

# Flow Management Procedures

Normally, on VATSIM, the Reykjavik CTA operates under the principle of “free flow,” meaning there are no restrictions on aircrafts’ movements, departures, or arrivals. However, during periods of heavy traffic, flow control measures may be imposed to reduce the strain on local and neighboring ATC.

Flow control measures may be issued either by a local **supervisory controller**, if one is present (e.g., rostered for an event), or through a larger traffic management initiative like **ECFMP (European Collaboration and Flow Management Project)**, where neighboring vACCs may impose restrictions on flights entering/exiting their airspace via the Reykjavik CTA.

## Types of Flow Control

### CDM (Collaborative Decision Making)

During periods of high traffic, such as major events, controllers may initiate what is known as **Collaborative Decision Making (CDM)**. This is implemented into the BIRD sector file using the CDM for Euroscope plugin.

A detailed guide to CDM for Euroscope, written by the Danish staff, is available [HERE](#).

To summarize the basic principles of CDM:

- Aircraft are assigned a **calculated take-off time (CTOT)**.
  - Aircraft must take off within -5/+10 mins of their CTOT.
- Based on their CTOT, and the distance from their parking location to the runway, they must also adhere to a **target start-up time (TSAT)**.
  - Aircraft must start up within +/- 5 mins of their TSAT.

This system allows controllers to make sure that the flow of departures is spread out and does not exceed the airport's capacity at any given point in time, while also reducing congestion on the ground by ensuring aircraft do not start moving until there is capacity for their departure.

The overall flow of CDM is:

1. **Aircraft calls for clearance.**
2. **DEL issues clearance and asks for the aircraft's target off-block time (TOBT)**, i.e., the time they expect to be ready for push & start. DEL inputs the TOBT into Euroscope, and the CDM plugin will use the TOBT to automatically calculate the aircraft's CTOT and TSAT.
  1. **During events with bookings, DEL shall NOT let the plugin calculate a CTOT based on the TOBT. Rather, the CTOT shall be the booking slot time, which DEL must *manually input* into the plugin** (generally by referencing the aircraft's slot time as displayed by the VATCAN Bookings plugin.) The plugin will automatically calculate a TSAT from the manually-input CTOT.
3. **DEL provides the aircraft with their TSAT, as calculated by the plugin** (e.g., "BAW123, startup time 1234z.")
4. **When the pilot reports ready for startup, DEL shall:**
  - Mark them as ready in the "RDY" column of Euroscope's Departure List.
  - Within +/- 5 min of their TSAT, DEL shall transfer the aircraft to GND for push & start.
5. **GND and TWR must ensure that the aircraft takes off within -5/+10 mins of their CTOT.** If they miss this window, TWR and DEL shall arrange a new CTOT for them.

Generally speaking, DEL shall always be the CDM "master" in Euroscope, and all other controller shall be in "slave" mode.

## Radar Release

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During periods of high traffic congestion in the airspace surrounding the airport, APP may move an airport into the status of **radar releases**. When radar releases are in effect, TWR must receive a release from APP for each aircraft before TWR clears them to take off.

APP & TWR should remain in coordination regarding when the period of radar releases will end.

# Minimum Departure Interval (MDI)

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A minimum departure interval (MDI) is a minimum amount of time which must elapse between two departing aircraft going in a specific direction. This is generally imposed by either local staff, or by staff in neighboring FIRs, to manage the flow of departing traffic out of an airport.

Generally, when CDM is in use, the CDM plugin will factor in any active MDIs issued via ECFMP and include them in the CTOT calculation automatically. **Regardless of whether CDM is in use or not, it is TWR's responsibility to ensure that aircraft are adhering to the MDI requirement.**

Note that for an MDI, like wake turbulence separation, the time between departures is counted from between the aircraft being airborne. TWR may, for instance, clear aircraft for takeoff slightly early, so that they become airborne just as the MDI is satisfied.

## Level Capping

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Level capping refers to when flights meeting certain conditions are subject to a level restriction for part (until a certain point) or all of their flight. This is in order to reduce congestion in enroute airspace, particularly in upper sectors.

## Rerouting

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Flow controllers may occasionally decide to reroute aircraft if necessary to relieve pressure on enroute sectors. If a rerouted aircraft already has a clearance, then the issuing of the re-clearance via the new route is generally handled by DEL.

If the aircraft is already taxiing, then GND should taxi them to an unoccupied area where they will not be blocking traffic so that they can hold position and receive the re-clearance.

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