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European Parliament

Relaunching transport and tourism in the EU after COVID-19

Part V: Freight transport

Policy Department for Structural and Cohesion Policies
Directorate-General for Internal Policies
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RESEARCH FOR TRAN COMMITTEE

Relaunching transport and tourism in the EU after COVID-19

Part V: Freight transport

Abstract

This thematic briefing provides the European Parliament's Committee on Transport and Tourism (TRAN) with an overview of the repercussions of the COVID-19 pandemic on EU freight transport, as well as policy recommendations to address the challenges emerging from the crisis.

This document was requested by the European Parliament's Committee on Transport and Tourism.

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LIST OF ABBREVIATIONS

B2C	Business to consumer
GDP	Gross domestic product
EC	European Commission
ECB	European Central Bank
EEA	European Economic Area
EU	European Union
ICT	Information and Communication technologies
IRU	International Road Union
LEZ	Low emissions zone
RFC	Rail freight corridors
RIS	River information systems
TEN-T	Trans-European Transport Network
TIR	Transports Internationaux Routiers in French and International Road Transport in English
UK	United Kingdom
US	United States
UVARs	Urban Vehicle Access Regulations
ZEZ	Zero emissions zone

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EXECUTIVE SUMMARY

KEY FINDINGS

- International trade fell by 19% in the second quarter of 2020 compared to the year before, due to the effects of COVID-19 on the global economy, which affected the revenues and viability of the freight transport sector.
- Road and rail freight transport performed better than freight transport via ocean and air.
- Measures undertaken by the EU to tackle the crisis include financial relief measures, the Green Lane initiative and the suspension of administrative and regulatory requirements for road, rail and air freight transport operators.
- The digital transformation of the industry was accelerated during the pandemic, in order to comply with recommendations to reduce physical contact and to capitalise on the demand for online shopping.
- The EU and national policy makers should continue to incentivise digital innovation, as well as provide a clear legal framework for the use of disruptive vehicles such as drones and digital technologies.
- State aid rules need to be reviewed to impose stricter criteria on competition, connectivity or minimum levels of services. For example, operational aid under the current State Aid Guidelines for Railway Undertakings can potentially distort the freight market, as rail freight can thrive where its competitive advantages are fully utilised; subsidies should instead be targeted on areas such as infrastructure use or multimodality.
- The harmonisation of policies regulating urban freight and rail freight transport should be carried out across the usual geographical boundaries. For instance, urban freight regulations should be harmonised with the regional level and rail freight regulations should apply beyond national and EU borders.

The outbreak of COVID-19 put a strain on the freight transport sector. International trade fell by 19% in the second quarter of 2020 compared to the year before, displaying the crisis experienced by the freight sector. Goods flows were not only impaired by border closures but also by the supply chain disruptions caused by lockdowns.

The maritime and aviation sectors were hit the hardest by the pandemic. For instance, the closure of ports and shortages in seafarers worldwide paralysed freight transport by ocean. The aviation sector was similarly slowed down by airports shutting down and border closures. A significant number of air transport companies converted passenger aircrafts into cargo aircrafts to accommodate the rising

demand in goods transport. Despite this strategic initiative, the recovery of air flights has not outpaced the effects of airport closures and grounding of aircrafts during the pandemic.

In contrast, road and rail freight transport have performed relatively better compared to freight by other modes. Whilst the share of increase of rail transport remains small in contrast to road transport, in 2020 rail freight operations continued almost without interruptions, notwithstanding lockdowns and restrictions. Urban deliveries experienced, on the one hand, a substantial increase in revenue due to the growth of e-commerce. On the other hand, the increase in demand was not met with sufficient capacity by logistics operators in the short term, resulting in delays and disruptions.

To relieve some of these burdens from the freight transport industry, the EU undertook a series of initiatives. Apart from substantial fiscal measures to support the sector, the "Green Lane" initiative was pivotal in ensuring the continuous flow of essential goods by road transport through border crossings between EU Member States. This measure has now been extended to include other modes of transport too. To address constraints on rail freight, the EU has temporarily suspended some administrative requirements related to access charges and certification. This reduced the bureaucratic procedures railway operators would have to comply with and allowed Member States more flexibility to support them financially. The situation faced by air transport operators was improved by waiving certain administration-related conditions and slot obligations. In contrast, in the maritime sector, the EU primarily focused on the repatriation of seafarers, enacting guidelines to guarantee the workers' protection and support while they were stranded away from home due to border closures.

The crisis generated by the pandemic accelerated and intensified several ongoing trends in the freight transport sector. On a positive note, the digital transformation of the industry has remarkably accelerated, resulting in more automation and less human contact, which improved hygienic conditions and efficiency in the transport chains in the short term. It also allowed for more resilience in the sector against disruptions.

The lockdowns implemented in cities across the EU generated a drastic increase in demand for e- commerce, which prompted many physical stores to also open online stores to remain active. This contributed to the surge of new kinds of services, such as the 10-minute delivery service. The growth in urban deliveries also induced demand for parcel lockers, pick-up and drop-off points, and alternative vehicle types, such as cargocycles, which may improve the industry's sustainability in the future.

At the same time, COVID-19-related disruptions to freight transport negatively affected the industry. For instance, worldwide lockdowns resulted in more trade regionalisation. This phenomenon impairs the international flow of goods, decreasing worldwide trade and making the supply chain more vulnerable and costly. The establishment of freight corridors should work against trade regionalisation and, hopefully, will continue to play a crucial role in reducing transport barriers and encouraging trade development.

Altogether, the impacts of COVID-19 on freight transport can be tackled by recommendations targeting the most important stakeholders. Firstly, digitalisation should be favoured due to its surging importance for guaranteeing higher efficiency with fewer face-to-face contacts. Adoption of innovations, such as information and communication technologies (ICT) and increased data-sharing among companies, can provide a solid springboard to grow companies' resilience. EU policy makers should draw up plans that offer specialised funding for all businesses intending to invest in digital technologies and skills.

However, high-tech products, such as drones or autonomous vehicles, may not be sufficiently integrated into companies' day-to-day operations if they are not properly regulated by the authorities. For this reason, the EU should devise clear regulatory frameworks that allow companies to invest in digital solutions with a high degree of legal certainty.

State aid guidelines should also be revised to support the recovery and growth of the transport sector without distorting competition. For example, rail freight transport may only face road freight competition if it develops in a market-forces driven environment. State aid is fundamental to ensure that competition does not detriment stakeholders, but should be subject to a strict review to avoid being used more than necessary.

EU policy makers should keep some of the guidelines and protocols introduced in the Green Lanes initiative, such as the fast-track procedure for TEN-T border crossings, with the objective of decreasing regulatory burdens for transport operations and guaranteeing the international free flow of goods. The shortage of truck drivers may be tackled through policies to increase the attractiveness of the road freight transport labour market.

