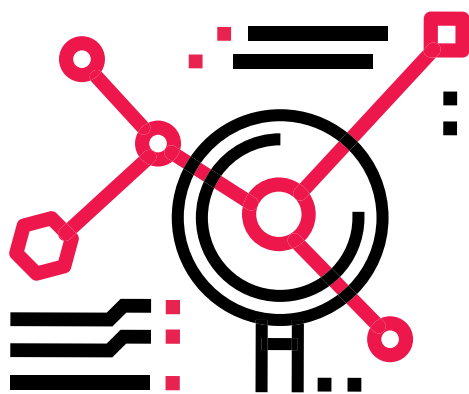


OCTOBER 6, 2017

Commentary



**Impact
Research
Hub**

The launch of TRIMIS: a new tool for analysing transportation innovations within the European Union

Background.

In the European Union (EU), where it directly employs more than 11 million people, the transportation industry has a major impact on the day-to-day lives of citizens.

With an estimated market value of EUR 200 billion this sector, which is currently undergoing a number of fast-paced technological, economic and social transformations, is one of the cornerstones on which the EU's ability to compete is built. In May 2017, the European Commission (EC) adopted a long-term strategy, entitled 'Europe on the Move', designed to turn challenges into opportunities and deliver smart, socially fair and competitive transportation by 2025. Since that time, it has been following through on this promised transition using targeted legislation and various supportive measures which include investments in infrastructure as well as research and innovation (R&I) activities.

To this end, the EC proposed investing 2.7 billion euro into 152 key transportation projects that support competitive, clean and connected mobility in Europe. This investment which is being made using the Connecting Europe Facility (CEF) - the EU's financial instrument specially designed for supporting infrastructure networks, will also provide access to 4.7 billion euro in public and private co-financing. This year, out of the total 2.7 billion euro, the Commission is allocating 1.8 billion euro for the 15 Member States (MSs) that are eligible for support from the Cohesion Fund in order to further bridge infrastructure disparities. Other projects will be powered by Horizon 2020 (H2020) financing.

The ever-growing demand for mobility of goods and people, which requires smart technological and infrastructural solutions, is, after all, a key challenge facing this industry. That is why, to retain its efficiency and sustainability, a set of EU-wide research projects has been outlined in seven Strategic Transport Research and Innovation Agenda (STRIA) roadmaps. These roadmaps focus on a number of areas including: cooperative, connected and automated transportation; electric transportation technology; vehicle design and manufacturing; low-emission alternative energy for the transportation industry; network and traffic management systems; smart mobility and services; infrastructure. The objective of STRIAs is identifying the potential contribution of each of the above mentioned technologies to achieve the EU's goals in terms of climate change and energy efficiency as well as competitiveness. It is also about coming up with and prioritizing policy options that support research, innovation and wide market penetration in each of the areas discussed above. STRIAs will ultimately also contribute to the creation of an integrated long term R&I strategy on transportation that encompasses relevant links to sectors such as energy or ICT.

Transport Research and Innovation in H2020.

With a total budget of 80 billion euro, H2020 (scheduled to run 2014-2020) is the world's largest, EC led and monitored, collaborative research and innovation programme. In the transportation industry, the Commission has been trying to adopt a balanced approach to implementing the programme: one that takes into account the specifics of each mode of transportation (rail, road, waterborne and air) but maintains a holistic approach while finding a proper balance between issues related to competitiveness as well as sustainability and invests in both technology and relevant socio-economic research (as outlined in the 7 STRIA roadmaps). Most of the EU-wide innovative pilot studies and projects are financed as part of H2020, but the information regarding their main objectives, progress as well as dissemination of materials and data regarding their exploitation is difficult to find. And that is not to mention the lack of a single, easily accessible, coherent database presenting all of the project results.

The answer is TRIMIS.

The Transport Research and Innovation Monitoring and Information System (TRIMIS) platform was developed and implemented by the EC's Joint Research Centre (JRC) on September 19th 2017 on behalf of the Directorate-General for Mobility and Transport. It is an evolution of the outdated and inconvenient Transport Research & Innovation Portal (TRIP) which it replaces. The new platform includes the latter's database of over 10,000 EU and national research projects on transportation.

Filling the need for a concise database on the matter of innovations in mobility which, up until now, had been unanswered, TRIMIS serves as analytical support tool that provides a complete assessment of technology trends and R&I functions in the European transportation system. It is designed as an open-access information and knowledge management system. At its core is a database of transportation projects and programmes as well as transportation technologies and innovations. This helps in gathering and disseminating information on the status of various research and innovation and provides a holistic view of the 'horizon' in the above-mentioned areas.

How it works.

