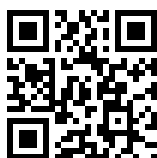


Relaunching transport and tourism in the EU after COVID-19

Part I: Overview



Transport and Tourism



RESEARCH FOR TRAN COMMITTEE

RELAUNCHING TRANSPORT AND TOURISM IN THE EU AFTER COVID-19

Part I: Overview

Abstract

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

This *overview briefing* will be followed by 5 *thematic briefings*, focusing on specific issues relating to transport/tourism and COVID-19.

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

AUTHORS

PANTEIA: Maria RODRIGUES, Tharsis TEOH, Carolina RAMOS, Thomas de WINTER, Ljubica KNEZEVIC
Università degli Studi Roma Tre: Edoardo MARCUCCI, Giacomo LOZZI, Valerio GATTA, Barbara ANTONUCCI, Nicole CUTRUFO, Lidia MARONGIU
POLIS: Giacomo LOZZI, Ivo CRÉ

Research manager: Ariane DEBYSER, Davide PERNICE, Balazs MELLAR
Project, publication and communication assistance: Mariana VÁCLAVOVÁ, Kinga OSTAŃSKA
Policy Department for Structural and Cohesion Policies, European Parliament

LINGUISTIC VERSIONS

Original: EN

ABOUT THE PUBLISHER

To contact the Policy Department or to subscribe to updates on our work for the TRAN Committee please write to: Poldep-cohesion@ep.europa.eu

Manuscript completed in February 2021
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This document is available on the internet in summary with option to download the full text at: <https://bit.ly/2PryheX>

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Please use the following reference to cite this study:

Rodrigues, M; Cvelbar, L; Lozzi, G; Teoh, T; Ramos, C; Antonucci, B; Marcucci, E.; Gatta, V. 2021, Research for TRAN Committee – Relaunching transport and tourism in the EU after COVID-19, European Parliament, Policy Department for Structural and Cohesion Policies, Brussels

Please use the following reference for in-text citations:

Rodrigues, Cvelbar, Lozzi et al (2021)

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LIST OF ABBREVIATIONS

ECF	European Cycling Federation
ECTAA	European Travel Agents' and Tour Operators' Associations
EMSA	European Maritime Safety Agency
EP	European Parliament
ETC	European Travel Commission
EU	European Union
EUR	Euro
GDP	gross domestic product
IATA	International Air Transport Association
IRU	International Road Union
MFF	Multiannual Financial Framework
MICE	meetings, incentives, congresses and events
OECD	Organisation for Economic Co-operation and Development
OEM	Original Equipment Manufacturer
SEK	Swedish krona
SME	small and medium-sized enterprise
TEU	twenty-foot equivalent unit
TRAN	Committee on Transport and Tourism
UIC	International Union of Railways
UITP	International Association of Public Transport
UNCTAD	United Nations Conference on Trade and Development
UNWTO	World Tourism Organization

USD	US dollar
VAT	value added tax
WHO	World Health Organization (UN)
WTTC	World Travel & Tourism Council

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EXECUTIVE SUMMARY

KEY FINDINGS

- Commuting and shopping patterns in urban areas have changed with increased walking, cycling, car travel, and online shopping, at the expense of public transport use. Long distance travel declined drastically, leading to revenue and job losses in the transport and tourism sectors and those dependent on them (e.g. industrial and retail sectors).
- The impact on freight transport has been modest but depends on the future direction the economy takes.
- The main operational challenge facing the transport and tourism industry has been to ensure the health of personnel and passengers, while securing an adequate supply of services.
- The EU provides crucial assistance to citizens, governments and the transport and tourism industry so that they can emerge better placed to achieve sustainability and resilience following the present crisis.
- The EU has provided guidelines, legislation and financial support to mitigate virus spread, maintain essential cross-border services and protect the single market.
- The industries' recovery relies on the vaccination campaign's successful roll-out, and on financial support and policy actions that will help the industry to adapt to economic situation.

The COVID-19 pandemic severely impacted the EU's transport and tourism sectors in 2020, both directly **impacting the industries' income** and indirectly by **changing mobility and tourism patterns**. While the EU's economy has suffered, the impact on the income of countries and regions reliant on tourism have been worse, leading in some areas to 40% job losses. Commuting and shopping patterns in urban areas adapted to government-imposed travel restrictions by increasing walking, cycling, car travel, and online shopping, at the expense of public transport ridership. Travel by rail, cruise, passenger ships, and flights have suffered, in line with a 70 % drop in international tourism demand, leading to revenue and job losses in both sectors and the sectors that depend on them (e.g. industrial and retail sectors). Though the impact on freight transport have thus far been modest, the sector is expected to shrink in the coming years, especially if the economy is in recession.

The subsectors in the **tourism industry** were impacted by the pandemic in different ways. **Tourist arrivals** to Europe dropped 68% year-on-year (yoy). **Intra-EU tourism** also suffered, as visits to popular destinations, such as France, Germany, and the Netherlands, were just 40 % compared to 2019. **Domestic tourism** was affected, depending on accessibility by road (e.g. islands of Cyprus and Malta), its generally strong demand (e.g. Germany and France), or smaller tourist destinations (e.g. [Slovenia's](#) grew by 43%). The effect on travel propagated to accommodation providers, tour and travel operators, and the hospitality industry.

EU action is essentially structured around: i) guidelines; ii) dedicated legislation to provide relief to the transport sector; iii) economic support, as outlined in the Communication on the coordinated economic response to COVID-19 to the Temporary framework for state aids, the recovery plan and the Multiannual Financial Framework (MFF). It aims at keeping the single market functioning, mitigating the virus spread, and ensuring the proper functioning of essential services, especially in cross-border movement and freight.

The **Commission published guidelines** to promote a consistent set of passenger rights, including rights for ticket reimbursement or alternative travel solutions. Recommendations to reduce disruption of passenger and tourist movement have been adopted by the EU Council, providing common principles for rules on testing, passenger locator forms and quarantine periods. **Legislation** has been adopted to temporarily reduce the administrative burden of transport operators, managing bodies or authorities in the context of the COVID-19 pandemic. The EU published a package of guidance and recommendations to help Member States gradually lift travel restrictions. The Commission also adopted a **State aid Temporary Framework**, which allowed Member States to provide state aid to the economy, including the transport and tourism industries. The **MFF** and **'NextGenerationEU' recovery plan** are expected to help the EU rebuild its economy, including transport and tourism sectors, during and after the pandemic.

Member States have adopted a wide variety of measures that promote the health of transport workers, financially support and boost investments in the transport sector, and relax existing transport-related policies. Besides fiscal and monetary measures, Member States have focused efforts on measures that support workforce retention and re-skilling, and enabling quick responses to the impacts of the pandemic.

Promising **initiatives to mitigate the crisis** in the transport sector have focused on **digital tools, innovative data analytics, automation in transport, contactless solutions, and better coordinated guidelines** to reduce the spread of the virus. A few solutions have aimed at providing better information to travellers and transport operators, such as displaying real-time occupancy of trains (e.g. Trainline) and route planners integrating cross-border delays (e.g. Truck Route Planner). Contactless solutions are part of the strategy to reduce the spread of the virus, and have been used for cross-border operations, ticketing and payment.

Traveller confidence in **international tourism** can be restored with clear and unified travel protocols, especially in safety and hygiene measures. As international travel reduced, the tourism industry shifted away from mass tourism towards local, domestic and regional tourism, specifically by enhancing the hospitality experience, promoting niche and 'experience' tourism, and emphasizing sustainability. The pandemic has accelerated the pace of digitalization in tourism industry through video conferencing; automating and providing touchless operations, and improving data management.

The **EU's aim** is to **repair the short-term damage caused by the pandemic and invest towards the European Green Deal targets, resilience in the transport system and the adoption of 'smart' technology**. Recovery of the **industries rely on the vaccination campaign, financial support, and policy actions** that help them adapt to the economic situation. It is unlikely that the industries will revert to pre-COVID-19 patterns after the crisis is over, considering the behavioural and structural changes they have experienced. These changes include the strong shift to online shopping, the use of smart and teleworking solutions, automation, virtual tourism and better data analytics. These are expected to continue to transform the industries, significantly lowering the demand for passenger transport services.

Investing in sustainability could be an opportunity for the transport and tourism sectors as the crisis recedes. Freight could shift towards efficient modes, such as rail, shipping, and towards the use of clean fuels. Environmentally-friendly and niche tourism could replace mass tourism, which would be more locally acceptable and profitable, and preserve good working conditions.

The **role of the EU** is vital to help citizens, the transport and tourism industries, and governments overcome the crisis and emerge stronger, especially to achieve sustainability and resilience.

Recommendations include facilitating active modes, such as walking and cycling, in urban planning, flexible working, data-driven monitoring of mobility patterns and transport planning, reducing cross-border administrative burdens, promoting contactless solutions and digitalisation of the industry.

The EU could also **promote coordinated health and safety protocols** in transport and tourism sectors. Harmonization of the protocols would help to improve traveller perception and promote collaboration. Identifying what the vaccine will do and how it can be integrated in travel protocols, e.g. with a digital vaccine passport, will be vital in the short term, as vaccination has begun.

Financial measures, especially for SMEs, could support workers, protect jobs and maintain services in the short term. Finally, the EU should take advantage of the crisis to stimulate sustainable development with an EU Green Scheme for destinations and businesses, and to provide investment in knowledge on sustainable practices implementation at destinations' and operators' levels.

1. STATE OF PLAY: OVERVIEW OF THE IMPACTS OF COVID-19 ON TRANSPORT AND TOURISM

KEY FINDINGS

- The global pandemic severely impacted the EU's transport and tourism sector, both directly (e.g. through the industry's loss of revenue and jobs) and indirectly (e.g. by changing mobility and tourism patterns).
- While the overall economic health of the EU has suffered, the income of countries and regions reliant on tourism have fared worse, leading in some areas to 40% of jobs being lost.
- Commuting and shopping patterns have largely adapted to government-imposed restrictions on movement while recommendations have led to a drastic decrease in public transport ridership, an increased share in walking, cycling and travel by car, and a marked growth in online shopping.
- Though the impact on freight transport has thus far been modest, the sector is expected to contract in the coming years, especially if the economy suffers a recession.
- Long distance passenger transport by air, cruise and passenger ships, and rail has suffered, in line with a 70 % drop in international demand, leading to revenue losses and retrenchment in the sector and those that depend on them.
- Domestic tourism is expected to lead the sector's recovery in 2021, while the recovery of international tourism will continue until 2025.

1.1. Introduction

The World Health Organisation (WHO) was first alerted to what would eventually be labelled as the COVID-19 virus on 31 December 2019. Governments around the world have been trying to mitigate the rapid spread of the virus and its health, social and economic after-effects ever since. Some of the [key events](#) are shown in Figure 1.

Figure 1: Highlights on Transport and Tourism until November 2020



Source: Own elaboration based on [WHO](#), [European Commission](#), [Reuters](#), [Bloomberg](#)

The pandemic has significantly impacted the economy, and continues to do so, especially in the transport, mobility, travel and tourism sectors. The emergency has obliged several governments to prohibit unnecessary movements and to adapt to the mobility needs of essential workers and goods, in order to safeguard health and contain the spread of the virus. There was a first strict set of measures in almost all EU Member States in an attempt to control the spread of the virus, and currently some Member States are again in partial or total restrictions, with more restrictive measures being applied in countries that had a more relaxed approach during the first wave. For example, the Netherlands changed its internal regulations in 1 December 2020 to make the use of [masks](#) mandatory in all buildings and covered spaces accessible to the public. Authorities, transport and tourism actors from all over the world have had to act quickly and find rapid and efficient solutions to guarantee safe mobility or to cope with the consequences of not being able to offer their services. All of these measures, ranging from school and workplace closures to internal and international travel restrictions, significantly impacted the conventional mobility assets, such as car ownership, while shaping new trends that prompted a change in people's [mobility habits](#).

The most significant changes in behaviour, which had an impact not only on mobility but on people's lives, were travel restrictions and mandatory lockdowns requiring people to stay indoors and – if possible – work from home. After the first lockdowns, several Member States extended teleworking. After some restrictions were lifted, in order to ensure social distancing, shifts were arranged to avoid crowded workplaces and hybrid forms of working (e.g. 2 days at office and 3 days teleworking) have since become the new normal in many EU Member States. In November 2020, the public were again advised to work from home as much as possible, because of the steep increase, reaching [9 million infections](#) in the EU (as of 30 November 2020). [Risk aversion and self-imposed social distancing](#) are resulting in changes to personal mobility patterns and user choices.

Whether as employees or consumers, many individuals are limiting trips that cannot be avoided through technology – and will continue to do so. Since the COVID-19 pandemic, online meetings, virtual conferences and online classes have replaced physical gatherings. Health and safety protocols at destinations have more relevance than ever before. Various measures on containment and mitigation have emerged by various European Authorities and in each Member State, such as those targeting aviation travel safety and restrictions. For example, on 30 June 2020 the EASA published their [“Operational guidelines for the management of air passengers and aviation personnel in relation to the COVID-19 pandemic”](#). On 13 November 2020, the same Agency published a [guideline for the Cabin Crew](#) to update their training and protocols during the pandemic. Furthermore, on 15 June 2020, the European Union published the [RE-Open Europe](#) tool which provides an interactive-coloured map of EU and EEA. This colour code classifies each country in red, green, orange, yellow and grey based on the epidemiological situation. While the [Council of the EU](#) adopted on 13 October 2020 a recommendation on a coordinated approach to the restrictions of free movement and on implementing common criteria (self-quarantine and testing) especially for red areas, not every Member State has implemented it yet.

1.2. Overall socio-economic indicators

The impacts of COVID-19 can be observed in indicators related to gross domestic product (GDP)¹, unemployment², bankruptcy³, etc. It is also possible to see differences across socio-demographic groups⁴, socio-economic positions⁵, etc.

The shutdown of economic activities was already felt in terms of GDP during the first half of 2020. According to the [Autumn 2020 Economic Forecast](#), the EU economy was expected to contract 7.4 % in 2020 before recovering with growth of 4.1 % in 2021 and 3 % in 2022.

Looking at the figures from January to September 2020, one can observe an increase in the unemployment rates of almost all EU Member States from March onwards. Greece, Spain and Italy are those with the [highest levels of unemployment](#), with Greece and Spain reaching over 16 % of the labour force in August. Continuing existing trends, the unemployment remains much higher within the [15-24 age group](#), having double the rate compared to the 25-74 age group. It is foreseen that the [unemployment rate](#) in the EU will rise from 6.7 % in 2019 to 7.7 % in 2020 and 8.6 % in 2021, before declining to 8.0 % in 2022.

The impact of the crisis on employment is not equally distributed. Regions where the economy is highly dependent on tourism suffered more considerably, e.g. Crete, Ionian islands, Canary islands, and Algarve region (Portugal), [having 40 % or more jobs potentially at risk](#). These regions are particularly reliant on international tourism and local consumption, whether in the retail or hospitality industry, and were therefore hit by the loss of tourist visits. Furthermore, the extent to which activities have recovered during the high season helps to determine the actual economic [decline in tourist destinations](#). The longer and more stringent the containment measures, the higher the risk for regional economies.

The potential for teleworking is unevenly distributed within countries and it is highly dependent on employee's responsibilities. Urban areas have a higher share of occupations that can be performed remotely compared to activities carried out in [rural areas](#).

1.3. Impacts of COVID-19 on Transport

The impacts on the transport sector are a consequence of the following measures: a) restriction of unnecessary trips (e.g. commuting or leisure travels), b) introduction of staying at home and teleworking (where possible), c) mobility adapted to the needs of essential workers and goods in order to safeguard health and contain the spread of the virus, and d) aversion to risk and self-imposed social distancing. These measures affected both passenger and freight transport. For example, walking,

¹ Gross domestic product (GDP) is a measure for the economic activity. It is defined as the value of all goods and services produced less the value of any goods or services used in their creation. Source: EuroStat. [Online] Available at: [https://ec.europa.eu/eurostat/web/products-datasets/tec00114#:~:text=Gross%20domestic%20product%20\(GDP\)%20is,measure%20for%20the%20economic%20activity.&text=T he%20volume%20index%20of%20GDP,average%20set%20to%20equal%20100](https://ec.europa.eu/eurostat/web/products-datasets/tec00114#:~:text=Gross%20domestic%20product%20(GDP)%20is,measure%20for%20the%20economic%20activity.&text=T he%20volume%20index%20of%20GDP,average%20set%20to%20equal%20100).

