NEWSLETTER #2

August 2021

PROGRESS TOWARDS FEDERATED LOGISTICS THROUGH THE INTEGRATION OF TEN-T INTO A GLOBAL TRADE NETWORK

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FUNDACIÓN VALENCIAPORT

Contents

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The emerging global corridors and their impact on the TEN-T

In the first newsletter, we shown that the purpose of the EGTN (Integrated Green EU-Global T&L Network) is to advance the European Commission's strategy for Smart, Green and Integrated Transport and Logistics by efficiently interconnecting infrastructure (TEN-T, rail-freight corridors) with geopolitical developments, as well as to optimise the use of current and emerging transport modes and technological solutions, all while ensuring the equitable inclusivity of all participants, increasing the prosperity of nations, preserving the environment and enhancing citizens quality of life.

In this regard, the emerging new trade routes are having significant impacts on the European transportation network and could shape TEN-T network future.

In order to achieve PLANET'S vision and the inherent objectives, PLANET aims to understand and analyse the global, geopolitical, commercial and economic imperatives as a way to assess the impact of these emerging global trade corridors on the TEN-T network and to ensure the integration of the European network into the global transport and logistics network.

PLANET researchers have investigated the new corridors, analysing the key drivers of these emerging corridors as well as their impact on the TEN-T network. This article summarises their most relevant findings and allows PLANET community to understand the value and importance of the PLANET Project.

The relation between geo-economics, geo-political aspects and the emerging trade routes

The interaction of international economics, geopolitics and business strategy explains how trade relations are shaped and how they could lead to the development of new trade routes. This correlation is therefore the starting point for understanding the dynamics of trade patterns and trade corridors.

The elimination of tariffs, the new agreements between emerging/developing and developed countries, inequalities between regions and advances in technology and transport, were the main factors driving the boom of global freight transportation and the development of global value chains.

These same factors have also determined the distribution of negotiation and market power between companies, whether public or multinational, as well as governments in their quest to dominate trade and markets (by protecting or providing the necessary resources, products or services, as well as the necessary infrastructure).

As a consequence, new economies have entered international trade and different trends have emerged (such as the regionalisation of production for high-tech products), causing variations in import and export flows, both geographically and in terms of goods flow.

Finally, the trade patterns have also been driven and determined by external factors such as the global environmental context. Governments have pursued alternative intercontinental land and shipping routes, either via large scale infrastructure projects abroad or via the opening of natural sea routes which are becoming opportune with the warming climate and the subsequent melting of the arctic waters in summer.

New trade routes and the impacts expected on current TEN-T corridors

In this context, it is important for Europe to comprehend three emerging trade routes:

The New Silk Road: China's Belt and Road Initiative (BRI)

Why is this corridor relevant for Europe?

How could this corridor affect the TEN-T?

The International North-South Transport Corridor

Why is this corridor relevant for Europe?

How could this corridor affect the TEN-T?

The Arctic sea route

Why is this corridor relevant for Europe?

How could this corridor affect the TEN-T?

Railway transport-corridors to / from Europe

As shown above, the internal competition of supply chains is changing, in some cases as a consequence of major foreign investments in infrastructure. Infrastructure investments have been aimed at servicing new patterns of freight flows or allocating them to more desirable routes. As a consequence, this has led to the development of new nodes and links along with new corridors, while others are weakened.

In Europe, in addition to deep sea ports, rail interconnections are key freight gateways between the European Union and other continents. The possibility of connecting the European rail network with other continents, especially Asia, plays an important role in improving the interconnectivity of the European transport network as well as steering freight flows to the desired nodes, links and corridors. Therefore, there is a growing need to understand the development potential on the Eurasian corridors.

PLANET found that the most relevant emerging routes for freight transport between Asia and Europe are three:

Eastbound (Russia)	Finland, Estonia, Latvia, Lithuania, Poland, Slovakia, Hungary, Romania
Southeast (Turkey)	Bulgaria, Greece
Southwest (Morocco)	Spain, Morocco, Algeria

However, PLANET's research activities also highlighted that the viability of the emerging routes, as well as interoperability of the trains circulating between Europe and Asia, are significant determined by operational

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and political issues, showing that the interconnection of the European rail transport corridors to the global network is not without problems.

The poor interoperability of rail infrastructure, the low digitalization levels and the lack of data harmonization along the entire global corridors.	Increased handling and transit time, reducing the competitiveness of rail.
The granting of subsidies to Chinese companies for transferring container through rail, the restrictions to the transportation of dangerous goods through the Chinese network and the complicated customs procedures.	Increased transit time and conditions of unequal competition between Chinese and European companies, significant obstacles to the development of the Eurasian land corridors.

PLANET will develop a diagnoses model, an instrument that should enable us to assess the impacts of the selected parameters on the current transport volumes of the identified emerging routes, as well as to better comprehend the ecosystem of the railway transport with intermodal loading units between Europe and Russia/China.

The Physical Internet paradigm: towards efficiency and sustainability in transport logistics.

Finally, in order to properly integrate the altered flows in the TEN-T network, not only the development and improvement of infrastructures but also of technological solutions will be key.

PLANET considers that the Physical Internet (PI) paradigm, as well as other logistics and transport concepts and technologies, are also a way to develop efficient supply chains, mainly through less fragmented logistics networks and the promotion of logistics integration and collaboration (discover interesting findings on the PI paradigm in the ICONET Project). The PI thus becomes the last relevant factor for the development of the EGTN, facilitating the process of designing the EGTN toward the goals of greener transportation and operational excellence.

