colour-coded vehicle passes to identify foreign vehicles that are permitted into the country. The introduction of the TransportBN mobile application enhances the digitization of transport services by gathering transport-related information in one platform for easy user access: for example, providing public bus schedules and the availability of taxis, and supporting the provision of online land-transport department services, such as online renewal of vehicle licenses.	**11th ASEAN-ROK Transport Cooperation Forum, 7 September 2021**
Brunei Darussalam	Mixed	Mixed	Both	Internationa	#2	Yes			Medium-term	Several measures to facilitate transport and logistics during pandemic have been issued, among others, (i) Guidelines for Entry Travel Pass Applications for travellers entering Brunei Darussalam, (ii) Guidelines for Transport Operators to facilitate importation, transit and exportation of goods and (iii) Foreign Vehicle Pass to identify foreign vehicles permitted in the country during the pandemic	**17th ASEAN-Japan Experts Group Meeting on Logistics, 15 December 2020**
Brunei Darussalam	Travelers (persons	Mixed	Passenger	Internationa	#2	Yes	n/a	2020 Q3	Short-term	**Guidelines for Entry Travel Pass:** - Effective from 15th September 2020. - Brunei Darussalam eased its travel/border restriction following the introduction of Entry Travel Pass (ETP). - The pass is issued for essential business travellers (including official travel), students, medical treatment and compassionate as well as other special circumstances which will be considered case-by-case. - Travellers are to declare their imminent arrival into Brunei Darussalam via Arrival Declaration Form and adhere to follow the stipulated procedures before and after arrival in Brunei Darussalam.	**26th ASEAN Transport Ministers Meeting (ATM), 24 November 2020**
Brunei Darussalam	Crew	Mixed	Freight	International		n/a	n/a			**Guidelines for Transport Operators** - As part of the ongoing effort to support the resumption of socio-economic activities, Guidelines for transport operators are issued to facilitate cross-border importation, transit and exportation of goods for local and foreign transport operators from Malaysia (i.e. Sabah and Sarawak). - Goods are delivered/collected at Checkpoint Areas or at designated approved depots. - Collected non-perishable goods are no longer required to undergo 72 hours quarantine before re-distribution to customers.	**26th ASEAN Transport Ministers Meeting (ATM), 24 November 2020**



one vision
one identity
one community