Finally, policies for urban and rail transport at the city level should be harmonised with those regulating the regional and national levels. This would provide a coherent legal framework, reduce unpredictability, increase city resilience and provide legal certainty for companies intending to work with intermodal transport.

1. OVERVIEW OF THE IMPACTS OF COVID-19 ON FREIGHT TRANSPORT

KEY FINDINGS

- Halted production and closed borders to international trade with major EU trading partners, such as China, the United States (US) and the United Kingdom (UK), have had a strong impact on import and export to the EU, resulting in lower freight transport volumes, especially in the first months of the COVID-19 pandemic in 2020. Compared to the year before, international trade fell by 19% in the second quarter of 2020.
- Road freight transport has generally remained partially possible, especially when compared to the halts experienced in maritime and air freight transport.
- The rail freight transport sector was able to respond well to the effects of the pandemic, taking advantage of the decrease in demand for passenger services and the low virus transmission risk in freight trains.
- Although the global shipping sector was severely hampered at the beginning of the crisis, the sector appears to be on the way to recovery.
- Air transport faced severe restrictions, affecting especially passenger transport. The sudden increase in cargo demand incentivised many operators to convert passenger aircrafts into cargo aircrafts, in order to resume services, thus reducing the drop in revenues the sector was facing.
- While the urban freight sector experienced a growth in demand for e-commerce deliveries, in some cases, especially at the beginning of the pandemic, there were interruptions in the supply of goods and insufficient transport capacity resulting in delays.

1.1. Introduction

This chapter addresses the impacts of COVID-19 on freight transport, starting from the impacts on trade up to the impacts on the ability of the freight transport system to facilitate trade. Part of this requires an understanding of what happened globally to the manufacturing, transportation and logistics industry, especially with the measures adopted to contain the virus spread, namely lockdowns, quarantines, border closures and movement restrictions. These measures created obstacles for international trade and transportation, caused disruptions in the supply chain, and affected the supply and demand of goods in the different countries.

1.2. Overview of impacts on freight transport

1.2.1. Effects on global trade

Due to the primary importance of **China in global manufacturing**, the first impacts of COVID-19 in logistics were felt there, such as cargo being delayed in China's major container ports, travel restrictions creating truck drivers shortages for picking up containers, and maritime carriers cancelling sailings. Goods from China are vital for many global supply chains, thus the disruptions in manufacturing suffered in China affected supply chains around the world, resulting in halted production. As a way to tackle this problem, several companies started to ship by air, despite the extra cost. The delay in the shipment of Chinese manufactured products resulted in shortages affecting automotive, electronics, pharmaceuticals, medical equipment and supplies, and consumer goods industries also overseas.

International trade in the second quarter of 2020 was down 19% compared to 2019. The **extra-EU imports and exports** experienced a sharp decrease in the second quarter of 2020 compared to the year before, averaging -22.1% for imports and -19.6% for exports[1]. By the end of 2020, extra-EU trade improved, but did not reach pre-crisis levels. However, in the second quarter of 2021, the level of EU exports and imports slightly exceeded the level of the second quarter of 2019. The EU's biggest import partner was China, followed by the US and the UK. The EU's biggest export partner was the US, followed by the UK and China.

The **industrial production in the EU** reached the lowest level in April 2020, dropping by 27.5% compared to February 2020. According to Eurostat, as of June 2021 the total industrial production loss caused by COVID-19 had been completely recovered, with industrial production in July 2021 being 1% above the level of February 2020. The impact on individual Member States varied greatly, although the majority of countries experienced a reduction of around 25%, comparing April 2020 to February 2020. Italy, Slovakia, Cyprus and Hungary recorded drastic rates of reduction, of between 43.2% and 37.1%, from February to April 2020. Since May 2020, many EU countries recorded enough gains to compensate losses registered during the first wave of the virus. Eighteen EU countries[2] either reached or went beyond their pre-crisis production level, while a number of others are rather close to returning to their previous production levels[3].

1.2.2. Road freight transport

Globally, road freight transport has generally remained available, except in countries with strict lockdowns, especially when compared to the halts experienced in maritime and air freight transport. The restrictions put in place to contain the spread of the virus impacted road transport, causing delivery delays and long queues primarily at country borders. As a consequence, many road freight transport providers experienced losses, with companies going bankrupt or being severely hit in terms of revenue and cash flows. Globally, road freight transport experienced a decrease in revenue of up to 40% (compared to 2019) in the first lockdown period in 2020.

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1 The average change per quarter was calculated using seasonally and calendar adjusted trade value obtained from EUROSTAT's Member States EU27 (from 2020) trade by BEC product group since 1999.

2 Ireland, Belgium, Lithuania, Poland, Greece, Latvia, Austria, Sweden, the Netherlands, Denmark, Croatia, Finland, Hungary, Slovakia, Italy, Czech Republic, Bulgaria, and Slovenia.

3 Spain, Estonia, Luxembourg.

In terms of logistics, the impacts were felt differently by small and big players. Smaller businesses running freight transport on small trucks and other vehicles registered high losses and were severely hit, especially due to the fact that they normally lack a risk management plan to deal with a crisis. In addition, in the absence of sufficient technology to follow health guidelines, their response to the crisis was further complicated. Although heavily impacted by the crisis, large logistics actors, e.g. DHL and CEVA Logistics, were more legally prepared and were able to declare Force Majeure[4] on their contracts due to COVID-19, thus limiting their losses.

Another phenomenon affecting road freight transport was the rise in urban delivery services, driven by the boom in e-commerce[5] during the COVID-19 lockdowns. To accommodate the services, retail strategies and distribution channels had to be quickly adapted. Accordingly, the transport of goods was diverted to e-commerce fulfilment centres, rather than regional warehouses. This resulted in an increase in the demand for e-commerce fulfilment centres, a shift towards business to consumer (B2C) delivery service providers and a general change in regional transport patterns.

1.2.3. Rail freight transport

Overall, rail freight was the most responsive mode of transport vis-à-vis lockdowns and restrictions. Firstly, as freight transport exposes far less individuals to risks compared to passenger transport, during the contraction in passenger traffic demand, some countries prioritised freight services over passenger transport. In addition, apart from benefitting from the use of relatively little manpower on long distances, rail transport carries high advantages in terms of efficiency and environmental performance compared to other modes. Consequently, the EU rail sector[6] recorded only a 7% reduction of freight volume in tonne-kilometres in 2020 compared to 2019. Partly due to the decrease in departures by 6% in 2020 compared to 2019, the punctuality of freight trains increased on average by 4%. This slight improvement in the quality of the service also added to the demand for rail freight during that period.

