



***SPECA Workshop on digitalization of  
transport services (eTIR and eCMR)  
24 November 2021***

***Digitalization of Transport:  
Regional Agenda for Asia and the Pacific***

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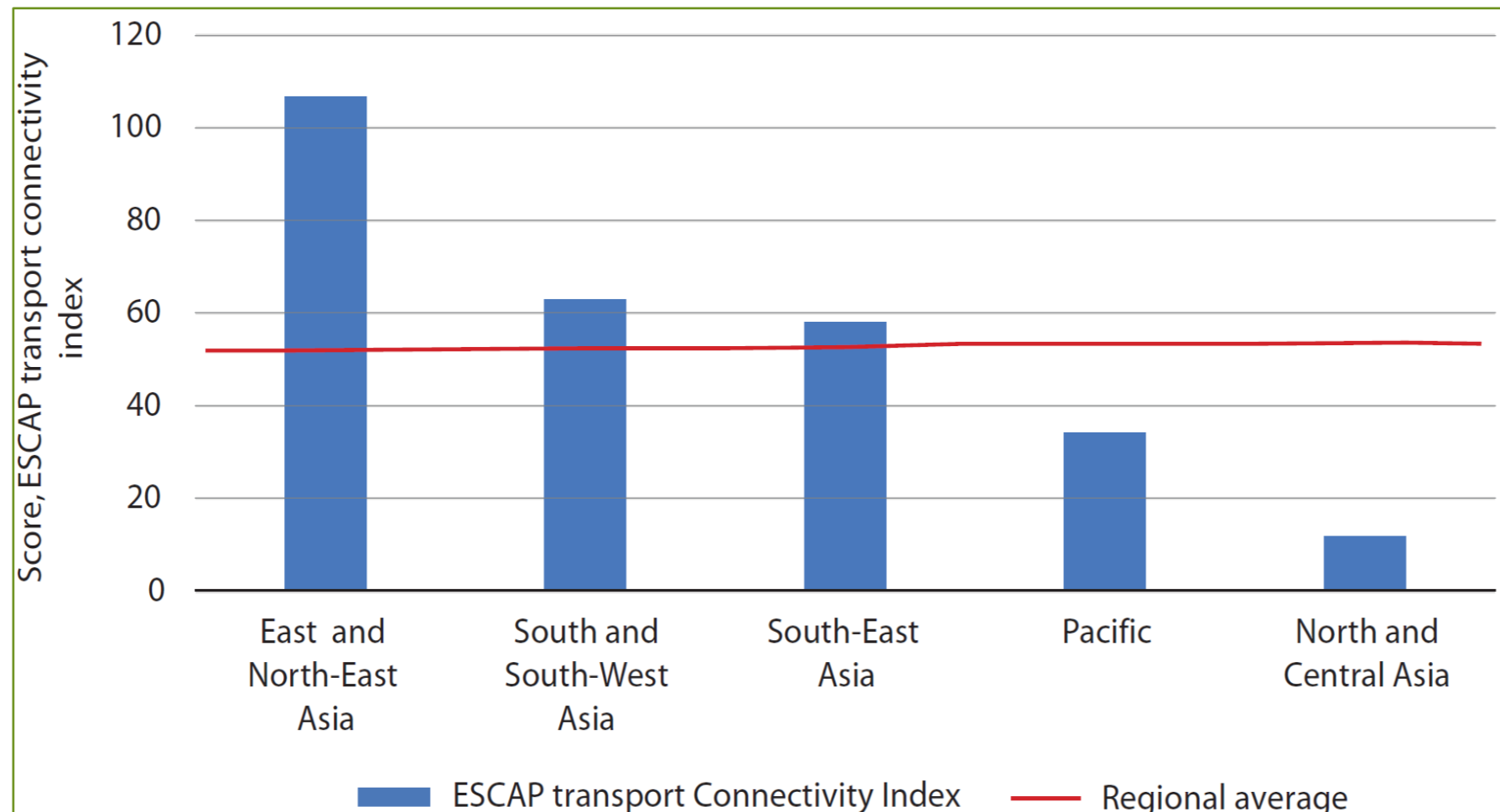