² Unemployed: comprise all persons of working age who were: a) without work during the reference period; b) currently available for work; and c) seeking work. Source: ILO [Online] Available at: https://www.ilo.org/ilostat-files/Documents/description_UR_EN.pdf

³ Bankruptcy: a business that cannot be saved and must be wound up. Source: European Commission. [Online] Available at: https://ec.europa.eu/info/sites/info/files/final_report_formatted_jiipib2_for_publication_final_opoce_0.pdf

⁴ Socio-demographic groups: different groups categorized by age, sex, education, migration, background and ethnicity, religious affiliation, marital status, household, employment, and income. GESIS (Leibniz Institute for the Social Sciences): [Online] Available at: <https://www.gesis.org/en/gesis-survey-guidelines/instruments/survey-instruments/socio-demographic-variables#:~:text=Socio%2Ddemographic%20variables%20include%2C%20for,household%2C%20employment%2C%20and%20income.&text=They%20include%2C%20for%20example%2C%20socio,information%20on%20education%20and%20income>.

⁵ Socioeconomic position (SEP) is the general term used to refer to the most common forms of inequality. These are usually accepted to be income, wealth, status (or prestige) and social class. Source: LIFEPAH Consortium. [Online] Available at: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0178071#abstract0>

cycling and private car use became the most popular modes of transport, while public transport and aviation are being associated to the risk of being infected and thus were most negatively affected.

On the other hand, freight transport was much less affected than passenger transport, ensuring essential supply chains continued to function and guaranteeing distributions of vital goods such as food and medicines. For instance, year-to-date trade-flows along the North-Sea Mediterranean TEN-T corridor with the rest of the world dropped by 26 % compared to a 15 % drop for the rest of Europe⁶. E-commerce increased substantially, a result of risk aversion but also of the physical closure of non-essential stores in most Member States during the first and the second pandemic waves.

The impacts of COVID-19 on the transport sector are described below by transport mode, in regard to both passenger and freight transport.

Urban mobility

According to a SLOCAT⁷ survey of 62 countries and 89 cities, public transport use fell to its lowest level in April 2020: a decrease of [76 %](#) compared to the pre-COVID-19 baseline.

Public transport and shared mobility services have come to be regarded as unsafe through the pandemic and were temporarily discharged in favour of private vehicles such as cars and bicycles, and walking. EU countries introduced various measures to mitigate and guarantee a safe distance between citizens. For example, contactless payments for public transport. Between June and July 2020 Berlin implemented [24 km of temporary bike lanes](#) and their goal is to transform them from temporary to permanent. Also in July 2020, Glasgow and Edinburgh launched a free-bike share service to alleviate the public transport pressure. In April 2020, [Milan started reducing the speed limits of its streets to 30 km/hr](#) to allocate more space to cyclists and pedestrians. [Freight deliveries](#) have proven to be an essential service, providing food and goods to households, and e-commerce is likely to keep growing in the future. It is expected that e-commerce in Europe will increase by [12.7 % in comparison to 2019 and it is estimated to be worth 717 billion euros](#) by the end of 2020.

The [Apple Mobility Trends Reports](#), which presents the change in requests in Apple Maps for walking, driving and public transport routing advice relative to the baseline of 13 January 2020, illustrate significant differences in the evolution of mobility habits during the pandemic of selected cities and countries. The data for the Netherlands show that requests for driving routing advice reduced by 60 % compared to the baseline by April, but steadily increased to about 30 % more than the baseline by August. The data for France show similar recovery in driving, but very different transit⁸ and walking patterns. The total mobility reduction (by driving, walking and transit) was more pronounced in France in the months of March and April, as it was under a total lockdown. Transit in France also recovered during the summer to autumn periods, while the Dutch transit remained at least 20 % below the baseline. Walking activity in France returned to baseline levels by summer, while it exceeded 60 % above the baseline in the Netherlands. The different trends reflect the local and national pre-COVID-19 situation, the different policies adopted, and the local culture.

Data from [Google Mobility Trends](#) present a baseline comparison of the visits or time spent at categories of places, such as home, workplaces, or public transport stations, per country. The baseline

⁶ Calculations done by Panteia using EUROSTAT data from COMEXT.

⁷ In full, the SLOCAT Partnership for Sustainable, Low Carbon Transport. Analysis of transport modes' use worldwide during lockdown (encompassing 62 countries and 89 cities). More information: slocat.net/wp-content/uploads/2020/05/SLOCAT_2020_COVID-19-Mobility-Analysis.pdf

⁸ The term "transit" is used in the US, and is synonymous with public transport.

was taken to be the median⁹ value of the first five weeks of 2020. The data for Italy show a drop of at least 50 % for visits to workplaces, grocery retail, retail & recreation and public transport from about mid-March to May, in line with the lockdown period. In contrast, the time spent at home increased by at least 25 % during the same period. As the lockdown eased, the summer periods saw a large number of visits to parks (over 150 %) and a slight reduction of other non-home categories: about 10 % for retail, recreational, grocery and pharmacy stores; and 20 % for workplace and public transport stations. The trend in November still show a drop in all non-home categories. Retail and recreational outlets remain closed, whether fully (e.g. museums, theme parks, cinemas, theatres and concert halls) or partially (e.g. restaurants, cafés and shopping centres). Other stringent rules of access and/or use of services continue to discourage visits and travel, for instance to workplaces.

In the municipality of Sant Cugat in Barcelona metropolitan area, the demand for both on-demand and traditional public transport services dropped by [95 %](#) at the beginning of the pandemic. On-demand services¹⁰ quickly recovered after the first wave, and by July 2020 reached [87 %](#) of the pre-crisis level. In contrast, traditional public transport services, in particular bus use, recovered at a much slower path, reaching only [45 %](#) of the pre-crisis level. According to the Apple Mobility Trends for Barcelona, the positive figures on public transport lasted until the beginning of the October when new measures to mitigate the spread of the pandemic were implemented. By November 2020, public transport use reduced to only [20%](#).

Cycling, however, has been one of the main responses at the EU level; its role was prominent already during the lockdowns but increased further with the easing of restrictions. Dashboards comparing [monthly cycling levels between 2019 and 2020](#) have found substantial increase in many EU Member States, ranging from 56 % in Berlin to 82 % in Barcelona.

The [increase in the use of private cars](#), associated with the driver's and user's perception of COVID-19 safety in comparison with other modes such as public transport, risks being an [undesirable structural trend](#), if not adequately countered by public policies. Furthermore, many countries, fearful of the negative economic and employment impacts of the crisis on the automotive industry, are providing state aid to the sector (see chapter 2.3).

The pandemic has favoured the significant growth and expansion of e-commerce into new markets. According to an OECD study, the e-commerce landscape will undergo long-term changes, additionally due to the possibility of new waves of the pandemic, the convenience of the new purchasing habits, learning costs and the incentive for firms to capitalise on investments in new sales channels.

Road transport

European road passenger transport companies have been severely affected by the pandemic with the estimated losses of [57 % in 2020](#) according to the International Road Transport Union (IRU). The losses for bus and coach services for tourists are expected to reach 82 %.

On the other hand, road freight transport proved to be more resilient than the passenger transport sector. Even though some Member States cut non-essential activities, which affected distribution and logistics, the supply chains were kept open and ongoing for essential services.

⁹ The median number is the middle number in a sorted list of numbers.

¹⁰ On-demand services corresponds to flexible public transport services designed to improve connections to transport hubs and other locations according to users' needs. Can include taxis, buses or other vehicles.

A simulation performed by the International Transport Forum shows that mobility restrictions could have reduced global freight transport by up to [36 %](#) by the end of 2020. According to its simulation, the impact of COVID-19 on freight activity in 2020 would also lead to 28 % reduction of CO2 emissions.

Operators of both passenger and freight transport services were obliged to improve their health and safety standards through the introduction of additional controls, sanitary procedures and additional personal protective equipment, which represented an extra cost. Driver shortages were a bigger problem than usual because e-commerce brought more traffic at distribution centres and last-mile deliveries. Those centres increased the use of robots and drones to cope with the staff reduction and increased numbers of items to be delivered.

In terms of revenues losses, the IRU forecasted [a loss of 64 billion euros and 81 billion euros](#) for European goods and passenger road transport operators, respectively. The major problem facing road transport operators is to maintain liquidity and avert the risk of payment default and indeed insolvency over the coming years. In the Netherlands, passenger coach companies are receiving support from the government amounting to only [20 % of their ongoing fixed costs](#), although their turnover losses reach up to 90 %. According to the IRU, the best possible outcome is only 40 % of the Dutch companies declare bankruptcy by the end of 2020.

Rail transport

[Rail transport demand](#) was affected by all the restrictive mobility measures put forward by public authorities as well as the advice not to travel.

A comparison between the second quarter of 2019 and that of 2020 prepared by Eurostat shows that the number of rail passenger [is at least half that of last year's figures](#) for the majority of the EU's Member States¹¹. Ireland presented the largest decrease in rail passengers (94 %), followed by France, Spain, Luxembourg (78 %) and Italy (77 %). The Netherlands was an exception as its figures remained relatively stable (0.2 %).

International rail passenger volumes dropped by almost [100 %](#) for all operators, in accordance with international border closures, as reported by the International Union of Railways during the first wave of the pandemic.

Rail freight was less affected than passenger transport, suffering a [20 % to 30 %](#) reduction between March and June. This is because the COVID-19 pandemic boosted a [shift of freight from road to rail](#), as international railway uses less manpower over long distance, road border crossings have more congestion and generate more physical contact than rail border crossing. Rail freight operators, also, increased their punctuality from [60 % to 80-90 %](#). This was primarily due to fewer trains operating, but also because of fewer delays to passenger rail services.

Maritime and inland waterways

Maritime transport and port traffic was affected by the reduction in trade with China during the early phases of the pandemic, but is showing signs of recovery.

According to the 23 October 2020 report from the European Maritime Safety Agency (EMSA), the scheduled ship calls in the EU's ports declined by 13.8 % in the first 42 weeks of 2020 (i.e. up to 18 October 2020) compared to 2019. The most impacted vessels are cruise and passenger ships, with an average reduction in port calls of [87 % and 26 %](#) respectively. Port calls by vehicle carriers (i.e. vessels

¹¹ EUROSTAT 2020, "Passenger transported (detailed reporting only) – (quarterly data)".

specially fit for carrying vehicles as freight) and chemical tankers have also experienced a reduction due to the pandemic (18 % and 17 % respectively).

In terms of the total gross weight of goods transported to and from principal ports (maritime), the data from [Eurostat](#)¹² show that those most affected (from the MS) are in Latvia, with a reduction of 44 % to their normal cargo compared to the first quarter of 2019. This was mainly due to the decrease of [container imports from China](#). This led to a further need of empty containers and the increase in the container shipping freight fees, resulting in the reduction of the volumes. Other affected hubs are in the Netherlands, Cyprus, Croatia and France, with a reduction on volumes of [10 % to 12 %](#).

In the case of inland waterways, [Eurostat](#)¹³ data show that 2020-Q2 container volumes did not drop much compared to the year before for countries, such as the Netherlands¹⁴ (4 %), Belgium (11 %), and Germany (18 %). Other countries' twenty-foot equivalent units (TEU)¹⁵ performances, such as Luxembourg, Austria and Romania, were less resilient in comparison. This in turn illustrates the importance of the Rhine-Alpine corridor as an economic structure to those countries, since it connects various major ports such as Duisburg, Antwerp and Rotterdam. When comparing the first two-quarters of 2019 and 2020, a reduction of 14 % (Q1) and 17 % (Q2) can be seen in TEU container traffic along the Rhine-Alpine corridor. One reason was the suspension of operations in certain manufacturing facilities in Europe. For example, some German vehicle manufacturers halted their production for several weeks between April and May. Hence, the demand for steel, and therefore the transport of related materials – some [25 %](#) of all volumes transported along the Rhine - declined.

Aviation

The aviation industry has been dealt a severe blow by the COVID-19 crisis. European revenue passenger-kilometres dropped [by 88 % in April](#) compared to the year before, showed signs of [recovery over the summer](#), but remained at [-53 %](#) in September with the pandemic's second wave. It is noteworthy that the improvement witnessed over the summer mostly occurred within Europe rather than to and from it. This is in line with what is being observed in the rest of the world where [domestic travel leads the recovery](#).

[Passenger revenue loss](#) in Europe in 2020 Q1 to Q3 compared to the previous year amounts to 63 billion euros, which poses significant problems for many airlines as well as airports. Eurocontrol predicts a total loss of [140 billion](#) euros for Europe's airlines, airports and air navigation service providers in 2020.

Most governments prioritise air transport connectivity to prevent the additional loss of jobs and economic activity. However, not all airlines received [governmental support](#), such as direct monetary support, loans and tax relief, creating a situation whereby certain airlines will survive and others will not. Among the airlines that have received monetary support are KLM ([3.4 billion](#) euros), Air France ([7 billion](#) euros), Lufthansa ([9 billion](#) euros), Iberia ([10 billion](#) euros), Tarom ([19.3 million](#) euros). Despite the financial support, several airlines have decided to make various job cuts before the end of 2020. [Air France – KLM](#) has reduced 7.500 of its jobs, [Lufthansa](#) plans to cut 22.000 jobs, [Tarom](#) will cut some 700 to 1.800 employees.

¹² EUROSTAT 2020, "Gross weight of goods transported to/from main ports by direction and type of traffic (national and international) - quarterly data".

¹³ EUROSTAT 2020, "Container transport by nationality of vessel."
https://ec.europa.eu/eurostat/databrowser/view/iww_go_qcnave/default/table?lang=en

¹⁴ Recent dataset for 2020 – Q3 for the Netherlands show that the figures are 5.8 % higher compared to the similar period last year.

¹⁵ The TEU is the most frequent unit to measure shipping vessel sizes. Vessel sizes vary so much today that they are even categorized by different names according to their TEU capacity.

1.4. Impacts of COVID-19 on Tourism

The pandemic made tourism flows stop for several months in different countries. No other crisis so far has had such an impact on the tourism industry. The United Nations Conference on Trade and Development (UNCTAD) in July 2020 has estimated that due to tourism losses, world GDP will fall by 2.8 % in 2020. With the crisis continuing into 2021, this figure could increase to total of [4.2 %](#) of world GDP.

Tourism¹⁶ contributed approximately [10 %](#) of the EU's gross domestic product and restrictions on human movement significantly affected tourism revenue. The World Travel & Tourism Council warns that the COVID-19 pandemic is putting and will put more than [60 % of tourism-related jobs](#) in the EU at risk in 2020. According to [Marques Santos et al. \(2020\)](#), in EU 'between 6.6 and 11.7 million jobs could be at risk of reduction in working hours or permanently lost in 2020', which represents between 3.2 % and 5.6 % of the total active EU population. Due to government support in many Member States, the actual impact on employment - and related job losses - is not yet fully visible, given also that the pandemic has currently not ended. The expectations are that a wave of unemployment in the tourism industry will follow in 2021 and potentially 2022.

EU hosts [2.4 million tourism businesses](#), 90 % of which are small and medium-sized and will be particularly vulnerable. Many tourism SMEs are challenged by liquidity and more tangible impact of the COVID-19 pandemic on tourism businesses' survival rates and employee retention will only be seen in 2021.

There is a long path to [recovery for the tourism industry](#) globally and in the EU. The predictions from the World Tourism Organization ([UNWTO](#)) are that the tourism industry's recovery to pre-pandemic levels will continue until 2025.

International tourism¹⁷

International tourism collapsed in 2020. At the beginning of the year, before the pandemic outburst, forecasts for tourism in Europe had predicted growth in international arrivals ([3 % and 4 %](#)). In April 2020, the UNWTO forecast [three scenarios](#) for international tourism in 2020: 1) a 58 % fall in international tourist arrivals, 2) a 70 % fall, and 3) a 78 % fall.

UNWTO communication from 27th October 2020 stated that the second scenario would probably take place, meaning a drop in international tourism arrivals of [70 %](#) in 2020 (globally). The OECD's estimates published at the end of October 2020 are even more pessimistic with international tourist arrivals expected to drop by [80 %](#) in 2020. The European Travel Commission estimated the drop in international tourist arrivals in Europe to be [68 %](#) in the first eight months of 2020. The forecasts for the last quarter of 2020 are not promising due to the pandemic's second wave. During the last financial crisis in 2008, the number of international tourists visiting Europe dropped 5.3 % in 2009. Ultimately, the losses in international tourist arrivals in 2020 are up to [eight time larger](#) (in terms of export revenues from international tourism). Given this drop, the UNWTO now foresees recovery to pre-crisis levels occurring no sooner than [2023 to 2025](#).

¹⁶ UNWTO defines tourism industry as all establishments for which the principal activity is a tourism characteristic activity and creation of tourism product. Tourism is a collection of activities, services and industries which deliver a travel experience comprising transport, accommodation, eating and drinking establishments, retail shops, entertainment businesses and the hospitality services provided for individuals or groups traveling away from home.

¹⁷ [International tourism](#) comprises tourism trips made by visitors to the country of reference, as well as trips made by residents within and leaving the country of reference.

