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AIRAC AIP AMDT 002/24

Effective Date – 21 MAR 2024

Publication Date – 08 FEB 2024

PAGE REVISIONS

AIRAC Changes incorporated in this Amendment are:

GEN 0.2	**Record of AIP Amendments:** Updated.
GEN 0.3	**Record of AIP Supplements:** Updated Text.
GEN 0.4	**Checklist of Pages:** Updated.
GEN 1.5	**Aircraft Instruments, Equipment and Flight Documents:** Updated Content.
GEN 3.2	**Aeronautical Charts**: Updated EIWF Charts, Removal of EIDW Charts EIDW AD 2.24-22.4 and EIDW AD 2.24-23.5.
GEN 3.4	**Communication Services:** Updated Content.
ENR 1.10	**Flight Planning:** Updated Content.
ENR 2.2	**Other Regulated Airspace:** Updated Content.
EICK AD	**Updated Sections:** AD 2.2, AD 2.4, AD 2.5, AD 2.6, AD 2.10, AD 2.12, AD 2.13, AD 2.14, AD 2.18 and AD 2.20.
EIDW AD	**Updated Sections:** AD 2.12, AD 2.20, AD 2.22 and AD 2.24.
EIKY AD	**Updated Sections:** AD 2.6, AD 2.10, AD 2.12 and AD 2.17.

Remove Pages	Insert Pages	
GEN 0.2-1/GEN 0.2-2	GEN 0.2-1/GEN 0.2-2	21 MAR 2024/21 MAR 2024
GEN 0.3-1/GEN 0.3-2	GEN 0.3-1/GEN 0.3-2	21 MAR 2024/21 MAR 2024
GEN 0.4-1/GEN 0.4-8	GEN 0.4-1/GEN 0.4-8	21 MAR 2024/21 MAR 2024
GEN 1.5-1/GEN 1.5-14	GEN 1.5-1/GEN 1.5-14	21 MAR 2024/21 MAR 2024
GEN 3.2-1/GEN 3.2-10	GEN 3.2-1/GEN 3.2-10	21 MAR 2024/21 MAR 2024
GEN 3.4-1/GEN 3.4-8	GEN 3.4-1/GEN 3.4-8	21 MAR 2024/21 MAR 2024
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ENR 2.2-1/ENR 2.2-10	ENR 2.2-1/ENR 2.2-8	21 MAR 2024/21 MAR 2024
EICK AD 2-1/EICK AD 2-16	EICK AD 2-1/EICK AD 2-16	21 MAR 2024/21 MAR 2024
EIDW AD 2-1/EIDW AD 2-46	EIDW AD 2-1/EIDW AD 2-46	21 MAR 2024/21 MAR 2024
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EIDW AD 2.24-23.5/EIDW AD 2.24-23.7		21 MAR 2024/21 MAR 2024
EIKY AD 2-1/EIKY AD 2-16	EIKY AD 2-1/EIKY AD 2-10	21 MAR 2024/21 MAR 2024
EIWF AD 2.24-1/BLANK	EIWF AD 2.24-1/BLANK	21 MAR 2024/21 MAR 2024

EIWF AD 2.24-2/BLANK	EIWF AD 2.24-2/BLANK	21 MAR 2024/21 MAR 2024

New Supplements for this Amendment: **NR 003/24, NR 004/24.**

Supplements cancelled in this Amendment: **NR 014/22, NR 016/23, NR 002/23.**

New AIC for this Amendment: **NR 001/24, NR 002/24.**

AIC cancelled in this Amendment: **NR 010/23, NR 009/23.**

PERM NOTAM* incorporated in this Amendment: **NIL**

.

**Note: NOTAMC will be issued 14 days after effective date of this AIRAC AIP Amdt.*

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Record of Amendments

AIP AMENDMENT			
NR/Year	Publication date	Date Inserted	Inserted by

AIRAC AIP AMENDMENT			
NR/Year	Publication date	Effective date	Inserted by
001/24	11-JAN-2024	22-FEB-2024	
002/24	08-FEB-2024	21-MAR-2024	

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GEN 0.3 Record of AIP Supplements

