



**DECADE
OF >>>
ACTION**



***Smart Railway Solutions
To support railways in addressing challenges
due to pandemic***

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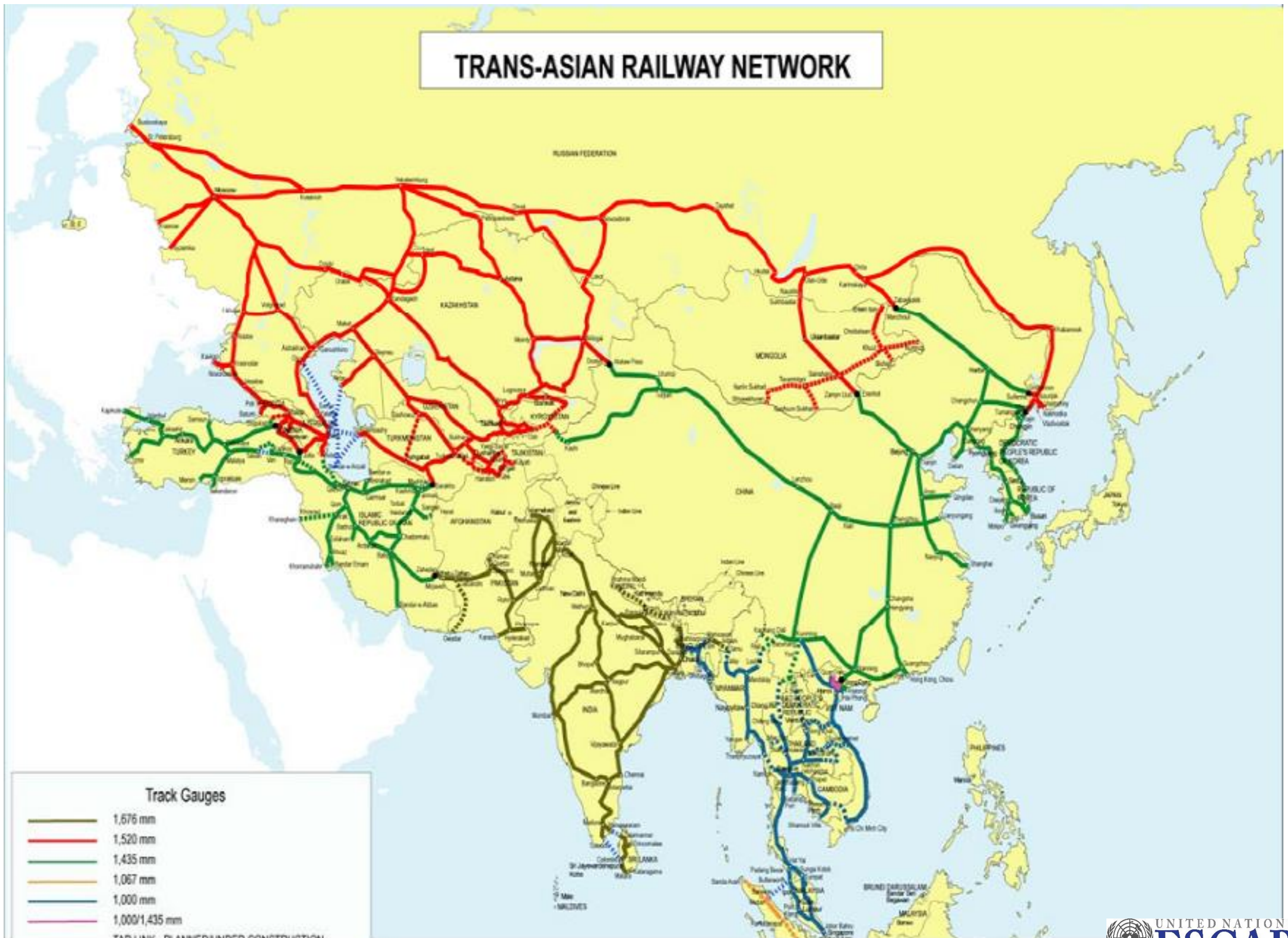


