

IFRIMA 2()18

A digital era for transport

solutions for society, economy and environment

Demographic, Behavioural, Cultural and Socioeconomic Factors on Transport Sector Workforce in Europe

In the framework of the "SKILLFUL - Skills and competences development of future transportation professionals at all levels" research project, major trends of the transport workforce were mapped with regard to



Demographic, Behavioural, Cultural, Socioeconomic

factors in the short, mid and long-term and correlated to existing and emerging professions in the transportation sector.

- ✓ Road Transport
- ✓ Air Transport
- ✓ Rail Transport
- ✓ Maritime Transport

related literature sources were thoroughly analysed and the following were found per group of factors

Demographic

Current trends

- > Ageing of the workforce results in reluctance to follow technology evolution.
- > Youth unemployment reaches high levels all over Europe.
- > Women workers seem to be highly under-represented.
- > Immigration is an issue that EU has to face in all sectors.

Future workforce

- > No discrimination in physical abilities of the employee.
- > Robotics provides a fair opportunity to people with disabilities.
- > Different patterns of family structure causing mobility patterns
- > Changes in workforce age caused by the extending retirement age.

Behavioural

Current trends

- > Technology-driven innovation (new services are invented).
- > Employees adopt collaboration agreements in various cases (i.e. carpooling or car-sharing)
- > Youngster may change or manipulate their interests following the potential job market trends.

Future workforce

- > Demand for workforce skilled in digitalization.
- > Advanced commuting technology will affect both the nature of vehicles and the environment.
- > Choosing green transport modes or to redesign infrastructure in a more environmentally friendly way.

Cultural

Current trends

- > Some people seem to be reluctant in following new market trends.
- > Older people do not accept changes to their transport choices, only if making the decision by themselves.

Future workforce

- > Diversity and exploitation of multicultural talent.
- > Less ownership and more shared usage of the different means of transport.
- > Emphasis should be given to transport safety culture.
- > The safety culture perspective is quite new to the transport sector, more research is needed.

Socioeconomic

Current trends

- > Mobile applications and social networking have created a totally new industry.
- >Autonomous vehicles are a hot transport topic.
- > Freight transport is at an ever increasing rate creating new vacancies and needs.

Future workforce

- > New education schemes focused on strategic skills that students need to get a job.
- > Need for experts and skillful employees will characterize the jobs needed.
- > Climate challenges and energy storage will totally affect the new transport patterns.

Future transport workforce will be influenced by the changing and evolving needs of the sector, its associate business schemes and enabling technologies as well as by the prevailing social trends in Europe.

Alexandra Laiou, National Technical University of Athens, Greece Christina Plati, National Technical University of Athens, Greece George Yannis, National Technical University of Athens, Greece Matina Loukea, Hellenic Institute of Transport-Centre for Research and Technology Hellas, Greece Evangelos Bekiaris, Hellenic Institute of Transport-Centre for Research and Technology Hellas, Greece

Maria Pomoni, National Technical University of Athens, Greece











