# THE DEPARTURE CONTROL POSITION (DEP)

## 1. Introduction

The Departure controller (called DEP) has the responsibility of ensuring Air Traffic Control (ATC) services to departing flights within the airspace around large airports.

His controlled zone is called the TMA (Terminal Control Area). It extends from a base altitude, always higher than the surface, to a ceiling flight level. All TMA boundaries are published on charts.

The DEP control within this zone is a subsection of the Terminal Control (Approach) which is always shared with the APP controller.

**This position can only be opened at large airports due to the amount of traffic and when this position is defined by national and division regulations.**

In every airfield which does not dispose of this type of position, the **APP** controller will take responsibility of the two tasks. He has to **manage efficiently the climb phase** and **provide optimal trajectories to ensure the separation** between departures and arrivals.

The **DEP** controller is responsible for:

- Separation between IFR departures and arrivals
- Initial climb (continuous and without level steps as far as possible) up to the en-route phase
- Departure trajectories according to traffic management

The **DEP** controller tasks are:

- Provide air traffic control along Standard Instrument Departure (SID) routes
- Ensure IFR traffic management by vectoring, providing direct routes and assigning speeds
- Issue climb clearances to IFR flights to avoid level steps when possible
- Ensure separation between departures and arrivals by moving them away from risky trajectories

The **DEP** controller is never responsible for:

- Aircraft transiting above his TMA
- All aircraft flying below his TMA in non-controlled zone and not going to enter the TMA (unless the controller is providing FIS)
- Approaching aircraft crossing the TMA in contact with the **APP** controller
- Take-offs and landings

| The departure control position | Version 2.0 | 3 January 2017 | Page 1 |
|---|---|---|---|
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# 2. Tasks of the DEP controller

## 2.1. Departures management

The main task of the DEP controller is to take charge of all IFR departures in order to relieve the APP controller of the departure management and the traffic separation with arrivals.

The **DEP** controller handles departing flights transferred by the **TWR** between 1000ft ASFC and the CTR boundaries.

The goal of the DEP controller shall be to ease the climb for each departing aircraft and to avoid level steps whilst ensuring the separation with arrivals continuously.

He can instruct the aircraft to deviate from the published track in order to fulfill this goal, using radar vectoring or issuing direct to fix clearances.

### 2.1.1. Handling SID procedure

Other task of the DEP controller is to take charge of all IFR departures following **Standard Instrument Departure** procedures (**SID**)

For the majority of airports, SID for IFR flights is published on charts.

The SID procedures to be followed by IFR aircraft are provided by the **IFR clearances** given by ground or by delivery controller in function of aircraft flight plan according the approach or departure controller requests.

### 2.1.2. Handling omnidirectional departure

**If no SID procedure is published** or the pilot asks not to follow a published one, the controller should issue an **omnidirectional departure clearance**.

The **content of an omnidirectional departure clearance is determined by the approach controller** (**DEP** or **APP**) considering environmental constraints, minimum safe altitudes, radio navigation equipment, airspace structure, traffic density. The approach controller will perform coordination tasks with the **DEL**, **GND** or **TWR** controller in order to inform them about his decision on each omnidirectional clearance.

### 2.1.3. Go around management

Go-around procedures are handled by the DEP controller

Following the notification of a go-around, the **DEP** controller shall give to any go-around aircraft the go-around published procedure or can provide radar vectoring and, once it is clear of conflict, transfer it to the **APP** controller at a point and altitude (or FL) previously coordinated with him.

| The departure control position | Version 2.0 | 3 January 2017 | Page 2 |
|---|---|---|---|
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## 2.2. Separating traffic

Departures must be quickly separated from arrivals and cleared towards the TMA boundaries before being transferred to the appropriate **CTR**.

It is quite usual also in real life to grant direct routes to departing flights in order to shorten their route and also provide separation.

A controller shall **never have any doubt about the actual and future separation** during the whole departure phase. **Separation must be strictly ensured at any moment** and shall be adapted to the needs of the **APP** controller whose regulation tasks are tricky.