The resilience of the rail sector is also attributed to the decreased capacity of air cargo freight services, cancelled sailings in maritime, and the longer transit times for trucks. Since the COVID-19 restrictions resulted in the stranding of many ships and aircrafts, there were insufficient transport means to meet the demand, resulting in a natural increase of prices for ship and airplane containers. Altogether, these factors led to a higher demand for rail services, which helped the sector to keep operating at an almost normal frequency during the first wave of COVID-19 restrictions.

1.2.4. Air freight transport

In March 2020, the global air freight volume decreased by 19% compared to the previous year, due to the decline in passenger flights which carry freight in its cargo hold as well as the drop in Chinese manufacturing. However, it is relevant to note that such a decrease did not involve all flights indiscriminately: long-haul flights (between 2000–4000 km) and ultra-long-haul (more than 4000 km)

[4] A clause that allows contracts to be declared null and void due to acts of God or other unexpected circumstances.
[5] E-commerce refers to all aspects of operating a business online, while online shopping refers to the online selling and purchasing of goods and services.
[6] The data was based on 22 EU countries plus the UK who were monitored in the report.

responded better to the advent of the pandemic, probably due to the pivotal role of these types of flights in cargo-handling and operations[7].

Moreover, the sudden increase in cargo demand incentivised many operators to convert passenger aircrafts into cargo ones, in order to resume services and halt the critical drop in revenue. This was an important response by the sector to the economic crisis. Furthermore, the rapid increase in sea shipping prices prompted many companies to switch from ocean freight to air cargo. For instance, while the price of transport by air was 12 times more expensive than by ship before the outbreak of COVID-19, this ratio had halved in 2021. During the pandemic, the share of e-commerce worldwide skyrocketed, calling for an increase in deliveries. The surge in ocean freight prices and the continued port congestion left shippers with little alternatives. This led to the transport by air of some goods usually transported by ship. By the end of 2020, the global air cargo sector only declined by 8%[8]. In addition, all-cargo[9] was the least affected segment of the air freight market, doubling its market share from 3% in 2019 to 6% in 2020[10].

Despite the net reduction in demand for air cargo services, the sharp reduction of global air transport capacity, due in part to the grounding of planes and congestion at airports, contributed to "far higher levels" of intercontinental air freight rates compared to before the pandemic. The rates are not expected to decrease at least until the end of 2022.

1.2.5. Maritime freight transport

Ocean freight was severely affected during the early phase of the pandemic by the measures in place to slow the spread of infection, such as closing or limiting access to seaports, crew and cargo movement, imposed quarantines, and refusal of port entry and refuelling. Freight rates have also been pushed to historic highs at the end of 2020 and in early 2021 due to the imbalance of empty containers, lack of return cargo (i.e. freight is primarily moving in one direction) and the impact of cancelled vessel calls or sailings. For instance, the spot rate for the route from Shanghai to Europe had increased by at least 4 times compared to before the pandemic in 2019.

Overall, the number of EU port calls declined by 10% in 2020 compared to 2019, although this number increased in August 2021 by 11% compared to August 2019, which may be signalling a recovery in the sector. The types of freight vessels most significantly affected were the refrigerated cargo ships and vehicle carriers. The total number of calls made by EU vessels around the world decreased by 3.5% compared to 2019 with a corresponding decrease of 11.1% of the total gross tonnage. By August 2021, the number increased by 3.5% compared to 2019, although still a decrease of 6.6% of total gross tonnage. In summary, it would appear that although the sector was heavily impacted, it is slowly making a recovery.

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7 Rodrigues, M; Sandri, E; Antonucci, B; Knezevic, L; Teoh, T; 2021, Research for TRAN Committee – Relaunching transport and tourism in the EU after COVID-19 – Aviation sector, European Parliament, Policy Department for Structural and Cohesion Policies, Brussels. Research for TRAN Committee: Relaunching transport and tourism in the EU after COVID-19 - Part III: Aviation sector (europa.eu)

8 Ibid

9 "All-cargo" refers to air freight aircrafts which carry mail and general types of freight, but do not offer passenger services. More than half of air cargo is carried in this segment.

10 Ibid

1.2.6. Urban freight transport

Urban freight transport operations serve freight collection within and delivery to urban areas for a variety of retail and non-retail sectors, such as courier-express-parcel service, the catering industry, construction and stocking of facilities and offices. Restrictions put in place to limit the spread of COVID-19 in city areas, such as curfews, lockdowns, closures of non-essential retail, and physical distancing, affected not only the travel patterns of residents (and tourists), but also the demand for goods and services at shops, city centre locations and even offices. Accordingly, this led to a drop in demand for urban freight services to those locations. Instead, consumer goods and food products were being delivered directly to homes, as a rise in parcel deliveries and use of grocery home delivery services were observed.

The rise in e-commerce deliveries increased revenues for many parcel delivery companies. For instance, both DHL and UPS registered record earnings at the end of 2020. DHL made profits of €4.8 billion, achieving its highest operating profits, while UPS' revenue increased by 21% in Q4 of 2020. This helped logistics providers to financially weather the economic crisis, which could have otherwise resulted in dramatic losses and, possibly, insolvency. In addition, the reduced traffic in cities resulted in lower operating costs. The easy access to parking helped drivers to reduce transport times while working more safely thanks to the empty roads. Furthermore, the stay-at-home measure considerably increased delivery success rates, further reducing times at the benefit of efficiency.

Another strong growth was observed for grocery deliveries, which replaced trips to supermarkets, especially in the case of high mobility restrictions. Online purchases of grocery and food were observed to have increased in Paris by up to 40%, in Spain by 50% and in Italy by 300% at the beginning of the pandemic. This is a trend that has also been observed globally.

Nevertheless, the rise of e-commerce orders and demand was insufficiently met with the existing capacity, which sometimes resulted in delays or extra disruptions. Staff shortages and safety rules impaired face-to-face deliveries. This challenged logistics service providers to at least offer options for contactless transactions to all consumers, with all the involved costs, to allow staff to maintain physical distances when delivering the items. Furthermore, whilst e-commerce is likely to keep increasing in the long run, in the absence of other mitigating strategies, such as the use of consolidation centres, deliveries and fragmentation of trips and volume loads will grow too, resulting in heavy urban congestion and other traffic impacts.

