

VATEIR CONTROLLER OPERATIONS MANUAL



Cork Airport – EICK

Version 1.3

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Cork Airport – Position Overview¹.

Ground (S1).

Cork Ground (EICK_GND) shall be responsible for the following:

- Departing aircraft:
 - Checking the flight plan of all departing aircraft, and amending where required.
 - Issuing the appropriate clearance to departing aircraft.
 - Issuing push and start instructions.
 - Controlling the movement of all aircraft on the ground.
- Arriving Aircraft:
 - Co-Coordinating initial taxi instructions with Tower/Approach.
 - Issuing stands to arriving aircraft.

Tower (S2).

Cork Tower (EICK_TWR) shall be responsible for the following:

- Operational considerations:
 - Selecting active runway.
 - Maintaining and updating the ATIS.²
- Departing aircraft:
 - Issuing Departure clearance.
 - Facilitating hand off to next position.
- Arriving Aircraft:
 - Issuing Landing clearance.
 - Providing initial taxi instructions.
- VFR:
 - Issuing zone entry/exit clearances.
 - Issuing joining/transit instructions.
 - Providing an information service.

Approach (S3).

Cork Approach (EICK_APP) shall be responsible for the following:

- Departing aircraft:
 - Co-Ordinate non-Standard climb out instruction with Gnd/Twr.
 - Ensure separation with other arriving/departing aircraft
 - Coordinating further climb/routing with Shannon Control.
 - Facilitating hand off to next position.
- Arriving Aircraft:
 - Coordinating arrival instructions Shannon Control.
 - Issue arrival instructions for appropriate runway.
 - Provide latest information.
- VFR:
 - Provide a traffic service to aircraft in un-controlled airspace.

¹ See table 1 below for list of frequencies and call signs.

² This can be delegated to another position, however tower is still responsible for it currency/accuracy.

Cork Ground – Procedures.

ATC Clearance.

Squawk Range:

The Squawk range for Shannon is 6650 to 6657. The standard VFR sqk of 7000 is to be issued to all VFR traffic.

Flight Plan Clearance:

Aircraft departing Cork on an IFR flight plan should be routed on one of the Standard Departures [SID] listed in table 2 & 3. Cork ground must be careful to issue the correct SID to avoid jet traffic departing on non-jet departures and vice-versa.

Aircraft unable to accept one of these departures should be given an omni-directional departure; the details for these are listed in table 4. Omni-directional departures need to be co-ordinated in advance with Shannon Tower and Shannon Approach.

ATC will confirm the read back and give the ATIS identifier and QNH, and ask the aircraft to report ready for push and start³. The clearance box⁴ should be ticked and the sts box should be set to push.

Example Transmission:

“RYR9845, Cleared to Dublin, TISMO1S departure rwy 17, initial climb 5000ft, sqk 6651.”

Push and Start

Depending on the stand in use, a start only will be required, otherwise a push and start instruction will be issued. See table 5 for details on stand type. The current reported QNH should be passed and the direction of push if required. The sts box should be set to “Taxi”.

Example Transmission:

“RYR9845, QNH 1013, Cleared to push and start, face North, call for taxi.”

Care should be given when issuing push and start instruction’s that the apron taxiway is not blocked for other departing or arriving traffic. Any delay and reason for delay should be informed to the pilot. The sts box should be left at push.

³ In some cases only start is required – see table 5 for details on stand type.

⁴ See diagram A below.

Taxi Routings⁵.

Given the relatively small apron area at Cork, depending on rwy in use, aircraft type and taxiway limitations⁵ some co-ordination is required in assigning taxi routings. However, common taxi routing are outlined below.

Outbound Routings:

Rwy17 – Backtrack to vacate onto either 07/35 to Bravo, or Charlie as appropriate.

Rwy 35 – Vacate onto either 07/35 to Bravo, or Charlie as appropriate.

Rwy 07 – Via the Apron to Bravo or Echo.

Rwy 25 – Backtrack 25, cross.17/35 to Bravo.

With the exception of RWY17 all runways at Cork require backtrack from the main apron. Ground will taxi the aircraft to the holding points of all runways, where they will be handed off to tower. This should be done by telling the aircraft to monitor towers frequency, and setting the status flag to “Dep” to let tower know the aircraft is on frequency. Aircraft should be handed off in sufficient time to allow for continuous manoeuvring.

Example Transmission:

“RYR9845, Apron and ALPHA to holding point RWY17.”

