



OECD initiative for safe international mobility during the COVID-19 pandemic (including blueprint)

31 May 2021

OECD Ministers have endorsed a new initiative to promote safe international travel during the COVID-19 pandemic at the OECD's annual Ministerial meeting in Paris. The Initiative involves a safe travel blueprint and a temporary international cross-sectoral forum for knowledge sharing. The forum will allow governments and stakeholders to share information in real time on plans and approaches facilitating travel. The blueprint promotes greater certainty, safety and security in travel as re-opening takes place. It builds on existing initiatives and aims to increase interoperability amongst travel regimes. It will be implemented by countries on a voluntary basis.



1.1. Context

On the occasion of the 60th Anniversary of the signing of the OECD Convention, 14 December 2020, Prime Minister Pedro Sánchez of Spain called on the OECD to work on an international framework to enable COVID-19-free international mobility.

At present, most people in OECD countries are not vaccinated, and the situation is even worse in developing countries. Several OECD countries are in the midst of a third wave of the pandemic, with intensive care units at full capacity, and thousands of deaths per day. The least-invasive non-pharmaceutical interventions are not controlling the spread of the virus, and many countries are moving to restrict daily activities. In this context, countries have adopted additional measures to restrict cross-border travel.

It is essential to reflect, however, not just on where we are in the pandemic, but where we will be and preparing for a scenario where greater international mobility may be possible. The vaccines are proving effective. Notwithstanding local supply issues, millions of people are being vaccinated each day. It is reasonable to look forward to a day where most people, in most OECD countries, will be vaccinated. COVID-19 will still be circulating, but the risks of severe disease and death will be sharply reduced – at least, if no new variant of concern knocks the recovery off track. At some point, the policy objectives will shift to ‘living with COVID’ – with some enduring changes in lifestyles from those that have been forced on OECD populations in the past year, but moving, in so far as it is possible, to ending many restrictions, including some of those on international travel.

Many countries are openly planning for such a situation. The likelihood is that in the course of this year, many OECD countries will be including certificates of vaccination as part of their travel policies. Going on the announcements that have been made, no country will insist on vaccination as a condition of travel, but in the absence of such a certificate, they will ask for tests and, possibly, quarantine – much as is happening as at present. This is the nature of the announcements made by, for example, Iceland, Israel, and the European Union (EU) with its ‘Digital Green Certificate’ proposal.

The human and economic costs of constraining international mobility are significant. The halt in travel and tourism is having a knock-on impact on the wider economy, given the interlinked nature of the global economy. The OECD estimates, for example, that more than a third of the tourism value added generated in the domestic economy comes from indirect impacts.



Box 1. The economic costs of restricting international mobility

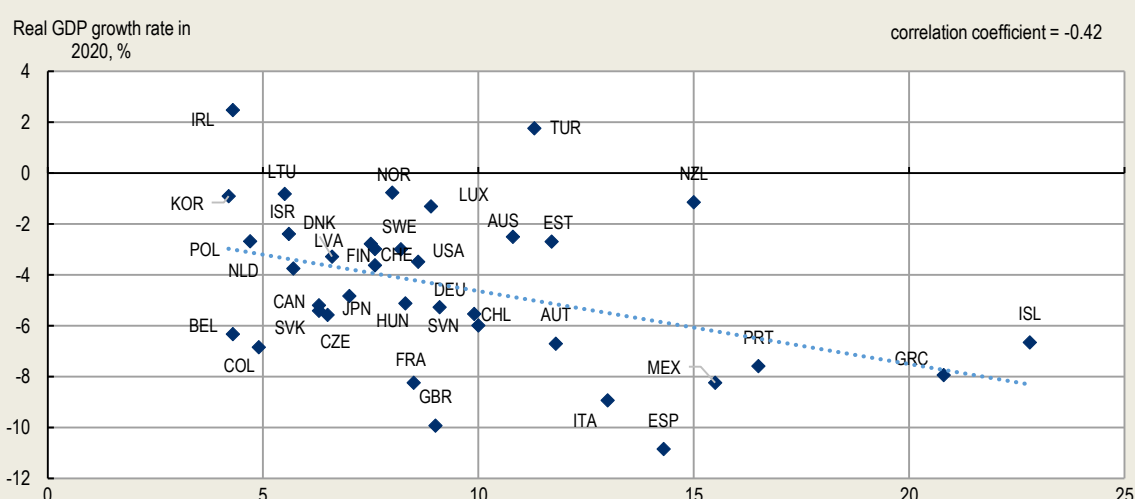
Restrictions on international travel have led to an unprecedented collapse in the number of international travellers with devastating implications for particular sectors:

- International tourism fell by around 80% in 2020. For the average OECD country, pre-pandemic, the sector contributed 4.4% of GDP, 6.9% of employment, and 21.5% of service exports, but with much higher shares for some countries. Tourism is highly labour intensive and the World Travel and Tourism Council estimates that up to 174 million jobs are at risk globally.
- Industries providing international transport have experienced massive declines: international air passenger traffic, measured in industry-wide revenue passenger kilometres, has been 90% or more lower compared to the previous year since April 2020; the cruise industry experienced a loss of 25 million passengers in 2020 relative to pre-pandemic expectations of 32 million passengers. In 2020, the drop in international rail passengers was about 90% for cross-border train services in Europe.

