



Private Sector Companies in the Fight against Covid-19

A Compendium of ITF Corporate Partnership Board Initiatives



Foreword

The Covid-19 global health crisis we face has been an unprecedented challenge for all of our society. Companies are also facing difficulties. Despite this, several have shown strong leadership in rising to the current challenge and responding to the needs of people in their communities and around the world.

They have contributed their skills, creativity, services and time, to pivot from their dayto-day activities, to those that help address this public health challenge and alleviate healthcare workers found on the frontlines of this pandemic.

The International Transport Forum (ITF) at the Organisation for Economic Co-operation and Development (OECD) is proud to present this compendium featuring a collection of initiatives by members of the ITF's Corporate Partnership Board (CPB). These initiatives are broad ranging in nature – from the creation of respiratory devices, to the transport of critically ill patients, to offering free services to frontline and healthcare workers. In the months since the World Health Organization declared a global pandemic on 11 March, the initiatives documented in this compendium have shown what the private sector is capable of when a true crisis calls for decisive, joint action.

The ITF would like to thank the following companies for their submissions: Airbus, Alstom, Bird, ExxonMobil, Iberdrola, Incheon International Airport, Kakao Mobility, Michelin, PTV Group, RATP Group, SNCF, Total, Uber, Valeo, and Volvo Cars.

The project was co-ordinated and prepared by Sofia Al-Dasouqi and Sharon Masterson (ITF). Individual company submissions have been collated and aligned to meet OECD style guidelines, but have not been edited for substance. The views expressed throughout this compendium are those of the participating companies alone.

To learn more about the work of the CPB and its members, please visit our website <u>here</u>. To follow the conversation on Twitter, please consult <u>#ITF Corporate</u>.

Paris, September 2020



As a proven leader in the global aerospace sector, Airbus designs, produces and delivers innovative solutions with the aim to create a better-connected, safer and more prosperous world. These cutting-edge products and services – which span the commercial aircraft, helicopter, defence, security and space segments – benefit from Airbus' wide-ranging expertise and continued emphasis on innovation.

Bringing masks from China to Europe

Airbus is using its own aircraft and crews in transporting millions of facemasks for donation to hospitals and public services around Europe. Since 22 March, Airbus has been sourcing masks (surgical and FFP2) in China and put air bridges in place to carry them from China to Europe, for the benefit of the UK, Spanish, German and French governments. As of 16 April, three flights had already taken place and more flights are expected to happen every week or so until early June.



Photo: Airbus

Airbus: taking part in the Ventilator Challenge UK

A consortium of significant UK industrial, technology and engineering businesses has come together to produce medical ventilators for the UK. Airbus has taken a leading role in providing technical expertise to the Consortium as well as leading on Government Affairs, liaising with the Cabinet Office, and Communications, with McLaren and HVMC. This consortium has been working hard to investigate the production of a range of ventilator design options to meet a high-level specification for a Rapidly Manufactured Ventilator System ("RMVS") developed by clinicians and the Medicines and Healthcare Products Regulatory Agency ("MHRA").



TARMAC: recycling oxygen masks from out-of-service aircraft

In cooperation with local partners, Tarmac Aerosave's team has collected all oxygen masks available on aircraft currently under deconstruction. They were entrusted to the health services of the Toulouse region (Airbus is a shareholder of Tarmac together with Safran and Suez).

SURVEY Copter, the tactical drones division part of Airbus, is participating in the 3D production of protective medical equipment

Airbus' tactical drones division SURVEY Copter's 3D printers take about 45 minutes to produce a visor. While the visor is not certified from the outset as medical equipment, it nonetheless offers the required protection and, given the urgency, is consequently undergoing approval by the Montélimar CHU (university hospital). These visors are then shipped to the users, i.e. the medical staff in the Montélimar and Valence university hospitals, freelance nurses, retirement homes, and a certain number of Town Halls in the South East of France.

Airbus to produce 3D-printed hospital visors in fight against Covid-19

Airbus plants in Spain (Getafe, Illescas, Albacete, Tablada, and San Pablo) have joined forces to produce 3D-printed protective face shields or visors, which will provide healthcare personnel with individual protection equipment to help them in the fight against Covid-19. Additionally, some Airbus employees also continue producing these visors at home with their own 3D printing machines. Airbus Germany joined forces in the visor production. Protospace Germany and the Composite Technologie Centre (CTC) in Stade, together with the 3D-printing network in Germany "Medical goes Additive," and a wider group of German companies and institutions are now supporting this project.



Photo: Airbus



Joining forces in the fight against Covid-19: remotely 3D-printing headbands in Wichita

3D printing technology also is at the heart of Covid-19 support activities from employees at Airbus' Wichita, Kansas Engineering Centre in the U.S. – which normally focuses on wing design for the company's long-range aircraft. Working remotely, these team members are helping 3D-print headbands for a crowdsourced protective face shield design from Prusa Research. Community members and businesses have been providing parts for the face shield, while several people from Airbus' Wichita facility perform quality control and final assembly duties. Completed face shields are delivered to the Wichita Police Department and Sedgwick County Sheriff's Department for distribution where they are needed. Working remotely, Airbus' Wichita employees already have provided more than 300 units.

Keeping the next generation of flyers inspired (and busy!)

With children around the world spending more time at home, the Airbus Foundation Discovery Space platform has fun and engaging videos for kids to explore the science behind what we do every day: learn how planes fly, how to travel to space, etc. Airbus China also developed a series of aviation on-line classes during the pandemic to show our care and solidarity to children in Wuhan. The initiative is aiming to enrich their spare life and inspire their passions for the aviation industry and science, which is also an innovative way of fulfilling the social responsibility of Airbus in China. Airbus Helicopter has also released colouring a book with instructions on how to build paper helicopters.

Skywise Covid-19 parking management

As airlines ground their fleets, it is complex to track which aircraft are in storage, where they are, and what maintenance needs to be carried out to uphold airworthiness. When passenger demand returns, airlines will need to identify the optimal aircraft to bring back into service and generate a checklist of the necessary maintenance tasks. Airlines are using this geospatial application to mark aircraft in Skywise as grounded, and park aircraft virtually in airports in a specific position (hangar, taxiway, etc.). Airlines can quickly pull contextual data such as the aircraft's age, last and next check, last major assembly overhaul, and more. This allows them to efficiently decide where to store each individual aircraft, and in what order

BizLab supports "start-ups against Corona"

In response to the global Covid-19 pandemic, start-ups around the world are raising their hands to signal their desire to help. A new online platform created by the venture client service provider 27 pilots is harnessing this spirit of solidarity to put it to good use. Specifically, start-ups are signing up to provide companies with practical support to address both small and large problems in a structured manner and via an accelerated timeline. The initiative enables BizLab and Airbus to actively contribute to business continuity and to help large companies to evolve their business models in the face of a global crisis.



Alstom is a French multinational company operating worldwide in rail transport markets, active in the fields of passenger transportation, signalling and locomotives, with products including the AGV, TGV, Eurostar, and Pendolino high-speed trains, in addition to suburban, regional and metro trains, and Citadis trams.

