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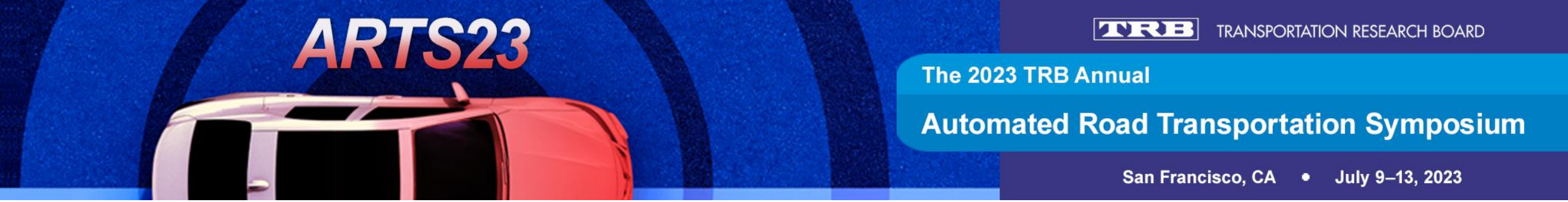

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WE-TRANSFORM: ADDRESSING AV WORKFORCE NEEDS IN EUROPE

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WORKFORCE EUROPE - TRANSFORMATION AGENDA FOR TRANSPORT AUTOMATION

- WE-TRANSFORM aims to apply a participatory approach, using Collective Intelligence (CI), to generate an evidence-based and action-oriented agenda to tackle the challenges related to the increasing adoption of digital/automation technologies to manage the transition rate to accommodate the workforce skills adaptation to the demands of this new digital era

Coordination and Support Action (CSA)
Call: H2020 MG-2-14-2020: *The effects of automation on the transport labour force, future working conditions and skills requirements*

WE-TRANSFORM consortium

Wide:

34 partners from 12 European countries and
4 overseas countries in Asia and the Americas

Balanced in terms

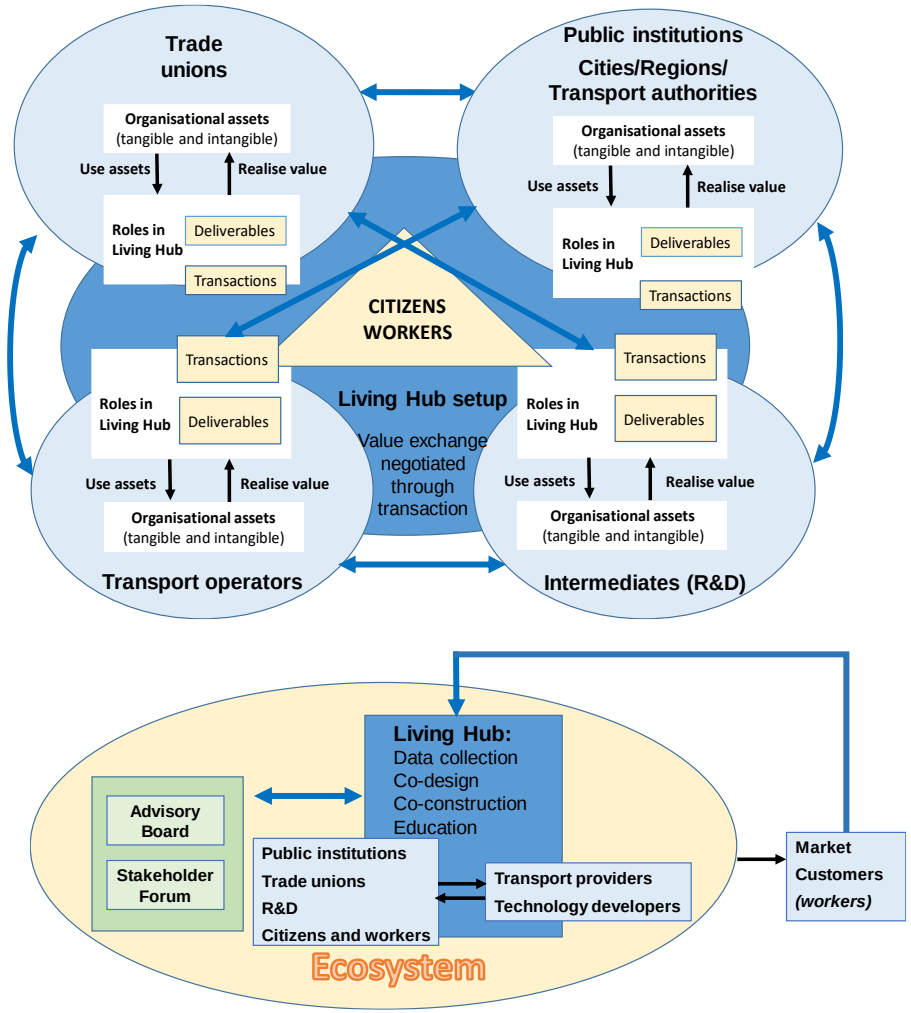
Expertise: it covers a large spectrum of competencies across all modes of transport (land, air, water)

Partner type: Original Equipment Manufacturers - OEMs), as well as urban transport, logistics, technologically advanced sectors and new forms of work

WE-TRANSFORM: the living hub

- Set up and foster a collaborative platform for the discussion of the effects of automation on transport labour with relevant stakeholders: the cross-national Living Hub.