Outline

1. Intergovernmental Agreement on Trans-Asian Railway Network
2. Smart Railway Solutions - rationale
3. Smart Railway Solutions



TRANS-ASIAN RAILWAY NETWORK

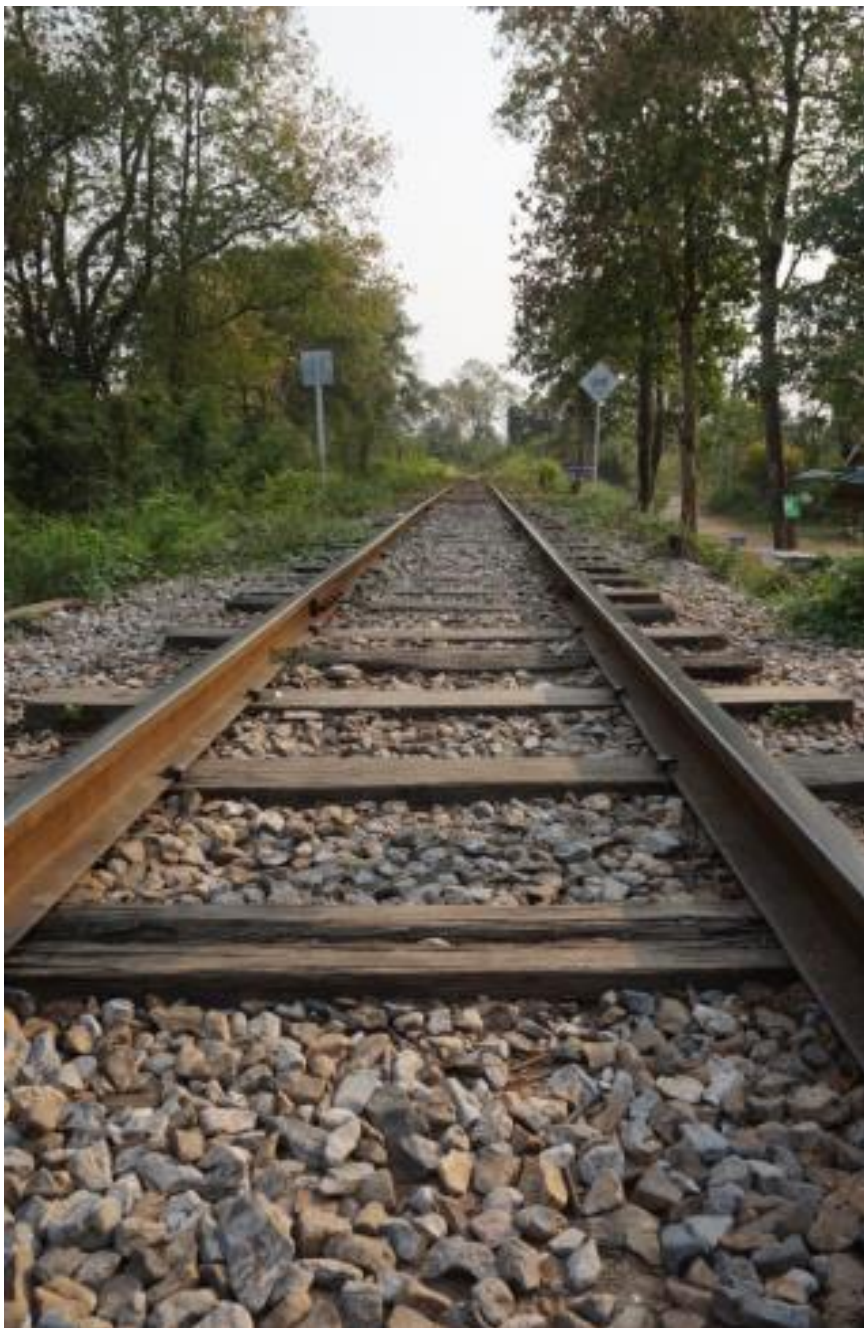


Intergovernmental Agreement on Trans-Asian Railway Network

Trans-Asian Railway Network formalized through intergovernmental agreement entered into force in 2009. Soon have 21 contracting parties