Alstom has engaged in a wide array of community activities in response to the Covid-19 crisis. All regions where Alstom operates have been very active, with 60 different initiatives organised locally.

Among its activities, Alstom has provided local donations including:

- About 200 000 masks of various types
- Approximately 400 bottles of hydro alcoholic gel
- Approximately 1 300 protective suites/overalls/gowns
- 5 000 pairs of disposable gloves
- Various other donations including glasses, goggles, and eye shields
- Nearly EUR 200 000 in financial donations mostly for medical equipment, protective clothing, laptops, and donations to local food banks

Further, Alstom has joined the effort to manufacture 3D-printed face shields, respirator valves, and door-handle covers and has deployed some of its staff to volunteer across local organisations.

Beneficiaries of these services include:

- Health authorities
- Hospitals
- Front-line medical staff
- Community-focused associations
- Partner Non-Governmental Organisations
- Vulnerable populations

The Alstom Foundation

To respond to the public health crisis, Alstom Foundation's budget is set to increase from EUR 1,5 million to EUR 1,9 million across the year 2020-2021. These funds will be used for humanitarian purposes primarily to target populations affected by Covid-19. These changes will allow Alstom to carry out roughly 7 to 10 more projects throughout the 2020 cycle.

Local community activities

Alstom's global community support activities began as early as March 2020. Since stepping into action, Alstom has been able to:

- Distribute 15 000 masks to operators and drivers of metro trains in China
- Donate EUR 8 000 by Alstom teams in Italy to the Hospital of Milan most affected by the virus
- Provide 70 000 masks and items of protective clothing to various hospitals across Alstom's 13 sites in France
- Manufactured and delivered 3D-printed face shields across Spain, Brazil, Argentina, the United States, Morocco, Chile, and France



Bird's mission is to make cities more liveable by reducing car usage, traffic, and carbon emissions. Partnering with cities to reduce pollution, congestion and gridlock, Bird aims to rebalance existing streets, while improving the way individuals get around. Serving as a clean, car-free transportation alternative, Bird works to complement existing transit systems and invest in safety infrastructure for everyone. Bird currently operates in over 100 cities across the globe.

Providing free mobility to healthcare workers in times of crisis

Bird is offering free electric scooter rides to healthcare workers and emergency personnel. Eligible riders will receive two free 30-minute rides per day for as long as it takes to help communities recover from the global health crisis. The program will initially be available in Tel Aviv, Antwerp, Santa Monica, and Culver City. In Turin, Italy, Bird has loaned a small fleet of scooters to the Red Cross to help deliver food and medicine to elderly residents and Covid-19 patients confined to their homes.

You can now see local restaurants serving takeout and delivery in the Bird app

Local businesses have been some of the hardest hit by the Covid-19 pandemic, but there are things we can all do to help.

Beginning on 26 March 2020, Bird is piloting a new in-app feature that allows riders to identify restaurants serving takeout and delivery in Santa Monica. Simply open the updated Bird app and participating establishment will be clearly marked on the map using coloured pins. When tapped, feature restaurants will expand to display pertinent details such as an address, photos and contact information.



Photo: Bird



In the midst of a global health crisis that is affecting millions around the world, supporting communities safely and intelligently has never been more important. Bird knows that nearly 60% of its riders use micromobility to connect to commerce in the area. By highlighting nearby local restaurants, Bird hopes to make it easier for them to support their favourite local businesses while adhering to safe social distancing guidelines.

Bird's team will be closely monitoring the results of the pilot to determine the feasibility of extending the service to their cities as well.

When it comes to seeing our communities through this emergency, we are all in this together:

- For more information on how you can support small businesses throughout the US, visit helpmainstreet.com. The newly created website enables visitors to purchase gift cards from local vendors across the country, supplying them with much needed revenue today that can be redeemed when the Covid-19 pandemic subsides.
- Read Bird founder and CEO Travis VanderZanden's message to riders here.
- Learn more about supporting restaurants in Santa Monica by visiting the city's official <u>food delivery and pickup guide.</u>



ExxonMobil, the largest publicly traded international oil and gas company, uses technology and innovation to help meet the world's growing energy needs. ExxonMobil holds an industry leading inventory of resources, is the largest refiner and marketer of petroleum products and its chemical company is one of the largest in the world.

ExxonMobil joins global centre to expedite medical innovation for personal protective equipment

ExxonMobil and the Global Centre for Medical Innovation (GCMI) said they have initiated multi-sector and joint development projects to rapidly redesign and manufacture reusable personal protection equipment for health care workers such as face shields and masks, which are in short supply as a result of the Covid-19 pandemic.

Mask ambition

A chance Facebook friendship between an Atlanta-based physician and a digital transformation expert from ExxonMobil could help unlock a wave of medical masks that healthcare workers need to treat patients with Covid-19. Just a day later, Dr. Newton returned to Facebook to announce she had partnered with a team at Georgia Tech University to 3D-print face shields and reusable masks.

Our Coronavirus response: meeting a new challenge

ExxonMobil is mobilising its resources to create PPE for healthcare workers helping combat Covid-19, in addition to producing the fuel the world needs to transport materials, enabling doctors, nurses and other medical personnel to get to hospitals to help critical patients. In addition, the company is providing monetary donations to foodbanks in the Houston and Montgomery County area in Texas.



Helping doctors and nurses breathe safely

An ExxonMobil team of experts in chemicals, material science, and manufacturing is offering their experience to help a collaborative effort organized by the Global Centre for Medical Innovation in re-thinking how protective medical equipment, specifically face shields and face masks, is made.

The collaboration has also produced models for a new, reusable facemask design that will address the shortage of N95 protective masks.





Producing solutions for frontline professionals

ExxonMobil is maximising its production of high-performance polymers used to make facemasks, surgical gowns, and other critical medical supplies for those treating patients with Covid-19.







Iberdrola is a global leader in clean electricity with more than 150 years of history. The company supplies clean energy to more than 100 million people and has 34 000 employees worldwide. For two decades, Iberdrola has been leading the energy transition, as a first mover in the industry to identify the urgent challenges posed by climate change. Developing clean electricity has been integral in Iberdrola's global growth with a focus on renewables, smart grids, energy storage, innovation and digitalisation.

In March, Iberdrola placed orders with suppliers worth EUR 2,9 billion in the throes of the crisis caused by the outbreak of the Coronavirus

Iberdrola has placed orders for almost EUR 4 billion during the first quarter of the year with more than 10 000 suppliers around the world, double the amount in the same period of 2019. These orders will help to keep industry moving and hundreds of thousands of people in work.

Specifically – and according to the company's data – March was the busiest month in this regard, with orders worth approximately EUR 2,9 billion placed, almost 75% of the total for the quarter. The purchases made during the quarter are equivalent to preserving around 700 direct and indirect full-time jobs, and will help to create around 400 000 jobs during the year.

At the same time, 24% of the total amount was allocated to suppliers based in Spain (more than EUR 940 million). Local companies in the United States took 21,5% of the total for the period (EUR 825 million) and those in Brazil 18% (EUR 695 million).