## **OUTLINE**

- ✓ **Challenges to transport connectivity in Central Asia**
- ✓ **Digitalizing transport - work done by ESCAP under UN DA project**

# Central Asia transport connectivity challenges

- Central Asia ranks low in transport facilitation and logistics performance indicators
- The ESCAP Transport Connectivity Index places the North and Central Asia at the bottom of the region. (2019, Review of Sustainable Transport Development)
- Share of intra-regional trade is only around 5% of total trade





## Central Asia transport connectivity challenges

- ✓ High transit transport costs
- ✓ Inadequate transport infrastructure including at the border crossings
- ✓ Excessive reliance on road transport leading suboptimal utilization of rail
- ✓ Lack of cooperation and harmonization of rules and standards on transport among countries in Central Asia
- ✓ Paper based cumbersome border and regulatory formalities



# Contactless, seamless and collaborative solutions in cross-border trade and transport COVID-19 response

## Transport and trade connectivity in the age of pandemics

UN solutions for contactless, seamless and collaborative transport and trade



A joint project that will implement United Nations solutions, including standards, guidelines, metrics, tools and methodologies to immediately help governments, including Customs and other border agencies, port authorities, and the business community world-wide, to keep transport networks and borders operational to facilitate the flow of goods and services, while containing the further spread of the COVID-19 virus.

Implementing entities:

Lead agencies: **ECE, ESCAP, UNCTAD**. Additional partner agencies: **ECA, ECLAC, ESCWA**

Concept note, submitted to DESA on 29 April 2020.

- ❑ Launched in May 2020 to help developing countries build transport, trade and logistics resilience in the wake of COVID-19.
- ❑ Co-led by **ESCAP, UNCTAD and ECE** with the participation of three other regional commissions (ECA, ECLAC and ESCWA), funding managed by the UN Department of Economic and Social Affairs.
- ❑ **Three clusters** designed to match existing and emerging standards and best practices in transport and trade facilitation with new concerns and demands arising from COVID-19 on cross-border freight transport

### Contactless

Reducing physical contact among people in cross-border supply chains by going digital

### Seamless

Eliminating obstacles to cross-border trade and transport operations and promoting synergies among border agencies