Inbound Routings:

Rwy17 – Backtrack to vacate onto either 07/35 to Bravo, or Charlie as appropriate.

Rwy 35 – Vacate onto either 07/35 to Bravo, or Charlie as appropriate.

Rwy 07 – Via the Apron to Bravo or Echo.

Rwy 25 – Backtrack 25, cross.17/35 to Bravo.

Given the short taxi distance from Charlie it would be more efficient to get the tower to issue the taxi instructions to the stand at the new terminal (6-10). This prevents aircraft stopping on Charlie and potentially blocking the taxiway.

Club Strip:

Aircraft from the Flying Club should be routed to hold short Rwy17/35. If full length 17 is to be used Cork Ground must coordinate a taxi clearance with Tower to 07/25 and the Bravo. Otherwise aircraft can be handed to tower while holding short.

⁵ See Table 6 for taxiway details.

Cork Tower – Procedures.

Runway Selection:

Runway preference:

While Cork has no preferential Runway⁶ as such, when the winds are calm or less than 5 knots rwy 17 should be used for departures, and Rwy 35 for arrivals. This allows for reduced taxi times.

Change of duty runway:

When a change of runway is anticipated Cork Tower shall co-ordinate with both Cork Ground and Cork Approach. Cork Tower will inform Cork Approach of the last aircraft to depart prior to the runway change, and the first aircraft to depart after the change. Ground should also be informed, to allow for amended clearances to be issued.

Following the change of runway no aircraft shall be allowed depart until Cork Approach has approved the first departure, after which normal departure procedures apply.

Departing Aircraft:

Cork departures from Rwy17/35 on a Standard Departure operate on a “free-flow” basis as far as EICK_APP, EISN_X_CTR are concerned. However, in periods of heavy traffic co-ordination with Shannon Approach/Shannon Control may require tower to request release to ensure adequate separation for the departing traffic. Non-standard departures and departures from 07/25, including circuits, require release from Shannon Approach.

Example Transmission:

“RYR9895, surface winds 190@15kts, cleared takeoff RWY17”

Outbound traffic should be handed to the next controller as soon as is practical after departure. This would usually be when passing 1500ft or about 2 miles from the end of the departure runway. This is to ensure that the aircraft is established in the climb, and to allow the pilot enough time to retract the wheels and start his climb out sequence.

Example Transmission:

“EIN23, Contact Shannon Approach on frequency 122.400, goodbye”

Departure Spacing:

The basic time separation to be applied by Cork Tower to departures on the same departure routing is set out in Table 8 below. This is measured from the time the preceding aircraft is airborne.

If two aircraft are departing, and their departing routings diverge by more than 45°, then the time separation may be reduced to one minute.

⁶ See Table 7 for runway details.

When the following aircraft departs from an intersection (declared distances can be found in Table 9 below), and the preceding traffic departs full length, one (1) minute must be added to the separation for wake turbulence.

Arriving Aircraft:

Arriving traffic should call Cork Tower once established on the approach.

Arrival Spacing:

With runway 17 in use aircraft unable to vacate onto Rwy 07/35 are required to backtrack to the runway end to turn. This should be taken into account if multiple aircraft are on the approach.

Aircraft on the approach should be passed all useful information, including number to land, if departures are expected, and the winds.

Missed Approach:

Standard missed approach is runway heading to 3000ft. However, if the reason for the go around is slow departing traffic a early climbing turn should be co-ordinated with Cork Approach. Both aircraft should be handed off to Approach as soon as is practical.

Low Visibility Procedures:

Low Visibility procedures are in operation at Cork Airport when the cloud ceiling is below 200ft and either the IRVR is less than 550M or the meteorological visibility is less than 800m.

Only RWY17 may be used for CATII operations. The CATII holding position on TXY Alpha must be used. When these procedures are in operation, and RWY17 is in use the following standard taxi route system applies:

Departing aircraft shall use TWY Alpha; Arriving aircraft shall use TWY Charlie.

VFR:

Circuits:

Standard circuit height is 1500ft (1000ft aal). The direction of the circuit is at Tower's discretion, however, circuits to the west are preferred due to the general flow of inbound IFR traffic

Zone Entry:

Arriving aircraft on a VFR flight plan should contact Cork Tower ten nm or five minutes before zone entry. The aircraft will then be cleared into the zone, given joining instructions, and passed any traffic information. VFR traffic should also be descended to below the level of IFR traffic (<3000ft) to help maintain separation. VFR traffic will have secondary priority to IFR traffic, and may need to be held abeam the field until they can make their approach.

