



NEWBITS

- ✓ NEWBITS is a Coordinated and Support Action project funded under the EC Programme Horizon 2020.
- ✓ NEWBITS aims at providing a deeper understanding of the changing conditions and dynamics that affect and influence the deployment of ITS innovations.
- ✓ This improved understanding contributes to
 - minimise the failures inherent to ITS innovation diffusion,
 - evolve present business models, and
 - identify effective policy incentives to accelerate ITS deployment.

NEWBITS

New Business Models for Intelligent Transport Systems

Programme
European Union's Horizon 2020

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10/2016 - 03/2019

Project Coordinator
Ortelio Ltd. (UK)

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What NEWBITS will bring to different ITS stakeholders

NEWBITS ...



Private sector actors

offers guidance based on real market data and end-user preferences.




Academia

provides a broad overview of the main barriers and enablers to the deployment of ITS services in Europe and beyond.




Public sector actors

improves the collaborative decision-making process across the various stakeholders.



End users and networks



configures Communities of Interest to foster a fully integrated network approach to the business modelling.



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2nd Project Meeting in Thessaloniki

The 2nd project meeting was hosted by INTELSPACE in Thessaloniki from 7th to 8th of June 2017. During this work progress meeting the NEWBITS partners focused on validating the selected case studies as key enablers of the upcoming activities of the project.




Next, the steps to deploy the market research analysis were discussed and the methodology of the value network analysis was introduced.

During the second day of the meeting, the consortium partners analyzed the possibilities for the configuration of the NEWBITS communities of interest. Ensuring a robust stakeholder engagement process was considered a critical factor in this process. The role of the future project network was introduced, being considered as a valuable output of the project and a potentially essential tool to root the NEWBITS legacy.





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Get to know the Consortium

Interview with project partner CE Delft



www.cedelft.eu

What does your organisation contribute to NEWBITS?

CE Delft is an environmental research and consultancy organisation, with a team of 10 people specialized in transport and mobility. We are leader of work package 2, the mapping of the ITS context, in which we gave an overview of opportunities and barriers for the implementation of ITS. In addition we are leading one of the case studies on ITS in container transport.

Did you take part in projects concerning the transportation sector before NEWBITS? What else does CE Delft do?

CE Delft is an environmental consultancy organization doing research in the fields of energy problems, life cycle assessments, sustainable economy, and transport and mobility. CE Delft's work on transport and mobility is concerned with analyzing how the benefits of mobility can be retained while tackling problems of greenhouse gas and air polluting emissions and other environmental burdens caused by transport. Currently, CE Delft is involved in several transport projects.

From your point of view, what are the main macro-trends influencing the deployment of ITS-applications/services in the medium term (2025)?

The main macro-trends identified in the results of work package 2 are urbanization, increased attention for sustainability, emerging technologies (e.g. 5G), demographic changes and an increased demand for multimodal transport.

From our work at CE Delft we can confirm the increased attention for sustainability and in particular for climate change.



An assessment of barriers and enablers

To support the development of innovative business models and effective policy incentives, a better understanding of the **factors affecting the deployment of ITS services** is required. A deeper understanding of these factors has been achieved by the recently published project deliverable D2.2.

The results of D2.2 illustrate that the relevance of barriers and enablers for the deployment of ITS services differ significantly between ITS market segments. Barriers and enablers relevant within all market segments include:



Barriers

- ✗ Lack of attractive business models
- ✗ Lack of political prioritization
- ✗ Insufficient cooperation between stakeholders
- ✗ Lack of interoperability between services



Enablers

- ✓ Increasing political commitment
- ✓ Enhanced popularity of 'Mobility-as-a-Service' (MaaS)
- ✓ More public-private partnerships
- ✓ A higher level of end-user involvement

Find out more about D2.2 - Assessment of main barriers and key performance indicators (KPIs) for the implementation of ITS services - under <http://newbits-project.eu/publications/deliverables/>



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Stakeholder Interview

We interviewed **Ing. Laura Cocone PhD**, Head of funded R&D and Strategic Projects at Swarco Mizar (Turin, Italy) on emerging business opportunities and concepts in urban transport ITS.

Swarco Mizar is a company specialised in the design, development and implementation of advanced ITS solutions for traffic and public transport management, traveller information services, etc.

Within NEWBITS, Swarco Mizar is a member of the [stakeholder Advisory Board](#) and one of the stakeholders involved in [case study 2](#) under investigation.



SWARCO has been a key global player in ITS for years. What is your view on the evolution of ITS and its role in the new mobility management paradigm?


The Internet of Things (IoT) is on its way to become the next technological revolution. Given the massive amount of data that the IoT will generate, its impact will be felt across the entire data universe.

Moreover, most of the traffic control centres are deployed in different moments in time by means of vertical ITS applications, that despite sharing the same infrastructure and the same goals, very seldom share data and data presentation layers.

Therefore, current mobility management tools, processes and technology need to evolve to accommodate this additional data volume and take advantage of the insights all this new data undoubtedly will deliver.

In the context of this transport digitalisation process, ITS applications will evolve into cloud-based services and Traffic Management as a Service (TMaaS) is the future of traffic management.



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Which are, to your opinion, the key challenges faced by the EU in this complex and evolving global market? Do you think there is a need for a new integrated model of mobility?

