

**Economic Commission for Europe**

Inland Transport Committee

**Working Party on the Transport of Dangerous Goods**

**111th session**

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13 May 2022

Item 8 of the provisional agenda

**Any other business**

**Sustainable Inland Transport Connectivity Indicators**



# Sustainable Inland Transport Connectivity Indicators

Understanding the performance of your road, rail, inland waterway, and inter-modal transport systems

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Secretary – Working Party on Transport Trends  
and Economics  
12 May 2022



**UNECE**

# Global context

- High degree of **economic connectivity** and interdependence
- **Lack of a unified methodological approach** to measure the degree to which economies are inter-connected in terms of **inland transport, trade and logistics networks**
- **Economic connectivity** is high on the **political agenda** of countries around the world, in particular LLDCs



# UNDA SITCIN Project



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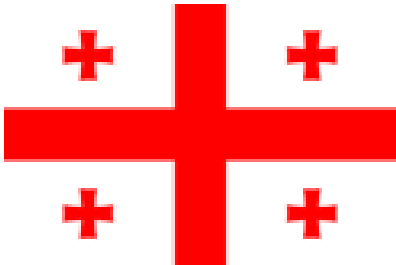
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# SITCIN Project phases 2018 -2021

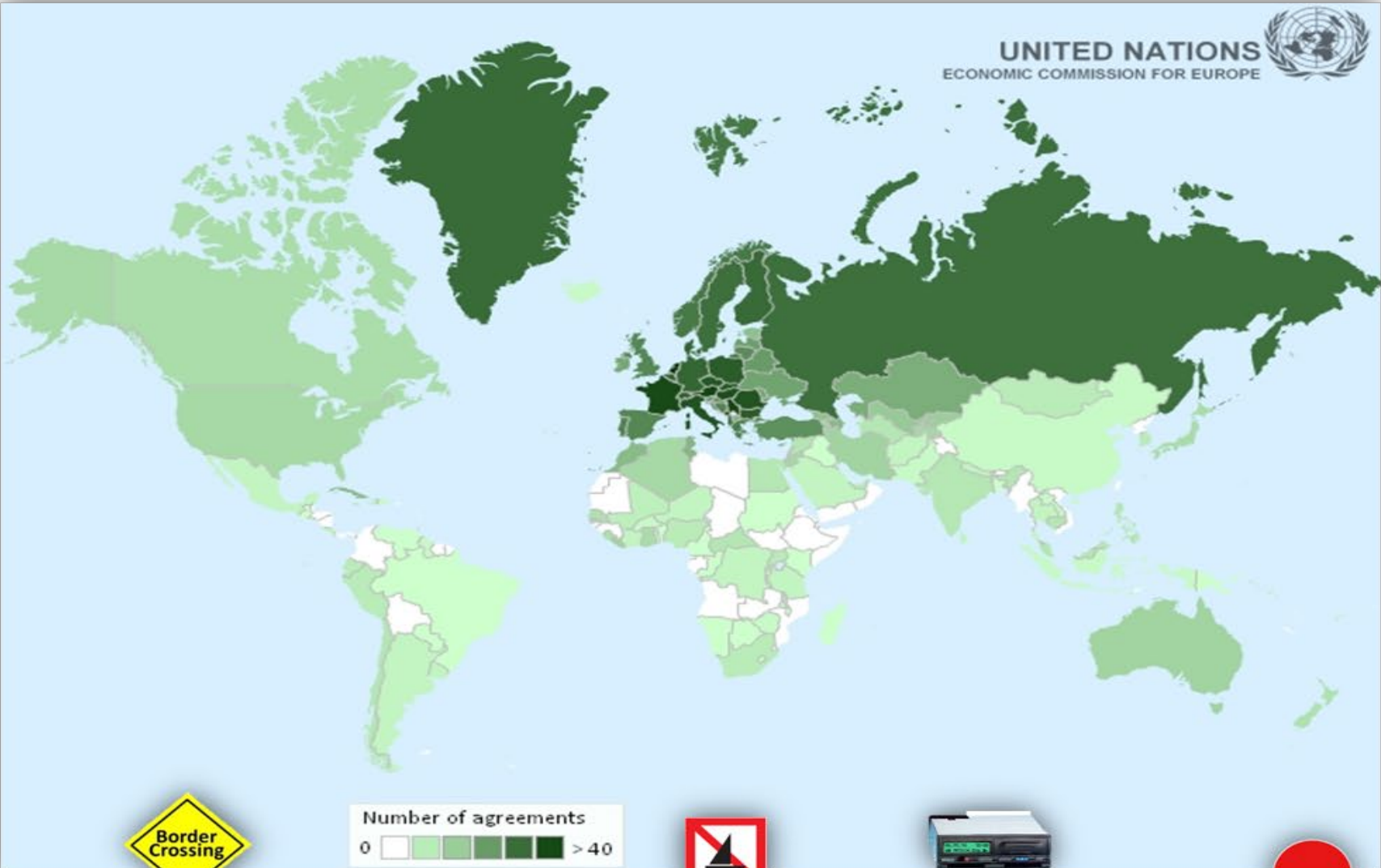


- I. Develop the initial set of Sustainable Inland Transport Indicators (SITCIN)
- II. Fact-finding missions to review national transport and logistics situation, resulting in five «national connectivity reports»
- III. National policy dialogue meetings to validate the reports
- IV. Tailor-made national capacity building programmes
- V. Concluding inter-regional forum / regional outreach events

# Rationale and purpose

- **Measurable/ quantifiable & qualifiable**
- **Build on and incorporate existing indexes**, e.g. World Bank Doing Business Indicators, Logistics Performance Index, Air Connectivity Index, Liner Shipping Connectivity Index etc.
- Assess efficiency of both **soft** (e.g. regulatory framework) and **hard** (e.g. infrastructure) related aspects of the respective inland transport systems
- **Connectivity and interoperability both bilaterally/subregionally**
- **Holistic scope** – incl. multi-modal transport and logistics systems, border crossing facilitation, transit, customs
- Provide basis for **informed & evidence based policy-making**

# SITCIN criteria –regulatory framework



Harmonization of Frontier Controls of Goods



European Code for Inland Waterways



Work of Crews of Vehicles engaged in International Road Transport / Digital Tachograph



Convention on Road Signs and Signals

**TIR**

Global Customs facilitation tool