Aware of the impact of the Covid-19 coronavirus pandemic – and within the framework of an unprecedented investment strategy approved to be carried out during 2020 which will amount to a record-breaking EUR 100 billion – Iberdrola's management opted to accelerate purchases from its suppliers as of mid-March.

Likewise, during the Shareholders General Meeting 2020 on 2 April, Iberdrola Chairman Ignacio Galán, announced that open agreements for delivering orders to the company until 2023 currently exceeded EUR 20 billion.

As a result of these investments, which will increase its portfolio of equipment, materials, works, and services, the company will start producing at least half of the 9 000 MW it is currently building around the world.

Specifically, Iberdrola is currently moving ahead around the world establishing 30 photovoltaic solar plants, 50 onshore wind farms, and new offshore wind farms such as: Saint Brieuc in France; Baltic Eagle in Germany; Vineyard in the U.S.; the Tâmega pumped storage hydroelectric giga battery in Portugal; more than 5 000 kilometres of very high voltage transmission lines in Brazil; and new distribution networks in the states of New York, Maine and Connecticut.



Iberdrola Group ramps up its driver effect every year

Iberdrola group made purchases of over EUR 20 billion from more than 22 000 suppliers all around the world in 2019, ratifying, yet again, the company's importance as a driving force for the business community in all its areas of business. These high volumes of purchases drive growth in the countries where the company operates, benefiting business activity, industrial and social development in the regions by creating jobs throughout the supply chain.

Iberdrola Mexico's sum of efforts against Covid-19

Coping with the global outbreak of Covid-19 is a challenge to which we can all contribute in different ways. The first is to stay home and follow the sanitary instructions. In Iberdrola's case, when producing and supplying an indispensable resource such as energy, the company must guarantee service to its customers and reaffirm that its commitment is also to society.

Iberdrola is joining forces with the public sector, supporting with more than 30 million pesos in sanitary material, which will serve to protect medical personnel in various areas of the country, but also public transport and civil protection workers, as well as the General population.

These donations have been delivered to government institutions and public hospitals in states such as Oaxaca, Veracruz, Coahuila, Puebla, Baja California, Mexico City, Querétaro and San Luis Potosí.

In situations like this, every action, regardless of size, adds up. At Iberdrola, we will continue to work responsibly, under strict security measures to guarantee the care of our staff.

In this contingency, we want to thank the personnel of the health sector and the Mexican population that every day puts their energy to face the pandemic.

SP energy networks powers the National Health Service through Covid-19

Working with the UK, Scottish and Welsh governments, Iberdrola has been working around the clock to protect power supplies to critical sites such as hospitals and care homes – including new field hospitals like the National Health Service (NHS) Louisa Jordan in Glasgow and the six planned field hospital sites for North Wales – as well as food supply chain businesses and key national security facilities that must keep working to support and protect us all.

This is part of a special measures package to ensure frontline services, businesses, and domestic customers can all be confident in relying on our energy networks to get us through the current crisis.



Efforts include:

- An enhanced inspection and monitoring regime focused around priority sites.
- Continued critical maintenance and repair work that secures the resilience of the electricity network and keeps the power flowing.
- Prioritisation of works to provide additional capacity and more electricity where needed.
- Constant monitoring of energy usage to ensure supply continues to meet the changing demands of how we are now working and living.
- Using new technologies to monitor network performance.

Given the vital role of the NHS during the Covid-19 pandemic, a comprehensive review of our infrastructure around 56 large NHS and private hospitals across central and southern Scotland, north-west England and North Wales has been undertaken.



Photo: Iberdrola

This has involved extensive checking of overhead lines and cables, as well as inspections of around 120 substations and other supporting infrastructure across the country. Identified repairs and modifications have been carried out – as required – to ensure the power stays on and life-saving support can continue to be provided 24/7.



Additional monitoring has also been introduced to ensure any potential issues are identified and addressed as quickly as possible, with some sites which would previously been checked every few months or annually now being inspected on a weekly basis.

Scott Mathieson, Iberdrola's Network Planning and Regulation Director, said, "While we know our hospitals and healthcare facilities already benefit from good power supplies – supported by robust contingency plans – it's never been more essential to ensure critical electricity supplies are maintained and enhanced at these key sites.

"Across the country, the UK, Scottish and Welsh Governments have been bolstering the capacity of our NHS by setting up specialist field hospitals alongside dedicated testing and treatment sites. We have been actively playing a crucial role in this process – working with our partners in government to make sure these facilities have the connections, capacity and resilience they need to adequately fight the spread of the virus.

"That includes support for the herculean efforts to transform venues across the country into new hospitals such as the NHS Louisa Jordan, which is currently taking shape in Glasgow, and the development of six field hospitals within leisure and education premises in North Wales. Responsive, reliable, and resilient power supplies will be vital to getting these facilities up and running and that is exactly what Iberdrola is working to deliver.

"We are proud to be part of the efforts to power our NHS through the COVID-19 pandemic and my thanks go to the many colleagues working across the business to keep our NHS working and saving lives.

"While this involves an incredible team effort, it is just one aspect of the critical works we are undertaking in these unprecedented times to ensure the power stays on and people can continue to live well, work and stay connected to the family and friends they are unable to visit.

"I can assure all our customers we are only doing essential works at this time, and I would ask people to keep this in mind if they see our colleagues working in their local community – we are all in this together."



Incheon International Airport Corporation (IIAC) was incorporated in February 1999 under the IIAC Act for the purpose of building, managing, and operating Incheon International Airport in an efficient manner as well as to build the corporation into a world-class enterprise that contributes to the development of air transport and the nation's economic growth. In 2014, Incheon International Airport ranked 2nd in international airfreight transport with 2 474 152 tons and 8th in international passenger transport with 44 906 813 passengers, hosting 88 airlines and connecting 184 destinations.

Incheon Airport implements "Covid-19 free airport" strategy and plans for traffic recovery

Under the vision and strategy of Incheon International Airport, the Smart Airport Group leads the introduction, development, and operation of innovated processes and services, and ICT-related projects.

Jungy Han, Manager, Smart Airport Group, Incheon International Airport Corporation (IIAC) explains that constant efforts are made to deliver a "better airport" for passengers and employees. "The primary role of the Smart Airport Team is to establish and manage the strategy and projects of the smart airport location in Incheon Airport. We guide and promote other divisions of IIAC, and moderate the difference between the strategy and projects based on new technologies the other divisions are developing. We are also in charge of developing and operating big data platforms, robots, self-driving cars, etc."

A key priority for all airports is responding to the Covid-19 crisis. "As Incheon International Airport is the gateway of Korea, after seeing the initial spike of Covid-19 in February, we thought it is most important to focus on early diagnosis and prevention of the spread of the virus," Han explains. "As IIAC announced the 'Covid-19 Free Airport' strategy, we focused on thorough three-step quarantine, providing the most robust disinfection, sterilisation, and sanitisation, with close cooperation with the government and other related agencies, including the KCDC (Korea Centre for Disease Control and Prevention), and airlines."

Along with reduced airport operation, IIAC is supporting its business partners – including the airlines, ground handlers, duty free operators, and F&B operators – with discounts on charges and the provision of incentives. "Upon the stabilisation of the crisis, we plan to focus on passenger traffic recovery and generating new traffic demand as well," Han adds.