NR/ Year	Subject	AIP Section(s) Affected	Period of Validity	Cancellation Record
004/2024	Checklist of Valid AIP Supplements	GEN	21-Mar-2024	-
003/024	Shannon Enroute - Special Procedures within the Shannon FIR/UIR/SOTA/NOTA for North Atlantic Traffic	EISN	21-Mar-2024	-
002/2024	Checklist of Valid AIP Supplements	GEN	22-Feb-2024	21-Mar-2024
001/2024	Weston Airport (EIWT) Aeronautical Ground Lighting Installation	EIWT	22-Feb-2024	-
020/2023	Checklist of Valid AIP Supplements	GEN	30-Nov-2023	22-Feb-2024
018/2023	Kerry (EIKY) - Tower Cranes at MTU Kerry North Campus, Tralee, Co. Kerry	EIKY	02-Nov-2023	-
016/2023	Dublin Airport (EIDW) Point Merge Fuelling STARs Withdrawal	EIDW	05-Oct-2023	21-Mar-2024
014/2023	Shannon Enroute - Special Procedures within the Shannon FIR/UIR/SOTA/NOTA for North Atlantic Traffic	EISN	07-Sep-2023	21-Mar-2024
013/2023	Kerry (EIKY) NOTAM	EIKY	07-Sep-2023	-
011/2023	Shannon Airport (EINN) Taxiway A - Pavement Rehabilitation Works	EINN	13-Jul-2023	-
009/2023	Dublin Airport (EIDW) Apron and Drainage Channel Refurbishment	EIDW	20-Apr-2023	-
007/2023	Dublin Airport (EIDW) Construction of Critical Taxiway North Phase 1	EIDW	23-Mar-2023	-
006/2023	Dublin, Co Dublin - Crane Activity	EIDW	23-Mar-2023	-
004/2023	Dublin Airport (EIDW) - Reconfiguration Works of Taxiways F-INNER, C, DN & DS	EIDW	23-Feb-2023	-
003/2023	Dublin Airport (EIDW) Installation of Aircraft Docking Guidance and Aircraft Fixed Electrical Ground Power - Phase 1, Including Reconfiguration of Aircraft Parking Stands Located West of Pier 1	EIDW	23-Feb-2023	-
001/2023	Dublin Airport (EIDW) Construction of Critical Taxiway North Phase 1, Operation of Reconfigured Twy F-Outer and Reintroduction of Twy F-Inner	EIDW	26-Jan-2023	-
031/2022	Cork Airport (EICK) - Runway Pavement Repairs	EICK	01-Dec-2022	-
030/2022	Met Eireann Meteorological - Radiosonde Helium Filled Balloon	EISN	01-Dec-2022	-
028/2022	Construction of Mobile Crane Ardderroo Wind Farm Turbines Co Galway	GEN	03-Nov-2022	-
027/2022	Dublin Airport (EIDW) South Apron Widening (SATW) Works - Phase 1 & 2 and Introduction of New Taxiway Tango (T)	EIDW	03-Nov-2022	-
026/2022	Ireland West (EIKN) Runway Guard Lights Taxiway Bravo	EIKN	03-Nov-2022	-

NR/ Year	Subject	AIP Section(s) Affected	Period of Validity	Cancellation Record
024/2022	Dublin Airport (EIDW) Construction of Apron 5H(12 New Parking Stands)	EIDW	08-Sep-2022	-
023/2022	Waterford Airport (EIWF) RWY 03 NDB Approach	EIWF	08-Sep-2022	-
021/2022	Dublin Airport (EIDW) Runway 16/34 LVP Taxiing Lighting Installation Works - Phase 2	EIDW	11-Aug-2022	-
016/2022	Dublin Airport (EIDW) Refurbishment of Airfield Perimeter Road South of Rwy 10R_28L Phase 1 and Phase 2	EIDW	14-Jul-2022	-
012/2022	Ireland West (EIKN) Apron Bravo	EIKN	21-Apr-2022	-
007/2022	Waterford Airport (EIWF) Revised Minimum Safe Altitudes	EIWF	24-Mar-2022	-
003/2022	Ireland West (EIKN) ATIS	EIKN	27-Jan-2022	-
001/2022	Dublin Airport (EIDW) Construction of Temporary Taxiway F-Inner to Twy's C, DN and DS	EIDW	27-Jan-2022	-
009/2021	Dublin Airport (EIDW) Rwy 16/34 LVP Taxiing Lighting Installation Works - Phase 1	EIDW	15-Jul-2021	-
022/2019	SHANNON AIRPORT (EINN) Radio Navigation and Landing Aids	EINN	10-Oct-2019	-
020/2019	DUBLIN AIRPORT (EIDW) Radio Navigation and Landing Aids	EIDW	10-Oct-2019	-
Note: Cancelled Supplements may be requested from aipinfo@airnav.ie				