Developed by ESCAP members as a *coordinated plan* to develop a *regional railway network* to meet the growing needs of *intra and interregional trade and transport*

The Working Group under the agreement provides a *regional platform* for the member countries to discuss *persistent and emerging issues in* international railway transport along the network. Six meetings- focus on operational issues



Why Smart Railway Solutions

- ❑ Emerging trends in international railway transport along Trans-Asian Railway Network
 - ✓ New routes for international railway transport
 - ✓ New rail infrastructure
 - ✓ New services along the Trans-Asian Railway network
 - ✓ New alliances to promote international railway freight

- ❑ Common priorities of the railways of members of Trans-Asian Railway Network
 - ✓ Railway network development
 - ✓ International railway transport
 - ✓ Shift to rail initiatives
 - ✓ Sustainability
 - ✓ Digitalization and automation

Why Smart Railway Solutions

- ❑ Effects of pandemic on railway transport over short, medium and long run; resilience shown by international railway transport during pandemic
- ❑ Short term demand upside may not persist in medium term and if pandemic prolongs it could overall decrease demand and the short-term disruptions to supply chains could become permanent and may lead to suspension of some services
- ❑ Crisis provides an opportunity for railway to enhance their comparative advantages by systemically improving efficiency and effectiveness of railway systems

What are Smart Railway Solutions

Smart Railway Operations

A1 - Automation of Terminals

A2 - Advanced Traffic Management Systems

A3 - Automation of Train Driving

Smart Railway Maintenance, Safety and Security

B1 - Condition-Based and Predictive Maintenance

B2 - Others (railway safety)

Smart Railway Financing

F1 - Green and Sustainable Financing

F2 - Modelling

What are Smart Railway Solutions

Smart Railway Border Crossing

D1 - Electronic Information/Data Exchange

D2 - New Technologies for Efficient and Secure Border Crossing (Electronic seals)

D3 - Railway Consignment Note as a Customs Document

D4 - Efficient Break of Gauge Operations

D5 - Joint Border Controls

D6- Railway – Customs electronic interface

Smart Railway Customer Orientation

E1- Railway freight mobile application

E2- Others

Current initiatives to strengthen international railway transport

To enhance efficiency of international railway transport, particularly post COVID-19, ESCAP is working on following issues following



1. Developing a ***comprehensive online database*** for Trans-Asian Railway Network
2. Supporting ***electronic information exchange among railways and between railways and control agencies***
3. Guidelines on ***harmonized customs formalities for transit*** for international railway transport
4. Support countries in establishing ***corridor management mechanism*** for railway corridors

Future work to strengthen international railway transport and linkages with Agenda 2030



5. Developing ***smart railway solutions*** in such areas as operations, maintenance, break of gauge and energy efficiency

6. Explore potential for developing a framework for ***digitalizing railways in the ESCAP region***

7. Enhancing ***sustainability of railway transport*** by supporting member countries in ***decarbonizing railways***

8. Encourage ***modal shift towards rail*** and mainstreaming railway transport in national plans to support realization of 2030 Agenda