Artificial intelligence, robotics, big data, and biometrics

The Smart Airport Team is working to enhance the service offered to Passengers with Reduced Mobility (PRMs) using robotics technology and automated vehicles. Meanwhile, a big data platform is being developed to increase technology-driven operational efficiency. Han explains that there are also plans to establish an artificial intelligence (AI) air traffic control platform, which will bring "a brand-new way of working to ATC officers".

"My colleagues on the 'Fast Travel Team' are in charge of innovating passenger handling processes. Led by the 'One-ID' project based on biometrics, we are constantly focusing on implementing RFID and improving common use systems."

Looking ahead, Han believes that AI and biometrics will be crucial in the aviation industry. "There are so many expanded possibilities in airport operation for technology growth. For example, there are already many developments and studies done around big data, but there are so few who optimise its outcome. In my opinion, the one who makes the creative application of technologies will lead the whole aviation industry."

Incheon Airport "Covid-19 free airport"

Starting 9 March 2020, Incheon Airport will set up a 3-step body temperature checkpoint procedure (from check-in to boarding) to measure the body temperature of passengers before their departure from Incheon Airport.

Passengers must follow and pass through a 3-step body temperature checkpoint procedure: the first checkpoint at the airport entrance, the second checkpoint in the security area of the departure hall, and the third checkpoint in front of the boarding gate. Passengers who show signs of a fever (body temperature measuring above 37,5°C) can be denied boarding.



< 3-Step Body Temperature Checkpoints >

Source: Incheon Airport

This is a measure to provide safe airport services by establishing a disease prevention and control system throughout the immigration process before the departure. Passengers are advised to arrive at the airport earlier than usual.

kakao mobility

ITF Corporate Partnership Board member since 2018

Kakao Mobility is an application-based mobility company with the vision of making travel faster, more convenient, and more secure. The flagship service of Kakao Mobility is Kakao T, a taxihailing, chauffeur-hailing, and parking lot connection service. As of September 2018, Kakao T had more than 20 million users. Kakao Mobility's other major product, a turn-by-turn navigation service called Kakao Navi, has 14 million users.

Additional information on list of diagnosing clinics and public relief hospitals

During this pandemic, many people in fear wished to be tested for Covid-19. Unfortunately, not all clinics can diagnose citizens; thus, Kakao Map and Kakao Navi have geared up to provide the location of screening clinics and drive-thru clinics for citizens. This service is nationwide providing 610 screening clinics and 73 drive-thru clinics as 5 April. Two companies, Kakao and Kakao Mobility also show information on 343 of Public Relief Hospitals, a government-designated medical institution that separates and treats respiratory and non-respiratory patients to prevent internal transmission of Covid-19.

Meanwhile, the local government in Gyeonggi-do Province provides disaster relief grants in forms of local currencies, hoping to help people overcome economic damage caused by the pandemic. Citizens residing in that province can easily search for stores and shops that accept local currencies on the Kakao Map.

Providing open API for other private sector actors to overcome Covid-19

Kakao supports Kakao Map and Kakao Local Open API for Covid-19 related services developed and distributed by other private sectors. After Covid-19's arrival in Korea, various information services have been created by individuals and small groups of developers. One example is the geographical service presenting the confirmed cases' movement history via mobile application. Kakao has been providing its Open API to these developers free of charge, helping these services to provide useful information to the public.

Providing facemasks for Kakao T branded taxi drivers and hand sanitizer for passengers

Kakao T is an integrated mobility platform run by Kakao Mobility with about 24 million subscribers. Kakao T is comprised of Taxi, Navi, Designated Driving, Parking, Bike, and Shuttle services, everything of mobility.

With the spread of Covid-19, a vast number of passengers are worried about riding taxis, leading to a 19% decrease in Kakao T Taxi calls within the first two weeks of this pandemic. To reassure all passengers and drivers, Kakao Mobility provides facemasks for Kakao T branded taxi drivers such as Blue, Venti, and Black. This offers emotional stability for both passengers and drivers as well as decreased spread of the virus.

Kakao Mobility has kept hand sanitizers for passengers of branded taxis. The company also has upgraded franchised taxis' air filters to HEPA filters (High-Efficient Particulate Air Filter), especially in Daegu where people have experienced Covid-19 severely.

kakao mobility



Kakao T taxi driver with mask and hand sanitiser | Photo: Kakao Mobility

Kakao Map and Kakao Navi provide location information of pharmacy availability of public masks and route to go there

Just like other global societies, Korea has faced huge inconsistencies between supply and demand for facemasks. The shortage of masks, confronted from early February, led to a drastic price increase throughout the nation. In response to this, the Korean Government implemented a new policy on the public distribution of facemasks on 9 March 2020. The policy states that it secures the domestic production of masks up to 80% and has to retail them at reasonable prices to the local public.

Citizens can buy public masks up to two units per week at the designated places such as pharmacies and post offices. To minimize the inconvenience of waiting in line for purchasing the masks and to avoid unnecessary contact between citizens, the government also enforced a "5-day rotation" system, which allows people to purchase masks at certain days depending on their birth years.

Kakao, a representative IT company based on South Korea, and Kakao Mobility – the number one mobility service company – decided to actively cooperate with the governmental policy. Kakao opened a service to check the venue of the public mask retail shops and real time stock information of the masks on its Kakao Map. The service is connected to Kakao Navi (run by Kakao Mobility), so that customers could navigate the route and visit there easily.

Data and API (Application Programming Interfaces) on facemask availability are provided by governmental agencies, the Health Insurance Review and Assessment Service, and the National Information Society Agency. The development of the system was completed on 11 March just two days after the launch of the public mask policy. This initiative was a result of close and swift cooperative discussion between the government and business operators, as well as Kakao and Kakao Mobility's willingness to make social contributions in times of crisis.

kakao mobility

Specifically, the public mask-related service provided by Kakao Map and Kakao Navi is as follows.

- The service shows the location information of pharmacies and post offices that handles public facemasks. One could search the locations via several services of Kakao and Kakao Mobility, i.e. Kakao Map, Kakao Navi, and Kakao Talk, the dominant mobile messenger in South Korea.
- It provides real time inventory information of the public masks. The service indicates distinguished quantities by four colours of green, yellow, red, and grey; Green means a sufficient volume of masks and grey means out of stocks.

If one chooses one location among several alternatives, Kakao Navi guides the route to go there fast and easily.



Kakao Map screen displaying location of official mask distributors | Images: Kakao Mobility



Michelin, the leading tyre company, is dedicated to sustainably improving the mobility of goods and people by manufacturing and marketing tyres for every type of vehicle. Headquartered in Clermont-Ferrand, France, Michelin is present in more than 170 countries, has 113 400 employees and operates 69 production plants in 18 countries. The Group has a Technology Centre in charge of research, development and process engineering, with operations in Europe, North America and Asia.