2. MEASURES ADOPTED TO SUPPORT THE FREE FLOW OF GOODS AND THE SAFETY OF WORKERS

KEY FINDINGS

- The "Green Lanes" initiative was initially adopted to guarantee a continuous flow of goods across the EU for road freight transport. An extension of the Green Lane approach was adopted to include multimodal transport, increase the number of border crossings, expand the use of digital solutions and extend the initiative to neighbouring countries.
- The EU temporarily suspended a few articles from different regulations, especially those related to competition law. Rail infrastructure managers could reduce, waive or defer access charges, reassess the ability of the market to bear the price of the services, and refuse to levy reservation charges.
- Member States were permitted to grant authorisations and permits for air transport from outside the EU, including temporary traffic rights for additional air cargo operations, and modify the implementation of slot restrictions for essential air cargo operations.
- The EU measures implemented for the maritime sector focused primarily on guidelines to support seafarers, providing recommendations on health, repatriation and travel arrangements. The EC also called on Member States to facilitate crew changes without delays.

2.1. Introduction

This chapter presents the measures adopted by the EU, national governments and other stakeholders to ensure the continuation of the international supply chain while taking into account the safety of the workers. The measures aim to ease the regulatory burden and reduce costs for transport companies.

The majority of the measures adopted are temporary and applicable only for the duration of the coronavirus crisis. Despite their temporary character, the debate around their continuity and/or the review of existing measures to ensure a more resilient supply chain is ongoing.

2.2. EU and national policy responses

The Commission has adopted a package of measures to support companies in the aviation, rail, maritime and road sectors on 29 April 2020. This package followed action taken to ensure the safety of transport workers, keep travellers informed about their rights and ensure the circulation of essential goods across Europe. The measures introduced to support transport workers have been presented

in the Research for TRAN Committee: Relaunching transport and tourism in the EU after COVID-19 - Part II: Transport workers briefing.

2.2.1. Road

An important EU initiative was to re-establish the free movement of goods within the EU, which had been partially stopped as Member States closed national borders to restrict the spread of COVID-19. On 23 March 2020, the '**Green Lanes' initiative** was adopted to guarantee a continuous flow of goods across the EU. Under this initiative, Member States were urged to let their borders open to all road freight vehicles. The implementation of Green Lanes is particularly important, because it allowed freight to keep moving at least across the EU during the pandemic, even as the mobility of individuals had been restricted. The Green Lanes initiative aimed at (i) establishing a maximum of 15 min border crossing time for all cargo; (ii) creating a network of contact points within the EU and with countries bordering the EU that would exchange data on traffic congestions daily; (iii) creating an online portal providing access to information about measures and rules taken at national levels.

An extension of the Green Lane approach to include rail, waterborne freight and air cargo was adopted by the Commission on 28 October 2020 in order to support multimodal transport and the free movement of goods regardless of the mode of transport. Further, all internal border-crossing points on the Trans-European Transport Network (TEN-T) were to be designated as 'Green Lane' border crossings, thus open to all freight vehicles, regardless of cargo type. The Communication also supported the use of electronic solutions, such as electronic freight and loading documents, Intelligent transport systems/River information systems (ITS/RIS) and customs formalities, to achieve 'paperless' transport, which served both to improve sanitary conditions and the efficiency of border checks. The European Commission also proposed to extend the Green Lanes system to neighbouring countries, such as the European Economic Area (EEA) members, Switzerland, the United Kingdom, Eastern partnership[11] countries and Turkey, as well as with and within the six Western Balkan States[12].

Similar measures have been proposed at the international level by the United Nations Economic Conditions for Europe (UNECE) working closely with the International Road Union (IRU). A campaign named '**Open the Borders**' was launched by UNECE in order to keep countries' borders open for the flow of goods. All custom authorities were informed in April 2020 by UNECE and IRU of measures to reduce the impact of COVID-19 on international supply chains. Such suggestions were based on internationally-agreed policies and included considerations such as (i) the application of non-discriminatory measures; (ii) respect for the TIR Convention[13]; (iii) the implementation of the UNECE Harmonization Convention and (iv) the reduction of controls and checks at borders. In particular, efforts to develop the electronic implementation of the TIR system, dubbed the eTIR International System, were quickened to also introduce contactless customs procedures.

Some countries have also temporarily lifted restrictions on road transport vehicles to ease the pressure on road transport operators struggling with limited capacity. For instance, Germany suspended its truck driving ban on Sundays and public holidays between 1 November 2020 and 30 June 2021.

[11] Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine.
[12] Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia and Serbia.
[13] The purpose of TIR (*Transports Internationaux Routiers* in French and *International Road Transport* in English) Convention, based on the TIR system, is to facilitate international customs transit for the movement of goods that include transport by road.

2.2.2. Rail

As noted before, the rail freight segment had not suffered as much as the passenger rail segment, thus the support provided to infrastructure managers and the transport sector as a whole served also to help the rail freight undertakings.

On 7 October 2020, the EU adopted **Regulation (EU) 2020/1429** aimed at establishing measures for a sustainable rail market in view of the impacts of the COVID-19 pandemic. While the regulation focused initially on the period until 31 December 2020, the **Commission Delegated Regulation (EU) 2021/1061** of 28 June 2021 extended the validity to 31 December 2021. The Regulation (EU) 2020/1429 temporarily suspended the provisions of Article 27, 31(3), 36, and 8(4) of **Directive 2012/34/EU** that aimed to establish a single European railway area. Under the Regulation, Member States could authorise infrastructure managers to reduce, waive or defer access charges, reassess the ability of the market to bear mark-ups, and refuse to levy reservation charges. Further, Member States were to compensate infrastructure managers for the specific financial loss resulting from the aforementioned actions.

On 27 May 2020, the EU adopted **Regulation (EU) 2020/698**, which addressed the renewal or extension of certain certificates, licences and authorisations and the postponement of periodic checks and periodic training required under various European legislation for road, rail, and waterborne transport. For the rail sector, it allowed for a legislative extension of the validity of safety certificates and train drivers' licences for a period of six months, considering the difficulty to carry out testing or checking procedures.

According to a survey conducted by the IRG-Rail group at the end of 2020 and the beginning of 2021, the following temporary or permanent financial measures were adopted by Member States or the infrastructure managers. In six countries[14], infrastructure managers adjusted the track access charges, by applying discounts, postponing invoicing or by changing the calculation basis for the charges. Some also applied a relaxation of cancelation charges or reservation penalties. Furthermore, many countries provided State aid to the railway undertakings or infrastructure managers in the form of funding, compensation for losses, supporting loan or credit, and support for workers.

2.2.3. Aviation

Support for the aviation sector as a whole has been thoroughly detailed in Research for TRAN Committee: Relaunching transport and tourism in the EU after COVID-19 - Part III: Aviation sector. This included support for the transport workers with harmonised and coordinated guidance on maintaining sanitary conditions, as well as including them in vaccination plans. The EU also permitted Member States to grant State aid to the aviation sector by temporarily lifting Article 107 TFEU. Similar to the rail sector, the support provided to the entire aviation sector incidentally helped the air cargo sector the most, as it became the main type of operations while passenger transport had been restricted.