Probably the main EU challenge is building sustainable communities, despite the huge impact of climate change, urbanisation, economic growth and globalisation. And you can't have sustainable communities without integrated mobility, which is one of the hottest themes when speaking about transportation today.

The deployment of ITS in urban transport has been recognised as key factor for sustainable and smart mobility in cities. Could you give us some examples how ITS-services can improve management of urban traffic and public transport in practice?


Congestion is particularly prejudicial to traffic management systems operability and efficiency, since it causes vehicles to spend a considerable fraction of their travel halted, which results in lost productivity, unreliability, cargo delays and safety problems, all of these being translated into some percentages of GDP wasted within the transportation system. For example, ITS applications that integrate predictive traffic flow management based on a multitude of data sources can boost service quality, while advanced and collaborative control techniques (like the ones based on co-operative systems) lead to a more uniform distribution of the traffic flow along the network. ITS is also having an important effect on the public transport and, more in general, on shared mobility, through efficient management of the vehicle fleets (e.g. public transport priority), to achieve more comfort and availability of multimodal options.

Could you explain which new business opportunities may arise from the deployment of ITS in urban transport?

Future traffic management is building upon deployment of connected vehicles and travellers by enabling their interaction with traffic control centres and permitting to achieve convergence of mobility services and traffic management. Therefore, created synergies between actions of the individual travellers with the collective ...



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... mobility objectives will not only improve the mobility services but will bridge the innovative developments in the vehicle and in the traffic management, while giving value to the legacy and creating new business opportunities.

Data represents the key element in this totally-collaborative scenario. Therefore, interesting perspectives are opening around it: hosting of data-centers, data collection, data fusion and validation, data quality, and the most challenging: extract valuable information out of this data. Last but not least, innovative concepts like TMaaS will shift resources and competences out of the environment of the public authorities and this will create the space for innovative business schemes.

How may business models change in the public transport ITS sector with the emergence of new ITS services?

Within this connected environment we were mentioning, the mobile device becomes an easy-to-get smart mobility solution which offers better and greater efficiencies and reduces operational costs of the transport service providers. This kind of solutions create a network between passengers and transport service providers and his network will form the backbone of the entire solution. New stakeholders, like network and communication services providers will also work with transport service providers to offer robust networks that these solutions can rely upon.

The changing behaviour of passengers is also propelling the growth of passenger information system market. Passengers today demand real-time information about the arrival and departure time of the transport mediums and also want to stay connected at all times.

Novel business models will also raise together with the large scale deployment of Mobility as a Service (MaaS), that integrates intermodal mobility services, organisational structure / value chains, financial / payment framework and technology harmonisation.



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Attended Events

12th ITS EUROPEAN Congress

(19.-22.06.2017 | Strasbourg)

Over 100 companies and organisations from 50 countries showcased the latest developments in intelligent mobility particularly focusing on the topics: Connected and Automated Driving, Mobility Services (MaaS) and Transport Network Evolution.



Midlands Connected Autonomous Vehicle

(27.06.2017 | Birmingham)



The [MCAV cluster](#) has been set up to support businesses to enter the CAV market. Its launch event “**The Future of Transport for the Midlands**” presented the latest innovations, addressed key transport, congestion and climate challenges faced by the

cities and showed live vehicle demonstrations from leading experts from the transport sector. The NEWBITS project was one of the initiatives presented.

ITS Asia Pacific Forum 2017

(27.-29.06.2017 | Hong Kong)

The focus of the 15th edition of the Asia Pacific Forum entitled “Metropolitan Transportation Infrastructure and Smart Cities” was the ITS for urban mobility and, in particular, the themes of autonomous guidance and cooperative systems. TTS Italia shared the preliminary results of NEWBITS, primarily with the ITS Associations present at the event and who had been contacted and involved in the past months in the survey to collect barriers, enablers and Key Performance Indicators (KPIs) for the deployment of ITS.



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Upcoming Events

- **1st Pan-European Safe Strip Workshop**
(27.09.2017 | Thessaloniki)
<https://www.eventbrite.com/e/1st-pan-european-safe-strip-workshop-tickets-36578516327>
- **CIVITAS FORUM Conference**
(27.-29.09.2017 | Torres Vedras)
<http://civitas.eu/forum2017>
- **European Transport Conference**
(04.-06.10.2017 | Barcelona):
<http://www.etcbookings.org/>
- **Electric Vehicle Symposium & Exhibition – EVS30**
(09.-11.10.2017 | Stuttgart):
<http://www.messe-stuttgart.de/en/evs30/>
- **Mobility Solutions for the 21st Century**
(29.-31.10.2017 | Dubai)
<https://merc.irf.global/welcome/>
- **ITS World Congress 2017**
(29.-02.11.2017 | Montréal):
<http://itsworldcongress2017.org/>
- **19th International Conference on Traffic and Transportation Engineering**
(13.-14.11.2017 | Venice):
<https://www.waset.org/conference/2017/11/venice/ICTTE>
- **Hypermotion**
(20.-22.11.2017 | Frankfurt a. M.):
<https://hypermotion-frankfurt.messefrankfurt.com>
- **Intelligent Transport Systems – From research and development to the market uptake**
(29.-30.11.2017 | Helsinki):
<http://futuretransport.org/2017/show/home>