Michelin in the fight against Covid-19

Since the beginning of the pandemic, ensuring the health and safety of each employee has been the number one priority for Michelin. To cover their needs in Personal Protective Equipment, the Group has launched four Task Forces aimed at making masks, hydro alcoholic gel, and medical thermometers available to everyone. In the regions and communities where the Group operates, Michelin mobilizes its expertise, ability to innovate, and production tool for the benefit of medical care staff and hospital services. Everywhere, the Group carries out numerous community actions.

Masks: protecting our employees, helping our communities

Since the start of the health crisis, a race against the clock has started to increase the number of masks available around the globe. In the face of this urgent situation, Michelin has mobilised the innovation force of its teams, its research, materials, manufacturing expertise, scientific intelligence, etc. to develop, manufacture and make available different types of mask solutions, in large quantities and in a very short time.

In ten of its factories in Europe, Michelin has set up production lines for "Category 1" surgical masks with the purchase of sewing machines. Manufacturing started with the aim of achieving weekly production of 400 000 masks. Similar initiatives in North America will add to this capacity in the coming weeks.

With its expertise in metal and plastic 3D-printing technique, Michelin, with the CEA of Grenoble (France) and other companies, has designed a reusable plastic mask equipped with interchangeable filters. Michelin's production capacity target goal is to reach the production of one million masks per week by the month of May. This equipment is intended for medical care staff.

Simultaneously with these productions, the Group has implemented a mask purchasing policy coupled with a donation system. In addition to ensuring the provision of masks for all employees, the Group has defined a ratio of the number of masks given for any mask purchased or produced at Michelin; priority is given to health services and elderly care homes.

Michelin is also manufacturing face shields and inflatable blocks to meet equipment needs and facilitating treatment of the disease. At the request of several hospitals, Michelin has just started to produce polycarbonate face shields that can be sterilised as well as inflatable blocks for hospital use.



Solidarity actions in favour of local health authorities and communities

Many initiatives are underway in all the countries where the Group operates. In addition to financial support, let us mention free services offered by its local distribution network or the free supply of tyres to transportation and logistics companies, as well as to healthcare professionals.



Michelin employees making masks (La Combaude, France) | Photo: Michelin



3D-printed face shields made in France by Michelin | Photo: Michelin



the mind of movement

ITF Corporate Partnership Board member since 2014

The PTV Group specialises in software solutions and consulting services for traffic, transport logistics and geomarketing in the private and public sectors. PTV's Vision Traffic Suite is a marketleading product for traffic and transport planning, as well as traffic simulation. Established in 1979 in Karlsruhe, Germany, the PTV Group today has customers in more than 100 countries; it employs some 600 people worldwide.

Reallocating street space: how Covid-19 changes urban mobility

In response to the coronavirus crisis, cities are reallocating street space from cars to cycling and walking. A step towards sustainable mobility?

Alongside the grim toll of the coronavirus pandemic, a positive side effect has emerged: people are cycling and walking more often. In times of social distancing, these seem to be the safest and quickest choice for getting around in cities. Metropolises such as Bogota, New York or Berlin, reacted quickly by opening temporary bike lanes. Other cities are reallocating street space to pedestrians. Could these measures be leading the way to a more sustainable urban mobility in post Covid-19 times?

Milan wants to reallocate street space permanently

According to a current German study, one in four Germans expect to walk more often after the crisis, and about one in five expects to cycle more. Milan is now the first city to announce an ambitious program to permanently reallocate street space from cars to cycling and walking and thus reduce car use. Under the lockdown, motor traffic congestion has dropped by 30-75% and air pollution with it. Now the North Italian city announced that 35 kilometres of streets will be transformed into bike lanes and walking paths. In other streets, pavements are to be widened and priority given to pedestrians and cyclists. In addition, the city will introduce 30kph speed limits.

For years, the Milan City Council has tried to reduce car traffic, Deputy Mayor Marco Granelli told British newspaper The Guardian: "If everybody drives a car, there is no space for people, there is no space to move, there is no space for commercial activities outside the shops."

How to change streets for good?

But does the opening of more cycle or footpaths also means that cities automatically become more bicycle-friendly or walkable? It definitely needs to be followed by a longterm change in people's behaviour towards active mobility.

Authorities can encourage active mobility by creating attractive connections to other modes of transport, as well as throughout the city road network. It is essential to provide an infrastructure that allows cyclists and pedestrians to reach their destination safely, comfortably and effectively.



the mind of movement

Cities are facing numerous questions: Where to build a new cycle lanes or footpath? What will the interaction with other road users look like? How will the new measures affect life in the city? How to provide 'green waves' that make real difference for cyclists? And, of course, which measures will guarantee road safety?

Before implementing costly infrastructure projects, it makes sense to test and validate the different measures for the reallocation of street space in a virtual environment. Models can help to realistically simulate and analyse a city's current and future bike and pedestrian traffic and run through different what-if scenarios.

Tech solutions to keep social distancing on public transport

As public transport returns to regular service after lockdowns, tech solutions can help keep social distancing and protect passengers and employees from coronavirus.

The current coronavirus pandemic forces public transport planners to come up with quick solutions that ensure the health safety of passengers and staff. One of the main challenges is to comply with social distancing and safety regulations, while keeping complex transport systems efficient and "mass".

Suspensions of public transports systems began in China in late January. As the coronavirus spread globally, lockdowns soon affected most mass transit systems. In many urban centres, ridership sunk to a fraction of its normal levels. In some countries, authorities allowed only passengers deemed as "essential workers" to use trains, metros and busses.

Recent weeks saw many of the affected countries relaxing lockdown measures, and allowing more people to go back to work or travel around. Despite this, many challenges remain for passengers of public transport: there are caps on the number of passengers allowed in train wagons or on buses; entering main stations is often slower because of body temperature checks; and the still-low demand for services led many operators to run reduced schedules.

In addition, the concern for the safety of public transport employees is another challenge for operators. For example, in some bus systems there is an urgent need to install barriers between the drivers and the passengers, and to look for alternatives to hand-tohand cash payments.

Fortunately, there are technology tools that support planners as they work to create efficient public transport in the Covid-19 era.



Social distancing in stations

For and foremost, planners need to consider that social distancing in public transport will remain a necessity for some time. And this includes preventing the crowding of passengers in platforms or at stops, during waiting times for trains or busses.

For passengers, one solution can be existing transport apps, that provide real-time updates. The commuters can then arrive at the stations or stops in proximity to their mean of transport, avoiding a long wait where social distancing might not be kept.

Other initiatives are aim at ensuring the safety of transport workers. Belgium railways is testing cameras with sensors, to ensure employees are using the appropriate protective equipment and respecting social distance.

While many tools are under development, it is already clear that transport operators have to rely on technology, including artificial intelligence, to ensure health safety.

These tools allow transport planners to identify overcrowding patterns and adjust the service to spread out the passenger loads. In addition, they will help adjust the number of trips and vehicles to avoid overcrowding, especially during rush hours.

In many major cities, authorities also encourage commuters to walk or use bicycle, to decrease crowding in public transport. Even cities in Latin America with poor bicycle infrastructure, such as Bogotá, México City and Santiago de Chile, now encourage a change in mobility culture and more bicycle use.