The halt in travel and tourism is having a major adverse macroeconomic impact, given the interlinked nature of these sectors. Those OECD countries with greatest exposure – including Greece, Iceland, Portugal, Mexico and Spain – are among those that have experienced the largest falls in GDP in 2020 (see Figure 1). Indeed, the pre-crisis size of the travel and tourism sector explains differences in GDP growth better than exposure to any of the other sectors most vulnerable to the pandemic, or the average stringency of wider lockdown measures. Regression analysis further suggests that a 10 percentage points of GDP greater exposure to the travel and tourism sector increased the hit to GDP by nearly 3 percentage points in 2020, after controlling for other factors such as lockdown measures.

Figure 1. Countries with the greatest exposure to travel and tourism experienced the largest falls in GDP

Share of GDP generated by travel and tourism in 2019, %



Source: OECD Economic Outlook database and World Travel & Tourism Council database.

Note: This box summarises material in a forthcoming Secretariat note "The Economic Costs of Restricting International Mobility", which provides further details, analysis and full references.



Hence, although the current situation is evolving, it may not be propitious for loosening existing restrictions to international travel, it is reasonable to plan for a future when it is in order to be well prepared and to have all necessary systems operational. Travellers will be relying on a mixture of vaccines and tests. However, if there is no international framework for travel policies, the result will be a patchwork of national and regional rules, inconsistent with each other, involving different proofs of vaccination or test results to be presented when people cross borders at the country of origin and/or destination. This will be confusing and costly for travellers and transport and tourism companies, discouraging of travel and tourism due to the uncertainty, and complex to manage. It can also increase the incidence of use of fraudulent certificates thereby undermining the ability of authorities to mitigate public health risks.

The OECD initiative is intended to help to address these issues and encourage greater consistency in policies on international travel. It does not seek to replace other international initiatives, but rather to support and complement them, by either accelerating them or helping to enable their adoption by a broader range of countries.

1.2. Process

As a first step in the initiative, the OECD Secretariat prepared four background documents, on the [economic consequences of restrictions on travel](#); [testing protocols](#); [data exchange](#) and [privacy](#); and possible forms any agreement might take. A series of bi- and plurilateral meetings and consultations with countries, international organisations and other stakeholders, discussed the issues raised in these papers. In order to advance the discussion as rapidly as possible, a draft 'blueprint' was prepared. This explicitly drew directly on existing frameworks wherever possible, avoiding duplication with and building on work already undertaken in other fora, particularly by International Civil Aviation Organisation (ICAO), the World Health Organization (WHO) and the EU.

The draft was also submitted to the following Committees on 5 February 2021 and other bodies for information and comment:

- Digital Economy Policy
- Health Committee
- Regulatory Policy Committee
- Tourism Committee
- Trade Committee
- Transport Management Board (ITF)
- Transport Research Committee (ITF)
- Working Party on Migration.

In addition to consultation through Committees, Delegations were encouraged to designate a national contact point responsible for co-ordinating positions at the national level and engaging on a whole-of-government basis with the OECD. The responses provided by countries were included in DELSA/HEA(2021)2/REV2 (Blueprint framework for safer international travel during COVID-19 pandemic: comments from committees).

Various meetings were held to discuss the responses to the draft Blueprint, including with national contact points, and international organisations active in this area (ECAC- European Civil Aviation Conference, ICAO- International Civil Aviation Organization, IMO- International Maritime Organisation, UNWTO- the World Tourism Organisation, WHO- World Health Organization, WTO- World Trade Organization), and stakeholders (ACI- Airport Council International, CLIA- Cruise Lines International Association, ETOA- European Tourism Association, IATA- International Air Transport Association, IBMATA- International Border Management and Technologies Association, ICC- International Chamber of Commerce, WEF-



World Economic Forum and WTTC- World Travel and Tourism Council). Companies such as Boeing and Airbus have also shared with us their technical modelling related to the pandemic. Bilateral consultations were also held with many countries, international organisations, and other stakeholders. Particularly intensive collaboration has taken place with ICAO, with the OECD participating in the CART discussions and relevant working groups, and the WHO.

A revised version of the Blueprint was shared with all the OECD bodies listed above on 1 April 2021 [see DELSA/HEA(2021)1/REV1 – Blueprint framework for safer international travel during COVID-19 pandemic: comments from committees] and subsequently also to the WP1 of the EPC for information. Comments received from countries were synthesised and key outstanding issues were discussed at meetings with business stakeholders (16 April 2021), the relevant International Organisations (19 April 2021) and National Contact Points (20 April 2021). At this last meeting of the national contact points, delegates agreed that the document was ready to be transmitted for consideration at the Ministerial Council Meeting. The document was discussed at the Executive Committee on 29 April and by Council on 6 May, and transmitted to the Ministerial Council Meeting.

1.3. Developments

The pandemic moves swiftly and there have been a number of developments in both the epidemiological situation and in the national and international responses which have required adjustments in some aspects of the Blueprint.

Vaccination has taken place rapidly in some OECD countries – notably Israel, where over half of the adult population have already received at least one shot of vaccine, and Chile, the United Kingdom, and the United States, all of which are very close to reaching this mark. Many other OECD countries are estimated to be only two or three months away from reaching a similar milestone. It is clear that the vaccines are effective in preventing deaths and severe disease; increasingly, the evidence is also that they prevent mild forms of the disease and are likely to be effective in reducing community transmission, even though levels of protection may vary from one vaccine to another and the evidence base is still being developed. Vaccination changes both the underlying risks that arise from travel, but also the perception of risks and preferences of national populations. This has been reflected in the revised blueprint.