Zone Exit:

Departing aircraft on a VFR flight plan should be routed in the most expeditious manner out of the Cork zone. However, care should be taken to avoid VFR traffic crossing the extended centreline of the active runway. Approaching the zone boundary the traffic should be handed to Cork Approach/Cork Control for a flight information service.

Cork Approach – Procedures.

Departing Aircraft:

Standard Departures:

Aircraft departing Cork will be passed to Cork Approach via silent transfer from Cork Tower. This should happen around 1000-2000ft. Once identified the aircraft can be further required to FL090, and if traffic allows to the SID designator fix. Approaching FL070 the aircraft should be handed off to Shannon Control. The aircraft should not be passed on voice to Shannon until the handoff has been accepted.

Non-Standard Departures:

Non-Standard (Omni-Directional) should co-ordinated with Cork Tower. As a general rule the departure will be as in Table 4, with a turn out dct the first file point, however, the traffic situation may not allow this. In this scenario Cork Approach will inform Cork Tower of the clearance. Approaching FL090 the aircraft should be handed off to Shannon Control. The aircraft should not be passed on voice to Shannon until the handoff has been accepted.

Onward Co-Ordination:

When traffic allows either Cork Approach or Cork Control can co-ordinate a direct routing to a point outside of Cork Approach's airspace. A further climb can also be co-ordinated. Approaching FL070 the aircraft should be handed off to Shannon Control. The aircraft should not be passed on voice to Shannon until the handoff has been accepted.

Kerry/Shannon Airports:

Where traffic is routing to either Shannon or Kerry Airport and the respective ATC unit is on line (Approach in the case of Shannon, Tower in the case of Kerry) Cork approach can hand the aircraft directly to that unit, bypassing Shannon Control.

Arriving Aircraft:

Standard arrivals:

Aircraft inbound to RWY 17/35 capable of flying STARs will be given an appropriate STAR⁷ based on runway in use. The aircraft will be descended to FL100 for the arrival FIX, and handed over to Cork Approach descending through FL120. This is to allow for sufficient time for Cork Approach to accept the aircraft, and issue any further instructions while the aircraft is in descent

Non-Standard arrivals:

Aircraft unable to fly a STAR will be co-ordinated between Shannon Control and Cork Approach. These aircraft will be radar vectored to the approach. Aircraft will be handed off to Cork Approach when before reaching the vertical boundary of Cork Approach's airspace.

⁷ See Table 10 & 11.

Onward Co-Ordination:

When traffic allows either Cork Approach or Shannon Control can co-ordinate an intermediate point to which an aircraft can be cleared. An initial descent level should also be co-ordinated. However, if it is not then descent should be to FL100 with handoff initiated approaching FL120 or approaching the vertical boundary of Cork Approach's airspace.

Speed Control:

As a general rule the following speed controls should be used:

Below FL100 – MAX 250kts.

AT ATLAM and BARNU – Max 220kts.

Intermediate Segment – Max 210kts,

Recommended 160kts from FAF to 4nm,

ATC may use these speeds at their discretion, and should use speed control where necessary for accurate spacing.

VFR:**Zone Entry:**

Cork Approach will provide a flight information service to flying VFR around Cork airspace. This information should include current QNH, ATIS identifier, Runway in use and any known traffic. Approach shall co-ordinate any descents for traffic entering/transiting the Shannon control zone with Cork Tower. They will also issue any descent instructions in sufficient time to allow the traffic to comply with these instructions. This traffic should be handed to tower via silent transfer ten nm or five minutes out.

Example Transmission:

"EIGSE, QNH 1013, Landing rwy 17, no known traffic, descend to 2500ft before the Cork control zone"

Zone Exit:

Departing aircraft on a VFR will be passed to Cork Approach via silent transfer upon reaching the Cork Control zone boundary. A traffic information service, as described in the Zone Entry section above will be provided. The aircraft should be passed to Shannon Control for further flight information services upon reaching the vertical limits of Shannon approach's airspace.

Example Transmission:

"EIGSE, QNH 1013, no known traffic, remain clear of controlled airspace."

Cork Airport Information Table's

Table 1 – Frequency List.