Tech to protect lives

Public transport authorities are looking at tools that allow to electronically identify areas in which social distancing is not kept. The aim is that these systems then generate alerts, so action can be taken to safeguard the health of users when they are waiting in bus stops – as well as and pedestrians walking nearby.

Some of the tools being tested show promising signs of success. For example, PTV Group developers have recently used a pedestrian simulation software to simulate many scenarios of pedestrians practicing social distancing. The simulation included some proposals for social distancing, such as one-direction sidewalks, and ways to maintain a two-meter distance between pedestrians.

It is also possible to prepare for the changes in demand and supply of public transport during the post Covid-19 era. For example, authorities can use PTV Visum to plan the number of buses needed to comply with regulations allowing for limited number of passengers in each vehicle. They can also use the modelling with this software to plan how to satisfy user demand.



the mind of movement

PTV Optima, another software solution of PTV Group, helps to electronically notify the number of users in a transport unit, such as a wagon or bus. Thus, it helps planners manage in real time the capacity of mass public transport modes.

PTV develops the first nation-wide traffic map

Covid-19 lockdown measures have changed the way we move. A new interactive map now visualizes the impact on road traffic.

#stayathome – to stem the spread of Coronavirus, we have cut down our interaction with the outside world for weeks now. Around the globe life is in lockdown – with an obvious impact on car traffic.

Cities worldwide record an all-time low of rush-hour traffic. New York City, for example, registered reductions of 43 percent as result of measures taken to curtail the pandemic. In Britain, road travel plummeted by as much as 73%, to levels not witnessed since 1955.

PTV developers have now introduced a new interactive map to measure and visualize the changes in traffic volume. The map is based on aggregated and anonymized mobile phone data provided by the Swiss mobility insights company Teralytics.

In a first analysis the mobility experts compared the traffic volumes across Germany on Easter Sunday (April 12th) to the previous Sunday. Did the number of trips rose due to beautiful weather during the holidays or did people keep to the restrictions?

"There has been 26 % more car traffic on Easter Sunday. Especially in the Northern and Western part of Germany, people travelled. In Bavaria and Saxony, on the other hand, there was only a slight increase in traffic, which could be explained by the more restrictive COVID-19 rules of those federal states," says Matthias Hormuth, Head of Product at PTV. "We can also see an increase in the number of trips to leisure regions such as the Bavarian Forest, the Black Forest or the Northern coast. On the main motorways, however, things remained calm. Thus, there was more regional visiting and leisure trips but less long-distance traffic".

It is also interesting to look at travel behaviour in comparison to previous year. Traffic has dropped by 78 % compared to Easter Sunday 2019.

Interactive map with details

The digital map can be successively expanded to other countries and evaluations. It will then be possible to illustrate the effects of further measures on travel behaviour and traffic – when authorities start relaxing restriction for example. What happens on the road when countries are softening their COVID-19 lockdown measures? How will the traffic volume change when schools, shops or restaurants reopen?



the mind of movement

Matthias Hormuth says the technology can be used beyond this crisis: "Various trafficrelated issues can be examined. Authorities and traffic planners receive detailed and meaningful figures on traffic volume and the impact on the road network. The interactive map gives important clues and can back-up decisions in the process of shaping the mobility of the future. For industry, commercial and service companies, this information can be relevant for the choice of location and optimization of service offerings."



PTV experts developed the first nation-wide coronavirus traffic map | Image: PTV Group

For the map, PTV Group's traffic experts refine the Teralytics data and visualize car and truck traffic on the road network in a national transportation model. Thus, authorities, traffic management centres and enterprises can rely on meaningful figures of traffic volume and the road network load down to the last detail.



Present in 14 countries on four continents and carrying nearly 14 million passengers worldwide daily, RATP Group is the fifth largest urban transport operator in the world. Globally, RATP Group applies its expertise to six modes of transportation (metro, tramway, train, bus, intercity and cable transport). In the Paris region, with its 14 metro lines (including 2 driverless lines), 2 regional express rail lines, 7 tramway lines, 350 bus lines and shuttle services to the region's two international airports, the multimodal network operated by RATP is the largest in the world to be managed by a single company. RATP Group has a workforce of nearly 6 000 employees worldwide and in 2015 generated revenue of EUR 5,55 billion.

RATP Group and the Coronavirus crisis

Île-de-France Mobilités – the Public Transport authority of Île-de-France (Paris Region) – and the RATP Group are mobilised in the fight against the Covid-19 pandemic, and have collectively decided, in close relation with the Assistance Publique – Hopitaux de Paris (AP-HP) (Greater Paris University Hospitals), to set up 20 special bus lines to facilitate the journeys of hospital staff between large public transport stations and main hospitals. This new service is set up for one unlimited duration, and is reserved exclusively for hospital staff, with a headway of 30 minutes on each line.

These shuttles provide direct connections to hospital staff towards their workplace and complement the public transport services that have been considerably reduced. They have been designed with the AP-HP to meet the needs of hospital staff.

The RATP also ensured the transfer of hospital staff coming from the other French regions between the stations and the hospitals of Île-de-France.

Health prevention measures have been implemented in all our services. RATP Group takes care by priority to the safety of its staff and its travellers and implements the prophylactic instructions of the health authorities.

Committed to the public service values, the RATP Group maintains the network's operation, thanks to the commitment of its staff and in spite of their concerns. Public transport is vital for the economic activity of the region and the country. The regional public transport services are adapted from day to day with a priority on access to the hospitals and the health infrastructures

Île-de-France Mobilités reinforced six on-demand bus lines for the outer suburb departments and synchronizes the actions of all the operators of transport from the Îlede-France region, by continuing operation on all the transport lines so that the people, who must go to work, can do it without difficulties. The inhabitants of Île-de-France that do not have any absolute need to travel are invited to remain at home.



SNCF is a global leader in passenger and freight transport services, with revenue expected to reach EUR 32 billion in 2015, including nearly 30% on international markets. With nearly 250 000 employees in 120 countries, SNCF draws on its foundations in French rail and extensive experience as an architect of transport services. It aims to become the benchmark for mobility and logistics solutions, both in France and worldwide.

SNCF deploys hospital TGV

SNCF has transported Covid-19 patients using a TGV Duplex trainset that has been adapted as a mobile hospital unit. The unit is currently being used to evacuate recuperating patients from hot spot areas where hospitals are saturated to regions that have spare capacity in their intensive care facilities.



Photo: SNCF – Maxime Huriez

Measures taken by SNCF to prevent Covid-19

SNCF has reacted to this unprecedented crisis by demonstrating how to mobilise a public service to the benefit of all French citizens. Since the beginning of the crisis, SNCF's passenger and freight services have immediately integrated customer and agent protection measures into their processes. A "task force" was set up in conjunction with public authorities to strictly comply with the State's instructions and promote barrier gestures by broadcasting public health messages to its customers.



The company's transport plan has been gradually lowered to keep pace with the tightening of measures as the health situation in France deteriorated. The reduction in everyday trains was made in conjunction with Transport Organising Regions, with adjustments made region by region.

