



ICAO AERODROME CONTROLLER CRIB SHEET

WHEN YOU LOG ON:

Decide if the weather conditions are **VMC or IMC**.

Conditions are IMC if any of the following are true (in a Class C zone, e.g. Dublin):

- **Visibility** less than **900 metres**.
- **BKN** or **OVC** clouds at less than **3000 feet** AMSL (or **1000FT above terrain**, whichever is higher).

If conditions are **IMC**, then you need to decide if **Low Visibility Procedures** are in force. LVPs are in force if **any** of the following are true:

- **Cloud ceiling 200FT**.
- **Visibility** less than **800 metres**.
- **RVR** on the active runway less than **550 metres**.

Decide on the active runway, according to the wind. The transition altitude is always fixed – it's on the charts. Work out the transition level, using this table:

QNH	5000FT
1050-1032	FL55
1031-1014	FL60
1013-996	FL65
995-978	FL70
<978	FL75

Use this data to create your ATIS. Add any relevant remarks about the status of the aerodrome.

Announce your presence on the ATC channel in IvAc.

Inform any other controller at the aerodrome you are online including any top down controller that may be online e.g Shannon Control, advising them of the active runway and passing any other relevant information.

METEOROLOGICAL CHANGES

When there is a new METAR/ATIS without significant change:

"All Stations, Dublin Tower, information is now Kilo, no significant change"

When there is a new METAR/ATIS with a new QNH:

"All Stations, Dublin Tower, information is now Kilo, new QNH 1004"

RADIO CHECK

"Tower, EIN123, request radio check 118 decimal 7"
"EIN123, readability 5"

IFR CLEARANCE

"Tower, EIN123 an A320 with Lima QNH 1014, stand 8, request clearance Heathrow"
"EIN123, cleared Heathrow, LIFFY 5 Alpha, RWY 28, departure frequency 131.150, squawk 1234"
"Cleared Heathrow, LIFFY5A, RWY 28, departure frequency 131.150, squawk 1234"
"EIN123 correct"

PUSH AND START

"EIN123, request push"
"EIN123, after the company 747 taxiing behind you left to right, push and start approved, face south-west, QNH 1013"

TAXI

Always use the red-carpet method when giving taxi instructions.
"EIN123, taxi Link 4, the Foxtrots to holding point E1, hold short RWYs 28/34"
"EIN123, follow the Shamrock A320 to holding point E1 via Link 4 and the Foxtrots, RWY 28/34"

Crossing an active runway:
"EIN123, taxi RWY 10 via link 4 crossing runway 16/34 approved, H and B to holding point B7"

You can use conditional line ups to expedite the traffic. Always give the holding point.
"EIN123, after the landing company Boeing 747, via E1, line up and wait runway 28"

DEPARTURE SEPARATIONS

The larger of the two separations must be used as the overall departure separation. Any speed separation required must then be added to this figure.

Vortex Separation, timed between the lift offs of main gear:

- Leading aircraft of bigger category – 2 mins
- Leading aircraft of same category – 1 min
- Leading aircraft of smaller category – none

When the first aircraft is slower, then one minute of Speed Separation is added for every successive group that the leading aircraft is slower by. Most airliners are Gp 3, fast regional jets/turboprops are Gp 2, slow jets and most turboprops are Gp 1, and slow aircraft are Gp 0.



IFR INBOUNDS

Leader	Follower	Spacing (NM)
Heavy	Heavy	4
	Medium	5
	Small	6
	Light	8
Medium	Medium	3*
	Small	5
	Light	6
Small	Small	3
	Light	4

*If the leader is a B757, DC8, B707, IL62 or VC10, this changes to 4nm.

"EIN123, continue approach, surface wind 050 at 12"

"EIN123, expect late landing clearance"

"EIN123, runway 28 wind 300 at 12 cleared to land"

SPEED CONTROL ON FINAL

You cannot change the speed radar assigns to aircraft on final approach without asking for permission.

RELEASES

All departing aircraft except those remaining in the circuit need a release from radar before they can be allowed to take off. At Dublin, free-flow is in operation by default, but can be cancelled by radar at any time (usually during a missed approach).

Non-SID or VFR: (to rdr) "Request release, EIEIO"

Radar: "EIEIO released" or "EIEIO released at time 57"

VFR LEAVING THE ZONE

- "Tower, EIEIO a Warrior with Lima 1014, north apron, request taxi for VFR to Gormanston leaving via the North"
- "EIEIO, taxi RWY 28 via Apron 6, Foxtrots, holding point E1, RWYs 28/34"
- (to rdr) "Request clearance, EIEIO to Gormanston, leaving the zone to the North."
- Radar: "EIEIO is cleared to Gormanston via VFR Skerries route, not above altitude 2500ft, VFR, QNH 1014, squawk 0431, release subject radar."
- Pass the clearance to the aircraft.
- Approaching the holding point, get a release, then clear the aircraft for takeoff, specifying the turnout direction.
- "EIEIO, right turn out runway 28 wind 300 at 12 cleared takeoff"
- Transfer the aircraft to Dublin Control once leaving the control zone.

VFR CIRCUITS

- Taxi as usual. Give circuit clearance during taxi – doesn't need to be coordinated with approach. You don't need a release either.
- "EIEIO, right hand circuits runway 28, not above height 1500 feet, QFE 1002, VFR, squawk 0431"
- "Right hand circuits runway 28, not above height 1500 feet, QFE 1002, VFR, squawk 0431 EIEIO"
- "EIO correct"
- Tell approach that the circuit is active. By default, the pilot will report downwind and final. Don't forget to shout when it becomes inactive again.