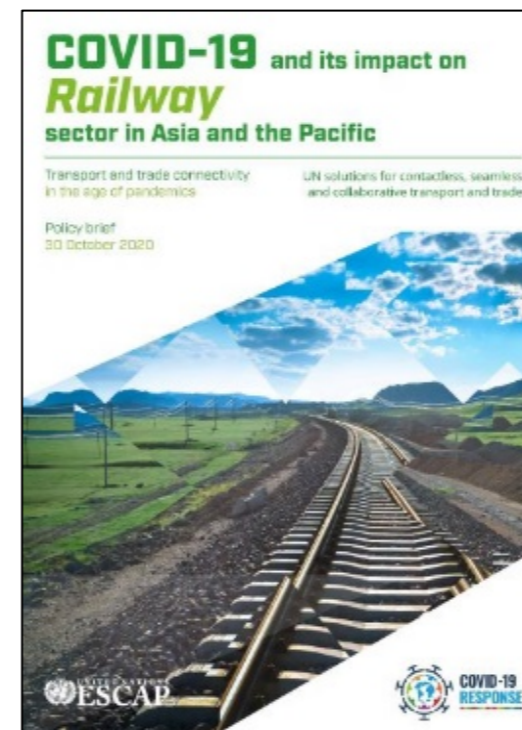
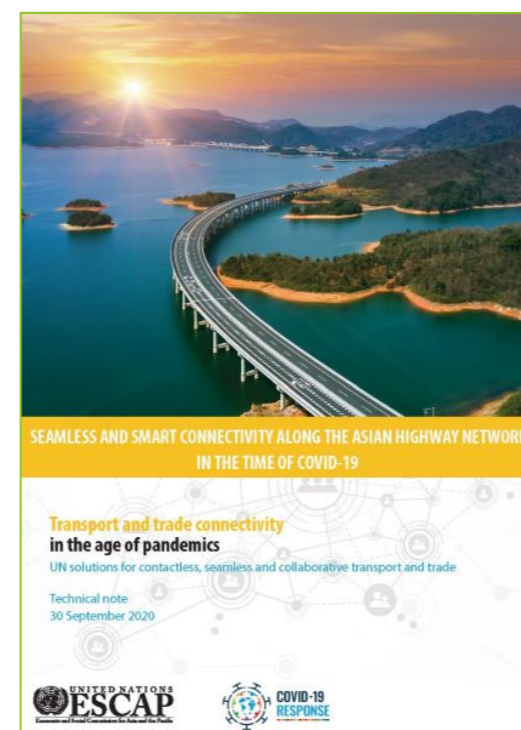
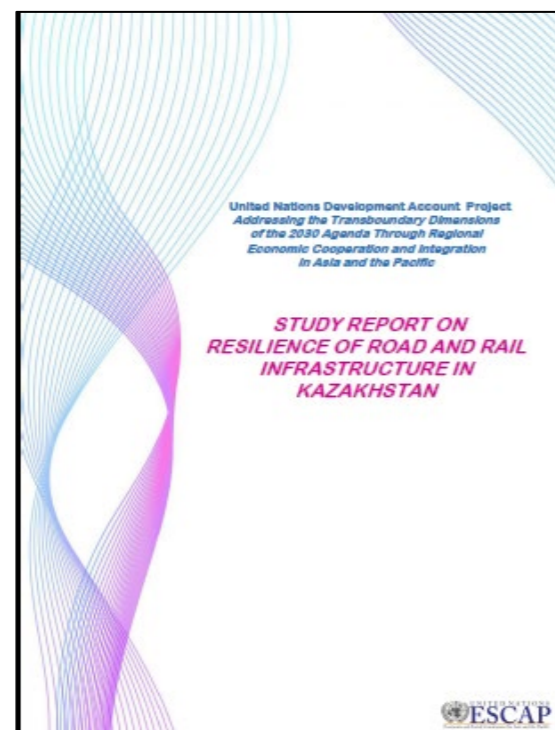
### Collaborative

Strengthening regional and sectoral cooperation to facilitate joint actions and solutions in responding to COVID-19