TRIMIS includes consolidated modules for mapping and analysis of new and emerging transportation technologies, R&I investments and functions. The objective of the platform is to assess the impact of each of these elements on the EU transportation system, taking into account current developments and future implications. Thanks to these capabilities, it monitors progress based on a set of key performance indicators and, in so doing, serves as an implementation support system for the STRIA roadmaps. TRIMIS also acts as a general source of information and data on transportation R&I providing progress reports and highlighting issues that should be addressed by policy makers, MSs experts and authorities, research organizations, as well as to the industrial and financial communities. This will surely enhance cooperation between all the involved players and enable creation of new forms of cooperation in terms of jointly applying for H2020 financing.

A push for strategic partnerships.

Aside from the above-mentioned database of legislation, projects and programmes, TRIMIS also includes MSs profiles. These present a clear picture of deficiencies in transportation innovations as compared to frontrunners, and, also describe an institutional framework for research on transportation - providing additional references for those particularly interested in a specific aspect of the topic.

The platform has been up for just two weeks but, apart from the EU and European Research Area (ERA: Iceland, Norway, Switzerland) country profiles, TRIMIS already includes information on R&I endeavours from EU Strategic Partnership (SP) countries (Brazil, Canada, China, India, Russia, South Africa and the US). There is not much information provided in this particular category and calling it complete would be a stretch to say the least. There are, however, plenty of references to complex national databases and legislative resources available for those interested. The most important thing to keep in mind is that innovations in transportation have been treated by the EC as a strategic issue in relations with its most important bilateral partners.

While mapping projects in the area of transportation innovations that are being conducted in cooperation with SP countries, it is easy to see that these are few and far between. The EU might propose that, in order to strengthen cooperation in this matter, SPs sign bilateral, legally binding agreements that assume gradual but full integration with the EU road and rail transportation market. At the end of the day, SPs are mostly about trade benefits and the EU does not just export vehicles - more and more Europeans opt for oftentimes cheaper Asian and American cars instead of their EU-made competition. It is high time for a unified set of worldwide norms and regulations in this matter. The result of these kind of bilateral agreements might be the beginning of a domino like effect in the area - each subsequent agreement would be easier to negotiate and could be used to profile the conditions in a selected country - further supplementing the TRIMIS database (particularly its 'country profile' portfolio).

Neighbourhood exclusions.

Although the country profiles database has been enriched by the addition of strategic and ERA partners, it still lacks European Neighbourhood Policy (ENP) countries and, in particular, those from the Eastern Partnership (EaP). That is quite surprising given the fact that the 'New Agenda for the EaP', which was discussed in 2016, in fact, focuses specifically on issues related to transportation and mobility. From the EU perspective, the integration of these countries into the region's transportation market would better connect them to the EU and facilitate easier trade. Improved infrastructure is, even more importantly, of interest to all those involved in the EaP development. Stronger EU involvement in these areas would, therefore, improve the now-poor visibility of the Partnership in the region. Also, worth mentioning is the fact that in the long term, these steps would move those countries towards full integration with the EU's internal market - helping to achieve one of the ENP constant objectives.

Another way to encourage adoption of EU legislation and, as a result, research cooperation is through incentives that take the form of promises of funding for more infrastructure projects (including the construction of new border crossings). A list of priority projects was agreed upon in 2013 during the EaP transport ministerial meeting. Their implementation does, however, require considerable financing. To achieve this objective, it might be wise to first utilize unused funds, for instance, the 25% of planned European Neighbourhood Instrument (ENI) funding for EaP countries which has not yet been spent.

The improved coordination of financial assistance (with financial institutions and third-party countries such as China) as well as activities promoting priority projects, including research-oriented ones, might be a good idea. In order to do so, the EU might consider establishing a permanent branch of the EaP transport panel responsible for establishing contacts, finding financing for projects and developing local implementation functions. A model to follow might be that of the South-East Europe Transport Observatory (SEETO) which operates in the Western Balkans. A joint grant and lending mechanisms, similar to the Western Balkans Investment Framework, should also be taken under consideration - it would facilitate the combining of resources of various stakeholders. The research potential, also between universities, in this regard looks more than promising and could make TRIMIS even more attractive.

Innovation spillover.

TRIMIS has been a much needed tool for all those interested in up-to-date info on innovations in transportation. Although the website has been up and running for just two weeks, the diverse resources available on it are already satisfactory. The next available functionality could potentially enable finding partners for cooperation in seeking H2020 funding - this would ultimately reinforce and further develop the community of parties interested in bidding together for transportation innovation projects and have a direct, positive impact on EU's ability to compete on a global scale.

In the future, administrators of the platform should also consider adding a section specifically devoted to 'European Transport Innovation Challenge' - a new award presented by the EC to young innovators in the field of transportation. Starting this year, the Commission literally invites them to come up with creative solutions for goods and services that will contribute to solving issues related to STRIA roadmaps - particularly reducing CO2 emissions related to transportation. These solutions can but do not have to be based on research. They can be related to any and all modes of transportation or simply to one of the many industries interrelated with transportation - such as healthcare, retail or foods. The key words here are innovation and new business model and that makes this an ideal initiative to be covered by TRIMIS from now on.