- Together with the Stakeholder Forum and the Advisory Board, creates an inter-continental, cross-sector ecosystem useful for workers and stakeholders as well as citizens' and citizens' representatives.



WE-TRANSFORM: the process of knowledge co-creation

Several round of focus groups/interviews to formulate the policies

Profiles involved

Trade unions, legislators (deputies and councillors), labour lawyers, EU law experts, labour economists	1. **Public governance and regulation**
HR manager, organisational managers/officiers, strategy managers, workers	2. **Industrial governance**
HR manager, labour psychologists, digitalisation technicians, training companies, workers	3. **Training & reskilling**
Trade unions, legislators , workers, workers' associations	4. **Minimisation of labour exclusion and exploitation**

THEMATIC AREAS

The main impacts of digitalisation and automation on workforce (with legal implications)

Work Organization

Skills

Tasks

(level and contractual legal employment category)

SKILLS: impacts of digitalisation and automation

- Impact on the **companies' organization as a whole**, since digitalisation and automation involve everyone in the company, not only **operational workers**, but especially **top management**, which needs to be **reskilled** (e.g., on artificial Intelligence, data privacy, data protection, data analytics, management liabilities) to be able to successfully apply digitalisation and automation to the workforce and **middle management** that has to be **trained** in order to be able to lead their teams into the changes

not only for maintaining employment levels but for maintaining corporate competitiveness

in non-financial reports, a lot of companies have provided training as a key issue

- Impact on the **internal communication** of companies, especially regarding the good management of the new artificial intelligence systems (es. traffic management system, asset management, the overall management system)

Skills: proposals

WHAT COMPANIES NEED

- The **evaluation of the skills** and **competence mapping** to define the gaps to design the training programme necessary to upskill, reskill or simply maintaining a high level of competence according to the technology evolution.
- **Implement** the system of recruitment, training, and research to **anticipate** future development of automation and identify the right profiles.

WHICH SKILLS

- **Soft skills**: psychological skills, communication skills, resilience to stress, coping with change must be addressed not only in the training of employees in the **workplace**, but already in **school**.
- **High-level technical skills** (e.g., in the maritime sector, engineers need additional training in automation and especially operating a ship remotely) → in the next 10 years lower-level workers must be identified and reskilled to be able to find another type of job.

WHAT

- Training is often inappropriate or unnecessary due to a lack of understanding of workers' vocabulary and experience levels → **Initial training** is needed, followed by **lifelong training** and **education programmes**, useful to establish levels of technological skills (e.g., beginner, intermediate, and advanced) and create ad hoc training programs.
- The **training programme** should be built for workers → **create change in management** and **involve employees** in the evolution of skills and the creation of training programmes that **matches** the existing knowledge of trainees and **supports** the co-creation of new contracts, new tools for workers in the operations and maintenance department.
  - setting up regular participative processes and thinking about the introduction of a **special training commissioner** who would have relevant knowledge about the new skills;
  - development of several different common skills.
- Set up **blended courses:** e-learning part + a classroom training or mentoring support in presence. Mentoring should be developed in a horizontal way, e.g., with peers; for example, training drivers to become trainers or mentors for other drivers.

Skills: proposals of rules and regulations

HOW

- **Set of rules** providing measures to encourage the creation of a **common skills-based system** with reference to digitalisation and automation processes:
  - a reference entity, also at European level, for training in digitalisation and automation in order to make expertise in this area more uniform, and thus promote transnational dialogue.
- **Common certification system for qualified professionals in digitalisation and automation**. Set of rules with measures to create common training programmes for employees.

EXAMPLES

Public transport sector:

- mandatory training within the working day: the company decide the topics according to the company's need. There is no limit to the number of hours that the company can devote to this training (e.g., mandatory training on phishing and cybersecurity);
- volunteer training of 20 hours per year: the company offers a flexible catalogue of different courses and specializations that can be done within or outside working hours (drivers) which are later compensated through days off or economically. Within the joint commission of the collective agreement, the annual proposals of the training plans are presented.

Skills: proposals of rules and regulations

HOW

- **EU legislative framework** requiring companies to create training programmes on digitalisation and automation, following the same logic as having mandatory training for the European Driver's license.
- The **regulation** that we already have for automated metros should be extended to other sectors, like railways to manage the training.
- In some **collective agreements**, two training moments have been included in addition to the traditional ones, namely retraining and professional development, both in the second level and first level bargaining:
  - **joint agreement committee** is provided in Collective Agreement, such as agreement negotiation committee as a tool for managing transition.
- **Set of rules** implementing safety measures such as risk assessment, safety equipment, and training programmes to ensure that workers are adequately trained to use these new technologies.
- Clear **guidelines** on the responsibilities of individuals and organisations about safety and security in the context of digitalisation and automation to reduce the risk of occupational accidents and security breaches that could have severe consequences for workers and organisations.

A joint approach that needs to be led by companies and government is required

Conclusions

- **Competence mapping** and defining the **gaps** to design the training programme necessary to upskill, reskill or simply maintaining a high level of competence according to the technology evolution.
- **All company workers** are concerned.
- **Tailored** and continuous training, subjected to a participative process.
- A **recognition of certificates and education** is needed, to recognise all skills developed in different countries.
- An **intervention of the Governments** in stimulating re-skilling processes is essential.
- **Collective Bargaining** has ha crucial role in managing such processes.

THANKS FOR YOUR ATTENTION

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