Service Designator	Callsign	Range	Frequency
EICK_GND	Cork Ground	10nm	121.850mhz
EICK_TWR	Cork Tower	20nm	119.300mhz
EICK_APP	Cork Approach	50nm	119.900mhz
EICK_ATIS	Cork ATIS	N/A	130.950mhz

Table 2 – Standard Departures – RWY17.

Rwy Designator (NR)	Waypoint	Aircraft Type	Initial Climb	Designator
17	ELTIG	A/B	5000ft	ELTIG1Q
17	GOTEM	A/B	5000ft	GOTEM1Q
17	KURUM	A/B	5000ft	KURUM1Q
17	TISMO	A/B	5000ft	TISMO1Q
17	VAPAL	A/B	5000ft	VAPAL1Q
17	ELTIG	C/D	5000ft	ELTIG1S
17	ERTER	C/D	5000ft	ERTER1S
17	GOTEM	C/D	5000ft	GOTEM1S
17	KURUM	C/D	5000ft	KURUM1S
17	ORTOM	C/D	5000ft	ORTOM1S
17	SOVIX	C/D	5000ft	SOVIX1S
17	TISMO	C/D	5000ft	TISMO1S
17	VAPAL	C/D	5000ft	VAPAL1S

Table 3 – Standard Departures – RWY35.

Rwy Designator (NR)	Waypoint	Aircraft Type	Initial Climb	Designator
35	ELTIG	A/B	5000ft	ELTIG1T
35	GOTEM	A/B	5000ft	GOTEM1T
35	KURUM	A/B	5000ft	KURUM1T
35	TISMO	A/B	5000ft	TISMO1T
35	VAPAL	A/B	5000ft	VAPAL1T
35	ELTIG	C/D	5000ft	ELTIG1N
35	ERTER	C/D	5000ft	ERTER1N
35	GOTEM	C/D	5000ft	GOTEM1N
35	KURUM	C/D	5000ft	KURUM1N
35	ORTOM	C/D	5000ft	ORTOM1N
35	SOVIX	C/D	5000ft	SOVIX1N
35	TISMO	C/D	5000ft	TISMO1N
35	VAPAL	C/D	5000ft	VAPAL1N

Table 4 – Omni-directional departures.

Rwy (NR)	Track	Aircraft Type	Initial Climb	Routing
17	165	A/B	5000ft	Climb straight ahead until passing 1500ft QNH and then turn dct first field fix or as advised by ATC.
35	345	A/B	5000ft	Climb straight ahead until passing 1500ft QNH and then turn dct first field fix or as advised by ATC.
17	165	C/D	5000ft	Climb straight ahead until passing 2500ft QNH and then turn dct first field fix or as advised by ATC.
35	345	C/D	5000ft	Climb straight ahead until passing 2500ft QNH and then turn dct first field fix or as advised by ATC.
25	248	A/B	5000ft	Climb straight ahead until passing 1500ft QNH and then turn dct first field fix or as advised by ATC.
07	068	A/B	5000ft	Climb straight ahead until passing 1500ft QNH and then turn dct first field fix or as advised by ATC.

Table 5 – Stand Details.

Std Designator (NR)	Wingspan (Max)	Aircraft Type ⁸ (MAX)	Std Type ⁹	Note
1E	22.80	Biz Jet	S/M	Stand 1W vacant.
1W	22.80	Biz Jet	S/M	Stand 1E vacant.
2S	29.00	ATR72	S/M	Stand 2N vacant.
2N	29.00	ATR72	S/M	Stand 2S vacant.
3S	29.00	ATR72	S/M	Stand 3N vacant.
3N	29.00	ATR72	S/M	Stand 3S vacant.
4S	29.00	ATR72	S/M	Stand 4N vacant.
4N	29.00	ATR72	S/M	Stand 4S vacant.
5S	34.10	ATR72	S/M	Stand 5N vacant.
5N	34.10	ATR72	S/M	Stand 5S vacant.
6	35.80	B737	T/P	
7	38.10	B757	T/P	
8	38.10	B757	T/P	
9	38.10	B757	T/P	
10	38.10	B757	T/P	
11	38.10	B757	T/P	
12	36.00	B737	T/P	Excl. B737-900.
13	36.00	B737	T/P	Stand 14 vacant – Excl. B737-900.
14S	38.10	B757	S/M	Stand 13, 14N and 15 vacant.
14N	38.10	B757	S/M	Stand 13, 14S and 15 vacant.
15	34.40	ATR72	T/P	Stand 14 vacant.
16	36.00	B737	T/P	Stand 17 and 19 vacant.
17S	47.60	B757	S/M	Stand 16, 17S, 18 and 19 vacant.
17N	47.60	B757	S/M	Stand 16, 17N, 18 and 19 vacant.
18	47.60	B757	T/P	Stand 17 and 19 vacant.
19	65.00	ALL	P/T	Stand 16, 17, 18 and 19 vacant.
20	36.00	B737	T/P	

⁸ Aircraft Type – Denotes aircraft of generic size i.e. B737 also includes airbus A32X, MD80 etc

⁹ Stand Type S/M – Denotes Self Manoeuvring.