VFR ENTERING THE ZONE TO JOIN

- Radar gives an inbound estimate for the aircraft.
- "Inbound estimate EIEIO Archer from Newcastle, estimates the field at 59 via the Pigeonhouse Chimneys"
- Radar will transfer the aircraft once it has the airfield in sight.
- "Tower, EIEIO 5 miles south with Lima QNH 1014, request joining instructions to land"
- "EIEIO, join left base runway 28, not above altitude 1500 feet, QNH 1014"



SEQUENCING IFR WITH VFR

Rule of thumb: you need, as a minimum, the required vortex gap plus 4 miles to fit in a VFR aircraft.

Short delay required – extend downwind

"EIEIO, number 2 to a 737 on a 1-mile final, caution wake vortex, recommended spacing is 4 miles, extend downwind leg as necessary and report final"

Longer delay required – orbit

"EIEIO, number 2 to a 747 on a 7-mile final, caution wake vortex, recommended spacing is 8 miles, orbit at the end of the downwind leg as necessary and report final"

Undetermined delay – orbit

"EIEIO, position in the sequence is not determined, orbit at the end of the downwind leg"

SPECIAL VFR (SVFR)

SVFR is a flight in a CTR that would otherwise have to be IFR – it could be in a Class A CTR, in IMC, or at night. If it is night/IMC and the pilot is not simulating daylight/VMC, then he cannot fly VFR but he can fly SVFR.

SVFR clearances must not be issued if the visibility is less than 1800 metres or if there are BKN or OVC clouds at less than 600 feet. Helicopters are exempt from this rule.

If the weather changes to become IMC, you should inform VFR pilots of the change.

"EIEIO, weather is now IMC, what are your intentions?"

He will then request either IFR or SVFR clearance. You must not give VFR clearance.

SVFR clearances are identical to VFR clearances, except for the fact that the flight rules are specified as "Special VFR" instead of "VFR".

TRAFFIC INFORMATION

In a Class C zone, you have to provide traffic information to VFR aircraft on relevant VFR aircraft. You have to provide separation between IFR, VFR and SVFR aircraft, and between pairs of SVFR aircraft.

All departing aircraft need traffic information on circuit traffic, on inbound IFR/SVFR traffic, and on any other relevant traffic.

All arriving aircraft need traffic information on circuit traffic, on departing IFR/SVFR traffic, and on any other relevant traffic.

"EIN123, Traffic Information, a C172 in righthand circuit runway 28, not above height 1500ft"

"EIN123, Traffic Information, a C172, estimating the field at time 47, not above altitude 2000ft"

"EIN123, Traffic Information, a C172 orbiting at the end of the right downwind leg for runway 28, not above height 1500ft, continue approach"

"EIN123, Traffic Information, a C172 departing runway 28 to the south, not above 1500ft"

MISSED APPROACH

ATC initiated:

"EIN123, go around, I say again, go around, follow standard missed approach procedure"

Pilot initiated:

"EIN123, going around"

"EIN123, acknowledged"

As soon as possible, ask radar how he wants the missed approach. Pass those instructions to the aircraft and then transfer him to radar. If radar takes too long to respond, just give the aircraft the standard missed approach.

You may give an aircraft conducting a missed approach heading instructions without prior coordination if there is a conflict (e.g. a departure rolling).

Missed approaches do not automatically cancel the operation of freeflow.

WINDSHEAR

If you get a pilot report of windshear, then you must continue to pass this on to arriving and departing aircraft until it can be broadcast on the ATIS.

"EIN123, at (time) a departing/arriving (a/c type) reported windshear at (altitude). Airspeed loss/gain (number) knots, strong left/right drift"

Once there are no further reports of windshear, it can be removed from the ATIS and does not need to be reported to pilots.

LOW VISABILITY PROCEDURES (LVPS)

You must protect the localiser sensitive area by using the next holding points back from the runway.

Aircraft must not be allowed to line up or otherwise infringe the localiser sensitive area until a landing aircraft has vacated the runway completely, or a departing aircraft has become airborne.



You have to tell radar to increase the final approach spacing in order to accommodate the reduced flow rate. The usual is 10nm or vortex, whichever is greater (6nm in Dual Runway Ops).

EMERGENCIES

All emergencies should be coordinated with radar. Radar should then provide adequate separation for all other aircraft. Once an inbound emergency aircraft gets within around 15nm, you should sterilise the runway (disallow any further movements on that runway).

The standard acknowledgement is: "EIN123 mayday acknowledged (further instructions)"

EFATO (engine failure at/after takeoff)
"EIN123, airfield is in your 5 o'clock position, range 3 miles – All runways available for landing."
The cockpit workload will be extremely high. The aircraft may wish to make a visual circuit.

Aborted Take-off
Not yet rolling:
"EIN123, hold position, cancel take-off. I say again, cancel take-off"
Already rolling:
"EIN123, Stop immediately. I say again, EIN123, stop immediately. Cancel take-off"

Runway Blocked
Send around any aircraft you have on final. Coordinate with radar, so they can break aircraft off the final approach.

RT Failure
"EIN123, if you read the transmission, squawk ident"
Transmit blind to the aircraft, just in case they hear you. Departing aircraft should fly the SID, then maintain speed and level for 7 mins, then proceed as filed. Arriving aircraft should follow the RT failure procedure as published in the charts. Coordinate with radar.

CLOSING

"All Stations, Dublin Tower closing at time 13, air traffic services terminated, frequency change approved"