Analytical and knowledge products on international railway transport

Studies

**Border crossing practices in
railway transport**

**Enhancing interoperability to
facilitate international
railway transport**

**Electronic information
exchange systems for
international railway
transport**

**Railway Electronic
Information Systems and
their Linkages with Customs
Systems**

Blogs

Five Years Into The 2030

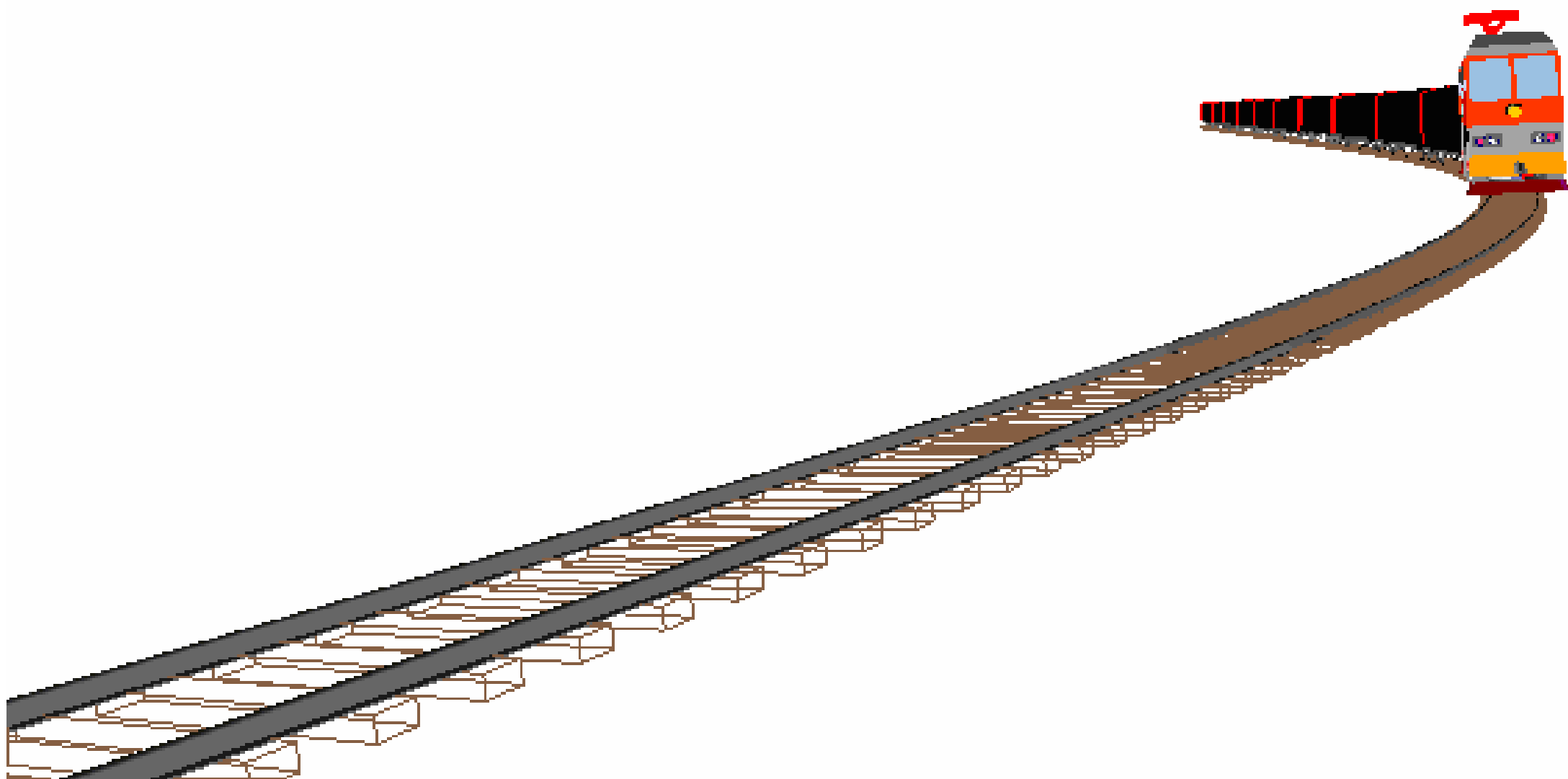
**Agenda: Time To Give A Big
Push To Railway Transport 03
December 2019**

COVID-19 Pandemic:

**International Freight Trains
Lead The Way Into Future 04
May 2020**

Policy Brief

**COVID-19 and its impact on
Railway sector in Asia and the
Pacific November 2020**



Thank you
for
your attention

<http://www.unescap.org/our-work/transport>