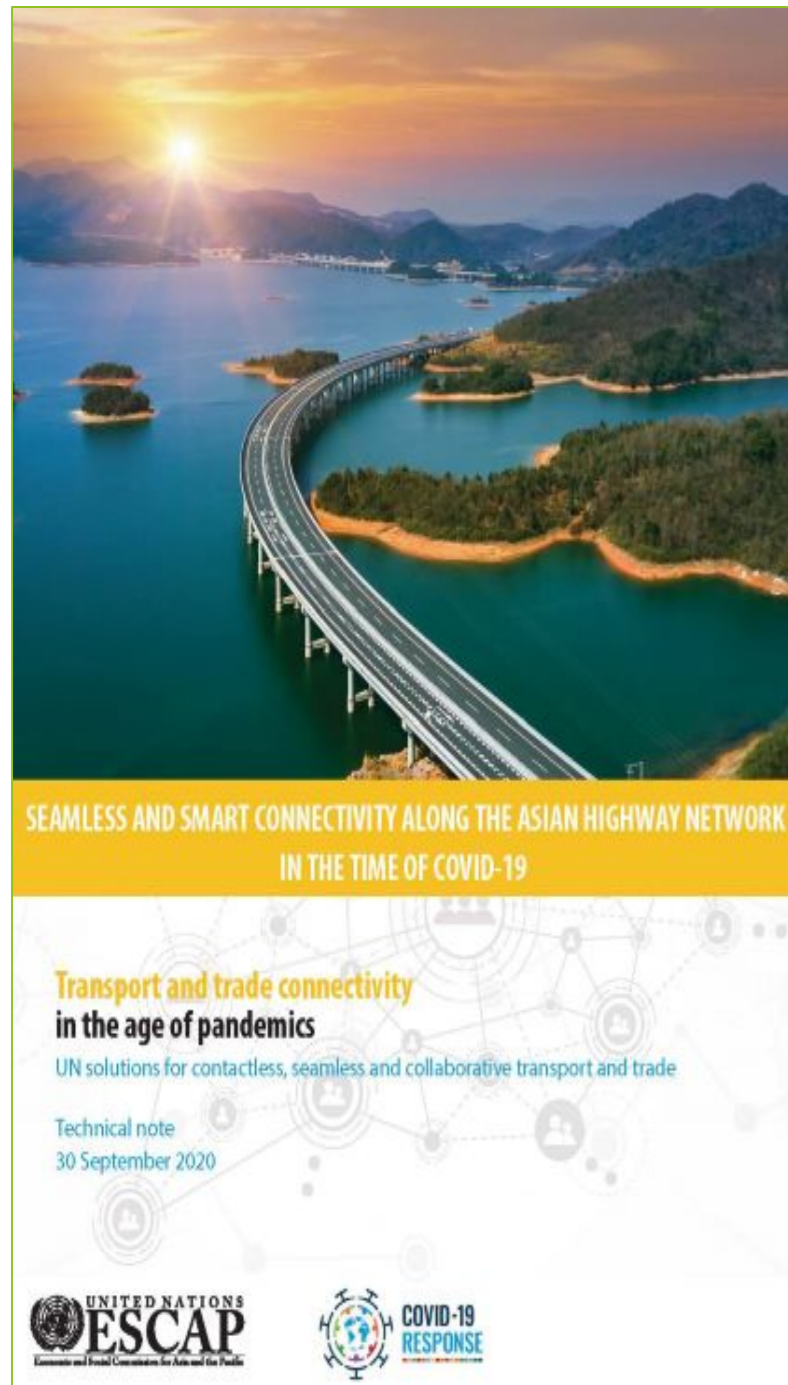
# Seizing the opportunities for building back better in transport connectivity in SPECA countries

- ❑ Monitoring freight transport response to COVID and drawing lessons learned on Resilience of road and rail infrastructure in selected countries in Central Asia
- ❑ **Promoting smart road and rail solutions along the Asian Highways and Trans-Asian Railways**
- ❑ Mobilizing transport agreements for a better crisis response
- ❑ Mobilizing existing intergovernmental platforms on transport cooperation in Asia and the Pacific





## Promoting smart road solutions along the Asian Highways



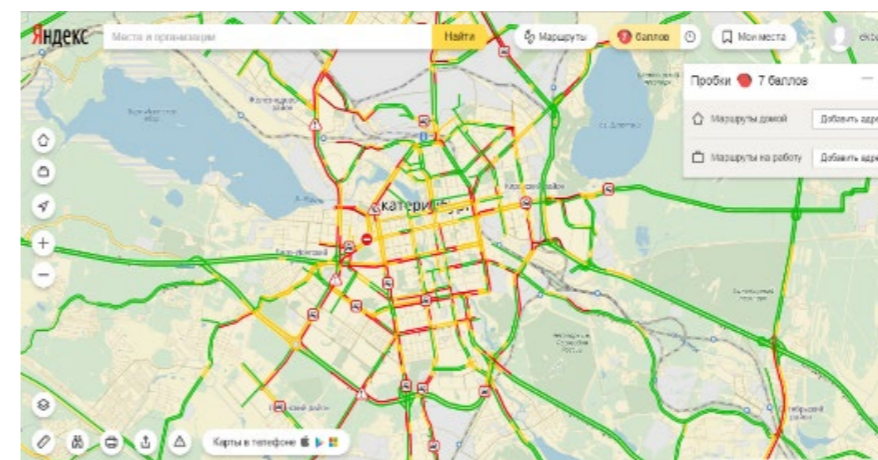
- ✓ Policy and technical solutions for seamless and smart connectivity already exist and many have been implemented by other regions
- ✓ There is a wealth of good practices and lessons learned for a tangible progress in achieving seamless and smart connectivity.
- ✓ For implementation, these solutions require buy in and participation of other sectors and a wide range of governmental actors.
- ✓ Awareness raising and capacity building activities are key to adopt digital solutions





