

CONCLUSIONS. COVID-19, a follow-up in the evolution of transport and logistics

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Background

The World Health Organization declared Covid-19 a pandemic on 11 March 2020. Its impact on economic and social activity was evident from the beginning. COVID-19 caused a global contraction of 3.5% of real GDP by 2020 according to World Bank data. The drop of real GDP in the Middle East and North Africa (MENA) and the European Union (EU) regions was estimated at 3.9% and 6.6% respectively, marked by the decline in the second quarter of 2020, with 6.6% and 14.6% respectively.

Marked by mobility restrictions, transport and logistics sector was not unaware of the impact of the health crisis. Despite the contribution of different modes of transport to ensure the distribution of essential goods, such as food and medical supplies, the decline in activity was a fact. More specifically, IRU estimates that, compared to 2019, in 2020 there was an 18% drop (USD 679 billion) in the global road freight transport. Regarding rail transport, UIC estimated passenger volumes decreased approximately 80% for all national rail services and almost 100% for international rail passenger services during lockdowns. However, for freight operations, the volumes were hit with an average estimated loss of between 10 -15% for most operators. With regard to maritime transport, UNCTAD estimated global merchandise trade to drop of 20% in 2020, influenced by the contraction of 27% in the second quarter. Finally, referring to global air transport, ACI and ICAO estimated that international passenger traffic fell by 74% (a reduction of 1,376 million passengers) in 2020 compared to 2019, equivalent to \$ 250 billion loss of gross operating revenues of airlines. Domestic passenger traffic, dropped by 50% (a reduction of 1,323 million passengers) in 2020 representing a \$ 120 billion loss of gross operating revenues of airlines.

Although the quantification of the impact of the pandemic is clearly reflected by statistics; home confinements of population, closure of borders, interruption of value chains, definition of priority freight corridors for essential goods and cancellation of flights and cruises showed the magnitude of the impact during the early stages of the COVID-19 crisis. With this perspective, CETMO and IEMed decided to contact experts on transport and logistics to open a reflection through short articles on how the pandemic could affect the future of the sector. The result is the initiative **“Mediterranean transport and logistics in a post-COVID 19 era: prospects and opportunities”**.

Articles drafted by experts from different parts of the Mediterranean and international institutions has served to exchange views on sector trends and the future of different modes of transport in the region, achieving a **socialization of knowledge and challenges focused on the Mediterranean reality**.

COVID-19, a trend accelerator

COVID-19 has accelerated the development of regional and global trends that were already manifesting before the onset of the pandemic and they allow us to frame the conclusions of the initiative. It mainly concerns the increase in reshoring and nearshoring processes, the 4th industrial revolution and increasing resilience in value chains.

The first trend is the **increase in reshoring and nearshoring processes**. The trend of relocation of some companies from developed countries in search of cheap workforce, occurring since the 80s of the twentieth century, has been losing support in recent times as a result of trade wars between countries, the visualization of the value chains' high dependence of countries such as China, the financial crisis that began in 2008 or the emergence of regional or global disruptions that can jeopardize the proper functioning of global value chains. Under these premises, the processes of reshoring (relocation of production to the country of origin) and nearshoring (closeness of production to country of origin) have been increasing in recent years, facilitating control of production, reducing transportation costs and gaining agility in the face of disruptions on value chains. The COVID-19 crisis has been an example of disruption, interrupting and unbalancing the functioning of global value chains, which has led some of them to look for closer alternatives, theoretically less fragile.

These nearshoring processes are of special interest in the Mediterranean region, as they strengthen trade relations between territories of the region and encourage the improvement of connectivity between both shores, promoting regional integration. In addition, there is also the impact on the country that hosts the companies, contributing to its development. But in a long-term view, a good business environment and efficient logistics should be provided in order to attract and retain potential companies.

Second, **the 4th industrial revolution**. Although popularly referred to as digitalization, the 4^a industrial revolution is based on the integration and mutual leverage of existing technologies to gain in productivity and transparency, as well as to improve products with digital capabilities and asset management, among others. They are key enabling technologies, which can be adopted and approved progressively, given their scalability. Transport and logistics sector can take advantage of the experience of other sectors to selectively adopt these new technologies and achieve substantial benefits, without the risks that past technological changes transmitted. The need to resume work and economic activity after the first wave of the pandemic, guaranteeing the safety of the population, helped to visualize the high potential for the application and development of these technologies in the different sectors of activity.

The technologies of the 4th industrial revolution with a potential impact on transport and logistics are: artificial intelligence leveraging Big Data Analysis, robotics and automation, Internet of Things (IoT), autonomous vehicles and drones, augmented and virtual reality, industrial 3D printing, digital platforms and blockchain, among others. As example, an increased connectivity and visibility of value chain can be achieved through a combination of IoT, cloud computing and artificial intelligence.

The latest trend is to **increase the resilience of value chains**. COVID-19 has had a high impact on global value chains. The temporary closure of production centres and the

interruption of sea, land and air transport services not associated with basic necessities disrupted the operation of value chains. Different speeds of recovery around the world and changes in consumption patterns related to e-commerce and inventory-building in anticipation of new waves of the pandemic contributed to increase trade flows. But this unexpected growth also involved changes in the operation of value chains with respect to the pre-pandemic period such as the increase of container freight prices. This disruption due to COVID-19 and subsequent alterations have made the concept of resilience gain prominence.

