



# SKILLS AND COMPETENCES DEVELOPMENT OF FUTURE TRANSPORTATION PROFESSIONALS AT ALL LEVELS

**General presentation of SKILLFUL Project**

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# General Information

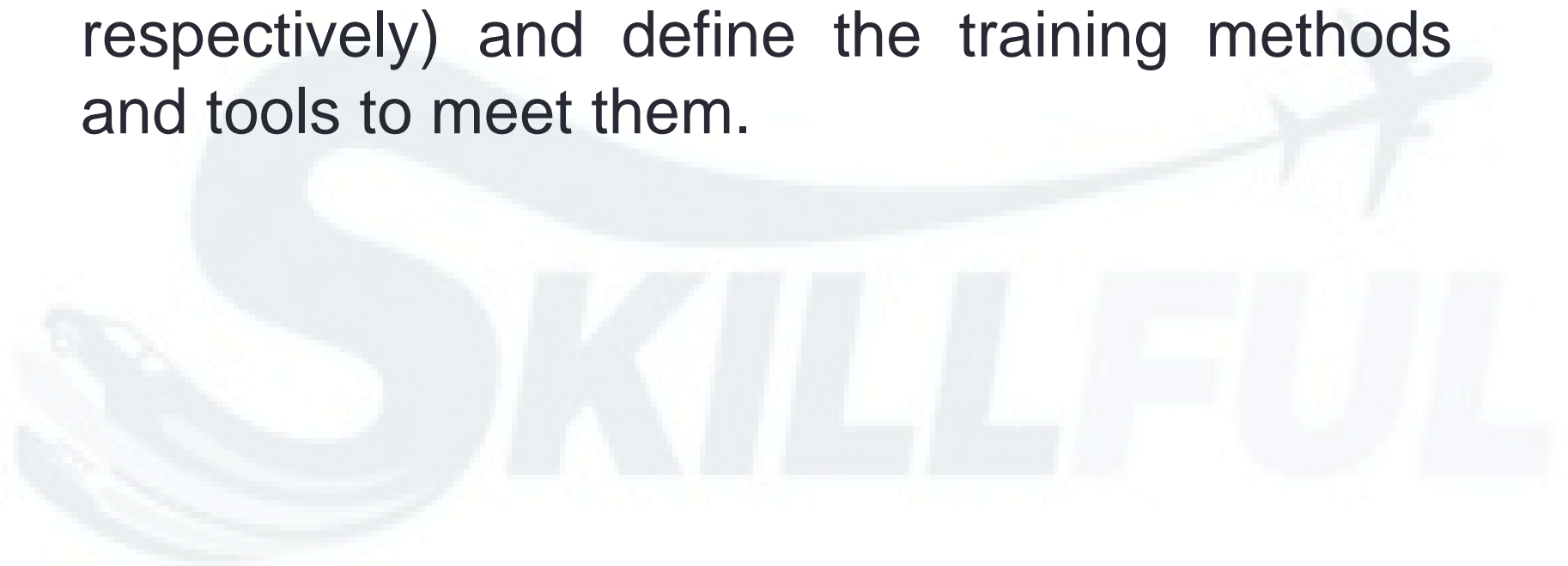
- ❑ SKILLFUL – Skills and Competences Development of Future Transportation Professionals at all Levels
  - ❑ Start date – 1 October 2016
  - ❑ Duration – 36 months
  - ❑ 25 organisations (21 partners + 4 third parties)
    - ❖ 13 countries represented
  - ❑ Budget – 2.99 MEur
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# The relevant needs

- ✓ In 2011, the transport and storage services sector (including postal and courier activities) in the EU-28 employed around 11.2 million persons, some 5.0% of the total workforce.
- ✓ Around 55% of them worked in land transport, 2 % in water transport, 4 % in air transport and 24 % in warehousing and supporting transport activities (such as cargo handling, storage and auxiliary activities), while the remaining 15% were in postal and courier activities.
- ✓ The European transportation system, which is a rapidly developing and changing sector, struggles to develop, attract and retain appropriate staff.
- ✓ As the overall trend is to increase automation, the sector will depend more and more on specialized equipment and products.
- ✓ Future jobs will therefore require new and advanced skills in engineering.
- ✓ The growing interdisciplinary elements of transport activities will also require transport professionals with developed skills in safety, security, logistics, IT, marketing and economics.