New variants of concern. At the time when the initial blueprint was drafted, countries were deciding how to adapt travel protocols to reflect new variants of concern (NVoC). New variants may be of concern if they have more severe effects on health; are more transmissible; or more resistant to vaccines or treatment than other variants. In all these cases, NVoCs change the balance of risks in travel across borders.

International developments. Since the initial version of the blueprint:

- ICAO has issued the third Report of its Council Aviation Recovery Task Force (CART) accompanied by the third edition of the Take-off Guidance Document and second edition of the ICAO Manual on Testing and Cross-Border Management Measures.¹ This set of documents provide governments with strategic recommendations and guidelines for the recovery of international civil aviation as well as up-to-date technical guidance for the establishment of a multi-layer risk management strategy. In addition, the ICAO Manual provides guidance on the implementation of Public Health Corridors (PHCs), which enable governments to mutually recognise their respective public health risk management frameworks and establish a bilateral or multilateral temporary arrangement within which air travel can be resumed. Information exchanged in a PHC may also include requirements and specifications for documentation regarding proof of testing for the purposes of international travel. The ICAO process has also delivered

¹ <https://www.icao.int/covid/cart/Pages/default.aspx>.



recommendations on the information that is to be included in the documentation providing proof of testing for the purpose of international travel.

- Furthermore, on 17 March, the EU published its legislative proposal “establishing a common framework for a Digital Green Certificate covering vaccination, testing and recovery. This will put in place an EU level approach to issuing, verifying and accepting such certificates, to help holders to exercise their right to free movement within the EU, as well as making it easier to wind down COVID-19 restrictions put in place in compliance with EU law”.² The proposal is open to global initiatives and takes into account ongoing efforts of specialised agencies of the United Nations such as the WHO and the ICAO, to establish specifications and guidance for using digital technologies for documenting vaccination status.
- The **WHO** has recently issued its “Interim guidance for developing a Smart Vaccination Certificate” (19 March 2021). The “approach is focused on establishing key specifications, standards and a trust framework for a digital vaccination certificate to facilitate implementation of effective and interoperable digital solutions that support COVID-19 vaccine delivery and monitoring, with intended applicability to other vaccines.” This is not, at present, intended to be used for travel purposes,³ but rather for informing vaccination rollout and policies. However, in principle, it could also be used by authorities wishing to take into account vaccination status in their travel policies (noting that WHO recommendations are revised every three months or earlier in light of new scientific evidence).

The ICAO CART guidance was approved on 12 March 2021 and communicated to States for implementation. The initiatives of the European commission (EC) and WHO are currently in progress and subject to further approval. All these initiatives converge on the objectives of more efficient use of information in the efforts to contain the pandemic, they do however target and cater to specific objectives and audiences in mind. While the ICAO initiative relates to the use of testing certificates for international air travel across a wide membership (193 countries), the EC initiative applies to intra-EU travel only and is framed in the context of helping EU citizens “facilitate the exercise of free-movement”. In turn, the WHO initiative is not designed for travel and provides “interim guidance”. This implies, among other things, that each initiative proposes somewhat different information sets and verification mechanisms, including in the context of who is able to issue certificates and how these might be validated, as indicated in Box 2.

Box 2. Information fields across emerging initiatives

There are three ongoing international initiatives which touch upon the information elements that might be included in certificates used to prove COVID-19 status. That of ICAO has been developed with the objective to facilitate international air travel through the use of testing certificates. In the EU, the “Digital Green Certificates” which include testing, recovery and vaccination certificates, are designed to help EU citizens exercise their right to free movement within the EU. In parallel, the WHO is currently issuing interim guidance on what “Smart Vaccination Certificates” might include. Owing to their different objectives, each initiative has different information elements.

² See page 3 in <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0129&from=EN>.

³ Indeed, in their [Interim Guidance document](#), the WHO states: “It is not intended to serve as an “immunity passport”. As per the “Interim position paper: considerations regarding proof of COVID-19 vaccination for international travellers” (See [Interim Position paper](#)).



ICAO	EU Testing Certificate	EU Certificate of Recovery	EU Vaccine Certificate	WHO interim guidance for Smart Vaccination Certificate
Full Name (Surname, Given Name)	Name: surname(s) and forename(s), in that order	Name: surname(s) and forename(s), in that order	Name: surname(s) and forename(s), in that order	
Date of Birth	Date of Birth	Date of Birth	Date of Birth	Date of Birth
ID Document Type				Unique identifier*
ID Document Number				
				Sex*
	Disease or agent targeted	Disease or agent the citizen has recovered from	Disease or agent targeted	Disease or agent targeted*
Type of test	The type of test	Date of first positive test result		
Sampling method*				
Name of testing facility or service provider	Testing centre or facility			
	Test name (optional for NAAT test)			
	Test manufacturer (optional for NAAT test)			
Date and time of specimen collection	Date and time of the test sample collection			
Date and time of report issuance (mandatory)	Date and time of the test result production (optional for rapid antigen test)			
Result of Test	result of the test			
Contact details	Testing centre or facility			
			Vaccine/prophylaxis	Vaccine or prophylaxis
			Vaccine medicinal product	Vaccine brand Vaccine manufacturer
			Vaccine marketing authorisation holder or manufacturer	Vaccine market authorisation holder
			Number in a series of vaccinations/doses	Vaccine batch number Dose number
		Certificate valid from	Date of vaccination, indicating the date of the latest dose received	Date of vaccination
		Certificate valid until		
Country of test	Member State of test	Member State of test	Member State of vaccination	Country of vaccination
	Certificate issuer	Certificate issuer	Certificate issuer	Administering centre Signature of health worker Health worker identification Due date of next dose*
	A unique certificate identifier	A unique certificate identifier	A unique certificate identifier.	
Optional Data Field*				

Note: * Denotes optional fields.