Integrate logistics networks into an open and interconnected global system through standard containers and routing protocols, improving as a result the economic and environmental efficiency and sustainability of transport and logistics.

Transport, storage and physical handling operations of load units.

By sharing resources through open and interconnected networks (horizontal and vertical collaborations) and through more standardized flows to develop an interconnected network and improve the efficient use of resources.

PLANET will examine the impacts that these new logistics and transport concepts and technologies will have, as well as the geo-economic aspects that could impact the adoption of the PI, obtaining a quantitative estimation of the impact of these technologies to the development of the EGTN.

Attended events

This Special Session was dedicated to present the PLANET project overall ambition, goals, activities and expected results, as well as to show the first findings and outputs achieved during the first year of the project development.

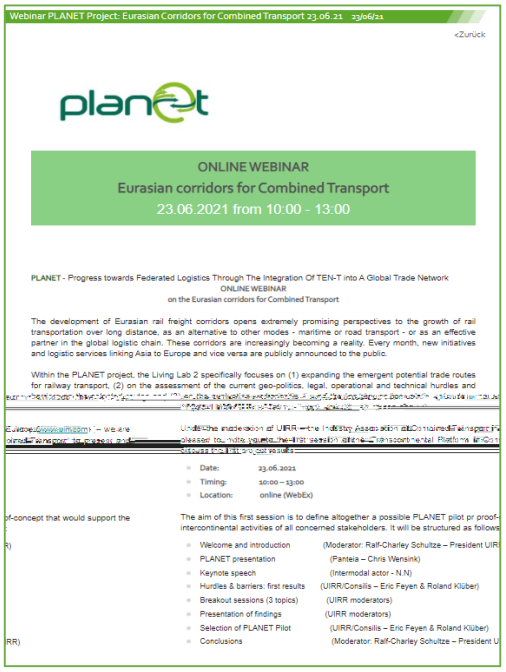
During this session, specific use cases were showcased where the Physical Internet was introduced as an approach to: 1) Optimize stakeholder infrastructures and operations by integrating logistics networks and taking advantage of the new technological reality in T&L, such as Blockchain, IoT and AI; 2) Efficiently exchange T&L data flows in a secure and privacy-preserving way within logistics networks; 3) Optimize end-to-end supply chains interconnection along the TEN-T corridors by sharing resources through horizontal and vertical collaborations; and 4) Efficiently and sustainably interconnect infrastructures (TEN-T, freight rail corridors) with current and emerging trade routes, improving decision-making.

You can watch the presentations of our colleagues Gerasimos Kouloumbis (Inlecom), Georgia Ayfantopoulou (CERTH-HIT) and Gosia Kirchner (ILIM Poznan) on our YouTube channel!

This PLANET Project webinar was related to Living Lab 2, which specifically focuses on (1) expanding the emergent potential trade routes for railway transport, (2) on the assessment of the current geo-politics, legal, operational and technical hurdles and barriers on the selected routes and (3) on the evaluation and prioritisation of the best innovative solutions.

Under the moderation of UIRR, the aim of the webinar was to define altogether a possible PLANET pilot proof-of-concept that would support the intercontinental activities of all concerned stakeholders.

You can download the presentations here!


Webinar PLANET Project: Eurasian Corridors for Combined Transport 23.06.21 23/06/21

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ONLINE WEBINAR
Eurasian corridors for Combined Transport
23.06.2021 from 10:00 - 13:00

PLANET - Progress towards Federated Logistics Through The Integration Of TEN-T into A Global Trade Network
ONLINE WEBINAR
on the Eurasian corridors for Combined Transport

The development of Eurasian rail freight corridors opens extremely promising perspectives to the growth of rail transportation over long distance, as an alternative to other modes - maritime or road transport - or as an effective partner in the global logistic chain. These corridors are increasingly becoming a reality. Every month, new initiatives and logistic services linking Asia to Europe and vice versa are publicly announced to the public.

Within the PLANET project, the Living Lab 2 specifically focuses on (1) expanding the emergent potential trade routes for railway transport, (2) on the assessment of the current geo-politics, legal, operational and technical hurdles and

- Date: 23.06.2021
- Timing: 10:00 – 13:00
- Location: online (WebEx)

The aim of this first session is to define altogether a possible PLANET pilot pr proof-
intercontinental activities of all concerned stakeholders. It will be structured as follows

- Welcome and introduction (Moderator: Ralf-Charley Schultze – President UIR
- PLANET presentation (Pantela – Chris Wensink)
- Keynote speech (Intermodal actor - N.N)
- Hurdles & barriers: first results (UIRR/Consilis – Eric Feyen & Roland Klüber)
- Breakout sessions (3 topics) (UIRR moderators)
- Presentation of findings (UIRR moderators)
- Selection of PLANET Pilot (UIRR/Consilis – Eric Feyen & Roland Klüber)
- Conclusions (Moderator: Ralf-Charley Schultze – President U

Upcoming events

Progress towards Federated Logistics through the Integration of TEN-T into A Global Trade Network

#2 PLANET General Assembly Meeting
October 20 - 21, 2021

Progress towards Federated Logistics through the Integration of TEN-T into A Global Trade Network

PLANET – Advisory Board Meeting
21 October 2021

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COORDINATOR OF THE PLANET PROJECT

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