Key Features and Challenges for the Mediterranean Corridor

Iveta Radicova, Coordinator of the Mediterranean Corridor, one of the nine TEN-T core network corridors.

This article is the result of an interview conducted by CETMO with Ms. Iveta Radicova in early December 2020. Ms. Radicova is the Coordinator of the Mediterranean Corridor, one of the nine core network corridors that make up the Trans-European Transport Network (TEN-T). The objective is to know the role of transport corridors, and more specifically the Mediterranean Corridor, during disruptions such as that experienced during COVID-19, the key elements for their effective operation and the challenges they will face in the medium and long term.

The Mediterranean Corridor: main figures and coordination tasks

First of all, Ms Radicova describes the Mediterranean Corridor and its importance for the territory.

"The Mediterranean Corridor is the main east-west axis in the TEN-T network south of the Alps. In political terms, it constitutes basis for an interoperable transport link between countries of Western Europe and countries of Central Europe. It also equips the Iberian Peninsula with a better transport connectivity in the wider Mediterranean basin.

The Corridor runs between the most south-west regions of Spain, following the Mediterranean coastlines of Spain and France, crossing the Alps towards the east through Italy, Slovenia and Croatia, continuing through Hungary up to its eastern border with Ukraine.

With 18% of the EU's population, the Mediterranean Corridor regions generates around 17% of the EU's GDP. It is a tremendous contribution.

It is one of the most interconnected Corridors in Europe, crossed by 7 other Core Network Corridors. It features in total 70 core nodes, including 12 highly competitive and global sea ports, situated along the Mediterranean coastline.

In pre-Covid times, it was a Corridor characterized by strong cross-border exchange flows, especially between Spain and France (48 million tons) and France and Italy (44 million tons) with the average annual projection of further growth at levels above 2%.

The ports of the Mediterranean Core Network Corridor (CNC) handled 490 million tonnes of cargo in 2018 (around 12% of all cargo transiting through EU ports), of which roughly 80 million tonnes are transhipment traffic. Hence, around 80%, or 400 million tonnes of cargo are actually moving between the ports and the corridor, making it the third-most important CNC in terms of maritime traffic.

Port traffic is dynamic, especially for containers. The growth observed between 2010 and 2017 in the ports of the Mediterranean Corridor is higher than the average growth in the North Sea ports over the same period.

It is also a Corridor with significant potential for further boosting of international passenger traffic. It carried 81 million passengers on international rail routes crossing six countries of the Corridor in 2015 with the main flows between major urban nodes of Spain and France and France and Italy.

Finally, large parts of the Corridor traverse environmentally sensitive areas (the Alps) and touristic zones (the coastline). This Corridor has a high potential to shift from road/air to rail both for freight and passengers, utilizing better the high-speed network between dynamic urban zones and conventional/regional rail lines for the transport of goods and passengers."

The Mediterranean Corridor and the rest of the TEN-T corridors were established in 2014. That year, the EU transport policies also underwent an important adaptation, as explained by the Mediterranean Corridor Coordinator hereafter.

"The EU transport infrastructure policy has evolved in the last several years. At the beginning of 2000, the whole of EU transport investment was limited to cross-border issues in the context of bilateral cooperation between Member States.

Transport infrastructure policy had a very limited link with horizontal issues of sustainability, decarbonisation, innovation, congestion or modal shift. It merely focused on a group of selected projects.

2014 marked the beginning of a new era in European infrastructure policy. Nine Core Network Corridors were established, a robust governance system headed by European Coordinators was created and a solid financial scheme for investments in infrastructure was set up thanks to Connecting Europe Facility (CEF).

Since that moment, the adoption of the new Regulation on the trans-European transport network, combining individual cross-border projects into real multimodal corridors, with horizontal topics of sustainability, modal shift, intelligent transport systems, and a clear EU investment planning through CEF and the other instruments that the EU disposes off, we can think of a truly European infrastructure policy."

Ms. Radicova is proud to be appointed as Coordinator of the Mediterranean Corridor. In the exercise of this position, she performs a double political and analytical function.

"I was very pleased when the European Commission proposed me to become one of the European Coordinators for the TEN-T network. This was an opportunity to join a team of distinguished personalities, who commit themselves to help enhancing Europe's transport system." "Given my past political experience, I exchange with Ministers, regional governments, infrastructural managers and European citizens on the common planning of transport infrastructure. Infrastructure that is interoperable, that invests in removing bottlenecks, that focuses on crossborder dimension and addresses adequate attention to the most environmentally modes of transport such as railways, Motorways of the Sea and inland waterways. In my interaction with involved stakeholders, I constantly appeal for stable and logic programing of actions that lead to a full completion of the Corridor.