Country policies. Countries have continued to face the challenge of providing an appropriate degree of security against importation of COVID-19 cases through international travel, and while considering the impact of mobility restrictions on specific economic sectors and the economy as a whole. Since the initial draft of the blueprint, several countries have faced a new wave of infections, often linked to the spread of more transmissible NVoCs. In some cases, this has led to new or reintroduced restrictions on all international travel, except for certain narrowly defined purposes. Furthermore, modelling of the effectiveness of pre-departure testing has led some countries to conclude that there was a need to tighten their travel policies. A number of countries have introduced periods of strict quarantine in state-monitored hotels for several days on arrival prior to being allowed to move about in the destination country. International travel currently remains heavily restricted.

1.4. The OECD initiative

In the light of these developments, and with a view to ensuring maximum complementarity and synergy with the most recent testing and vaccination certificate initiatives, the OECD initiative proposes:

- To set up a temporary cross-sectoral forum for knowledge sharing about safe international travel, and
- A blueprint for safe international travel, to be implemented on a voluntary basis, to promote greater certainty, safety and security in travel as re-opening takes place and consistent (and complementary) with the most recent certificate initiatives.

1.4.1. Knowledge sharing forum

In the course of consulting with countries and stakeholders on the Initiative, the absence of a temporary forum where countries could exchange experiences about their policies and implementation issues has been raised repeatedly. The OECD initiative has brought together expertise in economics, transport policy, health, trade, and information systems, in a way that does not exist in other international fora, and feedback from the consultations has been that countries have found it extremely useful to be able to exchange views on an ongoing basis, building on a set of common frames of reference, on the approaches that countries are taking and the tools they are using. Therefore, it is proposed that the OECD organise regular discussions on Safe International Travel. These discussions would be open to national experts, from a variety of ministries. Should Delegations agree, relevant international organisations, and other relevant stakeholders could also be invited to particular sessions. A website for Delegations could also be set up for those countries wishing to share information in writing with the wider group. Examples of topics that could be discussed in such a forum include:

- Quantifying the impacts of the pandemic-induced travel restrictions on international connectivity
- Assessment of costs and benefits of different measures limiting international travel, to transport users, transport operators, and the wider economy
- Experience of bilateral, multilateral, or plurilateral public health air corridors
- Modelling and simulating the effects of different testing and quarantine arrangements
- Use of policy measures to contain the spread of COVID-19 in the context of travel
- Experiences with mechanisms of proof
- Enforcement and tackling fraud
- Evidence of economic impact of travel restrictions
- Quantifying the risks from NVoC into a warning system
- Communicating changing requirements with travellers



Members may wish to review whether they wish to continue these discussions at the end of 2021.

1.4.2. OECD blueprint for safer international travel

The OECD Blueprint has been revised, in light of comments received. The OECD Blueprint is based around the following principles:

- **The OECD Blueprint explicitly builds on existing initiatives.** It reflects the relative risk framework and multi-layer risk management of the WHO; it argues for the adoption of ICAO guidelines in all respects relating to hygiene of air travel; it draws on a traffic light system along the lines of the model used by the EU; and the data, security and certification system builds on that of the EU, which in turn is consistent with the proposals made by ICAO.
- **The OECD Blueprint does not compete with any existing initiatives, rules, laws or agreements.** ICAO is the appropriate forum for framing the rules that will cover international air travel. An initiative which was not well-integrated into the ICAO framework would risk fragmenting international travel rules, which would have consequences for the ability of national authorities to manage their borders efficiently; and would impose costs on travel companies and travellers. Therefore, the OECD initiative must be consistent and closely integrated with ICAO's recommendations and guidance. With this in mind, the OECD initiative is designed to be implemented among countries which are similar in their administrative capacity, status of vaccination policies, access to test policies, and the strength of their health and governance systems. Such similarities may lead them to be able to go further in implementing travel policies which are not yet possible for all countries, but which other countries can reasonably prepare to match (as is currently foreseen under the ICAO framework).
- **The OECD Blueprint takes into account the dynamic evolution of the pandemic and specific country circumstances.** The nature of the pandemic is such that not all countries are in a position to envisage international travel for some time. As a result, instead of proposing a set of recommendations applicable to all countries at a given moment in time, two situations are included in the Blueprint. The first is when (as is generally the case in April 2021) most countries are concerned to prevent any importation of COVID-19 cases and variants into their country through international travel. The second situation is when countries accept the risk of a certain degree of importation, as the probability of this turning into community transmission of the disease is low (for example, due to high rates of vaccination and the population having developed significant immunity at the population level). In the first situation, a stricter set of restrictions are appropriate than in the second. It is up to countries themselves to decide when they are in the first situation, or when they are in the second.
- **The OECD Blueprint is voluntary.** The Blueprint is a set of guidelines, not a legal text. If countries wish to implement it, they may do so unilaterally, or in bilateral or multilateral agreements, or through mechanisms provided in other bodies, such as, in particular the ICAO Public Health Corridor arrangement.
- **The OECD Blueprint is temporary and designed to co-exist with growing rates of vaccination.** The OECD Blueprint is designed to provide a temporary framework in the context of the situation where vaccination is becoming more widespread (though not yet universal). It is also designed to help countries manage travel in the context of announcements that some countries have made that vaccination certificates may permit travellers to avoid some restrictions, but will not be required for travel, implying that testing certificates will continue to be necessary.