The EU's support of the air freight sector came primarily in the form of **guidance** to Member States issued on **26 March 2020 aimed at facilitating air cargo operations during COVID-19**.

[14] Estonia, Italy, Norway, Slovakia, Spain and Sweden.

It encouraged the granting of authorisations and permits for transport from outside the EU, including temporary traffic rights for additional air cargo operations, modifying the implementation of slot restrictions for essential cargo operations, facilitating the use of passenger aircrafts for cargo-only operations, ensuring sufficient cargo capacity in case regional airports were closed for economic reasons, reserving capacity for the supply of essential goods, such as medical and emergency supplies, as well as several other points aimed at supporting the air transport staff.

2.2.4. Maritime

In the maritime sector, the measures adopted by the Commission were primarily **guidelines** to support seafarers, passengers and other persons on board ships, providing recommendations on health, repatriation and travel arrangements. The Commission also called on Member States to allow crew changes and create a network of ports where they can take place without delays.

While the EU extended the Green Lanes system to maritime and other modes, on the national level Member States also took action to ensure that their ports, often the key transport infrastructure of the country, were functioning. Nevertheless, a survey conducted in April 2020 highlighted that there were only very few national, regional or local measures on liquidity applicable to the freight shipping industry (i.e. shipping of general cargo, containers, crude oil or product chemical tankers or dry bulk). The support from banks (i.e. private sector financing) was even less, partly due to the administrative burden and costs to apply.

2.2.5. Urban freight

The key measures affecting urban freight were, on the one hand, policies that changed freight demand patterns, such as the stay-at-home policies and encourage the use of delivery services in place of shopping trips, and on the other hand policies that restricted transport and supply, such as border closures and truck driver restrictions. The combination of the two policies, when measures were first implemented, resulted in temporary shortages in food, essential supplies, such as medicines and hospital supplies. These were eventually remedied with other policies to improve border access (see Section 2.2.1 Road) and lighten the restrictions on drivers.

The reduction in public transport capacity led urban transport planners to improve travel for non-motorised modes. These temporary changes to the road design facilitated safe paths for pedestrians, cyclists and other forms of micromobility, using traffic cones, plastic bollards, construction separators, temporary lane markings, or even just yellow tape. Inadvertently, these lanes also improved the quality of infrastructure used for light freight vehicles, such as bicycles or cargocycles, in last-mile deliveries.

3. EMERGING DEVELOPMENTS AND TRENDS

KEY FINDINGS

- As part of the measures to mitigate the spread of COVID-19 and mitigate supply chains disruptions, there was an acceleration of the digitalisation trend, such as the use of digital documents in place of the predominantly paper-based system in freight transport and a sharp increase in e-commerce to supplement conventional in-store shopping.
- Retailers were pressured to use e-commerce channels during the COVID-19 lockdown measures, leading also to new on-demand services, such as 10-minute grocery delivery services.
- The growth of home deliveries during the COVID-19 pandemic accelerated the growth of parcel lockers and pick-up and drop-off points, as well as alternative urban freight transport vehicles, e.g. cargocycles.
- Supply managers are taking steps to improve the resilience of their supply chain by dual sourcing, enlarging their inventory and supplier base, near-shoring, and regionalising supply chains. According to an OECD analysis, trade regionalisation may not be an effective means to increase the resilience of supply chains, but instead could make them more vulnerable and costly.
- The establishment of Green Lanes for TEN-T corridors, to ensure the continuous flow of goods across EU priority border points, is a good example of measures that can be adopted to safeguard freight corridors.

3.1. Introduction

This chapter addresses the emerging developments and trends related to freight transport that have been recently observed, focusing on the ones that are likely to stay in a post COVID-19 scenario.

The effects of the pandemic (Chapter 1), together with the measures adopted (Chapter 2), induced a series of reactions from private and public actors worldwide. The emerging developments and trends are clustered into 4 trends, a) Acceleration of the digitalisation trend in paperless businesses and e- commerce; b) Increase in home deliveries and a transformation of urban freight transport; c) Increased trade regionalisation and supply chain resilience; and d) Freight corridors.

3.2. Acceleration of the digitalisation trend in paperless businesses and e-commerce

Businesses have been digitalising internal operations, trade and freight, ordering and payment processes even before the pandemic. Digitalisation has long been treated as an important strategy for the EU, and had been explicitly mentioned in the political guidelines of the current European

Commission 2019-2024. As part of the measures to mitigate the spread of COVID-19, this trend has been further encouraged on two main fronts: the use of digital documents to replace the predominantly paper-based system in freight transport and the sharp increase in e-commerce to replace conventional in-store shopping.

Several measures taken to introduce digital documents in freight transport have been mentioned, such as the eTIR International System to replace the current international customs procedures, and the various measures encouraged under the extended Green Lane approach (Section 2.2.1 Road). The objective during the COVID-19 situation of introducing digital freight transport documents is to improve the sanitary conditions at border controls, as well as to increase the overall efficiency of the entire process to supply goods. The EU Digital COVID Certificate is also a result of digitalisation and the advances made in secure data access across the EU. According to a survey conducted for the European Central Bank (ECB), 90% of businesses have had to accelerate their take-up of digital technologies due to the pandemic. Furthermore, a survey of 53 actors in the maritime sector in Singapore (one of the major port cities in the world) indicated that 53% will prioritise blockchain technology within the next 5 years, while 8% already have it as a top-five priority. 27% have already initiated blockchain projects, especially in digitizing documents and enabling track and trace information sharing.

From the perspective of automation, one of the most interesting trends concerns new digital solutions for deliveries. Such solutions are enabling logistics service providers to diversify their services and better react to disruptions. In particular, the integration of information and communication technologies (ICT) infrastructure is increasingly helping transport providers to realise the concept of "eFreight", where "en route" information on the location and condition of transported goods is provided online in an accurate and safe way. This is being used to implement the notion of "intelligent cargo", where goods are self-, context- and location-aware as well as connected to a great range of information services. A consequence of this trend will necessarily involve a paper-free, electronic flow of information connected to the physical flow of goods, in order to join the rapid rise of e-Freight.

The ECB survey for the fourth quarter of 2020 also highlighted that around 20% of the respondents who belonged to 'leading euro area firms' expect that the pandemic will lead to more e-commerce or virtual selling[15]. In 2020, a sharp increase to 73% from 68% in 2019 of the number of online shoppers[16] was observed within the EU, which is an increase of 5 percentage points compared to 2 in the year before and 1 in 2018. This figure is expected to increase by 2% in 2021 (see Figure 1).