On the analytical side, I prepare Corridor Work plans. They consist of a detailed overview of the state of compliance of the Corridor infrastructure with the TEN-T requirements. The ambition is to show good examples of progress achieved, to inform about the state of modernisation with regard to key standards agreed by the TEN-T Regulation, to point out to challenges and weak points that still have to be addressed, if we want to achieve full compliance of the network along the MED Corridor by 2030.

My team also analyses the socio-economic situation of the Corridor and its transport flows through a dedicated transport market study. I make sure that there is a clear plan of the investment needed on the Corridor for all modes to reach the EU targets of 2030."

The COVID-19 and transport corridors

COVID-19 has had a high impact on the transport sector, but it has also allowed to draw lessons on the TEN-T as the backbone of transport. This is the vision expressed by the coordinator of the Mediterranean corridor.

"We know only part of the pandemic's dramatic effects on people and economies so far. The transport sector continued to be heavily impacted by the containment measures in Europe and worldwide.

The European Commission reacted quickly to the evolving pandemic situation. The concept of "Green Lanes" was established in the first weeks of the crisis in order to implement uniform border management measures to ensure the availability of goods and essential services.

What is important from my point of view is that the common practice set up at all the relevant internal-crossing points used the trans-European transport network (TEN-T) as a reference.

The Covid crisis proved the utility and resilience of the transport corridors in Europe built around the TEN-T concept. At the same time, it demonstrated further, a need and added-value for investing in truly interoperable and borderless transport infrastructure based on common transport standards and formalities.

The current crisis corroborated a crucial role TEN-T corridors can play for the effectiveness and functionality of the overall transport infrastructure in Europe. It is obvious that we need to further invest in cross-border solutions, remove bottlenecks that remain in national sections of transport grid, we need to further invest in digital solutions and intelligent transport systems and measure that decarbonise transport."

Advancing in multimodality and interoperability of the Mediterranean Corridor

The improvement of cross-border connections was already a priority before COVID-19, especially with regard to multimodality and interoperability, basic characteristics of the TEN-T core network corridors. For this reason, Ms. Radicova wanted to emphasize some actions that will be carried out in cross-border sections to improve connectivity between modes, contributing to the efficient operation of the corridor in the medium and long term.

"The Mediterranean Corridor is about 3000 km long. We must prioritize investments and make sure that they are not fragmented. Continuity and multimodal logic of highest standards are the key words applying to the Corridor. We need to resolve major bottlenecks that exist among various modes of transport. The most important is the completion of key missing links, notably the cross-border sections. The three sections come to mind – Lyon Turin Base Tunnel, high-speed line linking Barcelona with Montpellier, connections between Trieste-Ljubljana-Zagreb-Budapest up to the border with Ukraine.

The Lyon Turin project is the key section on which the optimal functioning of the whole Corridor hinges. This is the major link connecting the Iberian Meditterrean coast with Italy and South-East Europe. Without the modern base tunnel and high capacity access routes, the traffic flow across the Alpine border remains confined to road transport affecting this environmentally sensitive area. They will also be deviated to other routes (such as Ventimiglia) causing unnecessary congestion and creating additional costs.

The upgrade of Trieste/Aurisina and Divača requires an upgrade to meet TEN-T standards. I hope for a conclusion of this section on the Italian side by 2026. The same applies to cross-border section between Slovenia and Croatia."

In addition to cross-border sections, surroundings of large cities can also pose a problem to be solved, due to the concentration of flows.

"The Corridor features dynamic urban nodes – they suffer from lack of capacity and have congested ring roads. For example, regional rail passenger traffic has grown by 23% in Lyon between 2012 and 2017. High growth of such traffic is also observed around Barcelona, Milan, Budapest and other main cities. This particular phenomenon creates an increasing pressure on infrastructure in urban nodes, creating conflicts between freight, passenger long-distance and regional trains."

The introduction of interoperable railway standards represents the main element to be solved in the Mediterranean corridor to improve the connection of both sides of the Pyrenees.

"If I look specifically at the Iberian Peninsula most ongoing and planned investments aim at upgrade to UIC gauge by either modernising the existing lines or constructing parallel new platforms in the most congested sections.

The usage level of cross-border tunnel Le Perthus has not reached expected levels yet mainly due to the lack of connectivity in UIC gauge to traffic generators and lack of interoperability (different voltage and signalling systems, limited number of adapted locomotives). Both the extension of the UIC gauge to the south to Algerias, currently ongoing investment along the coastline of various sections, and the construction of the missing link between Montpellier and the end of the Le Perthus section are very important to realise the potential of the tunnel.