A blueprint for safer international travel during the COVID-19 pandemic

1. Applicability

- The travel protocols described in this document are applicable to international travel by air, rail, coach and ship. Private modes of transportation are excluded in this document, but countries may decide to extend the arrangement to include them.
- Application of the travel protocols is a joint responsibility of national authorities and carriers who transport travellers across borders, and travellers themselves.

2. General recommendations

- The following recommendations for travellers, aligned with guidance by the World Health Organization (WHO) and the International Civil Aviation Organisation (ICAO) apply, including for vaccinated travellers:⁴
 - i. do not travel when sick, including confirmed, probable and suspected (contact) cases;
 - ii. adhere to hand and respiratory hygiene practices;
 - iii. wear a surgical facemask or a filtering facepiece respirator properly covering mouth and nose (with exceptions as appropriate);
 - iv. practice physical distancing to the extent possible to lower the risk of disease spread; and
 - v. adhere to instructions provided by port or carrier personnel.

3. Principles

- The following principles underpin the system:
 - i. **Relative risk-based approach:** The protocol should aim to reduce the impact of the risk to a residual level that is considered acceptable by national authorities and in line with the World Health Organization (WHO).⁵
 - ii. **Consideration of the epidemiological situation:** Restrictions on international travel should be commensurate with the epidemiological situation in the country of origin and destination.
 - iii. **Equal treatment of travellers:** All travellers are to be treated equally and fairly, taking into consideration the previous point on the epidemiological situation. Safe travel is to be facilitated by presentation of proof of vaccination or recovery (where national policy allows this) or through tests demonstrating that the traveller is not infectious.
 - iv. **Appropriate use of quarantine:** The blueprint aims to achieve an appropriate use of quarantine. For the situations of lower epidemiological risk, testing, genomic sequencing of positive cases, and adequate data collection for contact-tracing can provide relevant information about the prevalence of the disease among travellers and of the appearance of new variants of concern. Quarantine would be an instrument applicable to cases of higher epidemiological risk, with an option to end isolation earlier based on the results of diagnostic tests. Where an individual has been vaccinated, and national policy is to reflect vaccination status in its travel policies, quarantine might not be necessary.

⁴ ICAO, CART Take-off Guidance for Air Travel through the COVID-19 Public Health Crisis. <https://www.icao.int/covid/cart/Pages/Public-Health-Risk-Mitigation-Measures.aspx>.

⁵ World Health Organization. Considerations for implementing a risk-based approach to international travel in the context of COVID-19.

<https://apps.who.int/iris/rest/bitstreams/1322899/retrieve>.



- v. **Reliance on national verification regimes:** Countries participating in the system will accept vaccine certificates, recovery certificates, and test results that have been approved by the national authorities of other **participating** countries, as appropriate, subnational jurisdictions, taking into account ongoing discussions on international systems at the WHO, ICAO and the EU.
- vi. **Simplicity and reliance on existing systems:** The complexity of processes and amount of information collected and transferred across borders should be minimised. The system should be based on collecting strictly necessary data only (data minimisation and privacy by design), and on drawing as much as possible on existing tools and systems for sharing information in compliance with applicable data protection rules.
- vii. **Interoperability, security and privacy protection by design:** The system should be interoperable and based on a common nomenclature and format for information transfers (to be agreed). The system should also abide by the principle of “privacy by design”, in which the contents, collection mode, purpose for collection, and length of storage for any or all data being collected will be made clear to the data subject at the outset.
- viii. **Recognition of other international agreements:** where countries are part of a supranational grouping, such as the EU, nothing in the blueprint should be considering as superseding agreements made in that body concerning travel within the countries party to that grouping. In particular, it is acknowledged that Member States of the EU are committed to free movement of people, and that Council Recommendation (EU) 2021/119 of 1 February 2021 amending Recommendation (EU) 2020/147 will apply within the Union.
- ix. **Priority of national legislation:** The blueprint provides policy guidance and is not a legal document.



Part 1. Measures for safer travel

4. Epidemiological criteria

- Participating countries will:
 - i. Use common epidemiological criteria for COVID-19 case notification rate, testing rate, and test positivity rate, as reported to the WHO under the International Health Regulations and reflecting WHO definitions and published in the WHO Coronavirus (COVID-19) Dashboard.⁶ Countries may also use the data published by the European Centre for Disease Prevention and Control (ECDC), as appropriate. Cut-off dates are left to the discretion of organisations collecting and publishing the data (WHO or ECDC).
 - ii. Take the following epidemiological criteria into account:
 - a) **Notification rate:** total number of newly notified COVID-19 cases per 100 000 population in the previous 14 days at national, or as appropriate, sub-national level;
 - b) **Test positivity rate:** the percentage of positive tests among all tests for COVID-19 infection carried out during the previous week;
 - c) **Testing rate:** the number of tests for COVID-19 infection per 100 000 population carried out during the last week.
 - iii. Define green, orange, red, and dark red categories of risk according to the severity of community spread of the SARS-CoV-2 virus in each country or region, calculated every two weeks, as indicated below:
 - a) **Green**, if the notification rate is less than 25 and the test positivity rate is less than 4%;
 - b) **Orange**, if the notification rate is less than 50 but the test positivity rate is 4% or more, or, if the notification rate ranges from 25 to 150 but the test positivity rate is less than 4%;
 - c) **Red**, if the notification rate is 50 or more and the test positivity rate is 4% or more, or if the notification rate is more than 150;
 - d) **Dark red**, if the notification rate is 500, or if there is high prevalence of new variants of concern;
 - e) **Grey**, if not sufficient information is available or if the testing rate is 300 or less.
 - iv. To the extent possible, provide sufficient warning of a possible change in risk level. A warning system to indicate that the limits for a change in risk level are being approached, calculated every two weeks, as indicated below:
 - a) **Orange** warning, if the notification rate ranges from 18.75 to 25;
 - b) **Red** warning, if the notification rate ranges from 37.50 to 50 and the test positivity rate ranges from 3% to 4%, or, if the notification rate ranges from 112.50 to 150 but the test positivity rate is below 3%;
 - c) **Dark red** warning, if the notification rate ranges from 375 to 500.
 - v. Coordinate with ongoing efforts (including the EU Early Warning and Response System) to identify criteria for taking into account the prevalence and risk associated with SARS-CoV-2 variants of concern, for which there is evidence of an increase in transmissibility, increase