Countries were affected [differently](#) and the fall in international tourist arrivals for the months from January to November 2020 varied between 48 % in Austria to 84 % in Cyprus. Due to slightly longer stays, overnight drops were lower than the fall of arrivals. It was still very dramatic, from 81 % in Spain to 35 % in Austria. Sweden, which approached restrictions rather liberally, also recorded a significant drop in tourists' overnights of almost 80 %, indicating that fear and insecurity of the travellers significantly limited demand even if restriction were not imposed.

A restart in international tourism is strongly conditioned by the possibility to harmonize safety protocols and mostly through the capacity to recover travellers' confidence by reducing risks related to travelling.

In the last months, several studies have investigated how COVID-19 has influenced the perception of travel risk. The perception of travel risk due to COVID-19 can be increased by some factors including:

- travel restrictions and bans issued by 96 % of countries worldwide by April 2020;
- amplified media coverage of exponential growth rate of cases, death rates and media constant focus on COVID-19 (Zheng et al. 2020);
- fear of exposure to the virus through human contact during the trip and at the hotel (Hang, Aroean & Chen, 2020; Ivanov et al. 2020);
- the absence of an emotional bond between the traveller and the destination (Hang, Aroean & Chen, 2020; Wang, Xue, Wang & Wu, 2020);
- the financial risk perception increased by the fear of money loss due to inflexible cancellation policies (Assaf & Scuderi, 2020).

Intra EU tourism¹⁸

Intra EU tourism was strongly impacted by the pandemic and the lack of a highly coordinated protocol for travel restrictions associated to the overall fear of traveling resulted in reduced consumer demand. The 2020 summer season was strongly impacted by this crisis, with traveller confidence reaching a low record. Hotel occupancy rates in Europe were at 26.5 % in July 2020, which accounts for a fall of 66.4 % compared to the same month of the previous year. Moreover, top 5 European destinations, such as France, Germany, the UK, and the Netherlands only saw just 40 % of 2019's volumes for intra-European travel, with Spain lagging at 22 % of last year's volumes (see the [European Tourism Manifesto](#)).

However, strong recovery potential is expected within the intra-European tourism market. Before the pandemic, some [85 %](#) of Europeans spent their main summer holidays within the EU and most of the tourism trips completed in 2020 in Europe were made within a 500 km range of one's residence ([Skift Research, 2020](#)). A [European Travel Commission](#) study published in October 2020 about European travellers preferences show that Europeans are eager to travel, although the anxiety related to travelling is still high. Most respondents (54 %) indicate that they intend to take a trip in the next six months, with 41% intending to travel domestically and 39 % to other European destinations. The main concerns of potential European travellers include the quarantine measures during the trip, the increasing COVID-19 cases, the possibility of being infected at the destination, and unpredictable travel restrictions.

Even for intra-EU tourism, a harmonization of travel safety protocols, a clear-cut communication strategy, and efforts by destination marketing organizations aimed to reduce risk perception among travelers would help restarting travel within Europe. Vaccination coverage will trigger recovery of

¹⁸ Intra-EU tourism refers to trips between EU countries.

traveler's confidence and foster mobility. However, the roll out of the vaccines will still take time, as the [vaccine](#) supply increases but still remains limited.

Domestic/regional tourism¹⁹

The main driver of tourism in 2020 was domestic demand, i.e. travelling within the borders of one's own country. Several studies agree that domestic tourism will be the first to recover and one of the most likely consequences of this crisis will be the bolstering of proximity tourism, which means visiting places near home ([Diaz-Soria, 2017](#); [Jeuring & Haartsen, 2017](#)). Post-crisis tourists will probably choose to travel to destinations closer to their place of residence. In the context of growing insecurity and uncertainty, nearby destinations could be considered 'less risky' by many potential tourists who, having been noticeably affected by the economic crisis arising from the health crisis, have seen their purchasing power reduced ([Romagosa, 2020](#)). [Domestic travel](#) is foreseen to achieve 2019 levels by 2022.

There are no international statistical sources monitoring and reporting on domestic tourist arrivals as tourism is mainly an export-oriented industry. European Travel Commission data show that countries with strong domestic demand like Germany and France recovered faster during the summer months compared to the others, including those reachable only by air or sea such as the islands of Cyprus and Malta. Some smaller countries with limited demand eventually managed to stimulate domestic demand. In Slovenia, for instance, domestic tourism arrivals in the first nine months of 2020 grew by 43% in comparison to the same period in 2019 ([SOURS, 2020](#)).

Even if domestic travel recovers, there are some countries, regions and destinations that will only survive if international tourism begins to thrive again. Typical examples are island countries or those destinations that are dependent on tourism, such as Malta or Cyprus, as well as those destinations dependent on international visitors, such as Spain, Italy, and Greece.

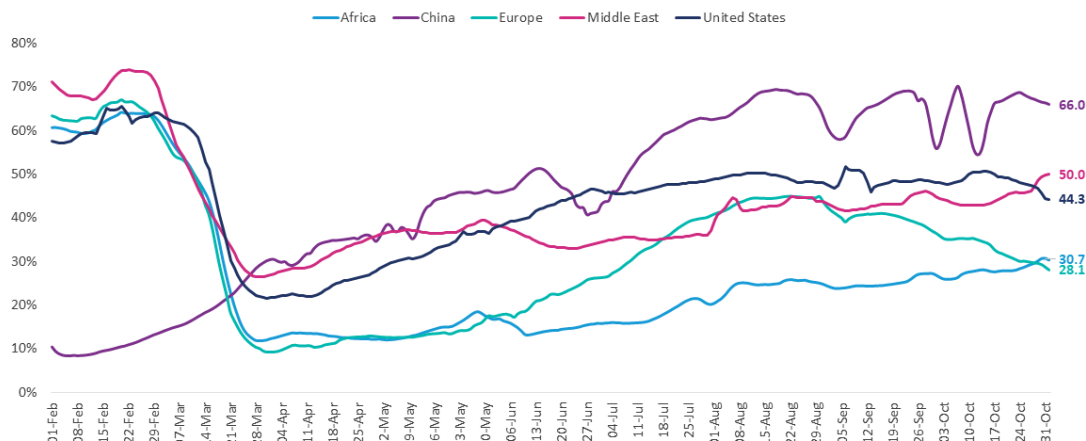
Accommodation providers

The impact of the pandemic on accommodation providers varies according to accommodation type. According to the OECD, hotel revenues per available room from January to June 2020 was [64.8 %](#) lower than in 2019. The average hotel occupancy rate in Europe during the third quarter (July, August and September) of 2020 was only [39 %](#). The average daily rate of rental revenue earned for an occupied hotel room in Europe fell by [17 %](#) during the first nine months of 2020. The revenue per available room in Europe was also the most affected (compared with worldwide), declining by [59.3 %](#) in the first nine months of 2020. Global data on hotel occupancy indicate that hotels in Europe are more affected by the pandemic than hotels in other regions. The [occupancy rate](#) by the end of 2020 in European hotels was 31 % (similar to Africa with 28 %), while hotel occupancy rates in Asia and the Pacific, Middle East and the Americas reached 45 %, 39 % and 41 % respectively.

¹⁹ Domestic tourism comprises tourism activities of a resident within the country, including trips that eventually leave the country ([United Nations, 2010](#)).

Figure 2: Absolute occupancy %**Europe the only region showing significantly declining performance**

Absolute occupancy % (reporting methodology), rolling 7 days to 1 November 2020



Source: STR, 2020 © CoStar Realty Information, Inc.

Source: <https://str.com/data-insights-blog/covid-19-webinar-summary-5-key-points-europe-hotel-performance-6-november>

The summer season also showed that city destinations were more greatly affected by COVID-19 than destinations in rural areas. Hotels in large tourist hubs such as Paris, Madrid and Rome experienced occupancy rates of less than 22 %. This yields insufficient income to cover fixed costs, so most properties operated with negative cash flow and experienced significant liquidity problems. The situation in regional destinations was different. According to STR, hotel occupancy levels in these areas were between 35 % and 55 % until the beginning of September 2020. Yet, many hotels in Europe were still open during the second lockdown.

In comparison, vacation rentals performed better. In April 2020, occupancy rates have dropped by 90 % compared to April 2019, while in August the decline was only of 16 % compared to the previous year. The main reason for success within this market was the consumers' fear of staying at crowded hotels. Furthermore, vacation rentals targeted individual travellers. This sector then was the first to recover, while business and group travellers that typically rely on hotels were almost non-existent, due to the cancellation of international and national congresses, events and group travels.

Tour and travel operators

This section considers tour and travel operators, travel agencies and online travel agents (including digital platforms and technology providers). The tour operators predict a 73 % decrease in business volume for the third quarter of 2020. One of the largest tour operators – TUI – reports a 98 % drop in revenues during the second quarter of 2020. The European Travel Agents' and Tour Operators' Associations (ECTAA) estimated that the COVID-19 pandemic resulted in a loss of 135 billion euros in revenues (down 80 %) compared to turnover in 2019. The largest global online travel agency, Booking.com, reported an 87 % drop in room nights booked during the second quarter of 2020. Airbnb recorded better results, specifically due to the recovery of domestic and individual leisure. Tour operators and travel agencies faced problems with cancellation policies.

Hospitality

Within the hospitality sector, a broader spectrum of tourism organisations is hereby taken into account, including food and beverage facilities, culture and leisure activities, sports and corporate tourism (known as MICE or meetings, incentives, congresses and events).

Data from Open Table²⁰ show the pandemic had a significant impact on the food and beverage industry. Data is collected in real-time and shows that restaurants globally and in Europe have been mostly closed since March to May 2020 and then again in early November 2020 or worked limited hours. [OECD](#) reports significant change in food consuming habits and “*shift in consumer demand away from restaurants, food service and other types of ‘food away from home’ towards food consumed at home*”. Due to this trend, sales in hotels, restaurants, catering and cafés collapsed. [Bartik et al. \(2020\)](#) emphasised that COVID-19 will have significant impact on companies in the restaurant industry, who typically have low cash reserves, and are therefore prone to taking more loans or significantly cut expenses in order to avoid bankruptcy. [Demand in 2020](#) was heavily dependent on the domestic market. New safety and hygiene standards significantly reduced capacities in terms of seats and tables that further impact on revenues reduction.

The pandemic also had a devastating impact on cultural and natural sites and zoos. [Zoos](#) have suffered a robust financial crisis, more than other attractions, as they had to face costs related to animal feeding and care while being shut. According to the World Bank, 90 % of countries closed their World Heritage sites during the first wave of pandemic ([Wahba, S., Ottone R. E., and Amirtahmasebi, R., 2020](#)).

Business travels have become almost non-existent since the COVID-19 pandemic. There has been limited domestic business travel, while international business travel has been postponed to the second half of 2021. This has a significant impact on European tourism, since the continent generated [50 %](#) of global business arrivals. Digital technology and video conferences are bringing significant changes to business travel, which is [expected to recover at a slower pace](#), with pre-2019 levels only being reached in 2026. Moreover, this transformation of habits may impact beyond the pandemic: virtual/digital congresses and events are easier to organise and less time-consuming for speakers and guests and have almost no impact on the environment. For large hotels that host conference halls, this may well lead to consistent financial decline. It must also be considered that while leisure travellers typically spend more days at a destination, business travellers will typically spend less days on a destination while spending from 4½ to 5 times more money, which translates into a significant drop in revenues for those catering for large group (MICE) tourism. Those revenues will have to be replaced with new and innovative models capable to turn capacities in potentially residential and tourist areas through a combination of long and short-term stays.

²⁰ Open Table is an online restaurant-reservation service company that contains data on 60.000 restaurants globally. See <https://www.opentable.com/state-of-industry>

2. EU POLICY ACTIONS SINCE THE BEGINNING OF THE COVID-19 PANDEMIC

KEY FINDINGS

- Early in the pandemic, the Commission published interpretative guidelines on passenger rights across the EU, which concerned, i.e. ticket reimbursements and alternative travel solutions.
- On 19 March 2020, the Commission adopted a new State aid Temporary Framework which enabled Member States to provide state aid to the economy, notably for transport and tourism.
- On 13 May 2020, the Commission published guidance and recommendations to help Member States gradually lift transport restrictions in a safe way and support the relaunch of tourism and transport.
- Legislation has been adopted by the European Union to temporarily support and reduce the administrative burden of transport operators, their managing bodies or authorities in the context of the COVID-19 pandemic.
- The Multiannual Financial Framework and 'NextGenerationEU' recovery plan are expected to help rebuild the EU's economy after the pandemic, including its transport and tourism sectors.
- Recommendations to reduce the disruption of passenger and tourist movements were adopted by the Council on 13 October 2020, providing a common framework on testing, passenger tracking and quarantine periods.
- EU Member States have adopted a wide variety of measures that protect the health of transport workers, financially support and boost investments in the transport sector, and relax certain existing transport-related restrictions in a safe way.
- Besides fiscal and monetary measures, Member States have focused efforts on measures that support workforce retention and re-skilling, enabling quick responses to the impacts of the pandemic, and initiating public-private partnerships.

2.1. Introduction

This chapter provides a summary of EU and key national policy actions in the field of transport and tourism since the COVID-19 pandemic. It offers an overview of the measures for relaunching transport and tourism, and the related actions coordinated among Member States and between EU and its Member States.

2.2. EU policy actions

2.2.1. Transport and mobility

EU action on mobility, transport and COVID-19 is essentially structured around three lines: i) a series of guidelines, covering different transport modes and tourism; ii) dedicated legislation to provide relief to the transport sector; iii) economic support, as outlined in the [Communication on the coordinated economic response to COVID-19](#), [Temporary framework for state aids](#), recovery plan and the [Multiannual Financial Framework \(MFF\)](#).

The Commission's response has aimed to keep the single market functioning, and to prevent the restrictions put in place to stem the pandemic from having an impact on the proper operation of

essential services. Guidelines were therefore introduced for the management of cross-border movements, and to streamline the procedures for managing the logistic chain.

At the same time, the Commission has undertaken initiatives to foster a common approach to the criteria for the mutual recognition of the epidemiological situation of the regions, through a coloured map that is updated on the basis of data provided by Member States, as well as attempts to make the different national tracing apps interoperable.

From a legislative point of view, the action focused on solving some practical issues generated by the application of some rules, which were difficult to respect in the emergency period.

Finally, the Commission intervened to promote more flexible financial support, in the short term with a Temporary Framework to relax the rules on state aid, and in the medium and long term through the Recovery Plan and the revised Multiannual Financial Framework 2021-2027.

Guidelines to travel during the COVID-19 pandemic

On 16 March 2020, the Commission first invited EU Member States to [introduce temporary restrictions on non-essential travels](#) to the EU. The following day, the Council [adopted a decision](#) endorsing this communication. Designed for an initial period of 30 days, on 8 April 2020 the Commission called for prolonging the travel restriction until 15 May. On 13 October, the Council adopted a recommendation, based on a Commission's proposal [adopted](#) on 4 September, to [coordinate Member States' restrictive measures on free movement](#). On the 2nd of February 2021, the Council [adopted](#) an updated recommendation amending the previous one. However, while the free movement of people could be temporarily interrupted, on the other hand, the movement of freight had to be even more facilitated through streamlined procedures. Indeed, during the first lockdown, logistics proved to be an essential service. Therefore, with its [guidelines for border management measures to protect health and ensure the availability of goods and essential services](#) of 16 March, the Commission urged the Member States to support freight transport during the crisis. The guidelines formulated recommendations for operational and organisational measures to keep essential transport flows active, including medical supplies and personnel. On 23 March, the Commission released new practical information on how to implement its guidelines for border management in order to safeguard the movement of goods across the EU during the pandemic. The [communication on the implementation of so-called "green lanes"](#) aimed to ensure the continuity of the flow of goods across the EU in a collaborative way, to ensure the seamless movement of all goods, including but not limited to essential goods such as food and medical supplies. Therefore, to ensure that EU-wide supply chains continued to function, Member States were required to designate all internal border crossing points of the Trans-European Transport Networks (TEN-T) as preferential (green lane) border crossing points, open to all vehicles being used for the transport of goods, regardless of the goods transported. The aim was to reduce border crossing time to a maximum of 15 minutes, including controls. On 26 March, a dedicated guidance was released on [facilitating air cargo operations](#).

On 30 March, the Commission released [guidelines concerning the exercise of the free movement of workers](#) during the COVID-19 pandemic, establishing burden-free and fast procedures for border crossings to ensure smooth passage of frontier workers working in healthcare, the food sector and other essential services.

[Guidelines on the protection of health, repatriation and travel arrangements](#) for seafarers, passengers and other persons on board ships, published on 8 April 2020, supported the maritime industry in facilitating repatriation and crew changeovers, which were essential also for the well-being of the seafarers.