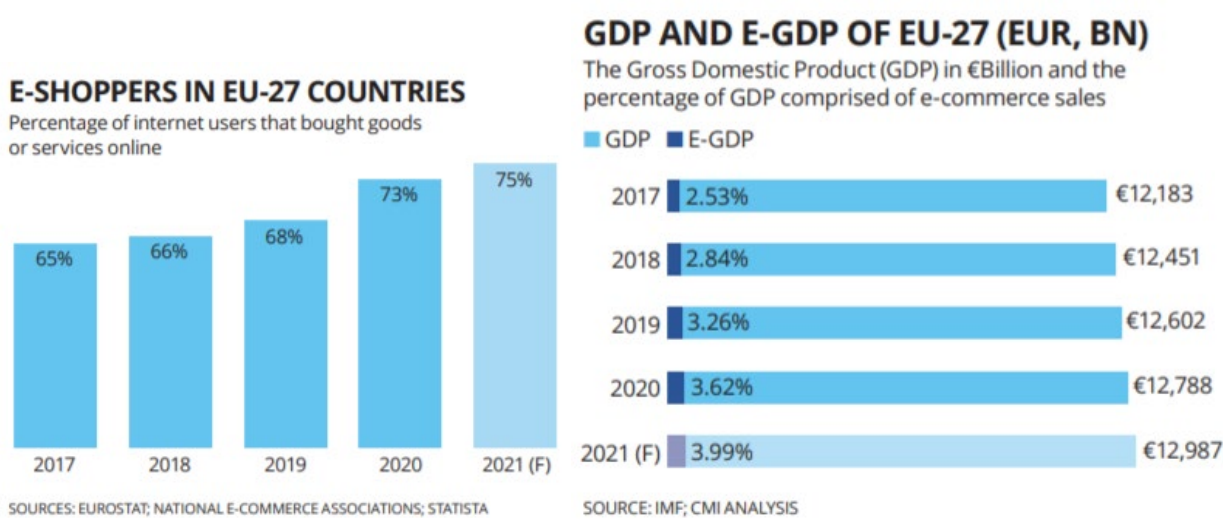
During the pandemic, many retailers and entrepreneurs had to add an online channel to their businesses to cope with the e-commerce boom and avoid a total loss of revenues. Even so, already established digital marketplaces, such as Amazon Europe, Bol, and Zalando, were more prepared, and were able to increase their revenues substantially since the beginning of COVID-19. Offline-only businesses that refused to launch online offerings experienced higher losses, either by forced closures or lower consumer' turnout. Statistics show that consumers are happy with online shopping, and they are likely to continue using digital means for their purchases regardless of a virus threat.

Overall, the importance of e-commerce to the gross domestic product (GDP) of EU-27 has been consistently increasing and can be expected to continue doing so in the future.

[15] Virtual selling is the remote use of digital processes and technologies in a selling process. (https://www.gartner.com/en/sales/glossary/virtual-selling, Accessed 15.10.2021)

[16] Note that this includes the purchase of physical goods, digital goods, as well as services.

Figure 1 Online shoppers and the share of e-commerce sales to the GDP in EU-27



Source: European E-commerce Report.

While it is clear that e-commerce experienced a rapid growth worldwide, it is interesting to observe how this trend diversified across the world. Before the pandemic, e-commerce was already strongly established both in Northern America and Western Europe, while its market share was limited in transition economies of Central Asia. Highly developed economies, such as in Europe, were often resilient enough to accommodate the growth of e-commerce demand, due to their higher level of digital inclusion[17], sufficient digital infrastructure in place, as well as more capacity for government intervention to support the e-commerce sector. In contrast, less developed countries experienced the forced closures of businesses, as the conditions for an agile pivoting towards online channels, such as those mentioned above, were not present.

3.3. Increase in home deliveries and the transformation of urban freight transport

When home deliveries had become a necessity for consumers due to lockdown measures and fear of the spread of the virus, many retailers added e-commerce channels to their brick-and-mortar stores. This is expected to accelerate the increase of e-commerce and urban deliveries in the future. In this section, the expected trends in terms of home deliveries and transport technology will be discussed.

Besides the rise in e-commerce, another trend in urban freight transport, which also builds upon the growth of e-commerce, is the rise of the "on-demand economy". Before the pandemic, shoppers could immediately purchase what they needed, for instance from grocery stores. However, during the lockdown, when they were more dependent on grocery delivery companies, this loss in flexibility and agility became an opportunity for the rise of "10 minute grocery delivery services", such as UK's

[17] Digital Inclusion refers to **the activities necessary to ensure** that all individuals and communities, including the most disadvantaged, have access to and use of information and communication technologies (ICTs).

Deliveroo and Zapp, Turkey's Getir, and Germany's Gorillas. While it is uncertain whether this particular business model will remain, the amount of venture capital poured into such initiatives does indicate a potential trend in urban deliveries.

The growth of home deliveries in dense urban areas could increase the number of trips needed to deliver goods, causing higher levels of urban traffic. Depending on how goods are transported, there could be an increase in air pollution, CO2 emissions, congestion and other externalities. It is estimated that in most cities, commercial vehicles are responsible for 15-25% of urban vehicle kilometres travelled, occupy between 20-40% of the motorized road-space and cause between 20-40% of transport-related CO2 emissions. In many metropolitan areas, congestion costs account for up to 5% of the national GDP. From a supply chain perspective, the last mile accounts for 25% of logistics supply chain emissions and 28% of the total transport costs. Thus, it is imperative that cities manage the growth of urban deliveries well, while encouraging a high level of service and low traffic impacts.

It is expected that cities play a more active but nuanced role in managing freight transport. Some cities are adopting harder policies with rules for traffic entering cities (or certain city areas), i.e. Urban Vehicle Access Regulations (UVARs), such as low emissions zones (LEZs) and zero emissions zones (ZEZs). For LEZs and ZEZs, vehicles that do not fit the required emissions standards cannot enter the city or a specific area within the city. Over 250 European cities have instituted LEZs. The Netherlands aims to have 30-40 of their largest cities with ZEZs implemented by 2035, as a recommendation of the Dutch National Climate Agreement to significantly reduce CO2 emissions from the logistics sector.

The transport industry has also responded with a variety of measures to reduce emissions, increase levels of service, and improve cost-efficiency for the last mile transport. These include parcel lockers, pick-up and drop-off (PUDO) points, the adoption of cargocycles, and zero emissions vans/trucks for transport operations.