# Supporting Smart Road Solutions for dealing with pandemic

- Medical monitoring of drivers 'condition and data exchange for sanitary controls
- Satellite monitoring systems for traffic progress and route compliance*
- "Electronic queue" system
- Preliminary electronic declarations
- WEB and mobile applications to monitor the operational situation on the route
- Remote systems for online control and authorization for freight operations
- Automated and online monitoring of weight and other truck parameters*
- Electronic navigation seals and smart containers***
- Smart tachographs
- Information systems for intermodal interaction and transport nodes
- Use of unmanned technologies (including caravan transport)

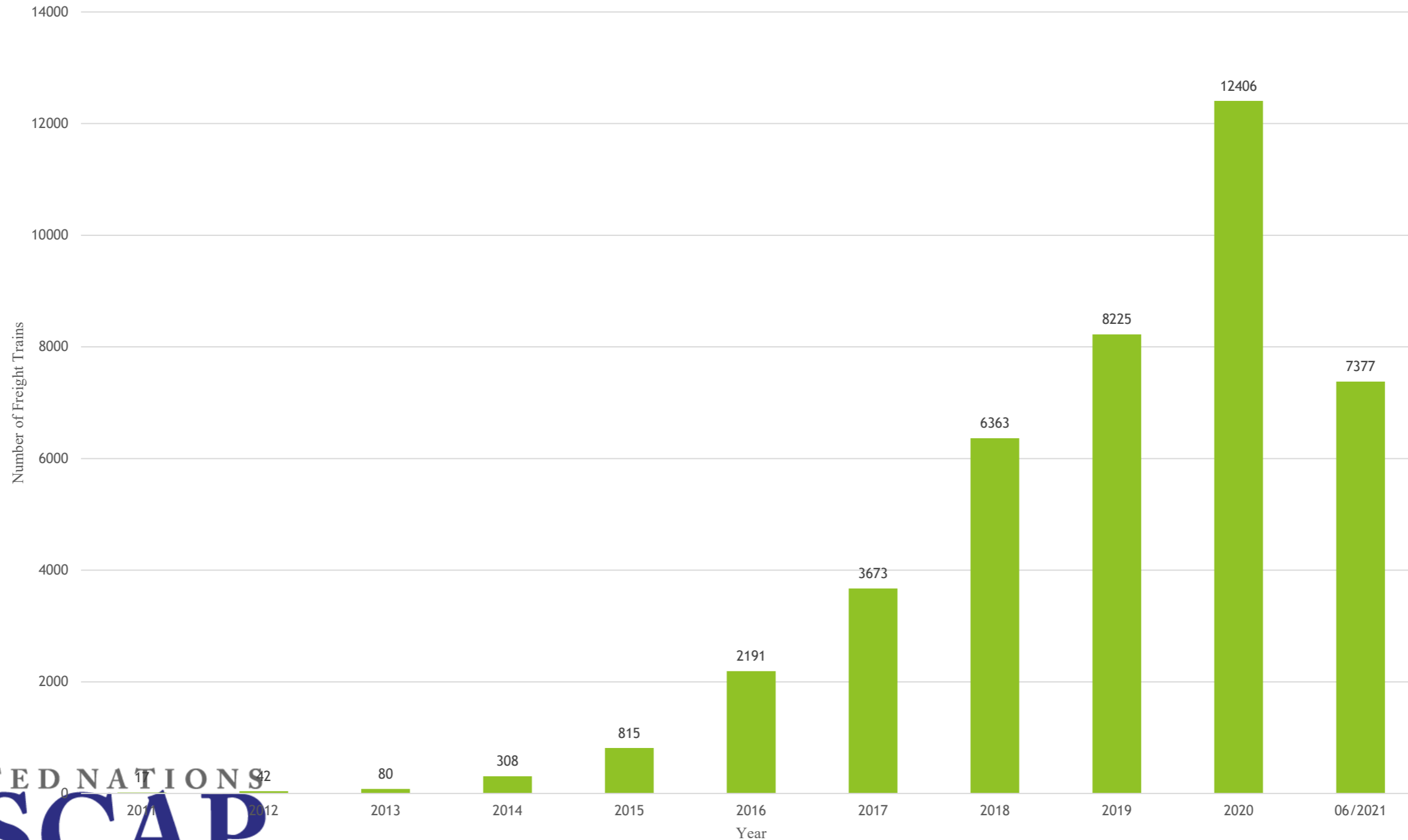






# China- Europe Freight trains growth

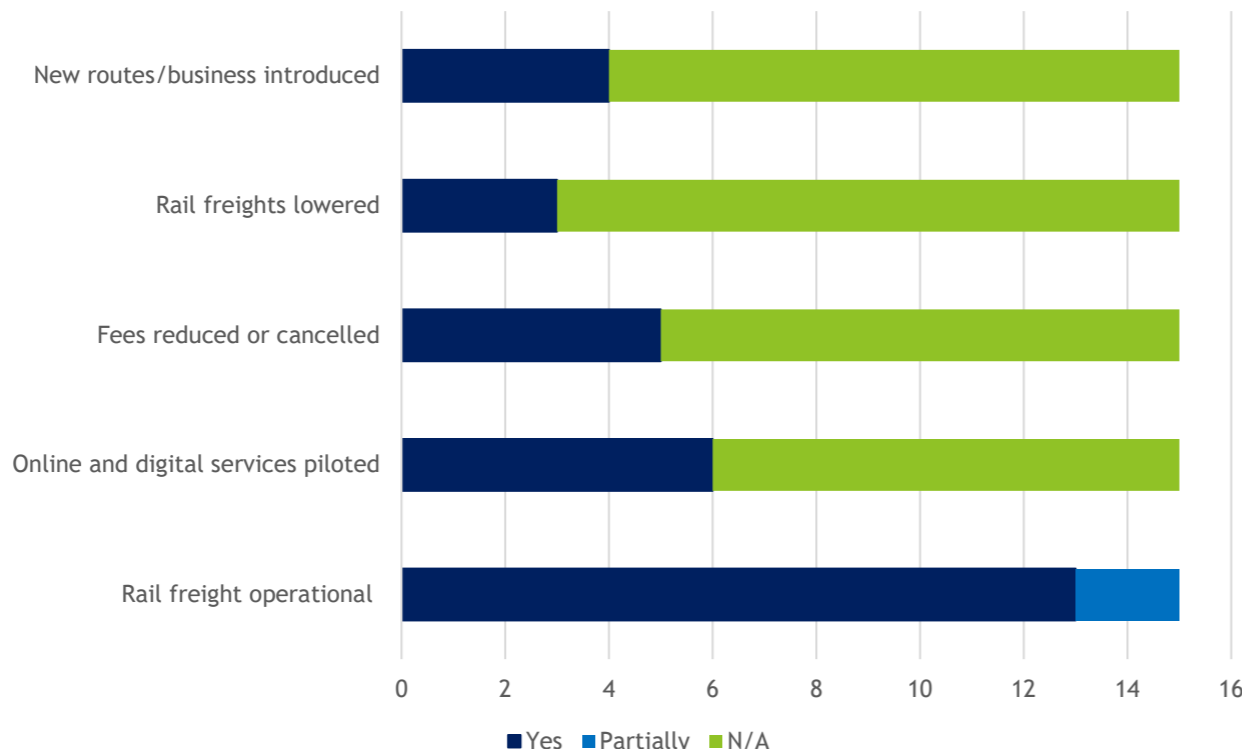
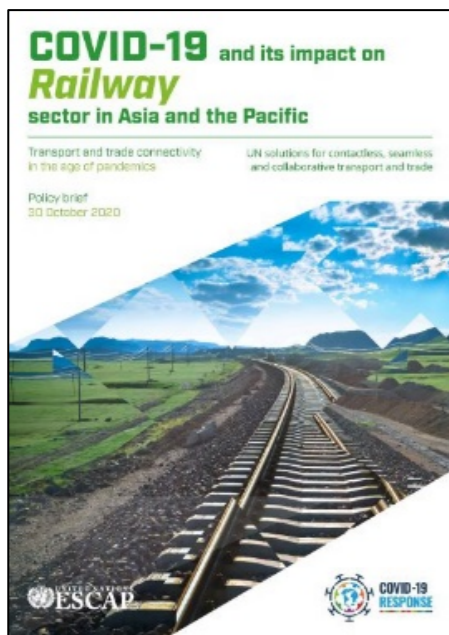
Fig1: China-Europe freight trains-exponential growth