This resilience is linked to **sustainability**. Climate change and its effects will have a major impact on the resilience of value chains. Sustainability was the main challenge for transport and logistics sector before the health crisis, in line with the Sustainable Development Goals and the Paris Climate Agreement. COVID-19 crisis has served to redouble institutions' efforts and commitment. In this sense, the European Commission, in the framework of the European Green Deal and in accordance with the EU Climate Law of 14 July 2021, aims to reduce its net emissions of greenhouse gases by at least by 55% compared to 1990 levels. Transport plays a relevant role in this reduction.

Commitment to an optimized transport connectivity

The above trends offer a framework that, crossed with the reflections of the different experts participating in this initiative, allows us to visualize some key ideas for the transport and logistics sector in a medium and long term scenario.

It's about taking advantage of the *momentum* and betting on the region. The impact of COVID-19 poses a scenario of change and acceleration of trends such as the 4th industrial revolution and sustainability. It is necessary to believe in its potential and, first and foremost, **invest in its transport infrastructure** to eliminate bottlenecks, especially on the southern shore, which hinder Mediterranean connectivity, fostering the development of Africa-Europe value chains. It will be of great help in consolidating nearshoring processes and increasing the resilience of value chains. Following the example of the Trans-European Transport Network (TEN-T) of the European Union and its priority corridors, the exercise of planning and identification of infrastructures on the southern shore is already done, either the GTMO 5+5 Multimodal Network of Transport Infrastructure (approved and focused on the Maghreb countries) with its trans-Maghreb corridor at the forefront or the Trans-Mediterranean Transport Network (TMN-T) (pending approval and focused on the southern shore of the Mediterranean). What remains to be done is a firm commitment to its implementation and funding.

A second conclusion is the visualization of **ports as key elements of this regional network**. They are the main gateway for goods in and out of the region, but they are also the main mode of connection between the territories of the region. Therefore, it is necessary to encourage the development of efficient intraregional maritime connections that contribute to strengthening intraregional trade flows, fostering motorways of the sea. But in addition, it is necessary to look inland and ensure good connection with their port community, promoting multimodality. They are key points to encourage nearshoring. Ports are the meeting point of land transport and maritime transport.

In addition to the physical connectivity, **digital connectivity and tools** related to the 4th industrial revolution have gained prominence. They have come to stay. The health crisis and

the corresponding protection measures adopted have highlighted how the application of certain technologies can contribute to the safety, reliability, robustness, transparency and sustainability of value chains and transport networks. So, their resilience will also improve. This includes the use of technologies such as IoT or AI, the dematerialization of transport documents, cooperation and trust between actors, among others. Applicable to different modes of transport, the adoption of interoperable technological solutions throughout the territory is an added value for the integration and efficient operation of transport networks.

The **harmonization** of regulations also applies to all modes of transport, both for the transport of passengers and goods. It is the main tool for facilitating transport, guaranteeing a smooth operation of the transport network and benefiting resilience of value chains, but also a tool for upgrading transport systems. Harmonization has been a recurring theme since the beginning of regional transport cooperation, led by UNECE and subsequently reinforced with technical assistance projects launched by the EC. The adoption of international conventions in the field of transport represents the first step towards a homogeneous operation based on the use of specific standards. Without harmonization one could not speak of liberalization of air transport or efficient road cross-border transport.

The last of the conclusions to highlight is the role of **decarbonisation of transport** to achieve a sustainable transport network. Despite the negative impact of COVID-19, the pandemic offered the opportunity to visualize what it would be like to live in a more peaceful environment, with fewer GHG emissions and less noise pollution. This image represents an additional motivation in the sector's commitment to the future of the planet. In this sense, sustainability is one of the requirements in the post-COVID-19 economic recovery and in the case of transport, it translates into the commitment to less polluting means of transport such as rail, support for multimodality to optimize transport routes and encourage collaboration between modes, the promotion of urban transport as the backbone of a more sustainable urban mobility... But sustainability in transport should also be associated with the transition to more sustainable and low-carbon energy systems, working to obtain a green energy network that supports the transport network.

Concluding thoughts

In short, the vision of the transport and logistics sector in the Western Mediterranean in a post-COVID-19 era refers to an **optimized transport connectivity**, with ports as the backbone of the multimodal transport network, thanks to its contribution to the economic development. A network that reinforces links between different modes of transport and connectivity among territories of the region, especially between the two shores of the Mediterranean. In addition, thanks to this connectivity and the processes of harmonization, it favours regional integration. Finally, the use of digital tools and technologies contributes to optimization and sustainability of the network and to the coordination and cooperation between their actors.

The initiative "Mediterranean transport and logistics in a post-COVID-19 era: prospects and opportunities" aimed to **build region** developing a collective knowledge from contributions of international institutions and experts from the region.

This process of research, reflection and socialization has highlighted the situation of transformation that is experiencing the transport and logistics sector, accelerated by the COVID-19. This transformation is still alive and that will need to be followed closely to take

advantage of the opportunities that may arise to build a **more sustainable, safe, accessible and connected transport system**.

In the meantime, we must take the opportunity to continue working together, generating and sharing knowledge, establishing dialogues on the priorities of the region and identifying common visions and strategies.

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