With respect to the growth of parcel lockers and PUDO points, the increase of urban deliveries is prompting companies to partner up to create major locker facilities. Smart lockers are already in use to ease the delivery process. Similar to traditional mailboxes, they are temporarily associated with one person, who is the only one to possess the QR code to open them. The customer holds the code to open the locker only if he or she makes a purchase and chooses for it to be delivered in the locker. Lockers are extremely useful in ensuring the quality customer experience as they eliminate issues where the recipient does not have control over the pickup point or the delivery time. Currently, Decathlon, Cleveron and Cubee partnered up together to install parcel lockers together. This is not only useful in terms of customers' experience, but by locating all lockers together close to the final delivery point, they can be conveniently accessed by customers as well as limit traffic by carriers. The implementation of smart lockers on a large scale will be pivotal in advancing the usage of autonomous ground vehicles with parcel lockers. These sorts of vehicles are equipped to deliver small freight without human intervention. They are programmed to park in specific areas of each delivery district and work as a sort of temporary stationary locker. They would replace the human workforce and be available 24/7, thus reducing costs of fixed lockers and the expenses of the entire transport chain.

With respect to the increase of the use of cargocycles and zero emissions vehicles for deliveries, this can be a response to cope with UVARs, i.e. LEZs or ZEZs, as well as incremental improvement of the electric vehicle market. As COVID-19 increased the use of home deliveries, the density of home deliveries in an urban area also increased. As density is related to profitability of serving the demand in that area, fleet operators are in a better financial position to increase investment in low and zero-carbon

vehicles for last-mile deliveries. Such vehicles range from eVans to e-cargo-bikes, allowing for a variety of multimodal efficient means of transport. In Canada, the US, China and Europe a boom in zero-emission vehicles has been experienced in the recent months, with an increase of up to 78% of new alternative fuel models of trucks being available.

3.4. Increased trade regionalisation and supply chain resilience

The supply chain and ocean freight disruptions caused by border closures, movement restrictions and other indirect effects of COVID-19 (discussed in Chapter 2) raised concerns about the resilience of supply chains, especially of those reliant on global trade. A survey with supply chain leaders highlighted that supply chain issues caused by the location of suppliers, production and distribution were revealed by COVID-19. 93% of respondents plan to increase resilience across the supply chain by dual sourcing, increasing inventory, nearshoring[18], increasing the supplier base, and regionalising supply chains. Nearshoring, increasing the supplier base and regionalising supply chains point to the shortening of supply chains, especially in order to reduce the influence of borders and distance on the supply of goods.

Trade regionalisation is also an outcome of the desire to reinforce the notion of the nation-state. For example, the US is seeking to decouple from China, restricting access to critical assets (such as technology) and raising costs for companies' market access. The increasing protectionism attitude of the US has also prompted East Asian economies to limit their dependence on imports from Western markets, relying on China for an increasing share of consumer demand. The United Nations Conference on Trade and Development (UNCTAD) also provided much evidence of the decreased flow of goods at the international level. According to an analysis of the import statistics from the EU, COVID-19 clearly had an influence on the volume of trade on the same continent (Europe) and a clear drop in the average geographic distance of imports.

If regionalisation is indeed happening or rather, if it continues to happen, it might however not be a solution to increase resilience in supply chains. Instead, regionalisation would add to further GDP losses and increase the vulnerability of supply chains to domestic supply chain shocks. This vulnerability arises because regionalisation offers generally less flexibility for adjustment in the face of shocks, especially in substituting suppliers or customers, who may be affected by the shocks. Any gains in stability will come at a price of efficiency and income.

3.5. Freight corridors

The development of freight corridors is also an important trend spurring out of movement restrictions imposed by COVID-19. Freight corridors reduce barriers to the movement of goods along the corridors, thus facilitating trade. The Global Gateway scheme proposed by the EU will compete with China's Belt and Road Initiative, presenting ambitious infrastructural goals to enhance transport connectivity partnerships with countries across the globe. The establishment of Green Lanes for TEN-T Corridors to ensure the continuous flow of goods was also a great example of this newly developed trend.

[18] Nearshoring is where a business moves its operations to a nearby country from one of greater distance.

It bears to be said that freight corridors were already a priority of the EU before the pandemic. Regulation (EU) No 913/2010 of 22 September 2010 initiated the establishment of a European rail network for competitive freight transport, setting out rules e.g. for the selection, organisation and management of the freight corridors. In 2013, Regulation (EU) 1315/2013 developed the guidelines for the development of the trans-European transport network (TEN-T), with the objective to close gaps, remove bottlenecks and technical barriers, as well as to strengthen social, economic and territorial cohesion in the EU. 11 Rail Freight Corridors (RFCs) and 9 European Core Network Corridors (CNCs) were defined.

On 14 December 2021, the Commission adopted four proposals to modernise the EU 'transport system, including a revised TEN-T Regulation, that contains measures aiming to improve freight transport.

4. RECOMMENDATIONS FOR EU POLICY MAKERS

KEY FINDINGS

- The digital transformation is essential to cope with the consequences of COVID-19. EU policy makers should provide funding opportunities for companies to invest in digital technologies and digital skills to support this transition in freight transport.
- An EU training programme on digital skills such as data analytics could be developed and provided to MSs' transport work force with the needed skills to address the labour market demands.
- Several innovations need a clear and flexible regulatory framework that allow for experimentation, e.g. automated vehicles, drones, and the development of new business models in the e-commerce sector.
- In some cases (e.g., for railways undertakings) a review of State aid guidelines might be needed to avoid market distortion.
- Initiatives modelled on what the Green Lanes initiative achieved, i.e. reducing border crossing time and regulatory burden, should be implemented for extra-EU border crossings to improve freight transport efficiency.
- The truck driver shortage should be addressed by implementing policies that increase the sector's attractiveness, e.g. increasing salaries and improving the social conditions.

4.1. Introduction

This chapter provides recommendations to policy makers that are needed to overcome the negative impacts felt on global trade and freight transport due to COVID-19 (Chapter 1), learning from the measures adopted (Chapter 2) and taking into account the recent developments and trends observed (Chapter 3). COVID-19 showed the vulnerability of the supply chain to disruptions by identifying its weak points, but it also hinted at measures that proved fundamental to keep supply chains open. The lessons learned during the pandemic point to where EU support is still needed to ensure the international free flow of goods while at the same time guaranteeing the level playing field for all stakeholders.

4.2. Recommendations

- **Support companies' digital transformation: technology and skills**

Digital technologies have the potential to boost more inclusive and sustainable growth by spurring innovation, generating efficiencies and improving services. It is one of the trends boosted by COVID-19 which has shown that when technology is correctly implemented in the supply chain and logistics processes, logistics providers and transport companies work more efficiently and can be better

prepared to tackle disruptions in real time. For this reason, it is essential that EU policy makers continue to provide funding opportunities for companies which intend to undertake a digital transformation and to those that are investing in new technology, such as blockchain, the internet of things, and cloud computing.

