

Automation in freight transport and logistics

WORKSHOP

WP.24, 65th session
Geneva 19 October 2022

Handbook for national master plans for freight transport and logistics

2.2.5 High-performance digital infrastructure

ITS are systems to be installed in vehicles, locomotives and barges and on transport infrastructure to support making optimum and efficient use of the infrastructure as well as of the modes of transport.

Governments through transport infrastructure providers work on integrating existing ITS solutions into vehicles and infrastructure and use their capabilities for transport optimization and efficiencies. At the same time, governments support research and development to further advance ITS in terms of its capabilities and in getting its deployment more cost-efficient.

Governments promote the benefits from the application of ITS, among them, increased safety and security, better environmental efficiency, improved solutions for seamless intermodality, better route and delivery planning, etc. At the same time, governments play an even more important role in addressing the challenges with ITS, such as interoperability among systems and data exchange, fraud and violation, privacy and security, increasing gap between developed and developing countries in terms of transport solutions.

Countries, leaders in the sector

- Sustain high-level implementation of United Nations transport infrastructure agreements and further develop them to meet the increasing demand for cargo handling.
- Monitor traffic and upgrade infrastructure bottlenecks.
- Optimize infrastructure networks by better utilization of ITS and telematics by the industry.
- Further develop ITS for infrastructure optimization through supporting relevant research and development.
- Support research and development for mainstreaming ITS solutions.
- Better address ITS challenges such as systems interoperability and data exchange, fraud and violation privacy and security.
- Research on segregating freight transport from passenger transport (dedicated road lanes and rail lines for freight transport).
- Optimize use of infrastructure by further enabling intermodal shift: road to rail and waterways/sea, rail to waterways/sea.
- Create and develop short-sea shipping.
- Adjust and develop infrastructure supporting a new city logistics concept.



Resolution on strengthening intermodal freight transport

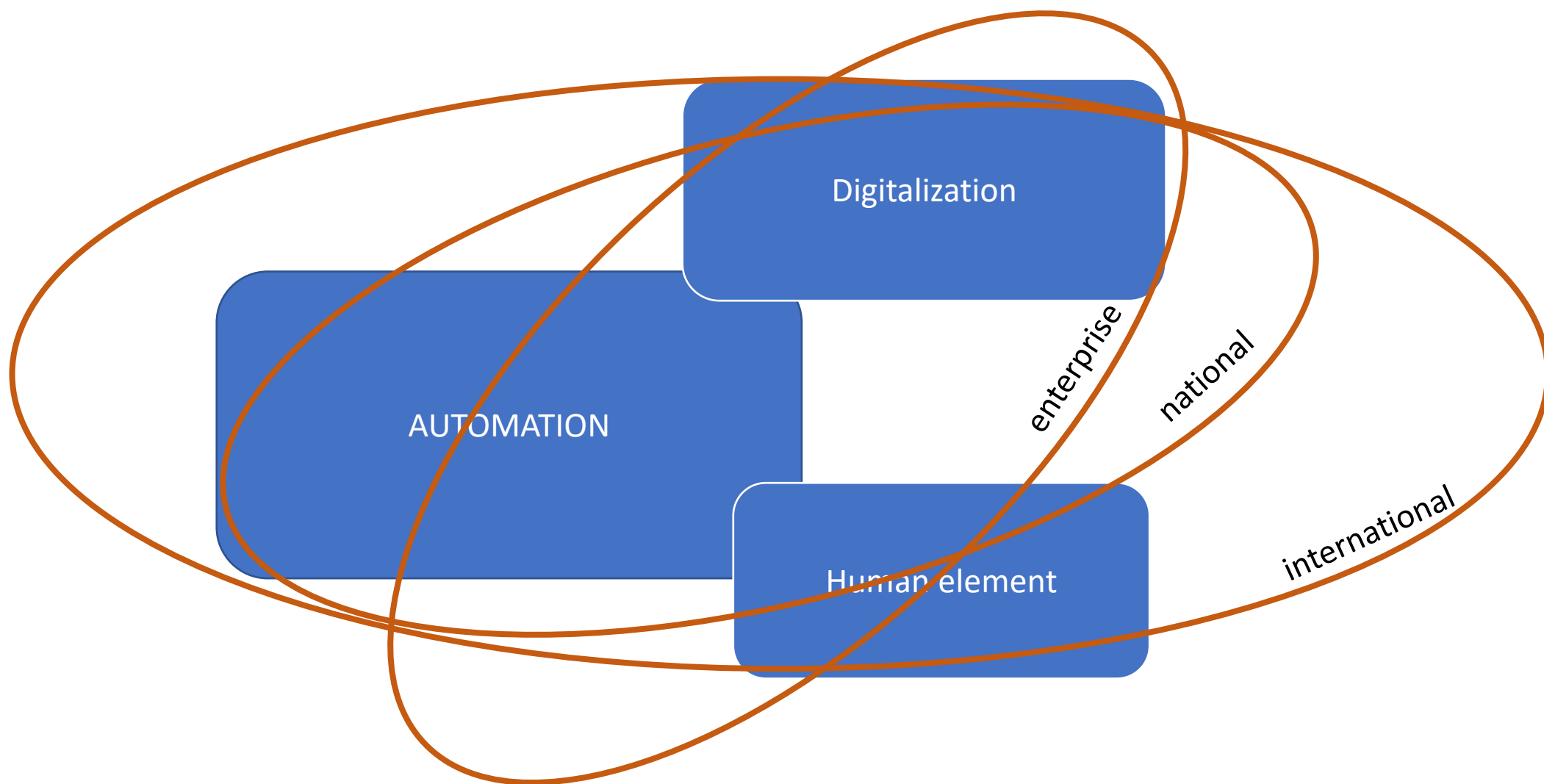
Invites WP.24 to

- Help accelerate automation
- Support transport documents digitalization efforts

64th session – decision to review experience, good practices, and innovation in automation in freight transport and logistics and to discuss elaboration of a relevant handbook

Automation – benefits and challenges

- Reduction of time and costs
- Access to information
- Less resource intensity
- Improved communication (M2M)
- Capital investment
- Uncertainty around safety/liability/cyber security
- Human-centered automation



Digitalization

AUTOMATION

Human element

enterprise

national

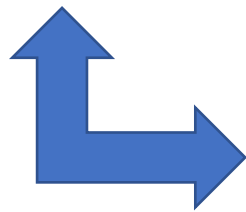
international

Automation in freight transport and logistics – way forward?

WORKSHOP to provide an important input to WP.24 discussion

Better understanding on:

- What is done
- Are guidance/access to good practice needed



Demand for Handbook on automation in the sector