On 13 May 2020, the Commission published a package of guidance and recommendations to help Member States gradually lift transport restrictions and support the relaunch of tourism and transport, in compliance with the necessary prevention measures. The [package](#) consisted of:

- an introductory communication "Tourism and transport in 2020 and beyond";
- a common approach to the gradual and coordinated lifting of measures to restrict free movement in the EU, in line with national provisions;
- a common framework to promote the gradual re-establishment of transport;
- a recommendation to make travel vouchers an alternative to reimbursement;
- common criteria and principles for the gradual and safe restoring of tourism activities, and the related health protocols.

This package encouraged and supported the development and implementation of new mobility solutions and measures to facilitate active, collective and shared mobility in a safe manner, and to ensure trust among citizens. The Commission also underlined the importance of sharing best practices, ideas and innovations for safe mobility in urban and suburban areas to facilitate cooperation and knowledge exchange.

On 15 June 2020, the Commission launched '[Re-open EU](#)', an online platform that contains essential information about the safe relaunch of free movement and tourism across Europe.

The Commission also launched an [initiative](#) on the interoperability of mobile apps for tracking and alerting COVID-19 infections. On 16 June, the Commission released the eHealth network guidelines on technical specifications for [interoperability of contact tracing apps](#). Member States, with the help of the Commission, have been working on an interoperable solution for contact tracking and national alert apps, to enable EU citizens' use of a single app while travelling across Europe. At the request of the Member States, the Commission has set up an interoperability gateway service, which is an interface for the reception and transmission of relevant information sent by [contact-tracing apps and national servers](#). This service aims to ensure the safe and efficient cross-border exchange of data between participating apps. However, the initiative seems not to have achieved the desired results so far, due to [legal barriers, security and data privacy issues](#), as well as [interoperability concerns](#).

On 13 October 2020, the Council of the European Union adopted a [recommendation on a coordinated approach to the restriction of free movement in response to the COVID-19 pandemic](#). The new system notably consists of a common framework for measures protecting travellers across Europe. These include common criteria on testing, passenger locator forms, and quarantine periods, when considering whether to apply restrictions. Moreover, the European Centre for Disease Prevention and Control (ECDC) produces every week a [common colour-coded map](#), based on data provided by Member States, to help them take decisions based on the epidemiological situation of each EU region. This recommendation aims to avoid fragmentation and disruption to the free movement of people, goods and services, and to increase transparency and predictability for citizens and businesses. However, although it requires Member states to provide clear, comprehensive and timely information on any restrictions and requirements, the decision on whether to introduce restrictions remains the responsibility of Member States. On 12 November, the [Council Report on the State of Play of EU-level coordination in response to the COVID-19 Pandemic](#) set out the ongoing work at EU level on different strands, like the mutual recognition of tests, vaccines deployment and a common approach on the lifting of restrictive measures. This report was presented and discussed at the EU Council meeting on 19 November.

At the [European Council of 25 and 26 February 2021](#), EU leaders recalled that the unhindered flow of goods and services within the Single Market must be ensured, including by making use of Green Lanes.

Queues were indeed witnessed in the last few [weeks](#) due to travel restrictions recently put in place, leading the Commission to reassert the need for [coordination](#) in relation to the free movement of goods and people. EU leaders also called for work to continue on a common approach to vaccination certificates to be pursued.

EU legislation to provide relief to the transport sector

On 13 March 2020, the Commission adopted a legislative proposal to amend Regulation 95/93 on [common rules for the allocation of slots at EU airports](#). The aim of the amendment is to support airlines, which have experienced a sudden collapse of their flights, by suspending the 'use it or lose it' rule for slot allocation – that otherwise would have prompted the companies to operate flights with half-empty planes anyway. The Commission [extended the slot waiver](#) until 27 March 2021, after consulting stakeholders on how to move forward on this matter. A further [amendment](#) to Council Regulation (EEC) No 95/93 as regards temporary relief from the slot utilisation rules at Community airports due to the COVID-19 pandemic was adopted in February 2021.

On 29 April 2020, the [European Commission adopted a "Transport support package"](#) consisting of four legislative proposals to provide relief to the transport sector. These proposals, adopted as three Regulations and one Directive of the European Parliament and of the Council on 25 May, cover all modes of transport, from aviation to rail, from maritime and inland navigation to road. Their goal is to facilitate the management of some practical issues that transport operators must face due to COVID-19. The first regulation lays down “specific and temporary measures in view of COVID-19 pandemic and concerning the validity of certain certificates, licenses and authorizations and the postponement of certain checks and training in certain areas of transport legislation” ([Regulation 2020/698](#)), to streamline and postpone some procedures that would take away valuable time to devote to managing operations. This Regulation was further [amended](#) in February 2021. The second amends Regulation 2017/352, so as to enable “managing bodies or competent authorities to provide flexibility in respect of the levying of port infrastructure charges in the context of the COVID-19 pandemic” ([Regulation 2020/697](#)). Another [Regulation \(2020/696\)](#) amends common rules for the operation of air services in the Community in view of the COVID-19 pandemic, to avoid that airlines' liquidity problems due to COVID have an impact on the possibility of obtaining or renewing their license. Finally, [Directive 2020/700](#) amends Directives (EU) 2016/797 and (EU) 2016/798, to merely extend the timeline of their transposition periods.

Recovery Plan, Multiannual Financial Framework and Temporary framework for State aids to the transport sector

[Article 107\(3\)\(b\) of the Treaty on the Functioning of the European Union](#) foresees that, in case of particularly severe economic situations, EU state aid rules allow Member States to grant support so as to remedy a serious disturbance to their economy. On 19 March, the Commission adopted the [Temporary Framework for State Aid measures](#) to support the economy during the COVID-19 pandemic. This provides some exemptions to the EU's rules regarding state aid in different sectors particularly affected by COVID-19, with a dedicated section of rules applicable to transport and tourism. A section on the subject was published within the [In-Depth Analysis COVID-19 and urban mobility: impacts and perspectives](#), while some of these measures are listed in section 2.3.

On 21 July, EU leaders agreed an overall budget of 1 824 trillion euros for the next budgetary period 2021-2027. Combining the [Multiannual Financial Framework \(MFF\) and an extraordinary recovery plan, 'NextGenerationEU'](#), the package will help the EU to rebuild after the COVID-19 pandemic. On 10

November 2020, the German Presidency of the Council of the European Union reached a political agreement with the European Parliament's negotiators for the approval of the next Multiannual Financial Framework. On 17 December 2020, following the European Parliament's consent, [the Council adopted the MFF for 2021-2027](#).

2.2.2. Tourism

Many passenger transport-related policy actions are aimed at tackling tourism (see chapter 2.2.1), and they are briefly referred to below. On 13 May 2020 the Commission published the [COVID-19: EU Guidance for the Progressive Resumption of Tourism Services and for Health Protocols in Hospitality Establishments](#), a report proposing recovery policies for tourism services and safety protocols in the hospitality sector aimed at the progressive and safe resumption of domestic and intra-EU travel in combination with the lifting of travel restrictions. According to [the EU Guidance](#), the main prerequisite for lifting restrictive measures is 'epidemiological evidence showing that the spread of the disease has significantly decreased and stabilised for a sustained period of time, and is likely to remain stable with the increased tourist population.' Furthermore, Member States were warned to lift restrictions only if the numbers of COVID-19 cases have reached a suitable rate and if a 'sufficient health system capacity is in place' both for visitors and citizens and both in central and peripheral areas of each state. In the communication, principles have the purpose to 'guide Member States in the design and implementation of infection prevention and control measures and protocols for hospitality services providers, such as hotels and other hospitality establishments, to ensure a safer touristic establishment and health of guests as well as workers'. The guiding principles aim to foster coordination among Member States based on facts and are synchronised with health authorities' recommendations and protocols (i.e. those of the World Health Organization and the European Centre for Disease Prevention and Control) and with local authorities. To favour a resumption of tourism services, hospitality establishments should follow the abovementioned prerequisites for a safe restart.

The [13 October 2020 Council](#) recommendation (for detailed info please see chapter 2.2.1.) help Member States to define the travel protocols in line with epidemiological situation that include:

- number of newly notified cases per 100 000 population in the last 14 days;
- number of tests per 100 000 population carried out in the last week (testing rate);
- percentage of positive tests carried out in the last week (test positivity rate).

Passenger and traveller rights

As part of its efforts to mitigate the impact on the economy of the COVID-19 pandemic, on 17 March 2020 the Commission published [a set of guidelines](#) to ensure the consistent application of passenger rights across the EU, as well as information on the so-called [package travel directive](#) in connection with COVID-19 (on 19 March 2020). The guidelines provide the necessary legal certainty on how to enforce passenger rights in a coordinated way across the EU. Basically, in the event of cancellation, the transport service provider must reimburse the passengers or offer them an alternative transport solution. However, to avoid an excessive number of requests for reimbursement that would excessively penalize travel operators, the Commission adopted on 13 May 2020, a [recommendation](#) on vouchers describing their characteristics so that they become a viable and more attractive alternative to reimbursement for cancelled trips in the context of the COVID-19 pandemic.

COVAX facility

The [global initiative COVAX](#) aims 'at working with vaccine manufacturers to provide countries worldwide equitable access to safe and effective vaccines, once they are licensed and approved'. On 10 December, the WHO has guaranteed approximately one billion doses of vaccine. Next step is their certification. The vaccines will be available through the COVAX mechanism, which aims to reach [20% of world immunity before the end of 2021](#). Several countries have a defined vaccination strategic plan, and in the beginning of 2021 they started with elderly people, and over the summer the vaccination for the rest of the population is expected to start. The EU increased their [contribution to COVAX to 500 million](#) euros, being one of the leading donors. Inside the EU, [vaccinations in EU MS started](#) on 27 of December 2020.

2.3. Key national policy actions**2.3.1. Transport and mobility**

In addition to the measures adopted by the EU institutions, Member States have identified their own transport-related policies and measures.

These generally include: i) economic and fiscal aid to ensure the functioning of transport infrastructures and services, ii) actions to decongest public transport and at the same time keep it functional for essential categories, and iii) actions to facilitate the supply of goods and essential services.

Many of these measures [take the form of state aid, whose Temporary Framework has been further prolonged and expanded by the Commission](#).

The [International Transport Forum](#) has summarised the transport policy responses to the COVID-19 pandemic. For instance, the focus of national governments, especially during the initial lockdown phase, has been to guarantee the health of workers in the transport sector, through advanced safety procedures, specific training and personal protective equipment. The hygiene protocols and sanitation measures have also been extended to public transport users and vehicles, which in many countries were operated with reduced seating and routing capacity, but generally remain in operation, both for urban and intra-urban connections.

To avoid contact between public transport workers and its users, physical barriers separating bus drivers from passengers have been introduced and contactless and online payment systems reinforced. The crowding of public transport, seen as one of the major problems in urban centres, has resulted in measures supporting alternative forms of mobility (such as walking and cycling). Besides this, measures to increase use of the private car as well as reduce peak-time circulation through, for example, teleworking have also been documented.

To revive transport and logistics, many countries have provided financial support and tax exemptions and have also relaxed restrictions. For example, many existing access regulations have been [suspended in various cities across Europe](#). Fiscal packages supporting airlines, railway companies and public transport companies and independent workers in the sector (e.g. taxi drivers) have been introduced.

Examples of measures to mitigate the impact of COVID-19 on the transport sector based on the comprehensive list of [Policy measures taken against the spread and impact of the coronavirus by DG ECFIN](#) are provided below.

Financial support and compensation

[Austria](#) mitigated the pressure on certain categories of self-employed workers who are at risk by introducing extended wage support to taxi drivers, transport drivers and driving instructors.

In [Croatia](#) transport of passengers is considered an activity at risk. Therefore, company employees benefitted from HRK 4,000 (about 530 euros) until the end of 2020, if their turnover dropped more than 60 %.

Italy allocated funds to reimburse the value of public transport passes to passengers that could not make use of services during lockdown (5 million euros). To compensate the revenue losses of public transport operators, it established a dedicated [500 million euros fund](#). The government also allocated [around 7.5 billion](#) euros in support of various sectors, including tourism, transport, innovation, and climate.

In the Netherlands, public transport providers are currently being funded up to 93 % of their services until July 2021 to ensure continuity of services despite lower demand and increased costs due to hygiene measures. This will cost around 1.3 billion euros (0.2 % of GDP).

The Polish government is co-financing the vehicle leasing sector in response to the second wave of the pandemic.

In Slovenia, the fifth anti-corona package foresees compensation to operators of public transport services for costs incurred during the first lockdown (March-May), when they were unable to carry out their services. Moreover, they are entitled to recover the cost of protective equipment for drivers and of disinfecting vehicles until the end of 2020.

The Spanish government has granted credit payment deferrals for loans, leasing and rental contracts for passenger buses and road transport vehicles, if their activities have been affected by COVID-19. The *Sociedad Estatal de Infraestructuras del Transporte Terrestre, S.A.* (SEITTSA) benefits from an additional credit of 110 million euros to compensate for the reduction in road toll revenues.

The Swedish government has provided extra support to regional public transport service providers, aid to regional airports and capital injection to the national airline company, airport operator and other State-owned enterprises. Furthermore, the appropriation of public aviation and maritime agencies has taken place while additional funding of SEK 1.02 billion has been allocated for increased railway and road maintenance. Regional public transport is being supported to mitigate the effect of reduced travel demand, thanks to temporary state aid worth SEK 3 billion²¹. This will be allocated in proportion to the amount of pre-COVID-19 ticket revenues in each region.

Relaxation of pre-COVID-19 transport policies

In Czech Republic, toll and road tax payments have been suspended to support road transport companies.

In Latvia, tax payments for freight transport operations were partially postponed for one year.

In Luxembourg, heavy-duty transport has been temporarily allowed on Sundays, while professional truck and train drivers are not subject to training obligations.

²¹ https://ec.europa.eu/info/sites/info/files/coronavirus_policy_measures_16_november.pdf

The Swedish government encouraged public transport users to use their car by removing the tax on work-related benefits concerning free parking. This should thereby assist public transport operators in meeting the targets for reduced capacity.

Fiscal bonus and investments

The Czech Republic government reinforced its State Transport Infrastructure Fund with 6.5 billion CZK (about 247 million euros) to boost the maintenance and renovation of road and railway infrastructure (and the construction sector).

Italy set aside 100 million euros to encourage the transition to sustainable solutions, such as electric vehicles, e-bikes and e-scooters through an eco-bonus.

In Latvia, EU funds worth 496 million euros were reallocated to various recovery programmes, including the investment of 174.7 million euros in the transport sector. For instance, spending on road works increased by 75 million euros. An additional 66 million euros was allocated for railway maintenance and the development of Latvian Railway.

2.3.2. Tourism

Policies and measures adopted at the Member state level to mitigate the impacts of the pandemic include:

- **Fiscal and monetary measures** refer to 'economic relief to tourism businesses, especially SMEs, such as the exemption or postponement of taxes, loan payments, and tourism related fees, the introduction of financial instruments such as special lines of credit, new loan schemes, and investment programmes. Other tourism specific measures include credit guarantees for tourism businesses and incentive programmes to support airlines'²².
- **Jobs and skills measures** cover sustaining jobs, income and livelihoods; providing companies special incentives to retain their workforce (e.g. delay, reduction or exemption of social security contributions); 'training and skills development, particularly digital skills, assisting tourism businesses' digital transformation and access to innovative tools, as well as covering traineeships expenses, reskilling workers, exempting and reducing training levies'²³.
- **Market intelligence** includes data collection and analysis for enabling a quick response to the impacts of COVID-19, access to real-time data and communication.
- **Restarting tourism** refers to the establishment of travel and hygiene protocols, tourist marketing and promotion, introducing travel vouchers aiming to restore trust and ensure safety of the tourists.
- **Promotion of domestic demand**, such as issuing staycation vouchers.

According to the [UNWTO](#), 92 % of European countries adopted fiscal and monetary policies to help tourism restart, 73 % of them adopted jobs and training policies and 33 % adopted policies to restart tourism. In terms of support for the travel and tourism industries, EU Member States have undertaken several initiatives to assist employees and companies. Most measures were issued to defer tax and loan payments (for 3 months), provide liquidity aids and ensure employee retention, as mentioned by [UNWTO](#) and [World Travel & Tourism Council](#).

State aid measures

Several [state aid measures](#) were adopted for tourism, some examples of which are provided below:

²² (p.7). (UNWTO, 2020)

²³ (p.8) idem

- Aid to tour operators and travel agencies and exemption of social security contribution payment for companies in the tourism and thermal bath sectors in [Italy](#);
- Irish Coach Tourism Scheme in [Ireland](#) - providing direct grants to the tourist coach companies affected by the pandemic;
- Aid to performers of economic activities in the tourism sector in [Latvia](#);
- Guarantee scheme for tour operators in [Lithuania](#);
- Aid to undertakings in tourism and directly related sectors in [Estonia](#);
- COVID-19 support to tour operators and other undertakings active in tourism and culture in [Poland](#).