ICT and data sharing can increase the coordination of freight actors. For example, for the rail freight sector, it improves the allocation of existing capacity, which enhance utilisation and profitability of the industry. EU policy makers could provide targeted funding for digital solutions and favour the allocation of subsidies to companies that are investing in ICT.

While smart solutions can result in scale-up freight interventions, their attainment is unlikely to happen if stakeholders are not aware of or trained for the new possibilities provided by technology. Since most barriers on freight development involve a lack of information and cooperation in decision-making, it is crucial that involvement mechanisms are incorporated in institutionalised structures, being embedded in the company strategy.

To keep the level playing field, some retailers might need more support than others, not only in terms of financial support but also in terms of skills. According to Ecommerce Europe, the key priorities for supporting very small companies going digital include awareness-raising, providing advice on how to establish an online presence, allowing companies to reach their customer base, and financial support to entrepreneurs.

An EU training programme on transversal digital skills, such as data analytics, could be developed and provided to EU MSs transport workers, to make sure that they have equal opportunities to better prepare themselves to fit the market. Furthermore, the types of skills that would be useful to each transport sector, e.g. in the maritime sector, could be adopted in higher learning and vocational training institutes.

- **Develop clear regulatory frameworks**

Several freight transport-related stakeholders are working on how to innovate their businesses and make them more resilient to future pandemics and other types of disruptions. Some of these innovations, such as automated vehicles and drones that cope well with situations where human contact is undesired are still missing a clear regulatory framework. A clear legal framework would encourage their use and quickly scale up their use in transport operations. To tackle this issue, EU policy makers should adopt clear and effective rules and protocols that clarify standards and rules that allow the usage of drones and automated vehicles.

Another example relates to e-commerce, where regulatory frameworks reinforce the artificial distinction between online and offline commerce, even as companies look into business models that combine both. Regulatory flexibility in response to the COVID-19 crisis is beneficial and was observed, e.g., through the easing of caps on contactless payments in the Netherlands. Similar flexibility could be considered for e-commerce, such as by relying on properly monitored and evaluated experimental regulatory waivers (e.g. regulatory sandboxes [19]), which have been used to test new technologies, e.g. drones and digital payment mechanisms, in a successful manner.

[19] A "regulatory sandbox" is a concept that enables firms to test innovative products, services or business models. Within such sandbox, regulatory obligations are partly not applicable.

A regulatory environment to make sure there is a level playing field regarding marketplaces should also be adopted. Online platforms have emerged as a way for retailers to reach customers online without operating their own web-shop. While some platforms have waived a few restrictions - eBay.uk temporarily dropped registration fees for small sellers (up to 250 items) - some still had restrictions that do not allow retailers to also use their own online channels. Further, some platforms use the data to recreate and thus, undermine their sellers' business model. Finally, the regulations applicable to domestic (within EU) sellers and overseas sellers should be enforced/compliant with EU rules, including safety regulations, product labelling and information, etc.

- **Ensure fiscal support to road freight transport companies**

Although several logistics providers had some unexpected gains thanks to the increase of e-commerce, most road freight service providers experienced financial losses. In some geographical areas, where lockdowns were fully implemented for extended periods of time and economic sectors requiring land transport, such as manufacturing, were not running, road freight rates dropped. In these cases, it is important that policy makers enact instruments dispensing sufficient financial incentives and subsidies to road freight service providers, for example by reducing upfront costs for vehicles or operating costs. At the national level, policy makers should adequately relieve road transport companies through targeted tax exemptions, tax deductions and decreased rates on tolls and truck levies.

- **Review State aid guidelines**

Several operators have required direct or indirect state support in order to maintain a level playing field while also ensuring the competitive position of EU operators at the international level. Public transport and aviation are particularly vulnerable to the impacts of changing user choices, worsening economic conditions, and the tightening of public budgets. State aid rules will probably need to be updated and potentially impose stricter criteria, such as maintaining connectivity or minimum levels of service.

To ensure that the rail industry can be supported, EU policy makers should review the State aid guidelines for railway undertakings. Under the current guidelines, operational aid has the potential of distorting the market. Since the rail freight market can thrive where its competitive advantages are fully utilised, subsidies should be targeted at specific spheres of railways. For instance, the guidelines could be revised to focus aid on infrastructure use, which in turns could reduce external costs for companies. In addition, due to the rising role of intermodal transport, the guidelines should especially provide guidance for State aid measures that encourage multimodality.

State aid should be driven by an assessment of the potential benefits and not only to mitigate losses. The Finnish COVID-19 package gives an example by linking State aid to the policy objective of supply security.

- **Institutionalise and enhance the Green Lanes initiative**

The Green Lanes initiative, where TEN-T border crossings should take maximum 15 minutes, is a useful instrument implemented for TEN-T border crossings as a fast track procedure that reduces the regulatory burden and speeds up border crossing. EU policy makers could consider keeping some of

the guidelines and protocols for the future. It would be worth assessing whether some of measures adopted to reduce the administrative burden could be institutionalised.

- **Address the shortage of truck drivers**

As mentioned in the Research for TRAN Committee: Relaunching transport and tourism in the EU after COVID-19 - Part II: Transport workers briefing, the increase in e-commerce demand has intensified the shortage of European drivers that already existed. IRU carried out a research amongst small and medium transport and logistics companies in several European countries[20], estimating the freight driver shortage to rise from 23% in 2019 to 36% in 2020.

EU policy makers should adopt initiatives to increase the attractiveness of the sector. A useful short-term measure should focus on an increase of pay in all Member States. Whilst the EU does not have the competence to set minimum wages in Member States, by providing funding to companies and tying it to the condition that salaries are increased, policy makers could ensure the sector is more attractive for new workers. In turn, this might also prompt companies to introduce bonuses and new opportunities for truck drivers. In the long run, policy makers should become more involved in the collective bargaining process of truck driver unions, as to provide leadership in addressing workers' social conditions and, in turn, improve the image of the sector.

- **Align policies across different governmental levels**

Collaboration should not just occur between the government and stakeholders, but also between different governmental levels. While initiatives undertaken by single cities are interesting in terms of the example or case study they provide, if such practices prove successful, governments should step in to ensure that good practices are replicated throughout their territory. As a result, cooperation among city, regional and national governments could facilitate planning, provide coherent frameworks for operators and create predictability. Many companies operate across multiple cities and countries. National policy makers should adopt common approaches in the territory of each Member State to allow businesses to plan and make investments with greater confidence.

[20] Spain, UK, France, Germany, Austria, Netherlands, Norway, Poland, Romania, Czech Republic.

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This thematic briefing provides the European Parliament's Committee on Transport and Tourism (TRAN) with an overview of the repercussions of the COVID-19 pandemic on EU freight transport, as well as policy recommendations to address the challenges emerging from the crisis.

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