# Promoting smart rail solutions along the Trans-Asian Railways

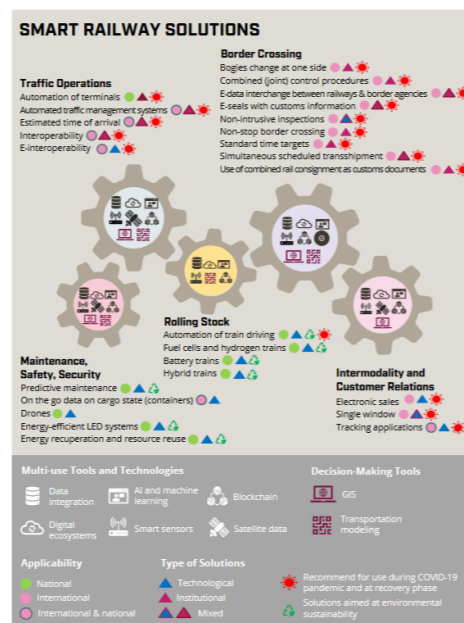
## COVID-19 response along the Trans-Asian Railway Network



Source: ESCAP survey of 20 TAR countries, July 2020.

- ✓ Digitalization is closely linked but not limited to the issues of electronic exchange of information
- ✓ Freight with multiple challenges including the digital divide, fragmented levels of development of railways and concerns over data protection and cyber security.
- ✓ Harnessing the full potential of digitalized railways requires:

- A regional consensus on key areas to be digitalized along with a way forward to scale them up,
- A plan of action to support railways of landlocked and LDCs in leapfrogging to digital railways
- A platform to share and learn from the experience of digitalizing railways





# ESCAP 4<sup>th</sup> Ministerial Conference on Transport



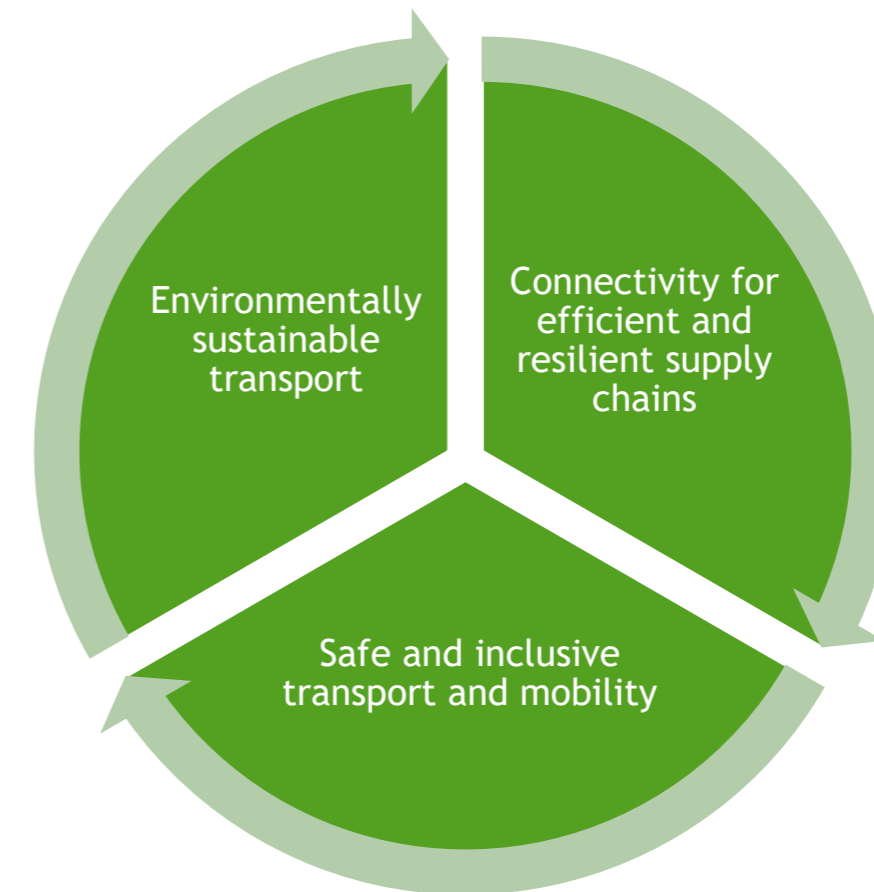
## Key expected outcomes of the Ministerial Conference