Tourism staycation and local spending vouchers were also introduced to stimulate domestic demand.

Table 1- Tourism voucher schemes adopted by Member States

Country/city	Measure
Italy	"Holiday bonus" worth up to 500 euros for lower-income households to be spent until 30 June 2021.
Slovenia	Residents aged over 18 years have already received a EUR 200 voucher and younger than 18 a 50 euros voucher to spend in hotel or other accommodation.
Lithuania	Vouchers of up to 200 euros for domestic health workers.
Vienna (Austria)	A 50 euros voucher for every family in Vienna to spend in local Viennese restaurants.

Italy, one of the first European countries hit by the pandemic, swiftly put in place emergency economic protocols, including the suspension of mortgage payments and temporary tax obligations. In August, it also launched a 25 billion euros [rescue plan](#). Measures were aimed at providing grants and tax deferral. *Cassa Integrazione* (where the government pays 80 % of the salaries) was activated for all the sectors and the Italian government also established a fund of 500 million euros to support the aviation industry.

Portugal issued very detailed measures to protect workers and families through liquidity aid and fiscal breaks, i.e. a [60 million euros](#) credit line 'for micro-businesses in the sector and by working closely with Turismo de Portugal'. According to [UNWTO](#), *Turismo de Portugal* represents a best practice for managing the emergency and looking to the future by supporting start-ups. [Portugal](#) offered extraordinary support including employee maintenance, training scholarships, accelerated payments by public administration, postponement of tax payments, specific initiatives in the area of communication and support for micro and small businesses (e.g. travel agencies and restaurants).

These measures and others help to keep local tourism, often headed by family-owned small businesses, afloat, which remains vital not only for economic reasons, but for social reasons.

3. CHALLENGES AND OPPORTUNITIES

KEY FINDINGS

- Ensuring the safe and healthy means to travel is one of the key challenges facing transport and tourism today. Additional health and hygiene protocols were put in place to protect the sector's workers as well as the population in general, so as to regain traveller confidence. Still, further work is needed to harmonise protocols.
- Social distancing, travel restrictions and a fear of mandatory quarantine has reduced passenger travel demand, which has also had a negative impact on tourism.
- Revenue losses due to the lack of passengers, besides restrictions on the transport of freight, has brought liquidity problems to SMEs in the tourism sector.
- On the other hand, the pandemic has accelerated digitalisation, resulting in contactless solutions for ticketing, payment for transport services and virtual tourism, leading to a more sustainable and environmentally friendly approach.

3.1. Introduction

This chapter indicates the challenges faced by the transport and tourism sectors but also the opportunities related to the trends that are being accelerated by the pandemic. Some examples of good practices being adopted are described below.

The primary challenges were the reduction of passenger transport demand and revenue, which is causing unemployment and bankruptcy risk. Other challenges were to ensure safe and healthy options, avoid delays and interruptions to the supply chain, define proper communication strategies and standard health promotion information, keep contact tracing, establish strategies to reduce overcrowding and look for financial support for the short-term.

The opportunities identified are the promotion of more sustainable transport options, a boost to flexible working, digitalisation and contactless solutions that can make the system more efficient, while at the same time safer and secure. The adoption of more sustainable actions rely on local supply chains. The change in consumer habits and the increase in e-commerce spending was also a trend that accelerated during the COVID-19 pandemic. The pandemic has also provided tourism with an opportunity to be reinvented, such as with the promotion of rural destinations.

This chapter presents the specific challenges, opportunities and examples of good practices per sector, i.e. transport (per transport mode), and tourism.

3.2. Challenges and opportunities for transport

Challenges and opportunities are structured according to transport modes and distinguish between passenger and freight transport (where differences exist). However, there are some common challenges for passenger transport as well as for the freight transport. These are:

- Ensuring safe and healthy means of travel.
- Reduction of passenger demand on various modes, especially public transport, rail passenger transport and aviation.
- Revenue reduction due to the lack of passengers and restrictions on freight transport cargo.

Urban mobility

Challenges

- Reallocating urban space to avoid crowded public transport.
- Encouraging modal shift (i.e. from car to public transport or to cycling).
- Reduction of public transport offer due to social distancing behaviours.
- Ensuring trust in public transport and shared transport services.

In its policy brief, *Public Transport Is Covid-Safe*, the [International Association of Public Transport \(UITP\)](#) argues that when measures recommended by the health authorities are implemented, ‘the risk of catching COVID-19 on public transport is very low’. However, the actual risk of becoming infected on public transport still remains unclear.

Opportunities

- The continuous monitoring of mobility data is necessary, not only in providing an overview of the current situation, but also to provide support for the next phases of the pandemic and in monitoring compliance with physical distancing, as well as to evaluate the effectiveness of current measures and the need for future ones.
- The role of mobility managers must be strengthened and integrated into the city mobility system in order to ensure their direct feedback on various measures and coordinate efforts. Mobility managers can also contribute to enhancing smart working and digitalisation processes, which must not become a temporary phenomenon but part of a structured evolution.
- Teleworking and digitalisation favours the better management and a spread of a city’s activities throughout the day, enabling the more efficient use of transport resources and the avoidance of peak hours.
- Urban infrastructures must be redesigned according to these trends together with the revitalisation of proximity shops and activities, as theorised by the 15-minute city concept.
- The use of active modes, such as walking and cycling should be increased to limit the predominance of cars. However, this requires bold choices in terms of transport infrastructure investments and space allocation.

Good practices:

Catalonia accelerated the deployment of its [Autocorb app](#), which provides users with the occupancy level of approaching buses in real time, making it possible to balance supply and demand without overcrowding.

In [Palma de Mallorca, Spain](#), a multi-fleet Demand Responsive Transport (DRT) provided a flexible solution to enhance the resilience of the public transport system.

The company Humanising Autonomy together with Transport for Greater Manchester have joined forces to measure, analyse and evaluate the impact of social distancing at three of the busiest multi-modal public transport interchanges across [Greater Manchester](#). The overall aim is to improve the safety for all public transport interchange users and surrounding shared spaces by deploying Humanising Autonomy’s behaviour video analysis software ²⁴on existing CCTV infrastructure.

[The Netherlands](#) used the Dutch Mobility Panel (DMP) to check the travel behaviour of thousands of participants by measuring daily trips using a GPS app. Using a survey panel of 100,000 representative Dutch residents, coupled with state-of-the-art sensor technology in smartphones,

²⁴ The video provides a heat map that indicates the hot spots for social distance breaches.

it was possible to track people's locations and combine this data with their background characteristics. The insights are being used by different governmental policy makers to study mobility patterns in the Netherlands and to measure the effect of their policies.

Road

Challenges

The COVID-19 pandemic directly and indirectly caused several major challenges for road hauliers and long distance coach drivers across the EU.

- Supply chains, both domestic and global, have been disrupted, with demand shifting from non-essential to essential goods. This has led to some road transport operators experiencing a loss in revenue, while others' capacity is under-utilised. Over the summer, the situation started to improve due to domestic tourism but after September/October, with the increase of the restrictions being applied, the situation got again worse.
- Delays and travel restrictions at borders have affected both goods and passenger transport, leading to outright [travel reduction](#) and extensive queues at borders.
- Travel restrictions coupled with fear of mandatory quarantine have [reduced transport demand](#) and social distance measures have also reduced transport offer.
- Incompatible and incoherent measures for dealing with COVID-19 across Member States has affected the [coach transport industry](#).

Opportunities

- [Digital road freight start-ups](#) 'unbundling traditional road freight operations and capturing key aspects of the value chain'. For instance, [digital road freight platform](#) match demand for palletised goods transport with hauliers that have unutilized space in their trucks.
- [Use of congestion data](#) at border crossings to inform road transport operators, tentatively leading to newer digital services and better collaboration between public authorities and private transport actors.

Good practices:

Upgrade of EU's Transport Green Lanes: According to the [communication of 28 October 2020](#), the target was achieved at most road borders but could be improved upon with digital technology.

Inform truck drivers of delays: PTV Map&Guide Truck Route Planner started to show delays at borders for trucks, giving dispatchers more transparency and an opportunity to react faster to daily challenges.

Restore confidence through communication and public relations measures: The [Transdev website](#) informs passengers what is done to keep buses clean and keep them safe.

[Temporary relief measurement on operation of heavy goods vehicles](#): several governments have relaxed restrictions on operating lorries, limits on operation during weekends and public holidays have been suspended, restrictions on driving/rest times relaxed, and the validity of licenses and certificates extended. In some countries and cities, night-time bans on lorries have also been relaxed.

Rail

Challenges

- Travel restrictions coupled with fear of mandatory quarantine have reduced [rail passenger transport](#) (and therefore the revenues).
- [Many freight operators](#) have fixed costs for locomotives and staff, which makes it difficult to survive without revenues.
- [Closed borders and sanitary measures](#) forced a nearly-complete halt to passenger services.
- Rail freight will face challenges related to the slowdown in industrial output.
- Digitalisation and automation need more funds to exploit the opportunity that they bring e.g. increases in performance and reliability, optimising costs, etc.

Opportunities

- [Eurnex](#) reported a positive impact on freight transport by rail for long-distance trans-Eurasian rail lines, since the situation brought about by COVID-19 increased shipping prices and transit times on air and maritime freight transport.
- [Service offer and punctuality](#) of rail freight were better due to less trains circulating and less delays in passenger trains.
- Straightforward and comprehensive [ticketing solutions](#) are essential to restore passenger confidence and to take advantage of an expected spike in demand for rail services as COVID-19 restrictions ease.
- New platforms can inform the passenger about health and safety requirements.
- New digital ticketing in rail could work as a pay-as-you-go package via your mobile phone.
- The pandemic has revived demand for [international \(night\) trains](#). Partly, this can be attributed to a smaller will for flying due to environmental concerns, as is the case in [Sweden](#) for example, where night trains were very popular in the summer 2020. However, a larger part can probably be explained by the sheer absence of other possibilities, flights in particular, since March. The main challenges for [international \(night\) trains](#) as compared to existing alternatives are the comparatively high prices and long journey times.

Good practices:

Improve booking and information services: [Amadeus has a partnership with DB](#) (German rail) to enable passengers to book their journey across multiple countries and operators. This substantially increases ease of the booking and transparency of the offers available.

Provide health-critical information to travellers: [Trainline](#) provides passengers with information on crowded trains segments to enable them to decide if it is safe to travel. It would also be important to encourage data sharing of health-critical information, such as crowding, punctuality and health measures [to third-party ticketing platforms](#) that can support such features.

Contactless solutions for ticket control: E-ticketing inside public transport (QR, apps, sms, contactless payments) in Iasi, [Romania](#), allows passengers to maintain social distance and reduce interaction with staff.

Reduce costs for operators: Track access charges could be waived, as done in [France and Italy](#).

Maritime and inland waterways

Challenges

Around [600 000 maritime employees](#), (seafarers and on-board crew) work on EU-owned ships. The travel restrictions enforced by different countries around the world have resulted in complications for ships and their passengers and personnel. Although some operations showed a small recovery around summer, they declined after September. Some of the initial restrictions included:

- delayed port clearance
- prevention of crew from boarding or disembarking
- restricted access to local medical healthcare
- forced 14-day quarantine at anchor before port entry

These restrictions have hindered shore leave and crew rotations, which have resulted in workers facing exhaustion, stress and health concerns. Furthermore, quarantine periods have affected the supply of provisions to ships.

European waterway authorities and ports managed to prioritise essential cargo movements while working at [40 %](#) of their usual workforce before summer 2020. Meanwhile, passenger vessels for daily cruises and day trips were almost at a standstill for the [first half of the year](#).

Opportunities

- Increase the [use of contactless solutions](#) to minimise physical contact during cross-border operations.
- Exploit all-in-one connectivity, i.e. eliminating challenges in cross-border trade by improving the automation of customs and the detection of non-tariff barriers.
- Realise collaborative transport solutions by sharing knowledge and best practice in the global maritime shipping and inland waterways transport networks.

Good practices:

On 8 April 2020, the European Commission published *Guidelines on protection of health, repatriation and travel arrangements for seafarers, passengers and other persons on board ships*.

[Antwerp](#) minimised the number of staff on shifts and defined a standby team. [Hamburg](#) reduced the number of shifts by also introducing a standby team.

[Marseille](#) reduced crews in traffic towers, even though the consequence was to limit its capacity to a maximum of three simultaneous ship manoeuvres in the port.

[Busan](#) formed a replacement workforce, consisting of retirees, among others.

[Gothenburg](#) introduced work rotation schemes to reduce the spread of the infection, with individuals working completely separately.

[Port Authority of Valencia](#) put in place urgent and compensatory measures to contribute to mitigate the negative effects of the crisis on its users and providers. They have streamlined payments to 250 supplier companies to provide liquidity to companies working for the port. Furthermore, this port authority has also launched a new Strategic Plan to ensure they are better prepared for the “new normal”, focusing on more digital, innovative, responsible, carbon neutral and resilient ports.

Aviation

Challenges

- Travel restrictions coupled with fear of mandatory quarantine have significantly reduced air passenger transport in Europe and it does not seem to be improving so rapidly. For instance, in the Europe market the revenue passenger-kilometres²⁵ [dropped 78 % year-on-year in October 2020](#), which is a significant drop in revenue and puts at stake the [viability of many firms and aviation jobs related](#).
- Operating costs are likely to increase due to additional health and safety requirements for airlines and airports.
- The lack of systematic [testing for passengers before departure](#) and mutual recognition of test results by governments increase the imposition of quarantine.

Opportunities

- The COVID-19 pandemic would be an ideal opportunity to reform the safe, cost- and flight-efficient air traffic management system in Europe. An upgrade of the Single European Sky (SES 2+) initiative (which was envisioned before the COVID crisis) will make aviation more sustainable and contribute to the implementation of the European Green Deal.
- [Crowd control systems](#): besides helping the management of the physical distancing requirements at queues and security checkpoints, it can enable a faster screening process in general. Biometric systems could be tool for access control, allowing contactless identity checks.
- [Collaborate and share data](#) between airlines and airports could be an optimal solution for optimising costs and provide more value to the passengers and the terminal costumers.

Good practices:

The IATA proposed the [IATA Travel Pass Initiative](#). This proposal consists of a global and standardized solution to validate and authenticate all country regulations regarding COVID-19 passenger travel requirements. The proposal includes a registry of health requirements and testing or vaccination centres to inform passengers, a Lab App that allows passengers to receive test results or vaccination certificates securely, and a Contactless Travel App that can be used to manage travel documentation, such as a 'digital passport', test results and vaccination certificates.

The Belgian government allowed a deferral of the payment of concession fees owed by the [Walloon airports \(Charleroi and Liege\) to the Walloon authorities](#) to support airport operators during and after the pandemic.

[Denmark](#) provided aid measures to partly compensate SAS for the damage suffered due to the cancellation or re-scheduling of its flights. The government will provide support in the form of a state guarantee on a revolving credit facility in favour of SAS.

[Finland](#) granted Finnair a 286 million euros recapitalisation through the subscription of new shares. The State also provided a guarantee [covering 90 % of a 600 million euros loan](#) granted to Finnair by a pension fund.

France set up a [deferral payment scheme](#) of certain aeronautical taxes to compensate damages suffered by airlines due to the COVID-19 pandemic. The scheme will be accessible to airlines with an operating licence in France, and will offer them the possibility to defer the payment of certain

²⁵ The revenue passenger-kilometre (RPK) is the number of kilometres travelled by a paying passenger.

taxes that would in principle be due between March and December 2020 to after 1 January 2021, and to pay the taxes over a period of up to 24 months. The aim of the scheme is to reduce the pressure on airlines' cash flows.

3.3. Challenges and opportunities for tourism

International travel

Challenges

- The willingness to travel on an international flight is still very low and the perceived healthy risk is still very high.
- A restart in international travelling will take place gradually and it will not be only depend on air transport recovery, but also on the ability of organizations and countries to support consumers regaining confidence in travelling.
- Risk perception will be positively reduced with vaccinations, with great advantages for those countries which have started vaccination first.

Opportunities

- Building confidence and trust among consumers and tomorrow's travellers, through clear and unified travel protocols, will support the relaunch of international travel.
- An opportunity for several destinations – which before COVID-19 were trying to handle the problem of overtourism – is to reconsider the value of the guest as an individual and focus efforts towards redesigning the guest experience, niche tourism, spiritual tourism and experience tourism, and sustainability in travel.
- The digitalization of processes and implementation of contactless tools is an opportunity to promote destinations while reassuring travellers with clear-cut communications that they are safe while traveling.

