



# COVID 19 RECOVERY: Scheduling & Capacity Guidance for Airports

May 2020

## Purpose and Overview

This guidance document provides guidance on steps for airport operators to take, and factors to consider, when restarting operations following the current COVID-19 shutdown and during the recovery phase, with regard to determining and communicating to all relevant stakeholders the actual capacity which the airport may make available. This can be influenced by numerous factors, particularly the need to ensure physical distancing between individuals in the terminal, when boarding/disembarking aircraft, and within aircraft cabins.

Airline schedules will be strongly influenced by the available capacity at an airport, and vice-versa – an airport operator will not reopen infrastructure unnecessarily if demand is not present. In order for this circle to function, reliable, accurate and timely information on flight schedules is required.

The Network Manager will play a crucial role as a liaison between airports, airlines and ANSPs and as a conduit for strategic planning information. Slot coordinators and schedule facilitators will also play a significant role where the discrepancy between declared capacity and operational capacity affects slot holdings at coordinated airports.

There will also be a need for some airports, which are not normally coordinated, to establish contact with their national coordinator to address any sudden terminal and airside capacity shortfalls at their airport in the restart and recovery phase.

The best results will be obtained through continuous, constructive and transparent collaboration and communication between the relevant stakeholders at local level – combined with coordination Europe-wide.

At airport level, the Airport Operations Centre (APOC) is the ideal forum for collaboration between stakeholders, including airlines, ground handling agents and the local ANSP. Airports which do not currently have a full APOC in place are invited to consider the collaboration and communication mechanisms which it offers and to implement similar procedures in accordance with the [Ground Coordinator concept](#).

## Key Problems & Possible Solutions

The guidance seeks to address the following problems by providing steps on how airports should implement the identified solutions:

Problem	Root Cause	Impact	Possible Solutions
Need to determine operational capacity of the airport for a given time period	<ul style="list-style-type: none"> <li>▪ Sanitary measures requiring physical distancing – at airport and at destination</li> <li>▪ Increased turnaround times &amp; schedule changes</li> <li>▪ Shortage of airport and ground handling staff</li> <li>▪ ATM capacity restrictions</li> <li>▪ Airfield restrictions e.g. AOG, stand separation</li> <li>▪ Traffic mix: aircraft type, domestic/international, Schengen/non-Schengen</li> <li>▪ Runway/Taxiway/Stand capacity required for long-term parking of aircraft</li> <li>▪ Regular operational constraints including night curfews.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduced terminal queue/dwell capacity (check-in, security, border control, lounges, gates, ramps)</li> <li>▪ Reduced terminal throughput capacity (check-in, security, border control)</li> <li>▪ Increased turnaround times &amp; schedule changes</li> </ul>	<ul style="list-style-type: none"> <li>▪ Assess impact of sanitary measures on airport capacity, in particular impacts on terminal capacity and on turnaround times and flight schedules as compared to normal operations</li> <li>▪ If not available, use simulation tools, EUROCONTROL questionnaires, Airport Corner</li> <li>▪ Develop short and medium term scenarios for terminal capacity management, including gate management in concert with key stakeholders (airport, airline, GHA &amp; ANSPs)</li> <li>▪ Communicate to airlines, NM, slot coordinators/schedule facilitators</li> <li>▪ Develop new temporary coordination parameters through coordination committee</li> <li>▪ Develop local guidelines/Local Rule to implement new coordination parameters</li> <li>▪ Request, where relevant, temporary</li> </ul>

			<p>change to coordination level</p> <ul style="list-style-type: none"> <li>▪ Revise regularly based on evolution of sanitary measures and demand</li> <li>▪ Use APOC/Ground Coordinator principles (even if you don't have an APOC)</li> </ul>
<p>Need reliable and accurate schedule information and slot programming</p>	<ul style="list-style-type: none"> <li>▪ Demand cannot exceed capacity in order to maintain physical distancing</li> <li>▪ Infrastructure opening needs to be based on demand and could require time to be restored.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Planning and adjusting passenger flows, critical gate and bus resources, embarkation; re-calibration of A-CDM parameters</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ensure a mechanism to receive accurate, reliable, useable and timely flight schedule information is in place</li> <li>▪ Ensure coherence between slots/flight plans and available capacity including turnaround times</li> <li>▪ Work with coordinator to implement priority rules in the event that historic slots exceed new capacity parameters.</li> </ul>

## Guidance material

### Determining operational capacity of the airport for given time period

The operational capacity of the airport for a given period can be determined based on the following information:

Information required	From which party	By when
<b>Physical distancing measures:</b> passenger separation in terms of m <sup>2</sup> ; need for space for longer queues (check-in counters, security filter, boarding gates and passport control areas, baggage belts, L&F); potential closure of boarding gates, retail/F&B areas, passport control posts or baggage belts if there is a risk of mixing passengers	Government/health authorities	May and ongoing as the situation evolves and alternatives are developed
<b>Border closures/restrictions</b> on particular routes	<ul style="list-style-type: none"> <li>• Governments</li> <li>• ICAO/CAPSCA</li> </ul>	May/June and ongoing as the situation evolves
<b>Airspace and airfield capacity</b> including ATCO availability and expected traffic mix	<ul style="list-style-type: none"> <li>• ANSP</li> <li>• Network Manager</li> <li>• Airlines</li> </ul>	May/June
<b>Availability of Ground Handling</b> and other support services	<ul style="list-style-type: none"> <li>• GHSPs</li> </ul>	May/June although situation may depend on the GH agents' financial status and terms of government furlough schemes
<b>Slower operational processes</b> due to aircraft, airbridge and handling equipment disinfection; need to sequence the passengers by groups, slower security processes (need to clean equipment, separate passengers), slower passport controls and slower baggage check-in procedures	<ul style="list-style-type: none"> <li>• Government/Health authorities</li> <li>• Airlines</li> <li>• Handling Agents</li> <li>• Police/Private security</li> </ul>	May/June
<b>Slower operational processes and space due to potential testing/checks upon departure and arrival:</b> need to separate arrival passengers in a separated area, space for testing, thermal scanning and separation, provide health self-declarations	<ul style="list-style-type: none"> <li>• Government/Health authorities</li> </ul>	Dependent on the potential measures required by authorities

## Producing information on the available capacity

Once the operating capacity of the airport has been determined, it will need to be communicated to the relevant stakeholders for flight and network planning. The Coordination Committee is the adequate forum to inform on changes to the capacity parameters. The following information elements have been identified as being of potential benefit to different stakeholders, although individual needs may vary depending on local circumstances and should be determined via dialogue with the partners concerned. In this sense, the coordinator/schedule facilitator can facilitate the flow of information between all the stakeholders while it fulfils its role to assign the slots according to the available capacity.

### Information to be provided to stakeholders:

#### Airline

- Operating capacity of airport (%age of usual capacity) – terminal & airside, identify most limiting factor(s) in concert with airport and ANSP
- Period of the day where more demand than capacity is expected – feed into DCB process
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- Requested action to be taken by airlines
- Possible new minimum turnaround time
- Possible new minimum connecting time
- Health measures at the airport for passengers and for crew
- Potential restrictions on the amount of carry-on baggage which can be permitted
- Handling of PRM – amended procedures

#### Slot coordinator/schedule facilitator

- New capacity levels (operational)
- Operating capacity of airport (%age of usual capacity)
- Spread of capacity reduction over the day
- No. of flights which can be served (overall)
- New minimum possible turnaround time

#### Network Manager (through the Airport Corner)

- Estimated capacity as a percentage of nominal capacity (terminal and airside) with a time horizon of at least 10 days up to 4 weeks
- Flight restrictions for commercial traffic and availability for cargo traffic
- Information concerning use and impact of runways, taxiways/taxilanes, and unpaved areas to park aircraft
- Use of normal terminal parking stands for long-term parking
- Impact on operations due to reduced level of ground services
- Information concerning Terminal Capacity including application of physical distancing measures, temperature checks for Departure, for Arrival, whether passengers required to wear facemasks, impact on boarding processes
- Information on impact of COVID-19 measures on (generic) turnaround times

- Demand-Capacity-Balancing (DCB) information, in particular reliable information on when traffic demand is anticipated to exceed airport capacity, enabling stakeholders to initiate a collaborate decision making process for optimum solutions.

## Communicating capacity to the Coordinator/Facilitator, Network Manager and airlines

In order for coordinators/facilitators, airlines and the Network Manager to plan accordingly, the capacity information needs to be communicated to them regularly. This can be done through the following:

- APOC
- Airport Corner, via special COVID-19 section with relevant questions, or through questionnaire if questions need to be asked only once, or answers are needed quickly
- Airport slot coordinator/schedule facilitator (for coordinated/schedule facilitated airports)
- Direct contact to airline operations or schedulers
- Airport slot coordination committee
- Special COVID-19 taskforce.

Airports would also benefit from obtaining the following information from the Network Manager:

- Predicted airport capacity during COVID-19 crisis and recovery phase as reported via the Airport Corner
- Potential un-balanced airport capacity and expected demand over the next four weeks
- An overview of city pairs (e.g. top 50), based on flight schedules checked with airlines
- Main constraints impacting airport capacity and operations.

## Receiving reliable flight schedule information

In order to plan the airport's operations and make decisions on the reopening of infrastructures etc., the airport needs to have reliable, accurate and timely information on airline's schedules through accurate slot programming. Airlines, airports and coordinators/facilitators should foster a continued dialogue during the current crisis, to understand their specific context and including the following issues:

- Airline communicates planned schedule to coordinator/schedule facilitator by D-4 weeks prior to the restart of operations, including the planned increases in the following months, with regular updates as operations evolve
- Coordinator/schedule facilitator ensures that airports have access to schedule database and can reconcile schedules and available capacity
- Airline returns unused slots to pool, and makes sure that the right slots have been allocated by D-4 weeks at latest
- Airline registers the new maximum number of passengers/load factor (due to physical distancing) in its slots

- Airline communicates flight passenger predictions and, where possible, loads on a weekly basis (reliable figures on loads will not be easily available in advance, so should not be a primary basis for planning)
- Airline to inform on predicted volume of connecting passengers on a weekly basis, to the best extent possible
- Airline to inform on changes to their schedule due to new restrictions as soon as the airline implements changes
- Airline communicates any sanitary measures that may affect airport capacity, in particular turnaround times.