- To review the implementation of the Regional Action Programme, phase I (2017-2021)
- To consider and adopt a new Regional Action Programme (2022-2026)

## Schedule and format

- Two days senior official segment and two days ministerial segment
- 14-17 December, Bangkok and online

From 2022: Leveraging synergies and integrating thematic activities to support Building Back Better and the implementation of SDGs



# ESCAP

Economic and Social Commission for Asia and the Pacific

# New draft Regional Action Programme: 2022-2026

	Overarching objectives		
	Towards efficient and resilient transport and logistics network and mobility for economic growth	Towards environmentally sustainable transport systems and services	Towards safe and inclusive transport and mobility
	Relevant Sustainable Development Goals		
Thematic areas	Classification of contribution*		
Regional land transport connectivity and logistics	Direct impact	Direct impact	Direct impact
Maritime and interregional transport connectivity	Direct impact	Direct impact	Direct impact
<b>Digitalization of transport</b>	Direct impact	Direct impact	Direct impact
Low-carbon mobility and logistics	Direct impact	Direct impact	Indirect impact
Urban transport	Direct impact	Direct impact	Direct impact
Road traffic safety	Indirect impact	Indirect impact	Direct impact
Inclusive transport and mobility	Indirect impact	Direct impact	Direct impact

# New draft Regional Action Programme: 2022-2026

## Overarching objectives

**Towards efficient and resilient transport and logistics network and mobility for economic growth**

**Towards environmentally sustainable transport systems and services**

**Towards safe and inclusive transport and mobility**

### Digitalization of transport

- Increased capacity of countries to use new technologies and/or regional frameworks or other instruments on smart freight and digitalization;
- Increased capacity of member countries to implement smart port reforms and support the digitalization of port and maritime transport;
- Promote the application of new and emerging technologies such as blockchain, in port and maritime transport
- Development of the regional roadmap for smart transport systems in Asia and the Pacific to support wider deployment of sustainable smart transport systems through capacity building projects.
- Knowledge products and best practices on emerging technologies, smart transport and its digital technology such as intelligent transport system (ITS) to increase efficiency
- Awareness raising activities on integrated urban and transport planning and the use of big data to improve traffic and other urban transport issues

Awareness raising activities and/or capacity-building workshop(s)/seminar(s) to promote low-carbon mobility and related emerging technologies, including application of new technologies, including smart mobility and smart transport technologies

Best practices exchange in the form of seminars or workshops on new technologies and digital solutions implementation to meet interests and support vulnerable groups of population

## **What are the challenges in digitalization of transport in the region**

- Digital divide- communication infrastructure and skills*
- Divergent levels of development in railways – no one size fits all*
- Investments in digital infrastructure, research and innovation*
- Capacity of railway and transport officials – digital skills and need for a cultural or mindset shift required for digital transformation- reorganization of business processes and business models*
- Data management/protection and cyber security*



**Thank you for your attention**