Good practices: Global Safety Stamp

The specially designed stamp 'Safe Travels Stamp' allows travellers to recognise governments and companies which have adopted health and hygiene global standardised protocols ([#SafeTravels: Global Protocols & Stamp for the New Normal | World Travel & Tourism Council \(WTTC\)](#)). According to WTTC the European countries which have currently introduced the Global Safety Stamp are: Bulgaria, Croatia, Iceland, Montenegro, Portugal, Slovenia, Turkey, Ukraine, Austria, Russia, Spain, and the UK. (see also [News Article | World Travel & Tourism Council \(WTTC\)](#)). A global standardisation of protocols with a worldwide recognized stamp is the most suitable way to make travellers feel safe to visit a destination.

Domestic/regional travel

Challenges

- Some Member States have limited domestic travel demand.
- Large cities and international destinations that generate most of the tourism revenues cannot recover based on domestic tourism demand only.
- It is a challenge to create a suitable domestic tourism offer.

Opportunities

- Increase of demand for tourism in rural and less-known destinations.
- Increase of more environmentally-friendly near-home travel, domestic and regional tourism.

- Modify tourism models that currently focus on mass tourism to towards more sustainable models.
- Domestic tourists may favour local tourism products consumption (e.g. local food and craftwork).

Good practices: [Slovenian staycation voucher scheme](#)

The tourism voucher scheme in Slovenia was introduced on 29 May 2020 (Official Gazette, 2020). A person with a permanent resident status in Slovenia that was older than 18 years on 13 March 2020 received a voucher worth 200 euros. Persons younger than 18 years received a voucher worth 50 euros. Everyone can redeem the voucher for accommodation or accommodation with breakfast from 19 June to 31 December 2020. The scheme accounts for 345 million euros representing 0.72 % of GDP in 2019.

In the first five months of the scheme, approximately 45 % of staycation vouchers were used. Due to the second lockdown, the scheme has been extended until the end of 2021.

Accommodation providers

Challenges

- Accommodation providers have recorded the lowest occupancy rates in history, specifically hotels in city destinations. It will take a long time for those hotels to recover.
- Digitalisation will negatively impact business travel and MICE market.
- Group travel will recover slowly.
- Transformation of large hotels infrastructure demands new business models (e.g. combination of residential and tourism stays) and significant investment.
- Brain-drain and retention of key personnel that may look for job opportunities outside the industry.

Opportunities

- Transition to more digital and sustainable business practices.
- Use of technology to provide contactless services.
- Adjustments to cancellation policies addressing flexibility to reduce financial risk perception, use of technology to improve processes and increase productivity.
- High safety and hygiene standards to reduce consumers' fear and anxieties with accredited safety and security certification or labels.
- Adopting more sustainable actions, e.g. zero waste programs and relying on local supply chains.

Good practices: [Rome safe tourism](#)

Rome introduced the label called 'Roma Safe Tourism' for companies and operators that applied the adequate COVID-19 safety measures. This is an initiative to restore confidence in the sector regarding health and safety measures.

Tour operators and tourism agencies

Challenges

- Tour operators have been significantly affected by the pandemic. Many tour guides are self-employed and the pandemic has left them without a source of income. Government help in many cases is not sufficient to replace their losses.

- Business and group travel will recover more slowly than the individual leisure travel segment. However, those segments make up the vast majority of tour operators' income.
- Tour operators are highly dependent on international travel, which is significantly limited due to pandemic.

Opportunities

- Measures undertaken to contain the spread of the virus and mitigate its effects have induced operators to find other means for self-promotion and to sell their products, leading to a robust development of digitalisation processes.
- To support its businesses, the European Tour Operators Association featured all best practices across the tourism ecosystem. It also encouraged stuck-at-home travellers to keep destinations in mind, offering virtual visits and inspiration for [future holidays](#).
- Self-employed operators should be supported to start their virtually oriented activities to promote cultural activities.
- The focus should be on the development of domestic and sustainable tourism by e.g. providing funding for green initiatives.

Good practices: [Aid for tour operators and travel agencies](#)

The Italian Government adopted a package of aid for tour operators and travel agencies. With this act, the government compensates travel agencies and tour operator for the financial losses suffered due to COVID-19. The Italian authorities explained that compensation is also granted because travel agencies and tour operators were rapidly hit by the crisis as their Italian clients were no longer able to travel. However, certified freelance guides did not receive significant support and are facing financial difficulties.

Hospitality

Challenges

- Most of hospitality businesses are small and medium-sized enterprises. The main challenge currently facing SMEs is maintaining liquidity.
- Many strove to meet safety and security demands after the first wave but were eventually forced to close throughout the second wave.
- Many jobs and families are destined to be left without income and employment.
- Younger populations will be specifically affected since many employees in the hospitality sector are younger than 35 years ([Marques Santos et al., 2020](#)). This may cause significant unemployment among the youth and create an even more dramatic situation than the one experienced after the financial crisis of 2009.

Opportunities

- The need to design new ways to experience cultural heritage sites and visitor attractions fuelled, inter alia, the creation of digital virtual tours. Museums all over the world, tourism operators had to quickly adapt from dealing with crowds to dealing with none.
- Provide clear information regarding the measures hospitality businesses, museums, tourism operators and manager of cultural sites implement to reduce risk of infection, while educating people on how to better apply safety measures. In this way, people's confidence in traveling again could be restored (Liu et al., 2016).
- Use digital solutions for marketing and improving the efficiency of business processes.

Good practices: Digitalisation in Faroe Island

An example of how proactive countries are to the crisis is given by the Faroe Islands. They have created [virtual tours of their territory simulating a videogame experience](#). They are also using a voice assistants and developed a boot-chat (using voice in text) that can provide the visitors with main information about the travel. They are using AI to create the answers and provide timely communication with visitors creating the current and potential wish for visitation.

4. EMERGING DEVELOPMENTS AND TRENDS

KEY FINDINGS

- The EU's aim is to repair the short-term damage caused by the pandemic and invest towards the European Green Deal targets, resilience in the transport system and the adoption of 'smart' technology.
- The short-term recovery of both sectors relies on the successful roll-out of vaccinations, financial support from governments, and the implementation of policy actions that help industry adapt to the crisis.
- It is unlikely that the transport and tourism industries will revert to pre-COVID-19 patterns after the crisis is over, since behavioural and structural changes have been observed.
- Digital technology, enabling smart systems and teleworking, automation, and virtual tourism, are expected to continue to transform both the transport and tourism industries.

4.1. Introduction

This chapter addresses one of the most frequently asked questions: What will the transport and tourism sector look like after the COVID-19 pandemic?

Recent developments indicate that structural trends and shifts in market supply and demand will affect tourism and transport. These include greener transport and more sustainable tourism. This chapter describes the most likely scenarios based on recently reported developments and behavioural changes.

4.2. Emerging developments and trends in transport

Short and mid-term

Already under pressure before the outbreak of the pandemic, the transport sector needs to become smarter and more efficient. The aim is to repair the short-term damage caused by the pandemic and [invest towards a more sustainable and resilient sector](#).

The pandemic has forced citizens and businesses to change their habits and behaviours. However, it is necessary to investigate whether these behaviours will last, and more importantly, whether the change is desirable.

The latest surveys of consumer concerns²⁶ during COVID-19 show that the intention to undertake out-of-home activities varies by country and activity. Most respondents intend to shop for necessity, but walking, cycling or using their private car, and avoiding crowded places also rank high. Similar levels of walking and cycling may be sustained if there is the political will, for instance, to retain pop-up cycle lanes. Citizens seem to be in favour of measures that guarantee more space for smooth modes of transport, but at the same time they want to move safely. Hence the risk of increasing the use of private cars, which are less efficient for the transport network and more polluting. Moreover, people are still not keen to travel more than 2 hours from home, and are even less willing to fly.

²⁶ <https://www2.deloitte.com/us/en/insights/industry/retail-distribution/consumer-behavior-trends-state-of-the-consumer-tracker.html>
<https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/a-global-view-of-how-consumer-behavior-is-changing-amid-covid-19>

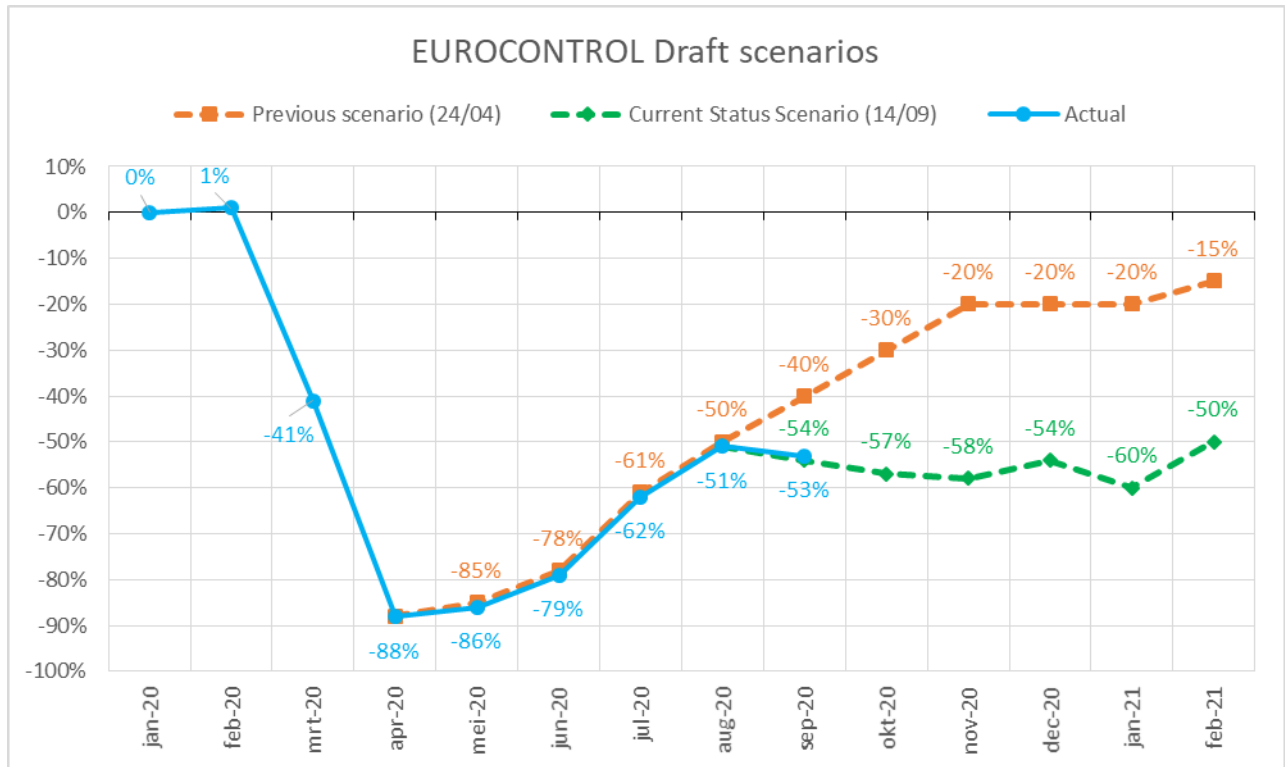
Consumers have expressed an interest to further shift their spending online, which implies that e-commerce will continue growing. This should encourage the development of better last mile solutions that help to avoid large numbers of vehicles circulating within cities.

Reducing the risk of infection is the most important factor when citizens decide how to move. Therefore, widespread vaccination coupled with mobility service providers taking significant steps towards health and safety should favour the recovery of shared mobility and public transport. However, the extent of that recovery is difficult to anticipate, and in the short term, a persistent reduction in the demand for passenger transport services is expected, associated with teleworking spanning over several days per week. This in turn alleviates the pressure on public transport and helps flatten the morning and evening peaks. Fewer long distance trips for business are expected to remain the norm, with digital tools becoming the 'new normal'. This is only valid for a subset of the population, as not everyone has this option. A [recent JRC study provides](#) a rough estimation of around 25 % employments that can be performed remotely in the EU.

According to a [study by Roland Berger for UNIFE](#), and given its structured and constant growth in recent years, the rail sector is expected to see a fast recovery: "While the COVID-19 pandemic has disrupted this growth path by causing lower passenger and freight volumes for rail operators, the attractiveness of rail will allow the sector to recover quickly and continue its positive development". Although COVID-19 caused an 8 % drop in transport volumes, due to postponements and cancellations of orders, experts still expect an average annual growth rate of 2.3 % until 2025. Moreover, the proclamation of 2021 as the European Year of Rail is expected to favour in the short term a shift towards the use of the rail, both for passengers and freight, through a series of campaigns and awareness-raising initiatives. The return of night trains, one of the flagship initiatives of the [2021: European Year of Rail](#), could get a boost from the current situation.

According to the recent [estimates made by IATA](#), 2020 could record a 77,5 % contraction in revenue passenger-kilometres for the European market. For airports alone, [the European association of airports reports for 2020](#) a decrease in revenues of 40 % (about 30 billion euros). Aviation's recovery will also be more protracted and the current modal shift in passenger transport towards trains could remain in the short term, also due to the fact that both the European Green Deal and the consequent [Sustainable and Smart Mobility Strategy](#), adopted in December 2020, aim to double high-speed rail and to achieve carbon neutrality for scheduled collective travel for journeys under 500 km. Both of these milestones will put pressure on short distance flights.

Finally, the lack of a coordinated response from the Member States has generated uncertainty in the real possibility of travelling. This has led to a further decrease in air travel, more than the epidemiological condition would require, especially over the summer. Figure 3 shows Eurocontrol's forecasts on air travel trends, carried out in April (in blue) and in September 2020 respectively. The first, according to Eurocontrol, could have corresponded to short-term recovery trends in the case of more certain and coordinated measures.

Figure 3: EUROCONTROL Draft Traffic Scenarios - 14 September 2020 (base year 2019/2020)

Source: Own elaboration with data from [Eurocontrol](#).

For aviation, once the second lockdown phase has passed, operators will have to implement operational, health and safety measures suitable to comply with new standards of social distancing requiring massive investments. After the trend towards privatization, a new direct involvement of the States in the flag carriers and an [acceleration of the process of consolidation of companies is expected](#).

As in other sectors, the trend in the [shipping sector](#) that was accelerated due to COVID-19 pandemic was digitalisation. This outbreak has shown that the working conditions of seafarers are still a crucial element. According to [Safety4sea](#) scenarios, the mild scenario for maritime sector says that trade flows will recover in 2023, growing 3.2 % annually, while on the most severe scenario sea trade will decline 17 % by 2024, a similar situation to the 1980 scenario, when trade collapsed.

Long term

The transport sector strives to be more sustainable and resilient. However, this depends on the scale of the economic crisis and the resources made available post-COVID-19, as well as the level and quality of investments. The EU will allocate resources for Green Deal implementation and its Recovery Fund can provide a reference. But the specific action plans and measures that will be implemented in the short and medium term will become a blueprint for future development. The analysis of the trends of the previous months provides an understanding of the patterns of the pandemic and of the impacts of the restrictive measures imposed during lockdown. This, in turn, could provide evidence on the most effective measures for the transport sector, including the design of a vaccine rollout strategy in 2021.

The transport sector's development also depends on the pre-COVID-19 situation and on policies that will be promoted at the European, national and local level. Three distinct scenarios are envisaged. The third one will presumably consist of a combination of the first two, and it is strongly influenced by the actions taken by policy makers and service providers.

Scenario 1: A return to the pre-COVID-19 situation

This scenario is more likely if virus infections are all but eradicated with the implementation of a mass vaccination programme. Without significant intervention by public authorities, people will return to their former mobility patterns that includes movement to work and places of leisure, without any substantial increase in the use of public transport or active modes. The trend toward more user-centric services, such as Mobility-as-a Service (MaaS) could continue.

Aviation for long distance passenger transport will more gradually resume normal service. Road use for long distance freight will recover the freight volume lost to rail.

Scenario 2: The habits developed during the outbreak period prevail: there are fewer and shorter trips, private transport demand rises, aviation sees some recovery in passenger transport as does road-based freight transport

If, on the other hand, the situation remains uncertain for a longer period and people perceive a high risk of contagion, demand for private transport will continue to increase in the mid to long term. The type of private car will depend on the presence of subsidies or incentives for the purchase of cars, also electric, given the will of many governments to reinvigorate their automotive sectors. The extent of policies supporting soft alternative modes, both for last-mile passengers and freight trips, will determine the modal share of private mobility.

For passenger transport, aviation could continue to see lower demand while rail retains a larger share. With the attention being given to high speed and night trains as replacement of short flights, an increase of demand for these can be seen, supported by the EC target of [doubling high-speed rail traffic across Europe by 2030](#).

With respect to freight transport, road can be expected to recover part of the share lost to rail, due to the cheaper cost — unless rail automation and digitalisation lowers costs and resolves the driver shortages, especially overnight when freight is usually transported.

This scenario was already witnessed after the lifting of the first lockdown and before the recent introduction of more restrictive measures.