Contract for the International Carriage of Goods by Road



Convention on Road Traffic

**E1**

World Forum for Harmonization of Vehicle Regulations (WP 29)



International Carriage of Dangerous Goods by Inland Waterways

**ATP**

Carriage of Perishable Foodstuffs

**ADR**

International Carriage of Dangerous Goods by Road

**E40**

Infrastructure Agreements for roads (AGR), Rail (AGC), Inland Water Transport (AGN), Intermodal Transport (AGTC)

# SITCIN criteria – international commitments





# A comprehensive inland transport sector assessment tool

- Full set of 215 indicators covering road, rail, inland waterways and inter-modal transport available [here](#) and [here](#)

## What is it about?

- A tool for Governments to better understand the performance of their road, rail, inland waterway, and inter-modal transport systems
- An online self-assessment methodology enabling Governments to evaluate the extent to which they implement the relevant UN legal instruments in the field of transport and the degree to which their inland transport systems are inter-operable with those in neighbouring countries
- Ranking from 0-10/ generating a cluster based and an overall “connectivity” score

# SITCIN – assessment scope

Mode	Pillar	Thematic clusters
<b>ROAD, RAIL, IWW</b>	Economic	Efficiency
		Cost
		Infrastructure
		Operations
		Intermodality/combined transport
		ICT and ITS Solutions
	Social	Road traffic rules/behavior
		Road traffic infrastructure
		Vehicle regulations
		Perishable foodstuffs transport
		<b>Dangerous goods transport (administrative)</b>
	<b>Dangerous goods transport (infrastructure)</b>	
	Environmental	Fleet
		Emission

# E.g. border crossing efficiency

- ✓ **TIR Convention**
- ✓ **Harmonization Convention**
- ✓ **In total: 16 UNECE conventions related to border crossings**



- ✓ Staff resources
- ✓ Availability of joint control facilities
- ✓ BCP infrastructure/ off-lane control areas
- ✓ Inland clearance and control procedures
- ✓ Coordination and delegation of controls among border agencies/ domestically, bilaterally
- ✓ Data exchange mechanisms
- ✓ Traffic separation for vehicles under cover of customs transit
- ✓ Average border clearance time
- ✓ Etc.

# E.g. transport infrastructure

- ✓ **Actual construction**
- ✓ **Actual capacity (volumes, TEU, etc.)**
- ✓ **UNECE infrastructure agreements**

- ✓ Percentage of international road network
- ✓ Length of international road network per class
- ✓ Design standard and technical specifications of new international roads
- ✓ Sufficiency of service facilities
- ✓ Provision of tunnel management systems
- ✓ Provision of safety equipment for tunnels
- ✓ Etc.