The recommended separation between two flights having the same departure route and speed is 8NM, whatever their altitude difference is. This separation constitutes a sort of pre-sequencing for the center controller (the two aircraft will likely climb at the same initial/transfer level at the same time).

## 2.3. Managing climb phase

In the case of serious difficulties in managing the separation between departures and arrivals (potential or real conflicts), the controller may assign altitudes, climb rates and speeds:

- Assign a higher speed and/or a lower climb rate
- Assign a lower speed and/or a higher climb rate
- Ask the pilot to maintain a given climb rate (minimum or maximum)
- Ask the pilot to maintain a given flight level (to undercross arrivals)
- Ask for a speed (IAS) decrease

To avoid potential conflicts and optimize departure trajectories the **DEP** controller may also assign headings (also to avoid maintaining an aircraft at a low flight level when the pilot wishes to climb to the cruise level):
- Grant direct routes
- Provide radar vectoring

## 2.4. Transferring traffic

Departing flights must be transferred to the center control only once they are all separated from arrivals and clear of potential conflict with other aircraft, whether they are under DEP control or not.

An anticipated transfer to the adjacent controller is an efficient way to manage traffic separation during climb up to cruise level. The adjacent controller is often a center controller (**CTR**) but can also be a connected approach.

Coordination with the **APP** controller is needed for transferring at a given position or altitude any going around aircraft to be inserted inside the incoming traffic.

| The departure control position | Version 2.0 | 3 January 2017 | Page 3 |
|---|---|---|---|
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# 3. Special IVAO procedures

All special IVAO procedures are mandatory since they fit to situations or special IVAO features which cannot happen in real life while they may occur on the network because of its proper limitations.

## 3.1.　　Flight strips

The **DEP** controller must ensure that flight strips are correctly filled in IvAc, in particular **fix** (in the "Cleared WP" field) **and flight level** (in the "Cleared FL" field), for all traffic. In the case of a sudden pilot disconnection, the **DEP** controller must **refill the flight strip before transferring the traffic**.
In particular, the "Cleared WP" field shall be filled whenever a direct route clearance is issued and the "Cleared FL" field shall be always filled in the case of heavily loaded airspace to ensure traffic safety.

## 3.2.　　Release to UNICOM

In the absence of the **CTR** controller or the adjacent approach, the **DEP** controller releases the pilot to UNICOM 122.800 before the TMA boundaries.

## 3.3.　　Tower or approach not connected

The **DEP** control is a subsection of the terminal approach control service and therefore it should be staffed only if the **APP** and **TWR** positions are staffed.

## 3.4.　　Not responding pilots

Any departing aircraft transferred by the **TWR** and **climbing without communication with the DEP controller must be warned by a FORCE ACT** to invite him to contact the **DEP** controller.
If the pilot does not pick up the ATIS within 1 minute, a new FORCE ACT must be sent, together with a private chat message (be careful to use proper language).

The DEP controller must not attempt to contact inbound flights when they are in contact with the APP or TWR controllers.
He shall coordinate the transfer with the adjacent controller before sending a FORCE ACT to the pilot!

The FORCE ACT sent to the pilot must be the last exceptional action to be taken if the adjacent controller does not transfer the traffic after an acceptable period of time.

| The departure control position | Version 2.0 | 3 January 2017 | Page 4 |
| --- | --- | --- | --- |
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## 3.5.     Pilots unable to fly a SID

On IVAO, many pilots are not able to correctly fly a departure procedure.

In this case, the **DEP** controller can (if the trajectory is clear of conflict and the aircraft is suitably equipped):

- Grant a direct route towards the first en-route point, a radio navigation beacon or a FIX
- Provide radar vectoring
- Provide a description of another IFR departure procedure that the pilot can follow easily.

The DEP controller is not supposed to guide any aircraft towards his first en-route point without any request from the pilot. The DEP controller will inform and coordinate with the adjacent controller about the difficulties faced by any pilot.

In the case of a technical problem faced by the aircraft, the diversion to an alternate airport shall be proposed if the flight cannot be continued under these degraded conditions.