In this context notable progress can be observed in sections between Barcelona-Valencia-Alicante.

- The second platform between Castellón and Valencia is under planning to increase the line capacity. The two future UIC tracks, currently under informative studies, will cover high-speed services, releasing additional capacity for freight traffic on the existing tracks.
- The Vandellos rail bypass, which solved the bottleneck caused by the single-track section between Vandellos and Tarragona, is in operation since the beginning of 2020. It reduced the travel time between two major urban nodes of Valencia and Barcelona.
- Between Tarragona and Barcelona the works are ongoing with regard to installation of a third rail in the existing conventional tracks.
- The line between Granada and Almería will be electrified and upgraded to UIC gauge by 2025.
- Regarding the Antequera-Algerias line, preparatory works started with the drafting of the engineering project for the construction of the two electric supply substations required for the electrification of the line.
- Finally, the new infrastructure is almost finished for the connection of Murcia with the highspeed network."

Different actions planned in the Mediterranean Corridor and supported by CEF aim at having competitive travel options available to users.

"The Mediterranean Corridor has been successful in securing CEF funds, especially if we take into consideration quite significant oversubscription rate.

Between 2014 and 2018, 147 actions were co-financed by the Connecting Europe Facility (CEF), which translates to ϵ 2.9 billion in CEF funding for a total investment of ϵ 6.3 billion. The largest share of funding remains allocated to rail (54 Actions, ϵ 2.4 billion, i.e. 83%) followed by projects aiming at making road transport cleaner and safer (49 Actions, ϵ 163 million) and maritime projects (33 Actions, 248 million).

By implementing the TEN-T policy, our aim is to create a viable and competitive transport infrastructure, offering competitive solutions across selected modes of transport. Only then, it is a decision of market players what offer to take, what preferred option for travel to take."

Next challenges of the Mediterranean Corridor

Beyond final impacts of COVID-19 on transport sector, there are some challenges that transport policies cannot ignore to guarantee the resilience of the sector in future scenarios, with climate neutrality being the most important of them, as pointed out by the coordinator of the Mediterranean Corridor.

"A serious commitment to EU's climate neutrality means achieving 90% reduction in transport emissions by 2050. I strongly believe that the TEN-T policy is a beneficial instrument allowing for a gradual achievement of the climate goal.

The European Green Deal and resulting from it and soon to be adopted the EU strategy for sustainable and smart mobility (9 December 2020) pave the way for future orientations of EU transport investment policy. Greater focus on transport decarbonisation, digitalisation, innovation, multimodality and the necessary shift from roads to other more environmentally modes of transport is emphasised.

Unavoidably, the Corridor Work Plan will follow the strategic objectives of the European Commission. They are numerous:

- We need to decarbonise transport.
- We have to increase rail's share in transporting people and goods
- We need to invest in transport solutions that are innovative, energy efficient and safe."

Ms. Radicova also indicated other challenges that should be faced in the near future, such as the confluence of traffic in urban areas and administrative and operational barriers.

"In addition, it became quite apparent that the rail in main urban areas faces serious bottlenecks, which hampers development and efficient co-existence of local, regional and international traffic. Particular attention needs to be paid to urban nodes which form the crossing points with other core network Corridors, in order to allow a seamless flow of high-speed passengers and freight flows. This concerns first the major nodes like Valencia, Madrid, Barcelona Lyon, Milan, Verona, Venice and Budapest.

A separate issue is the existence of the operational and administrative barriers that can have a negative impact on the profitability of the investment and on the efficiency of the whole Corridor. The existing limitations to train length, the limited loading gauge, various speed standards, ERTMS deployment, standardised length of the tracks in rail-road terminals are the most pressing issues that should be addressed in the future."

Finally, Ms. Radicova reflected on the importance of incorporating technological advances into the operation of the corridor, as shown by some projects already funded by CEF.

"Beyond the realisation of the geographical components of the Mediterranean Corridor by 2030, I believe that we must also make sure that we "go with the time" and leverage the technical and technological advances that are within reach today. Alternative fuels, intelligent transport systems, single windows, better multimodal connections should become a trademark of the Mediterranean Corridor. Many projects going into these directions are already being financed by the Connecting Europe Facility, a EU transport budget dedicated to a full implementation of core and comprehensive transport network.

CEF features many projects that deploy alternative fuels' infrastructure, implement digital solutions across four modes of transport, and innovate on ITS in urban nodes. We can be sure this focus will not be lost in the next EU financial perspective."