SDG 9: Relevant UNECE Work on Resilient Infrastructure

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SDG 9: How to Measure?

- Custodian agency: World Bank
- Basis: Rural Access index
- 9.1.1: proportion of rural population who live within 2 km of an all-season road
- How to measure?
  - This cannot be done by surveys; mapping and/or satellite data combined with road network information, possibly censuses too
- 9.1.2: Passenger and freight volumes, by mode of transport
- How to measure?
  - Passenger km, goods vehicle km (or ton-km), consistent across modes
  - Measured by UNECE for all transport modes except aviation and maritime
Overview

• Introduction
• Infrastructure Observatory
• Climate Change Impacts and Adaptation for Transport
• Benchmarking Infrastructure Construction Costs
• Data Collection for SDG9
SDG 9: Resilient Infrastructure

“Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation”

UNECE WORK

• Identifies main Euro-Asian links for priority development and cooperation
• Ensures seamless connections throughout Europe through Trans-European Motorways and Railways (TEM and TER)
• Facilitates border crossings (TIR convention)
Infrastructure Observatory
Infrastructure Observatory

• Given large number of different identified transport networks, Observatory will act as online repository for users to exchange basic information on projects, meetings, and to seek cooperation

• In the future, all international corridors should be hosted in a GIS environment. Hopefully ready by end-2018
Climate change adaptation

- Group of Experts on Climate Change Impacts and Adaptation for Transport Networks and Nodes (WP.5/GE.3) active since 2010
- Identifies parts of transport networks vulnerable to climate change impacts
- Develops tools to address potential extreme hazards to transport infrastructure
- Assess potential economic, social and environmental impacts and provide cost/benefit analysis of adaptation options
- Has a focus on geospatial applications (uses E-Road and E-Rail Census maps)
Infrastructure Costs

• Group of Experts on Benchmarking Transport Infrastructure Construction Costs (WP.5/GE.4)
• Identifies tools for evaluating infrastructure construction costs
• Identifies terminologies used for construction costs
• Collects data to benchmark construction costs, by country and transport mode
Infrastructure Costs

Examples of Cost Terminologies

**Construction Service**: Activity that supports the construction process or subsequent maintenance (SOURCE: EN 15804:2012+A1:2013)(2).

**Construction Works**: Everything that is constructed or results from construction operations. Note 1 to entry: This covers both building and civil engineering works, and both structural and non-structural elements. Note 2 to entry: Adapted from the definition in ISO 6707-1 (2).

**Construction Administration Cost**: The normal cost of administration, management, reporting, design services in construction, and community outreach required in the construction phase of a project (4).

**Construction Allowance**: An amount of additional resources included in an estimate to cover the cost of known but undefined requirements for a construction activity or work item. A construction allowance is a normal cost (4).

SDG 9: How to Measure?

• 9.1.1: proportion of rural population who live within 2 km of an all-season road
  How to measure? Not surveys; mapping and/or satellite data combined with road network information, plus population density data

• 9.1.2: Passenger and freight volumes, by mode of transport
  How to measure?
  • Passenger km, goods vehicle-km (or ton-km), consistent across modes (using Glossary definitions)
  • Measured by UNECE for all transport modes except aviation and maritime
Summary

• UNECE works on improving infrastructure in countries by sharing information, best practices and comparison tools, and identifying networks for improvement

• Key passenger and freight volume statistics feed into measuring SDG 9.1.2
Suggestions? Comments?
We are here to help!

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