T/P – Denotes Taxi In/Push Out.

P/T – Denotes Push In/Taxi Out.

Table 6 – Taxiway Details.

Txy Designator (NR)	Width of Txy (M)	Aircraft Type	Note
A	27	All	
B	23	Wingspan < 36M.	Max B737 or similar.
C	30	All	
E	13	Wingspan < 24M.	

Table 7 – Runway Details.

Rwy Designator (NR)	Dimensions of RWY (M)	Approach Type (MAX)	Frequency (Ident)	Course
17	2133x45	ILS CAT II	109.90(ICS)	165°
35	2133x45	ILS CAT I	109.15(ICN)	345°
07	1310x45	VOR	114.60(CRK)	245°
25	1310x45	VOR	114.60(CRK)	065°

Table 8 – Departure Spacing.

Leading Aircraft	Following aircraft	Minimum Spacing
Heavy	Heavy	2 Minutes
Heavy	Medium	2 minutes
Heavy	Light	2 minutes
Medium	Heavy	1 Minute
Medium	Medium	1 Minute
Medium	Light	1 Minute
Light	Heavy	2 Minutes
Light	Medium	2 Minutes
Light	Light	1 minute

Table 9 – Standard Arrivals – RWY17.

Rwy Designator (NR)	Waypoint	Designator	Routing
17	ELTIG	ELTIG1R	ELTIG GIVOL BARNU ROVAL
17	ERTER	ERTER1R	ERTER EPERO GIVOL BARNU ROVAL
17	GOTEM	GOTEM1R	GOTEM GIVOL BARNU ROVAL
17	KURUM	KURUM1R	KURUM CRK28 BARBU ROVAL
17	ORTOM	ORTOM1R	ORTOM SOVIX LANRO TIRUK BARNU ROVAL
17	SOVIX	SOVIX1R	SOVIX LANRO TIRUK BARNU ROVAL
17	TISMO	TISMO1R	TISMO GIVOL BARNU ROVAL
17	VAPAL	VAPAL1R	VAPAL GIVOL BARNU ROVAL

Table 10 – Standard Arrivals – RWY35.

Rwy Designator (NR)	Waypoint	Designator	Routing
35	ELTIG	ELTIG1G	ELTIG ROBVO ATLAM GOSDA
35	ERTER	ERTER1G	ERTER ATLAM GOSDA
35	GOTEM	GOTEM1G	GOTEM ROBVO ATLAM GOSDA
35	KURUM	KURUM1G	KURUM TIRUK LANRO INSAL ATLAM GOSDA
35	ORTOM	ORTOM1G	ORTOM ATLAM GOSDA
35	SOVIX	SOVIX1G	SOVIX ATLAM GOSDA
35	TISMO	TISMO1G	TISMO ROBVO ATLAM GOSDA
35	VAPAL	VAPAL1G	VAPAL ROBVO ATLAM GOSDA

Table 11 – Standard Holds.

Rwy Designator (NR)	Waypoint	Track Inbound	Turn	Min Level	Max Level	Max IAS
17	ROVAL	165°	Right Hand	3000ft	FL80	210
35	GOSDA	345°	Right Hand	3000ft	FL80	210
07	UPLOM	071°	Right Hand	3000ft	FL80	NIL
25	GINGI	245°	Right Hand	3000ft	FL80	NIL

Table 12 – Revision History.

Revision	Date	Author	Reason
1.0	16/07/2010	M Bergin	Original Draft
1.1	02/06/2011	M Bergin	Cork Approach climb reduced to FL090, Initial Descent changed to FL100, Release requirement for rwy07/25 added.
1.2	16/07/2011	K Thornton	Revised Formatting
1.3	10/9/2011	K Thornton	Table 9 – Standard Arrivals – RWY17 Correction Table 10 – Standard Arrivals – RWY35 Correction Standard Departures Correction Non-Standard Departures Correction