⁶ WHO regularly publishes data in its Coronavirus (COVID-19) Dashboard, available at: Data Table. <https://COVID-19.who.int/>.



in virulence or change in clinical disease presentation, or decrease in effectiveness of public health and social measures or available diagnostics, vaccines, therapeutics.⁷

5. Travel requirements

- Participating countries will:
 - i. In line with national regulations, travellers who produce proof of vaccination, or who produce proof of recovery from a prior COVID-19 infection may be exempt from testing requirements, unless for surveillance purposes, and/or quarantine requirements in the context of travel.⁸ Proof of vaccination is defined as having received the full number of specified doses for each vaccine. Recognised vaccines for proof include the ones recommended by the WHO for Emergency Use Listing (EUL), or the ones approved by a Stringent Regulatory Authority according to WHO's interim definition.⁹
 - ii. For the passengers who are unable to provide a valid proof of vaccination or recovery, adopt a travel protocol that may include tests and quarantine requirements commensurate with the level of risk of COVID-19 infection, according to the colour-coded categories of epidemiological risk defined above. Where the use of RT-PCR is appropriate, countries will accept results of tests that have been approved by origin countries. When the use on antigen tests is appropriate, countries will rely on the results of antigen tests approved by origin countries that provide for a minimum of 80% sensitivity and high specificity (minimum $\geq 97\%$ and ideally $> 99\%$ for rapid antigen tests) COVID-19 diagnostics.^{10 11 12}
 - iii. Request all travellers to complete a passenger locator form prior to travel, preferably in digital format.
 - iv. General public health measures should be maintained at all times, including the use of facemasks, distancing, and hand washing.

6. Travel protocols

- Subject to their own considerations of risk associated with importation of cases of COVID-19, local rates of vaccination, and other elements of national context, participating countries will adopt one of the travel protocols described below, and subsequently shown in Table 1.

⁷ The World Health Organization has proposed working definitions of SARS-CoV-2 Variants of Interest and Variants of Concern on the COVID-19 Weekly Epidemiological Update published on 25 February 2021. https://www.who.int/docs/default-source/coronaviruse/situation-reports/20210225-weekly-epi-update-voc-special-edition.pdf?sfvrsn=1eacfa47_7&download=true.

⁸ There is growing evidence suggesting that people who are fully vaccinated are potentially less likely to transmit SARS-CoV-2 to others. See: <https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/fully-vaccinated-people.html>.

⁹ WHO's interim definition of Stringent Regulatory Authority (SRA) is available at <https://www.who.int/medicines/regulation/sras/en/>.

¹⁰ Sensitivity is defined as the ability of a test to identify true cases; the proportion of people with a health condition that are identified by a screening test. Specificity is defined as the ability of a test to exclude persons without the health condition of interest; the proportion of persons without a health condition that are correctly identified as such by a screening test. <https://www.cdc.gov/csels/dsepd/ss1978/glossary.html>.

¹¹ The EU has made available a common list of COVID-19 rapid antigen tests, including those for which test results are mutually recognised within the EU, and a common standardised set of data to be included in COVID-19 test result certificates, https://ec.europa.eu/health/sites/health/files/preparedness_response/docs/COVID-19_rat_common-list_en.pdf.

¹² Point-of-care RT-LAMP tests that meet these criteria for sensitivity and specificity may be used in the same way as antigen tests.



- The following protocols may be modified by countries to indicate that travellers in transit are not subject to additional requirements and travellers who return within 48 hours of arrival are exempt from further testing requirements before the return trip.
- The protocols may also be modified to cover travel and provide exemptions of quarantine requirements for essential functions. Essential function should be defined by countries. WHO suggests the following: emergencies and humanitarian actions, travel of essential personnel, repatriations, and cargo transport for essential supplies such as food, medicines, and fuel.
 - i. **Travel protocol A.** When the potential health impact associated with the importation of cases is estimated by participating country to be **high**, considering their own assessments of health system capacity, immunisation rates, global and regional trends of viral circulation, and other criteria, the following requirements and conditions will apply:

Level 1 requirements, to be applied when country of departure is coded green, or when the country of departure is coded orange and the country of arrival is coded red:

Evidence of a negative antigen (where allowed) or RT-PCR test conducted up to 72 hours (and ideally within 48 hours) from departure will be requested from travellers, who will be recommended to self-isolate between test and departure. Travellers who receive a positive test result will not be allowed to travel. Travellers will be requested to have a second antigen (where allowed) or RT-PCR test conducted on day 2 counting from arrival, to allow for contact tracing of positive cases and, if possible, for genomic sequencing in the case of RT-PCR samples. Travellers who produce proof of vaccination or proof of recovery may be exempt from these testing requirements.