For passenger trains, most have been immobilised, however, those in service are serviced with great condition. Currently, only 40 TGV trains run per day as opposed to 600-700 trains prior to the Covid-19 outbreak to prevent travel and the spread of the virus, while ensuring territorial links. In addition, train operations for TERs have been reduced to 15% and Transiliens (Île-de-France), with an adjustment of service schedules to coincide with hospital staff needs, have been reduced to 20%. Further, SNCF has transformed a few TGVs into health TGVs serving as hospitals on rails with high levels of safety on routes, diminishing all possible hazards.

In terms of freight services, SNCF has maintained 60% of all usual volume with vital trains (transporting fuel, chlorine, food, and cereals) to maintain the country's activity at the request of some of its customers.

SNCF and its agents continue to "do more"...

In the context of the health crisis, SNCF continues to carry out its primary mission of transporting people and goods. Beyond this essential mission, the company and its employees have taken other actions. Below are a few examples of the current initiatives SNCF is undertaking:

Initiative to make skills and time available: Due to the health crisis, several dozen medical staff are currently on duty in university hospitals and residential institutions for dependent elderly persons. As a partner of National Defence, SNCF wanted to be fully involved in the "Resilience" operation. To date, several dozen operational reserve railway workers (caretakers, cyber-defendants, officers, etc.) have been mobilised for the French Army, Air Force, Navy, and Gendarmerie.

Actions for the health sector and vulnerable populations: The SNCF Foundation continues to highlight the importance of skills sponsorship, enabling individuals to dedicate time to volunteer work via its "citizen involvement" website. The Foundation has also increased its financial sponsorship by donating EUR 100 000 to each of the following three foundations: The Public Assistance Foundation - Paris Hospitals (medical research, equipment), the Abbé Pierre Foundation (emergency accommodation, food), and the Women's Foundation (re-housing solutions, listening).

The SNCF has also strengthened its partnership with the Samu Social. Currently, SNCF's TGV fleet has donated 3 000 catering products and Intercités has donated 3 150-night train duvets to homeless people. Eight SNCF agents have also pledged to serve as volunteers to the Samu Social for 12 months.



Numerous TER establishments, the Equipment Department, and SNCF Réseau have also mobilised by donating Personal Protective Equipment. Establishments with 3D printers, particularly in the Equipment Department, have made them available for the manufacture of protective visor supports, especially for care staff.



Photo: SNCF – Maxime Huriez

AlloCOVID

Since 27 April 2020, a national phone line co-developed by e.Voyageurs SNCF has been providing information on Covid-19 and collecting real-time information on the evolution of the epidemic.

To respond to the urgency of the health crisis, e.Voyageurs SNCF and the start-up company specializing in artificial intelligence, Allo-Media, have joined forces with researchers, professors, doctors and experts from the French National Institute for Health and Medical Research (Inserm) and the University of Paris to create and develop a system to support and monitor the development of Covid-19.

SNCF's scientific committee

For the duration of the Covid-19 epidemic, the SNCF has set up a Scientific Committee, a deliberative medical body whose mission is to assist the company's management in its decision-making on all questions of a medical nature or with medical implications. The committee will issue recommendations and medical opinions on subjects that the Chairman of the SNCF, the Group HR Director, or their representatives have decided to address, particularly in relation to Coronavirus and serve as a reference for SNCF doctors.



Total is one of the largest integrated oil and gas companies in the world, with activities in more than 130 countries. The Group is also a first rank player in chemicals. The company's presence extends globally with a workforce of 97 000 people engaged in every part of the industry – exploration and production of oil and natural gas, refining and marketing, new energies, trading and chemicals. Total is working to help satisfy the global demand for energy, both today and tomorrow.

Total provides hospital healthcare staff in France with EUR 50 million

Total Group is committed to supporting healthcare staff of French hospitals mobilised in the fight against Covid-19. The company is supplying them with fuel for travel, providing hospitals and hospital staff with gasoline vouchers worth up to EUR 50 million that can be used at Total stations.

Total's mobilisation during Covid-19

Like many companies, the Total Group is currently facing three crises: a health crisis of course, which is impacting the global economy by creating major uncertainty, and, finally, the challenge of climate change. This last crisis was there before the pandemic began, and has not gone anywhere since. It is an issue that the Group has resolutely integrated into its strategy, sharing the ambition of reaching net zero emissions by 2050, together with society, for all of our operations, from production to the use of the energy products sold to our customers (scopes 1+2+3).

As for the health crisis, Total employees have responded by standing together with their communities and showing discipline.

First, with due attention to the applicable protection rules, they have ensured the continued production, processing and distribution of the products that consumers need. Especially in France, their efforts to maintain business continuity have enabled healthcare staff, food haulers, delivery workers and public service employees – to name just a few examples – to stay on the job so that they can support the most vulnerable members of society and keep the country running despite the lockdown.

In practice, Total service stations adapted very quickly to the situation, coordinating with the competent authorities to introduce the measures necessary to continue supplying fuel and, on the main roads, offering essential food and toilet/shower facilities to truck drivers transporting goods. This required many changes to space-related procedures, logistical adjustments and – above all – a lot of agility.

Thanks to our far-reaching network, each and every employee made an essential contribution to keeping people mobile.

At the same time, the Group decided to take concrete initiatives to contribute to the fight against Covid-19.



The most emblematic measure was the donation of fuel vouchers worth a total of EUR 50 million to nursing homes and hospitals in France with resuscitation and intensive care wards, which are on the front line against the virus.

By May 10, more than 150 people had received and processed over 7 400 requests from these establishments. The measure has now been rolled out in certain other countries where Total operates, including Morocco, Côte d'Ivoire and Jamaica. In the same spirit, Total donated fuel to the French branch of non-profit Aviation Without Borders, which transported more than 200 doctors and nurses from regions less impacted by the virus to those that rapidly needed extra support.

In addition, some facilities that produce hydro-alcoholic solutions for internal use gave their supplies to medical stakeholders in their regions, and close to 175 000 masks from company stocks were donated to the public authorities.

Another key initiative in France, Tunisia and Thailand was the 3D printing of protective visors for medical teams.

Beyond our operations, many Total employees all over the world got involved with the Group's partner non-profit organizations, helping them to meet growing demand.

Standing Together is one of Total's five values. Across our teams and with our stakeholders, the importance of this value was brought into stark relief by the global pandemic. Going forward, the Group intends to adopt the same responsible approach to its lockdown exit strategy.



Photo: Total

UBER

ITF Corporate Partnership Board member since 2015

Uber is evolving the way the world moves. By seamlessly connecting riders to drivers through our apps, we make cities more accessible, opening up more possibilities for riders and more business for drivers. From its founding in 2009 to its operations in more than 315 cities across 58 countries today, Uber's rapidly expanding global presence continues to bring people and their cities closer.

Uber offers meals and discounted rides to first responders

Free meals and discounted Uber rides are now available for over 25 000 healthcare workers in certain regions of the U.S. helping to respond to the Covid-19 outbreak. This is part of Uber's latest partnership with healthcare union 1199SEIU, representing over 450 000 first responders in the country.

Uber launches "Uber Medics"

Uber Medics is a special Uber service for healthcare personnel. Expanding the collaboration with the Community of Madrid, Uber is providing commuting transport services to thousands of employees at a wide group of major hospitals in Madrid.