GEN 0.4 Check list of AIP Pages

New Pages *

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0.4-8	21 MAR 2024	*
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2.2-7	21 MAR 2024	*
2.2-8	21 MAR 2024	*

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4.4-8	23 MAR 2023
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5.6-4	27 FEB 2020
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0.6-12	25 FEB 2021
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GEN 1.5 AIRCRAFT INSTRUMENTS, EQUIPMENT AND FLIGHT DOCUMENTS

1. GENERAL

1.1. Flight under IFR in Shannon FIR/UIR Class A, Class C and Class G airspace must as a minimum be equipped with and use the following radio navigation equipment

a. VHF RTF with Appropriate Frequencies available
b. VOR receiver
c. DME
d. ILS

1.2. No general exemption from these requirements will be granted, but relaxation of the requirement to have an ILS may be granted by the appropriate ATC unit for a single flight.

1.3. Non ACAS equipped aircraft must be equipped with an SSR transponder Modes A and C for flight in controlled airspace Class A and Class C. Aircraft with transponder temporarily U/S may be admitted to airspace Class C only, at discretion of ATS Unit responsible for ATS provision in that airspace, provided the aircraft concerned immediately vacates such airspace when so instructed.

1.4 8.33 kHz Radio Equipment.

1.4.1 8.33 kHz Radio Equipment above FL195 in the Shannon FIR/UIR

With the exception of State aircraft, there are no exemptions to the requirements for the carriage and operation of 8.33 kHz spacing radio equipment above FL195 in the Shannon FIR/UIR.

Non-equipped flights must flight plan to operate below FL195.

Exemptions for State aircraft, from the mandatory carriage of 8.33 kHz spacing radio equipment are described in ENR 1.8

1.4.2 8.33 kHz Radio Equipment below FL195

Aircraft operated under IFR in Class C and Class G airspace are required to have 8.33 kHz spacing radio equipment.

Aircraft operated under VFR in Class C and Class G airspace are required to have 8.33 kHz spacing radio equipment if communications are performed on 8.33 kHz spaced frequency assignments.

Exemptions from mandatory carriage of 8.33 kHz aircraft radio equipment are described in ENR 1.8

2. RVSM

2.1. This entry for Reduced Vertical Separation Minimum (RVSM) is published in accordance with European RVSM (EUR RVSM) implementation

2.2. Introduction

2.2.1. RVSM is the generic term for a reduction in vertical separation from 2000 ft to 1000 ft that can be applied to approved operators of approved aircraft operating between FL290 and FL410 inclusive. RVSM operations are mandated in the upper airspace of the Shannon FIR/UIR, NOTA and SOTA. RVSM airspace in the adjacent North Atlantic (NAT) region covers the same flight levels as in the EUR RVSM area. With the exception of State aircraft, non-RVSM Approved aircraft are not permitted to operate within the EUR RVSM airspace which includes the Shannon FIR/UIR, NOTA and SOTA,

2.2.2. The requirements for RVSM are published in the ICAO Regional Supplementary Procedures (Doc 7030 -EUR), Doc 9574 — Manual on Implementation of a 300 M (1 000 ft) Vertical Separation Minimum Between FL 290 and FL410 Inclusive. and Procedures for Air Navigation Services Air traffic Management (PANS ATM Doc 4444) plus JAA Temporary Guidance Leaflet No. 6 Revision 1 (TGL 6). Detailed information on RVSM NAT/EUR ENTRY/EXIT points are published in ENR 4.4

2.3. Means of Compliance

2.3.1. Except for State aircraft, operators intending to conduct flights within the EUR RVSM airspace require a RVSM approval from the State in which the operator is based or from the State in which the aircraft is registered. To obtain such an RVSM approval operators shall satisfy the said State that:

a. aircraft for which an approval is sought have the vertical navigation performance capability required for RVSM operations through compliance with the criteria of the RVSM minimum aviation system performance standards (MASPS);
b. they have instituted procedures in respect of continued airworthiness (maintenance and repair) practices and programmes; and
c. they have instituted operational procedures and a programme of flight crew training so that they have an in depth knowledge of the criteria for operating in RVSM airspace and this should include both initial and recurrent training

2.3.2. Once obtained the RVSM approval is not restricted to a specific region. Instead it is valid globally, where RVSM procedures are applied, on the understanding that any operating procedures specific to a given region should be stated in the operations manual or appropriate crew guidance.