Level 2 requirements, to be applied when country of departure is coded orange and the country of arrival is coded green or orange:

Evidence of a negative RT-PCR test conducted up to 72 hours (and ideally within 48 hours) prior to travel will be requested from travellers, who will be recommended to self-isolate between test and departure. Travellers who receive a positive test result will not be allowed to travel. Travellers will be required to quarantine for 5 days counting from arrival date and to have a second RT-PCR at the end of quarantine. Travellers may leave quarantine earlier if they receive negative results of a RT-PCR conducted on or after day 2 counting from arrival. Travellers who produce proof of vaccination or proof of recovery may be exempt from these testing and quarantine requirements. However, all travellers who are tested positive will be required to observe a 10-day quarantine from the onset of symptoms if symptomatic, or from the date of the test with a positive result if asymptomatic.

Level 3 requirements, to be applied when country of departure is coded red:

Evidence of a negative RT-PCR test conducted up to 72 hours (and ideally within 48 hours) prior to travel will be requested from the traveller, who will be recommended to self-isolate between test and departure. Passengers who receive a positive test result will not be allowed to travel. Travellers will be required to quarantine for 10 days counting from arrival date. Travellers may leave quarantine earlier if they receive negative results of a RT-PCR conducted on or after day 7 counting from arrival. Travellers who produce proof of vaccination or proof of recovery may be exempt from these testing and quarantine requirements. However, all travellers who are tested positive will be required to observe a 10-day quarantine



from the onset of symptoms if symptomatic, or from the date of the test with a positive result if asymptomatic.

Level 4 requirements, to be applied when the country of departure is coded dark red or grey:

Travel will only be allowed for travellers with an essential function or for the return of citizens or permanent residents. All other requirements in Level 3 apply.

- ii. **Travel protocol B.** When the potential health impact associated with the importation of cases is estimated by participating country to be **low** or **moderate**, considering their own assessments of health system capacity, immunisation rates, reduction in global and regional trends of viral circulation, and other criteria, the following requirements and conditions will apply:

Level 1 requirements, to be applied when country of departure is coded green:

Travellers will not be requested to produce evidence of diagnostic tests or be required to observe quarantines. Other general recommendations of hygiene, use of facemasks and physical distancing apply.

Level 2 requirements, to be applied when country of departure is coded orange and the country of arrival is coded orange or red:

Evidence of a negative antigen (where allowed) or RT-PCR test conducted up to 72 hours (and ideally within 48 hours) from departure will be requested from travellers, who will be recommended to self-isolate between test and departure. Travellers who produce proof of vaccination or proof of recovery may be exempt from these testing and quarantine requirements. Travellers who receive a positive test result will not be allowed to travel.

Level 3 requirements, to be applied when country of departure is coded orange and the country of arrival is coded green or when the country of departure is coded red:

Evidence of a negative antigen (where allowed) or RT-PCR test conducted up to 72 hours (and ideally within 48 hours) prior to travel will be requested from travellers, who will be recommended to self-isolate between test and departure. Travellers who receive a positive test result will not be allowed to travel. Travellers will be requested to have a second antigen (where allowed) or RT-PCR test conducted on day 2 counting from arrival, to allow for contact tracing of positive cases and, if possible, for genomic sequencing in the case of RT-PCR samples. Travellers who produce proof of vaccination or proof of recovery may be exempt from these testing and quarantine requirements. Travellers who are tested positive post-entry will be required to observe a 10-day quarantine from the onset of symptoms if symptomatic, or from the date of the test with a positive result if asymptomatic.

Level 4 requirements, to be applied when the country of departure is coded dark red or grey:

Travel will only be allowed for travellers with an essential function or for the return of citizens or permanent residents. All other requirements in Level 3 apply.



Table 1. Summary of proposed travel protocols according to health impact and risk levels

Testing and quarantine requirements may be applicable for travellers who cannot provide proof of vaccination or recovery from COVID-19

Protocol	Risk levels	Category of risk		Testing required		Length of required quarantine
		Departure country	Arrival country	Pre-departure	Post-entry	
A (When potential health impact from importation of cases is high)	1	Green	Any	Antigen or RT-PCR, 72 hours before travel	Not required	None
		Orange	Red			
	2	Orange	Orange or Green	RT-PCR, 72 hours before travel	RT-PCR on or after day 2 from arrival. Traveller may leave quarantine starting from day 2 if post-entry test is negative.	5 days
	3	Red	Any	RT-PCR, 72 hours before travel	RT-PCR on or after day 7 from arrival. Traveller may leave quarantine starting from day 7 if post-entry test is negative.	10 days
4	Dark red	Any	Essential travel or citizen/resident return only. Other Level 3 requirements apply.			
B (When potential health impact from importation of cases is low to moderate)	1	Green	Any	Not required	Not required	None
	2	Orange	Red or Orange	Antigen or RT-PCR, 72 hours before travel	Not required	None
	3	Orange	Green	Antigen or RT-PCR, 72 hours before travel	Antigen or RT-PCR on or after day 2 from arrival.	None
		Red	Any			
4	Dark red	Any	Essential travel or citizen/resident return only. Other Level 3 requirements apply.			

Note: Pre-departure tests should ideally be conducted 48 hours before travel.