Supporting cities and communities around the world

Uber is employing a wide array of initiatives to support healthcare workers and vulnerable populations. The company has committed over 10 million free rides and deliveries to healthcare workers, seniors, and people in need, all free of charge. Uber is also providing donations to food banks and other organizations, and are supporting transit agencies to cover and expand service to cover all grocery and pharmacy destinations. In addition, they are helping their current restaurant partners, in addition to freight shippers and carriers.



Valeo is an automotive supplier, partner to all automakers worldwide. As a technology company, Valeo proposes innovative products and systems that contribute to the reduction of CO2 emissions and to the development of intuitive driving. In 2016, the Group generated sales of EUR 16,5 billion and invested over 11% of its original equipment sales in research and development. Valeo has 169 plants, 20 research centres, 38 development centres and 15 distribution platforms, and employs 106 000 people in 32 countries worldwide.

Air Liquide, Groupe PSA, Schneider Electric and Valeo rise to the challenge of producing 10 000 Air Liquide medical systems respirators in response to the French government request

Faced with the compelling need for more respirators on its national territory, the French government has asked, on 22 March 2020, a group of French industrial companies led by Air Liquide to study the possibility of increasing the production of respirators to provide 10 000 respirators in 50 days, between the beginning of April and mid-May. In response, Air Liquide, Groupe PSA, Schneider Electric and Valeo have set up a Task Force composed of about 30 purchasing and industrialization experts in order to define an action plan to increase the production of Air Liquide Medical Systems respirators, which are already referenced by a great number of hospitals in France and abroad. To meet this industrial challenge, the exceptional contribution of 100 partner companies will also be sought to provide the 300 essential components that are necessary for the fabrication of these medical systems.

Within this task force, Valeo is providing support to the Air Liquide teams by:

- Putting together a team of Valeo buyers in charge of supplier management and the procurement of the components needed to produce respirators. This team help respond to the demand for accelerated production and the increased need for components in the supply chain;
- Providing technical support with its Research & Development teams, supplying expertise in plastics, mechanical and electronic technologies;
- Making available full-time engineers specialized in wide-scale industrial production. Valeo will organize the accelerated production of the respirators, establish and train the production teams required for a fast ramp-up; and
- Gathering around 20 voluntary engineers and technicians to respond to the demand for accelerated production.

During this difficult period for hospitals, which are lacking respirators, Valeo has put all of its resources at the disposal of the consortium it has joined with Air Liquide, Schneider, and Groupe PSA to manufacture 10 000 units very quickly. This is an exemplary act of cooperation and Valeo is proud to contribute to the national solidarity effort.



Volvo Car Group produces a premium range of cars that includes sedans, wagons, sportswagons, cross country cars and SUVs. Volvo Car Group (Volvo Cars) is owned by Zhejiang Geely Holding (Geely Holding) of China.

Volvo Cars – 3D printing technology

Volvo Cars is utilising 3D printing technology to help produce protective visors for hospitals and healthcare workers in the Gothenburg area (Sweden). Volvo Cars has produced 2 500 3D-printed visors delivered across the Västra Götaland's Region (VGR), responsible for health care and the City of Gothenburg, primarily for elderly care. In addition, 1 200 visors have also been delivered to hospitals in the Charleston (North America) region.

Volvo Cars – supporting medical staff with transportation

More than 2 000 of Volvo Cars' showroom vehicles are now supporting healthcare workers across Europe. They are used for ensuring that health workers can effectively and safely get to and from work and for managing supply transportations. This project is in collaboration with different organisations such as the local Red Cross, <u>www.wefightcovid.org</u> in Sweden, as well as Conquer Covid-19 in Canada.



Photo: Volvo Cars



Volvo Cars – repositioning its fleet to support healthcare workers

As this pandemic continues, Volvo Cars is determined to keep doing its part to protect the people who protect us. At Volvo Cars USA, the company has repositioned its fleet of press and marketing cars to support nurses and doctors – especially those who have flown into coronavirus hot zones to provide relief for hospitals there (in New York, its entire fleet is now hard at work on this cause). Volvo Cars is also supporting the Medical University of South Carolina, the Memorial Sloan Kettering Cancer Centre, NYU Langone Health, and U Chicago Medicine.

Volvo Cars – project procurement: using Volvo Cars supplier network to help source protective gear to healthcare workers

- 10 000 face masks delivered to Sahlgrenska hospital in Gothenburg
- 100 000 face masks bought in China donated to the City of Gothenburg, which is responsible for elderly care among other things
- 150 overalls, >2 000 vinyl gloves delivered to the City of Gothenburg
- Logistics support to the City of Gothenburg

Volvo Cars – project "Hack the Crisis"

Volvo Cars co-organised a hackathon called "Hack the Crisis" to help find smart solutions to mitigate the impact of the corona crisis on our society. Many of our engineers, working reduced hours, put in their extra spare time to help. Volvo employees came up with one of the winning concepts, which is currently being deployed as functioning tool for business.

- ~6500 entrants from around the world
- ~200 Volvo employees involved as participants or mentors
- ~1200 concepts submitted for judging
- Volvo Cars employees won the Digital hack "Save the Business"

About the ITF Corporate Partnership Board

The Corporate Partnership Board (CPB) is the ITF's platform for engaging with the private sector and enriching global transport policy discussion with a business perspective.

Businesses are at the cutting edge of the rapidly changing world of transport and mobility. The Corporate Partnership Board allows the private sector to contribute business insights to policy discussions, helps policy-makers to better understand marketdriven developments, and provides an effective mechanism for collaboration on issues of common interest.

Corporate Partners provide input to policy discussions by suggesting topics for different workstreams and participating in concrete projects. The current CPB workstreams include Decarbonising Transport, Gender and Transport, and a series of topical projects carried out in an annual cycle.

The research for CPB projects is carried out within the ITF Secretariat in collaboration with Corporate Partners. The findings are published in the ITF <u>Corporate Partnership Reports</u> <u>series</u>.



About the International Transport Forum

Who we are

The International Transport Forum at the OECD is an intergovernmental organisation with 62 member countries. It acts as a think tank for transport policy and organises the Annual Summit of transport ministers. ITF is the only global body that covers all transport modes. The ITF is administratively integrated with the OECD, yet politically autonomous.

What we do

The ITF works for transport policies that improve peoples' lives. Our mission is to foster a deeper understanding of the role of transport in economic growth, environmental sustainability and social inclusion and to raise the public profile of transport policy.

How we do it

The ITF organises global dialogue for better transport. We act as a platform for discussion and pre-negotiation of policy issues across all transport modes. We analyse trends, share knowledge and promote exchange among transport decision-makers and civil society. The ITF's Annual Summit is the world's largest gathering of transport ministers and the leading global platform for dialogue on transport policy.



This compendium presents a selection of initiatives by the private sector enterprises of the ITF Corporate Partnership Board to combat the Covid-19 health crisis. The pandemic has created an unprecedented challenge for our societies and economies. Companies are facing enormous difficulties, yet many have responded with vigour and creativity to address the needs of concerned citizens and communities around the world.



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