# Vision

The vision of the project is to identify the skills and competences needed by the Transport workforce of the future (2020, 2030 and 2050 respectively) and define the training methods and tools to meet them.



# Objectives

- ✓ **To critically review the existing, emerging and future knowledge and skills requirements of workers at all levels in the transportation sector**, with emphasis on competences required by important game changers and paradigm shifters (such as electrification and greening of transport, automation, MaaS, etc.). This will be achieved through:
  - ❑ **identification of the key technological and business future trends in the transport sector** with respect to changing environmental and social conditions and **assessment of their potential impact on job skills and competences requirements**, as well as on the employability of the various transportation related professions;
  - ❑ **identification of key elements to be taught, as well as appropriate mixed training schemes** (combining local and blended training with on-the-job learning and e-learning) **for each target group** of the project (such as transport infrastructure operators, young researchers and developers, low to middle-skills workers in transportation systems, multidisciplinary university courses attendees);
  - ❑ **definition of the necessary competences of trainers and trainees for each type of training/learning scheme**, as well as appropriate business scenarios and roles to promote those schemes.

# Objectives (2)

- ✓ **To structure the key specifications and components of the curricula and training courses** that will be needed to meet these competence requirements optimally, with emphasis on multidisciplinary education and training programmes.

This will be achieved through:

- ❑ **review and benchmark of existing and emerging training and learning methods, tools, supportive and enabling technologies and recognition of replicable best practices** that match the above future needs and requirements;
- ❑ **definition of the necessary competences of trainers and trainees for each type of training/learning scheme**, as well as appropriate business scenarios and roles to promote those schemes;
- ❑ **pilot testing of the most promising new training/learning schemes for each target group** in at least 3 relevant working/educational environments Europe-wide and to assess their usefulness, stakeholder acceptance and impact;
- ❑ **proposal of best practices, training application guidelines and policy recommendations to promote the novel training/learning schemes and their Europe-wide adoption.**

# Objectives (3)

- ✓ ***to identify and propose new business roles in the education and training chain,*** in particular those of “knowledge aggregator”, “training certifier” and “training promoter”, in order to achieve European wide competence development and take-up in a sustainable (WP4).



# SKILLFUL Methodology

**Step 1:** Identification of Future Trends/ Needs & Best Practices

**Step 2:** Development of Training Schemes & Definition of Profiles and Competences

**Step 3:** Verification and Optimization of training schemes





# Step 1: Identification of Future Trends/ Needs & Best Practices

- The foundations for the implementation of the appropriate educational/ training programs and relevant curricula, methodologies and tools and for configuring also their wider context.
- It includes the identification of future trends and the impact on jobs that are likely to affect the European Transportation system.
- Following on from this, training methodologies and approaches will be identified and developed to meet the emerging and future needs of transportation professionals.

## Step 2: Development of Training Schemes & Definition of Profiles and Competences

- The implementation and development stage of the project.
- The design of appropriate training/ education modules for key actors in the Transport sector to fulfil their emerging and foresighted required competences and skills in the most cost-efficient, modular and coordinated ways.
- The definition of the necessary trainer and trainee profiles, the suggestion of new business roles, the promotion of sustainability of proposed new training schemes and the development of risk assessment and SWOT analysis on the those business roles and schemes.

## Step 3: Verification and Optimization of training schemes

- Implementation of SKILLFUL Pilots
- Assessment of the selected training schemes in Step 2 by experts and users
  - ✓ in order to prove the project's concept and methodologies,
  - ✓ to evaluate its future impacts,
  - ✓ to derive best practices, application guidelines and policy recommendations based upon concrete project results.

***Thank you  
and  
enjoy the workshop***