Part 2. Information and security

7. Information requirements for travel

- Participating countries agree on the following:
 - i. If countries choose to enable travel through the use of **vaccination certificates** or **certificates of recovery**, these should be based on a common set of information elements and agreed measures for security, facilitation, machine reading and interoperability in line with ICAO CART recommendations. Existing international initiatives (EU Digital Green Certificates and WHO Smart Vaccination Certificate) are considering what these should be.¹³ Although these initiatives are still under discussion in their respective organisations, they include the following information:
 - (1) Personal Information of Subject:
 - a) Full Name (Surname, Given Name)
 - b) Date of Birth (YYYYMMDD)
 - c) (optional but recommended) ID Document Type
 - d) (optional but recommended) ID Document Number
 - (2a) Additional information to be included in **vaccination certificate** (based on EU Digital Green Certificates and WHO Smart Vaccination Certificate):
 - a) Disease or agent targeted
 - b) Vaccine/prophylaxis
 - c) Vaccine medicinal product
 - d) Vaccine marketing authorisation holder or manufacturer
 - e) Number in a series of vaccinations/doses
 - f) Date of vaccination (indicating the date of the latest dose received)
 - g) Country of vaccination
 - h) Certificate issuer
 - i) (optional fields) The WHO Smart Vaccination Certificates include all the above and: signature of health worker; health worker identification and due date of next dose
 - (2b) Additional information to be included in the **certificate of recovery** (based on EU Digital Green Certificates):
 - a) Disease or agent individual has recovered from
 - b) Date of first positive test result
 - c) Country of test
 - d) Certificate issuer
 - ii. A common set of information for **testing certificates** to be presented under a common nomenclature based on the ICAO “Recommended dataset on reporting COVID-19 testing results” and in-line with other initiatives (EU Digital Green Certificates). The certificates will include the following minimum information:
 - (1) Personal Information of Test Subject:

¹³ As discussed above, the WHO “Smart Vaccination Certificate” is *not* designed to be used for travel purposes, but rather for monitoring vaccination rollout and policies. However, in principle, it could also be used by authorities wishing to take into account vaccination status in their travel policies.



- a) Full Name (Surname, Given Name) (mandatory)
 - b) Date of Birth (YYYYMMDD) (mandatory)
 - c) ID Document Type (mandatory)
 - d) ID Document Number (mandatory)
- (2) Service Provider:
- a) Name of testing facility or service provider (mandatory)
 - b) Country of test (mandatory)
 - c) Contact details of testing facility or service provider (mandatory)
- (3) Date and Time of Test and Report:
- a) Date and time of specimen collection (mandatory)
 - b) Date and time of report issuance (mandatory)
- (4) Test Result:
- a) Type of test conducted: molecular (PCR); molecular (other); antigen; antibody (mandatory)
 - b) Result of Test (normal/abnormal or positive/negative) (mandatory)
 - c) Sampling method (nasopharyngeal, oropharyngeal, saliva, blood, other (optional))
- iii. Provision of this information to the traveller in an ‘eye readable’ and printable format,¹⁴ as well as with an automatically generated and ‘machine readable’ QR or bar code codifying the information in a common order and format. If unable to create a QR or bar code, results will allow travellers to link their ID to the test.
 - iv. Definitions on the type of providers that are authorised to issue results to travellers in the commonly agreed format.
 - v. Inclusion of a unique and interoperable identifier or similar mechanism to enable verification of authenticity of certificates. This should rely on and be interoperable with existing initiatives including the ICAO Visible Digital Seal, the EU Digital Green Certificate and the WHO Smart Vaccination Certificate.

8. Data protection and mechanisms for proof

- Across all and any certificates, participating countries will:
 - vi. Limit the amount of information requested from travellers to that agreed under the information requirements detailed above.
 - vii. Avoid collecting and storing personal or sensitive data, giving preference to decentralised mechanisms of proof.
 - viii. In the event that data is collected, countries will ensure that data is protected and secured in accordance with relevant domestic regulations.
 - ix. Limit transfers of personal or personally identifiable data across international borders and, where needed, rely on existing mechanisms (e.g. informed consent) in full compliance with applicable data protection and transfer rules.

¹⁴ Including following guidance from the Web Content Accessibility Guidelines (WCAG) 2.1 describing how to make Web content more accessible to people with disabilities (see [Web Content Accessibility Guidelines \(WCAG\) 2.1 \(w3.org\)](https://www.w3.org/WAI/WCAG21/)).



- x. Rely on existing mechanisms for relaying status information, favouring decentralised approaches that rely on QR/bar codes carried by travellers and which can be printed or integrated into existing private and public sector digital solutions.¹⁵
- xi. Rely on existing and interoperable mechanisms for verification of certificates, including those proposed under the ICAO Visible Digital Seal, the EU Digital Green Certificate and the WHO Smart Vaccination Certificate.

9. Other

- The proposed system applies to those countries which voluntarily agree to participate in the system; that is, it is an agreement between parties, not a universal system.
- Additional requirements may be applied for travel involving countries that are not part of the agreement.
- Participating countries may apply lists of travellers exempted to compliance with testing and quarantine requirements in accordance with national laws and regulations.
- This system can be implemented unilaterally, bilaterally, plurilaterally or multilaterally, or through the ICAO Public Health Corridor mechanism.

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¹⁵ This include, but are not limited to: IATA Travel Pass, the ICC AOK Pass, the Common Trust/WEF Common Pass, the SICPA Certus myHealth Pass, the IBM Digital Health Pass.