Scenario 3: the transport sector rebuilds more sustainably and resiliently

Through integrated land-use planning and transport demand management, the need to travel and the [length of journeys are reduced](#). For example, the maintenance of full or partial teleworking assets, flexible working hours and store openings reduces transport demand, either overall or during peak hours. Moreover, the growth of e-commerce leads to less shopping trips, for instance, for groceries, although the potential negative effects of increased freight movements and fragmentation of deliveries will need to be considered. Furthermore, the pandemic has favoured the rediscovery of proximity shops and activities, as theorised by the [15-minute city concept](#). Teleworking and flexible working hours could influence the choices on the location of residence and workplace, diminishing the trend toward urban sprawl that has been observed in recent years, conversely encouraging larger distances between employer and employee.

This scenario corresponds to the prevailing vision of smart and sustainable mobility seen in recent years, but which has generally failed to materialise. That is, the promotion of a multimodal transport system, in which the most efficient and sustainable modes are prioritised, and the transport offer is integrated both from a planning and user perspective. Consequently, it would be desirable to continue along this path with some adaptation, for example, integrating the positive trends seen in teleworking

and flexible working hours to decongest public transport, while redesigning it with improved health and safety measures.

Digitalisation and automation would implicitly allow the supply chain to be more efficient and resilient. Freight transport could see a shift towards rail and maritime/inland waterways together with the use of cleaner fuels.

4.3. Emerging developments and trends in tourism

Short and mid-term

The immediate focus is on recovery. For tourism operators the major obstacles are liquidity, retaining employees and dealing with uncertainty. The second lockdown²⁷ has had harsh impacts on tour operators' performance. Many small and medium-sized companies do not have the financial means to survive the second lockdown and many may close. Recovery is very much dependent on vaccine development and its availability. Furthermore, the tourism sector's recovery will be dependent on the Member States and EU financial support. This includes not only the retention of employees and the preservation of jobs, but also the stimulation of investment cycles that can lead the industry on a path toward green and smart development. Tourism is traditionally viewed as a conventional industry. Tourism remains absent from most Member States' 'S3' Smart Specialisation Strategies²⁸, indicating that it has not been identified as an industry with strong research potential. Rebuilding tourism towards being a smarter, greener and more inclusive industry depends on their capacity to invest in research and development.

Emerging developments and trends in tourism in the short term can be summarized in five points:

- Provide liquidity and protect jobs.
- Recover confidence through policies of health and security.
- Harmonize and coordinate travel protocols and procedures.
- Encourage local tourism and personalise tourism experiences.
- Encourage digitalization, better use of data (within the context of a [European Strategy for Data](#)) and innovative solutions to make travel safer and reduce risk perception.

Long term

While short term and medium term policies will be focused on recovery, long term policies will be focused on building the resilience of the industry. Resilience building will demand not just vision and inspiration but also significant financing and investments. Three scenarios for future tourism development follow.

Scenario 1: Tourism bounces back to the pre-COVID-19 level

Recovery and a bounce back to pre-COVID-19 level in tourism is hoped for by many experts. But the impact of the pandemic on human behaviour patterns, on their risk perception and the socio-economic impact on the whole tourism industry is not insignificant. Therefore, it is reasonable to believe that changes generated by the pandemic will be permanent and structural, especially when related to business travel. Vaccination will foster people's travelling again – first domestically, then internationally. Insurance policies will certainly be *conditio sine qua non* in order to travel. Open air

²⁷ This refers to the period after the summer 2020, when Member States adopted more restrictive measures.

²⁸ Smart Specialisation is a place-based approach for the identification of strategic areas for research and the development of the economy.

journeys, mountain vacations, and holidays within the 500 km will grow again as soon as governmental restrictions will be lifted and vaccination coverage will be granted.

Scenario 2: Tourism uses the crisis as a catalyst for change and rebuilds more resiliently

The transformation of the industry towards greener, smarter and more inclusive tourism constitutes the second scenario. It responds to those stakeholders who have recognized that there is an urgent need for change, in light of the harm caused by overtourism, specifically with respect to the impact on the environment and the local population. This crisis may accelerate this change whose key traits would include smarter (digital), greener (environmentally friendly) and inclusive tourism (in line with local populations' acceptance and better working conditions for employees).

Scenario 3: Tourism is significantly reduced over a longer recovery phase

Under this scenario, domestic tourism will remain popular in the longer term, and overseas travel will be significantly reduced. In the majority of cases, business travel will be replaced by virtual meetings and the use of new technologies. The number of tourism companies and employment within the sector will significantly decline. As less tourism actors compete in the market, the price of tourism products will increase.

5. RECOMMENDATIONS FOR SHORT AND MEDIUM TERM POLICY RESPONSES

KEY FINDINGS

- Devote greater attention to active modes of transport by defining flexible policies for the management of public space. For example, implementing safe pedestrian and cycling corridors can help reduce car use in urban areas, especially for short trips.
- Establish clear and common protocols at the EU level on health and safety for the transport and tourism sectors. These must be communicated to both EU citizens and the EU's visitors. For example, there should be a common approach to the applicability of the PCR test for international tourists and/or the digital "vaccine passport".
- Monitor mobility patterns and utilise the data to support decision-making processes in the transport and tourism sectors. Sharing this data can be beneficial in maximising the value of the services, minimising losses and improving the customer's experience.
- Protect jobs in transport and tourism and the survival of SMEs through a special recovery scheme or rescue fund, while supporting better conditions for transport workers.
- Support the digital transformation of the transport and tourism industry through investment in technological solutions as well as personal capacities/skills.
- Stimulate the sustainable development of tourist destinations and businesses, and channel investment in the corresponding knowledge at tour operator level.

Transport

The general message for policy makers and citizens subsequent to the COVID-19 crisis is to build a more resilient transport system that is smarter and more sustainable.

Recommendations to relaunching smart, sustainable, and resilient transport include:

- Improving **policies for the management of public space** and giving **more attention to active modes**, such as walking and cycling, by providing better infrastructure. Micromobility solutions need rules to avoid conflicts with other transport modes. The COVID-19 pandemic can also accelerate the rollout of Mobility as a Service.
- **Aligning all EU interventions** for mobility and connectivity **with the strategies already in place**, such as the Green Deal and the recent Sustainable and Smart Mobility Strategy.
- **Supporting flexible working** (i.e. teleworking, flexible hours) as an instrument that can reduce congestion, as it flattens demand during peak hours and alleviates the burden on public transport.
- Implementing and communicating **coordinated measures at EU level** related to safety protocols and health measures (via online and offline channels), following harmonised guidelines in both the transport and tourism sectors.
- **Monitoring mobility patterns** and compliance with physical distancing rules. Real time data has shown its relevance in monitoring mobility behaviour and should be used to support effective government decision-making as well as for those entities responsible for transport management and operations.
- Continue efforts to ensure the **free flow of goods, services and personnel** and retaining flexibility by suspending restrictions, reducing paperwork for transport workers, extend the temporarily relieving airlines of their airport slot usage obligations (if needed), etc. As transport

and logistics rely on a physical work force, their health, repatriation and travel arrangements should also be facilitated.

- **Supporting digitalisation and promoting the use of contactless solutions**, such as remote working, contactless payment solutions, ticketing checks, online shopping, apps that indicate public transport occupancy, etc.
- Supporting **better conditions for transport workers** and guaranteeing their safety.
- Providing **short-term financial viability for the transport sector**, given that the reduction in travel demand and revenues is a real challenge for operators. Giving financial support to workers so as to keep their jobs and continue offering services.

Tourism

The pandemic has severely impacted the tourism industry. Worldwide, travelling is perceived as risk-prone and will be considered so until the pandemic is over and the vaccination has been widely distributed. People still long to travel, but are currently limited by travel restrictions and a fear of infection. The recent data from [ADARA](#) shows a significant increase of internet searches in the first two weeks of December 2020 related to travel. Travel will continue, but it will change. The patterns of mobility will also change, further accelerating the need to rethink and redesign the tourism of the future. Europe, the world number one tourism market and destination, should take a leading and pioneering role in this transition. This can only be done in collaboration with all concerned stakeholders and in cooperation with public authorities. The tourism industry is complex and is interdependent with other economic sectors. It is important to lead the industry towards recovery and resilience also in social and environmental terms.

Recommendations for the recovery of the tourism industry and its greater resilience include:

- For international and intra-EU travel, introduce **harmonized and uniformed travel protocols at EU level** to better prevent the risk of virus contagion and mitigate its impact. The measures adopted by the Member States currently lack coherence and consistency and are subject to constant change. This limits tourism demand and increases fear and anxiety among travellers. At the same time, the harmonisation of those measures is beyond the responsibility of the tourism sector, and broader political will and collaboration is necessary to achieve this goal.
- **Develop safety travel protocols with health authorities**, so that besides vaccinations bringing some optimism for revitalising not just domestic and intra-European but also international travel, harmonised health and travel protocols (e.g. the introduction of a vaccination passport) at the EU level will restore traveller confidence.
- Continue the **digitalization of the tourist experience and virtualisation of products**, according to travellers' interests to rely on technology to travel safely and in a contactless fashion. At the EU level, allocate more funding for the adoption of technological solutions and workforce training to improve their digital skills.
- Move from **awareness of more sustainable forms of travelling to action in sustainable development**, by fostering a transition to sustainable business models and providing more investments in green initiatives/actions, besides employee and traveller education, including sustainable travelling typologies.
- **Redesign tourism flows through campaigns and communication**, with the aim of having travellers visit destinations throughout the year and not only during high seasons.
- **Equally distribute financial help and fiscal relief** across EU Member States and address all operators within the tourism value chain.
- **Adjust accommodation** structures to favour work-action, i.e. working while being on holiday (e.g. through offering Wi-Fi and a desk in every room).
- **Implement insurance protocols** at the EU level to improve traveller's confidence so that they book journeys without fear of cancellation.

- **Support the use of holiday vouchers to favour staycations, 'workations' (work + vacations) and off-season journeys** (based on their success during the summer 2020 season) so as to help reducing demand and restore confidence in travel and tourism.
- **Rethink the key performance indicators (KPIs) for measuring the impact of tourism** (including the environmental and social aspects), since the current statistics are limiting (based on the number of arrivals and overnight stays).

REFERENCES

- Abate, M., Christidis, P., and Purwanto, J. (2020) 'Government support of airlines in the aftermath of the COVID-19 pandemic', *Journal of Air Transport Management*, vol. 89, p. 101931 [Online]. DOI: 10.1016/j.jairtraman
- Agenzia delle Entrate. (2020). *Aree tematiche - Bonus vacanze*. <https://www.agenziaentrate.gov.it/portale/web/guest/bonus-vacanze1>
- Aerotime Hub, 'Romania's air carrier TAROM to get €19.3 million state aid', [Online]. Available at: <https://www.aerotime.aero/26082-romania-s-air-carrier-tarom-to-get-19-3-million-state-aid>
- Assaf, A., & Scuderi, R. (2020). COVID-19 and the recovery of the tourism industry. *Tourism Economics*, 26(5), 731–733. <https://doi.org/10.1177/1354816620933712>
- Apple, 'Apple Mobility Trends', [Online]. Available at: <https://covid19.apple.com/mobility> (Accessed 9 December 2020).
- Ayuntamiento de Madrid, "Informe de evolución de la movilidad", September 2020.
- BBC News, (2020), Coronavirus: Lufthansa agrees €9bn rescue deal with Germany, [Online]. Available at: <https://www.bbc.com/news/business-52801131#:~:text=Lufthansa%20has%20agreed%20a%20rescue,budget%20airline%20Germanwings%20in%20April>.
- BBC News, (2020), Coronavirus: Air France set to cut more than 7,500 jobs, [Online]. Available at: <https://www.bbc.com/news/business-53284789>
- Bloomberg, (2020), Coronavirus: These Countries, Airlines Restrict Travel to China, 2 February 2020, [Online]. Available at: <https://www.bloomberg.com/news/articles/2020-02-02/coronavirus-these-countries-airlines-restrict-travel-to-china>.
- Bloomberg. (2020). Vienna Opens 50-Euro Tab for Every Family to Promote Eating Out. Retrieved 8 August 2020 from: <https://www.bloomberg.com/news/articles/2020-05-13/vienna-opens-50-euro-tab-for-every-family-to-promote-eating-out>
- Booking Holdings (2020) *Booking Holdings Reports Financial Results for 2nd Quarter 2020* [Online], Booking Holdings. Available at ir.bookingholdings.com/static-files/2221d23a-fa72-41ac-940c-ad80f44d3769
- Briginshaw, D (2020) "European operators urge policymakers to prioritise rail freight in Covid-19 recovery". *International Railway Journal*. 5 October 2020. Available at: https://www.railjournal.com/in_depth/european-operators-policymakers-prioritise-rail-freight-covid-19-recovery/ (accessed 14.11.2020).
- Covey, C. (2020) 'New research uncovers the impact of COVID-19 on travel agencies, tour operators', *Travel Pulse*, 24 June [Online]. Available at www.travelpulse.com/news/travel-agents/new-research-uncovers-the-impact-of-covid-19-on-travel-agencies-tour-operators.html
- Diaz-Soria, I. (2017). Being a tourist as a chosen experience in a proximity destination. *Tourism Geographies*, 19(1), 96–117. <https://doi.org/10.1080/14616688.2016.1214976>
- Dichter, A. (2020) *Travel Industry in Numbers*. McKinsey & Company.
- ECTAA. (2020). *The European Travel Agents' and Tour Operators' Associations*. <https://www.ectaa.org/en>

- European Union, 'Re-open EU' [Online], Available at: <https://reopen.europa.eu/en> (Accessed 8 December 2020).
- d'Errico, A. Ricceri, F. Stringhini, S. Carmeli, C. Kivimaki, M. Bartley, M. McCrory, C. (LIFEPATH Consortium) 'Socioeconomic indicators in epidemiologic research: A practical example from the LIFEPATH study' [Online], PLOS ONE, Available at: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0178071#abstract0>
- El Pais, (2020) 'El Gobierno inyectará dinero a Iberia del nuevo fondo para empresas estratégicas' [Online], Available at: <https://elpais.com/economia/2020-07-03/el-gobierno-inyectara-dinero-a-iberia-del-nuevo-fondo-para-empresas-estrategicas.html>
- European Union Aviation Safety Agency (EASA), 'Cabin Crew Recurrent Training, Guidelines in relation to the COVID-19 pandemic' [Online], Available at: https://www.easa.europa.eu/sites/default/files/dfu/easa_cc_recurrent_training_guidelines_covid_19_issue_1_13nov2020.pdf
- European Union Aviation Safety Agency (EASA), 'COVID-19 Aviation Health Safety Protocol Operational guidelines for the management of air passengers and aviation personnel in relation to the COVID-19 pandemic' [Online], Available at https://www.easa.europa.eu/sites/default/files/dfu/EASA-ECDC_COVID-19_Operational%20guidelines%20for%20management%20of%20passengers_v2.pdf
- Eurocontrol (2020) 'COVID-19 impact on the European air traffic network' <https://www.eurocontrol.int/covid19>. (accessed 20.11.2020).
- Euromonitor International (2020) "Global consumers shift after coronavirus".
- European Business Aviation Association (2020) *Aviation Round Table Report on the Recovery of European Aviation* [Online], EBAA. Available at www.ebaa.org/app/uploads/2020/11/Aviation-Round-Table-REPORT-FINAL-16.11.2020-v2.pdf
- European Commission (2020) *Communication from the Commission to the European Parliament, The European Council and The Council. Upgrading the transport Green Lanes to keep the economy going during the COVID-19 pandemic resurgence. COM(2020) 685 final* [Online], Brussels, European Commission. Available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0685>
- European Commission (2020) *Communication from the Commission. COVID-19: EU Guidance for the Progressive Resumption of Tourism Services and for Health Protocols in Hospitality Establishments. C(2020) 3251 final* [Online], Brussels, European Commission. Available at ec.europa.eu/info/sites/info/files/communication_tourismservices_healthprotocols.pdf
- European Commission. (2020). *The EU helps reboot Europe's tourism*. https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/travel-during-coronavirus-pandemic/eu-helps-reboot-europes-tourism_en
- European Commission. (2020). Commission recommendation on vouchers offered to passengers and travellers as an alternative to reimbursement for cancelled package travel and transport services in the context of the COVID-19 pandemic (Issue 13.5.2020). https://ec.europa.eu/info/sites/info/files/recommendation_vouchers_en.pdf
- European Commission (2020) "Future of Transport: Update on the economic impacts of COVID-19". Available at https://ec.europa.eu/jrc/sites/jrcsh/files/202005_future_of_transport_covid_sfp.brief_.pdf.