# E.g. Dangerous goods transport

## Ca. 20 Indicators

### 1-SO-5: DANGEROUS GOODS TRANSPORT – ADMINISTRATIVE REQUIREMENTS

#### 1-SO-5.1: General provisions for the transport of dangerous goods by road

##### 1-SO-5.1a: Classification of dangerous goods for transport

**Definition:**

Degree of harmonization of internationally/regionally agreed provisions on the classification of dangerous goods for transport, in the national laws and legislations.

**Scoring:**

- In accordance with internationally agreed provisions: **10 points**
- In accordance with regionally agreed provisions: **5 points**
- Not recognizing international/regional provisions or no national law applied: **0 points**

##### 1-SO-5.1b: Marking and labelling of packaging

**Definition:**

Degree of harmonization of internationally/regionally agreed provisions on marking and labelling of packages of dangerous goods, in the national laws and legislations.

**Scoring:**

- In accordance with internationally agreed provisions: **10 points**
- In accordance with regionally agreed provisions: **5 points**
- Not recognizing international/regional provisions or no national law applied: **0 points**

### 1-SO-5: DANGEROUS GOODS TRANSPORT – ADMINISTRATIVE REQUIREMENTS (continued)

#### 1-SO-5.1c: Placarding and marking of containers and vehicles

**Definition:**

Degree of harmonization of internationally/regionally agreed provisions on placarding and marking in the national laws and legislations. It concerns placarding and marking of all types of containers and vehicles for the transport of dangerous goods.

**Scoring:**

- In accordance with internationally agreed provisions: **10 points**
- In accordance with regionally agreed provisions: **5 points**
- Not recognizing international/regional provisions or no national law applied: **0 points**

# E.g. Dangerous goods transport

## 1-SO-6: DANGEROUS GOODS TRANSPORT – INFRASTRUCTURE/ HARDWARE REQUIREMENTS

### 1-SO-6.1: Application of tunnel categorization

#### Definition:

Degree of harmonization of internationally/regionally agreed rules in the national law on tunnel categorization when applying restrictions to the passage of vehicles carrying dangerous goods through tunnels. According to ADR, there are five tunnel categories that define the degree of restrictions for the carriage of dangerous goods.

#### Scoring:

- The applied tunnel categorization is developed based on internationally agreed rules (ADR): **10 points**
- The applied tunnel categorization is developed based on regionally agreed rules: **5 points**
- The applied tunnel categorization is partially developed based on internationally/regionally agreed rules: **3 points**
- The applied tunnel categorization is deviating from the internationally/regionally agreed provisions or no categorization in place: **0 points**

## 1-SO-6: DANGEROUS GOODS TRANSPORT – INFRASTRUCTURE/ HARDWARE REQUIREMENTS (continued)

### 1-SO-6.3: Requirements concerning the construction and approval of vehicles

#### Definition:

Degree of harmonization of internationally/regionally agreed provisions in the national law on the requirements of vehicles for the transport of dangerous goods, as regards their construction, type approval, ADR (Agreement concerning the International Carriage of Dangerous Goods by Road) approval and annual technical inspection.

#### Scoring:

- The vehicles requirements are developed based on internationally agreed provisions (ADR): **10 points**
- The vehicles requirements are developed based on regionally agreed provisions: **5 points**
- The vehicles requirements are deviating from the internationally/regionally agreed provisions or no requirements in place: **0 points**

### 1-SO-6.2: Availability of information on tunnel categorization

#### Definition:

Availability of information on tunnel categorization (including road signs and signals), notifications of tunnel prohibitions/restrictions and alternative routes for transport of dangerous goods.

#### Scoring:

- Information is publicly available and accessible for free: **10 points**
- Information is available against a fee or not publicly available: **0 points**

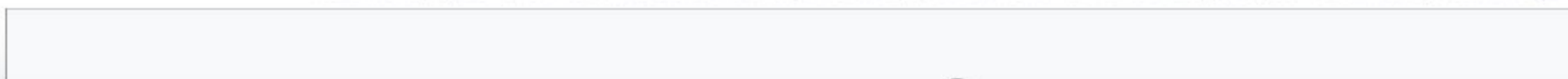
# SITCIN

The SITCIN provide a tool enabling countries to measure their degree of inland transport connectivity



## The indicators provide an instrument

A set of measurable criteria, for Governments enabling them to evaluate the extent to which they implement the relevant UN legal instruments, agreements and conventions effectively and the degree to which their inland transport systems are inter-operable with



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# Become a SITCIN test user



Forthcoming – June 2022

## Sustainable Inland Transport Connectivity Indicators

Understanding the performance of road, rail, inland waterway, and inter-modal transport systems



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# SITCIN e-learning course



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## SITCIN - Sustainable Inland Transport Connectivity Indicators

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**Thank you for your attention!**

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