- European Commission (2020) "Timeline of EU Action". Available at https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/timeline-eu-action_en (Accessed 8 December 2020)
- European Commission (2020) "Insolvency proceedings". Available at https://ec.europa.eu/info/policies/justice-and-fundamental-rights/civil-justice/civil-and-commercial-law/insolvency-proceedings_en (Accessed 8 December 2020)
- European Commission. (2020). State Aid Cases. Competition. https://ec.europa.eu/competition/elojade/isef/index.cfm?fuseaction=dsp_sa_by_date (Accessed 8 December 2020)
- European Parliament. (2020). Tourism. Fact Sheets on the European Union. <https://www.europarl.europa.eu/factsheets/en/sheet/126/toerisme>
- European Tourism Association (2020) *Private coach transport: what group size is permitted? Policy Impact Note* [Online], ETOA. Available at www.etoa.org/wp-content/uploads/2020/07/PIN.2020.7.21.coach_load_factor.pdf
- European Travel Commission (2020) *European Tourism: Trends and Prospects (Q3/2020)* [Online], European Travel Commission. Available at etc-corporate.org/uploads/2020/11/ETC-Quarterly-Report-Q3-2020-Final-Public.pdf
- European Travel Commission. (2020). "Monitoring sentiment for domestic and intra-European travel – Wave 2". Available at <https://etc-corporate.org/reports/monitoring-sentiment-for-domestic-and-intra-european-travel-wave-2/>.
- European Union. (2020). Re-open EU. <https://reopen.europa.eu/en/>
- EUROSTAT 2020, " Passenger transported (detailed reporting only) – (quarterly data) https://ec.europa.eu/eurostat/databrowser/view/rail_pa_quartal/default/table?lang=en
- EUROSTAT 2020. "Gross weight of goods transported to/from main ports by direction and type of traffic (national and international) - quarterly data" (Updated 17 November 2020). https://ec.europa.eu/eurostat/databrowser/view/MAR_GO_QM/default/table.
- EUROSTAT 2020. "Container transport by nationality of vessel" (Updated 20 October 2020). https://ec.europa.eu/eurostat/databrowser/view/iww_go_qcnave/default/table?lang=en.
- EUROSTAT 2020. "GDP per capita in PPS" (Updated 1 June 2020). [https://ec.europa.eu/eurostat/web/products-datasets/-/tec00114#:~:text=Gross%20domestic%20product%20\(GDP\)%20is,measure%20for%20the%20economic%20activity.&text=The%20volume%20index%20of%20GDP,average%20set%20to%20equal%20100](https://ec.europa.eu/eurostat/web/products-datasets/-/tec00114#:~:text=Gross%20domestic%20product%20(GDP)%20is,measure%20for%20the%20economic%20activity.&text=The%20volume%20index%20of%20GDP,average%20set%20to%20equal%20100)
- Gesis Leibniz Institute for the Social Science, *Socio-demographic variables* [Online],. Available at https://www.esis.org/fileadmin/upload/SDMwiki/Hoffmeyer-Zlotnik_Standardisation_and_Harmonisation_of_Socio-Demographic_Variables.pdf
- Hang, H., Aroean, L., & Chen, Z. (2020). Building emotional attaching during COVID-19. *Annals of Tourism Research*, 83(May), 103006. <https://doi.org/10.1016/j.annals.2020.103006>
- Haubold H. <https://ecf.com/news-and-events/news/covid-19-cycling-boom-real-numbers-say-yes>. (accessed 14.11.2020).
- Hill, A. (2020) 'Private cars may be more popular post-Covid, experts warn' <https://www.itsinternational.com/its17/news/private-cars-may-be-more-popular-post-covid-experts-warn>.

- IATA (2020) *Impact of COVID on European Aviation* [Online], IATA. Available at www.iata.org/contentassets/c0b84098b8d845d2a01f78f637521dbe/impact-covid-european-aviation-august-2020.pdf
- ICAO (2020) "Effects of Novel Coronavirus (COVID-19) on Civil Aviation: Economic Impact Analysis". Available at https://www.icao.int/sustainability/Documents/COVID-19/ICAO_Coronavirus_Econ_Impact.pdf.
- International Labour Organization (ILO), 'Unemployment Rate'. [Online], Available at: <https://www.ilo.org/ilostat-files/Documents/description.UR.EN.pdf> (Accessed 9 December 2020).
- United Nations. (2008). Role of the International Recommendations for Tourism Statistics 2008. https://unstats.un.org/unsd/publication/Seriesm/SeriesM_83rev1e.pdf#page=26
- IRU (2020a) *Next generation EU: priority areas for road transport to drive recovery* [Online], IRU. Available at www.iru.org/system/files/Next%20generation%20EU%20-%20priority%20areas%20for%20road%20transport%20to%20drive%20recovery.pdf
- IRU (2020b) *COVID-19 Impact on the Road Transport Industry – Update November 2020* [Online], IRU. Available at www.iru.org/resources/iru-library/covid-19-impact-road-transport-industry-update-november-2020
- Jeuring, J. H. G., & Haartsen, T. (2017). The challenge of proximity: the (un)attractiveness of near-home tourism destinations. *Tourism Geographies*, 19(1), 118–141. <https://doi.org/10.1080/14616688.2016.1175024>
- Kampel, K. (2004). COVID-19 and Tourism: Charting a Sustainable, Resilient Recovery for Small States. In *Commonwealth Trade Hot Topics* (Issue 163, pp. 1–14). Commonwealth Secretariat. <https://doi.org/10.14217/d284a4dd-en>
- Krisinformation.se (2020) *COVID-19 International travel restrictions*.
- Lawson, R. (2020) *Tourism & Travel in a New COVID-19 World* [Online], STR. Available at str.com/sites/default/files/STR-Report-tourism-and-travel-in-a-new-covid-19-world.pdf (Accessed 21 November 2020).
- Lozzi, G., Rodrigues, M., Marcucci, E., Teoh, T., Gatta, V., Pacelli, V. (2020) *Research for TRAN Committee – COVID-19 and Urban Mobility: Impacts and Perspectives* [Online], Brussels, European Parliament. Available at [www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL_IDA\(2020\)652213](http://www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL_IDA(2020)652213) (Accessed 21 November 2020).
- Marques Santos, A., Madrid, C., Haegeman, K. and Rainoldi, A. (2020) *Behavioural Changes in Tourism in Times of COVID-19. JRC Science for Policy Report. Employment scenarios and policy options*. Luxembourg, Publications Office of the European Union [Online]. DOI:10.2760/00411 (Accessed 21 November 2020).
- McKinsey & Company (2020) "Travelers anxiety and what we can do about it".
- McKinsey&Company. (2020a). Travel industry in numbers. In Future Hospitality Summit [presentation].
- McKinsey&Company. (2020b). Travelers anxiety and what we can do about it. In Future Hospitality Summit [presentation].

- Medimorec, N., Enriquez, A., Hosek, E., Peet, K. and Cortez, A. (2020) Impacts of COVID-19 on Mobility. Preliminary analysis of regional trends on urban mobility [Online], SLOCAT Partnership. Available at slocat.net/wp-content/uploads/2020/05/SLOCAT_2020_COVID-19-Mobility-Analysis.pdf (Accessed 21 November 2020).
- Mendoza, S. P. 10 de septiembre de 2020 https://www.eldiario.es/madrid/covid-19-madrid-trastoca-movilidad-desplazamientos-publico-pie-bici-sigue-superan-transporte-mandando-coche_1_6212654.html (Accessed 14 November 2020).
- Ministry of Culture and Tourism of Italy. (2020). Turismo, Franceschini: 25 milioni di euro per agenzie di viaggio e tour operator <https://www.beniculturali.it/comunicato/turismo-franceschini-25-milioni-di-euro-per-agenzie-di-viaggio-e-tour-operator>
- Navarro Jurado, E., Ortega Palomo, G., & Torres Bernier, E. (2020). Propuestas de reflexion desde el turismo frente al COVID-19. Incertidumbre, impacto y recuperacion. Universidad de Malaga. https://habitacion61.com/wp-content/uploads/2020/04/Propuestas-Reflexiones-Turismo-ImpactoCOVID_i3tUMA.pdf
- NOS (2020) *Steunpakket KLM voor 3,4 miljard, banenverlies onvermijdelijk* [Online], Available at <https://nos.nl/artikel/2338574-steunpakket-klm-voor-3-4-miljard-banenverlies-onvermijdelijk.html>
- OECD (2020) *Rebuilding Tourism for the Future: COVID-19 Policy Responses and Recovery* [Online], OECD. Available at read.oecd-ilibrary.org/view/?ref=137_137392-qsvjt75vnh&title=Rebuilding-tourism-for-the-future-COVID-19-policy-response-and-recovery
- OECD. (2020b). Tourism Policy Responses to the coronavirus (COVID-19). Retrieved 4 August 2020 from: <https://www.oecd.org/coronavirus/policy-responses/tourism-policy-responses-to-the-coronavirus-covid-19-6466aa20/>
- Official Gazette. (2020). ZIUOOPE - Zakon o interventnih ukrepih za omilitve in odpravo posledic epidemije COVID-19-. Retrieved 25 July 2020 from: <http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO8206>
- OpenTable. (2020). State of the Industry. <https://www.opentable.com/state-of-industry>
- Reuters (2020), Timeline: How the global coronavirus pandemic unfolded, [Online], Available at: <https://www.reuters.com/article/us-health-coronavirus-timeline-idUSKBN23Z0UW>
- Ritchie, H. Our World in Data (2020), 'Google Mobility Trends: How has the pandemic changed the movement of people around the world?' [Online], Available at: <https://ourworldindata.org/covid-mobility-trends>
- RIVM (2020), Face masks and gloves [Online], Available at: <https://www.rivm.nl/en/novel-coronavirus-covid-19/face-masks-and-gloves> (Accessed 9 December 2020)
- Romagosa, R. (2020). The COVID-19 crisis: Opportunities for sustainable and proximity tourism, *Tourism Geographies*, 22 (3), 690-694, <https://www.tandfonline.com/doi/full/10.1080/14616688.2020.1763447>
- Sanford, W., and DuBois, D. (2020) *COVID-19 Impact on Hotels and Short-term Rentals* [Online], STR and AirDNA. Available at [airdna-website-reports.s3.amazonaws.com/documentation/Hotels+vs+Short+Term+Rentals.pdf](https://s3.amazonaws.com/documentation/Hotels+vs+Short+Term+Rentals.pdf)

- Serrano, F. Kazda, A. (2020), 'The future of airports post COVID-19' ELSIEVER, [Online], Available at <https://www.sciencedirect.com/science/article/pii/S0969699720304841>
- Skift Research (2020). Available at <https://research.skift.com>.
- Slocat (2020) *Impacts of COVID-19 on Mobility, Preliminary analysis of regional trends on urban mobility* [Online], Available at http://slocat.net/wp-content/uploads/2020/05/SLOCAT_2020_COVID-19-Mobility-Analysis.pdf
- Statistical Office of the Republic of Slovenia (SOURS). (2020). Tourism. <https://www.stat.si/StatWeb/en/Field/Index/24>
- STR. (2020a). Tourism & Travel in a New COVID-19 World [presentation].
- STR. (2020b). Data trends and insights on the hotel industry. <https://str.com/data-insights-blog/coronavirus-hotel-industry-data-news>
- The European Tourism Manifesto alliance. (2020). European tourism sector demands urgent supportive measures to reduce devastating impact of COVID-19 – European Tourism Manifesto. <https://tourismmanifesto.eu/european-tourism-sector-demands-urgent-supportive-measures-to-reduce-devastating-impact-of-covid-19/>
- Trips Guard (2020) *Destination Romania* [Online], Available at <https://www.tripsguard.com/destination/romania/> (Accessed 09 December 2020).
- Tour MIS ÖW/MU Vienna. (2020). https://www.tourmis.info/index_e.html
- TUI Group (2020) *Quarterly Statement 1 October 2019 – 30 June 2020* [Online], TUI Group. Available at www.tuigroup.com/damfiles/default/tuigroup-15/en/investors/6_Reports-and-presentations/Reports/2020/20200813-TUI-Group-Quarterly-Statement-Q3-2020.pdf-fd18b2ec0874450d1c25d82a90036c62.pdf
- UNCTAD (2020) *COVID-19 and Tourism: Assessing the Economic Consequences* [Online], (UNCTAD/DITC/INF/2020/3). Available at unctad.org/system/files/official-document/ditcinf2020d3_en.pdf
- United Nations. (2010). Role of the International Recommendations for Tourism Statistics 2008. https://unstats.un.org/unsd/publication/Seriesm/SeriesM_83rev1e.pdf#page=26
- UNWTO (2019) *Tourism Barometer*. Madrid. UNWTO.
- UNWTO. (2020). *Glossary of tourism terms*. <https://www.unwto.org/glossary-tourism-terms>
- UNWTO (2020) *A Joint Statement on Tourism and COVID-19: UNWTO and WHO Call for Responsibility and Coordination* [Online], Madrid, UNWTO. Available at www.unwto.org/news/unwto-who-a-joint-statement-on-tourism-and-covid-19
- UNWTO. (2020). *UNWTO World Tourism Barometer and Statistical Annex, January 2020*. UNWTO World Tourism Barometer, 18(1), 1–48. <https://doi.org/10.18111/wtobarometereng.2020.18.1.1>
- UNWTO. (2020). How are countries supporting tourism recovery? (Issue 1). https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2020-06/BFN_V4.pdf
- UNWTO. (2020). International Tourism Down 70% as Travel Restrictions Impact All Regions. <https://www.unwto.org/news/international-tourism-down-70-as-travel-restrictions-impact-all-regions>

- UNWTO (2020) *International Tourist Arrivals Could Fall by 20-30 % in 2020* [Online], Madrid, UNWTO. Available at www.unwto.org/news/international-tourism-arrivals-could-fall-in-2020
- UNWTO (2020) COVID-19 response: Recommendations document – white paper.
- UNWTO. (2020). UNWTO World Tourism Barometer May 2020 Special focus on the Impact of COVID-19 (Summary). UNWTO World Tourism Barometer (Issue May). World Tourism Organization (UNWTO). <https://doi.org/10.18111/9789284421817>
- UNWTO (2020) *How are Countries Supporting Tourism Recovery? UNWTO Briefing Note – Tourism and COVID-19, Issue 1* [Online], Madrid, UNWTO. Available at www.e-unwto.org/doi/epdf/10.18111/9789284421893
- Vilnius (2020) *COVID-19: Information for travellers?* Available at <https://www.govilnius.lt/media-news/important-information-regarding-the-coronavirus#:~:text=Everyone%20arriving%20to%20Lithuania%20from,if%20such%20a%20test%20is>
- Wahba, S., Ottone R. E., and Amirtahmasebi, R. (2020) 'Culture in the COVID-19 recovery: Good for your wallet, good for resilience, and good for you', *World Bank Blogs*, 20 August [Blog]. Available at blogs.worldbank.org/sustainablecities/culture-covid-19-recovery-good-your-wallet-good-resilience-and-good-you
- Wang, F., Xue, T., Wang, T., & Wu, B. (2020). The Mechanism of Tourism Risk Perception in Severe Epidemic—The Antecedent Effect of Place Image Depicted in Anti-Epidemic Music Videos and the Moderating Effect of Visiting History. *Sustainability*, 12(13), 5454. <https://doi.org/10.3390/su12135454>
- Watts, J 2020 "People plan to drive more post-Covid, climate poll shows" <https://www.theguardian.com/environment/2020/nov/10/people-drive-fly-climate-crisis-global-poll-green-recovery-covid-pandemic>.
- World Travel & Tourism Council (2020) *COVID-19 Restrictive Policy Shifts* [Online], World Travel & Tourism Council. Available at wtccweb.on.uat.co/Portals/0/WTTC%20COVID-19%20Restrictive%20Policy%20Shifts%2008_04.xlsx
- World Travel & Tourism Council (2020) *Recovery Scenarios 2020 and Economic Impact from COVID-19*
- World Travel & Tourism Council. (2018). *Travel & Tourism: Tourism Economic Impact 2018*. <https://wtcc.org/Research/Economic-Impact>
- World Travel & Tourism Council. (2020). *Economic Impact from COVID-19: EU* (Issue November 2020). <https://wtcc.org/Research/Economic-Impact/Recovery-Scenarios/moduleId/1904/itemId/204/controller/DownloadRequest/action/QuickDownload>
- Worldometers.info. 2020. COVID-19 Virus Pandemic. [online] Available at: <https://www.worldometers.info/coronavirus/> (Accessed 14 November 2020)
- Young, S. (2020). *The Impact of COVID-19 on Zoological Organizations - American Humane - American Humane*. <http://americanhumane.org/blog/the-impact-of-covid-19-on-zoological-organizations/>

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

PE 652.235

IP/B/TRAN/2021-093

Print ISBN 978-92-846-7811-2 | doi:10.2861/315977 | QA- 05-21-006-EN-C

PDF ISBN 978-92-846-7810-5 | doi:10.2861/62593 | QA- 05-21-006-EN-N