2.3.3. Aircraft that have received State approval for RVSM operations will be referred to as 'RVSM approved aircraft' while those aircraft that have not received such approval will be referred to as 'non-RVSM approved aircraft'. State aircraft that have not been granted RVSM approval should be granted access to RVSM airspace and ATC will apply a 2000 ft separation from other traffic.

2.4. Flight Crew Operating Practices and Procedures

2.4.1. All RVSM airspace is defined by ICAO as 'special qualification airspace'. Accordingly it is important that all operators provide their flight crews with a resume of any special procedures or phraseology applicable to a given RVSM operation. Holders of AOCs are required to have an 'operations manual' in which all pertinent details and procedures are specified. Non-AOC holders are required to submit to the IAA for approval RVSM operations instructions/ procedures for use by flight crews.

2.4.2. Operations manuals should include sections on:

a. Equipment Requirements and Minima;
b. Flight Planning;
c. Pre-Flight, In-Flight and Post-Flight Procedures;
d. Contingencies;
e. TCAS/ACAS Alerts;
f. R/T Phraseology;
g. Height Monitoring Requirements;

2.5. Contingencies - Applicable to all RVSM Airspace

2.5.1. General

2.5.1.1. Flight crews are to report to ATC as soon as practicable any event that may affect their ability to comply with the ATC clearance, examples being: severe turbulence, loss of thrust, loss of pressurisation, need to divert, uncertainty of present position, etc. If, at any time, it is not possible to notify ATC immediately that a problem has occurred and obtain a new clearance before departing from the old, comply as accurately as possible with any procedures that may be specified for the airspace, e.g. IAA contingency Procedures. In all cases a good lookout should be maintained and if the aeroplane is equipped with TCAS/ACAS the visual display should be used to assist in the sighting of proximate traffic.

2.5.1.2. The following equipment failures must be reported to ATC:

a. Loss of thrust on one or more engines necessitating descent;
b. b. Loss of one or more altimetry systems;

c. c. Failure of all automatic altitude control systems;

d. d. Failure of any other equipment that could affect the ability of the aeroplane to maintain flight as cleared.

2.5.1.3. In RVSM airspace it is expected that all aeroplanes will be in continuous radio contact with ATC either on the assigned frequency or on the distress and emergency frequency (121.500 MHz). They will therefore be able to advise ATC of any abnormal circumstances where RVSM performance requirements cannot be met, including encounters with turbulence greater than 'moderate'. ATC will then respond and issue an appropriate revised clearance before the pilot initiates a deviation from the original clearance. It is recognised, however, that there may be some circumstances (such as emergency descent following the loss of cabin pressurisation) where deviations may have to occur with little or no prior notice to ATC. In such cases the pilot will need to obtain a revised clearance as soon as possible after the deviation.

2.5.1.4. North Atlantic and other Oceanic or Remote RVSM Airspace (if applicable)

For oceanic and remote area RVSM application, where continuous direct controller-pilot communication may not always be possible, a range of contingencies have been considered which allow independent action by flight crews. In general they permit crews, in exceptional circumstances, to deviate from assigned clearances by selecting flight levels and/or tracks where other aeroplanes are least likely to be encountered. During such deviations crews are required to make maximum use of aeroplane lighting and to transmit relevant information on all appropriate frequencies, including the distress and emergency frequency. Once contact with ATC has been re-established, the crew will be assisted and issued with new clearances as required. Offset track procedures may be permitted if an encounter with turbulence is considered to be due to wake vortex in accordance with PANS ATM (Section 15.2.4).

2.6. TCAS/ACAS Alerts and Warnings

Procedures for dealing with TCAS/ACAS Alerts and Warnings are contained in Procedures for Air Navigation Services Aircraft Operations (PANS OPS, ICAO Doc 8168), Part 3, Section 3, Chapter 3. Where fitted, TCAS should be operated in the TA/RA mode during all operations. Any TA/RA should be treated as genuine. Flight crews should respond and report them as specified in their Operations Manual.

2.7. RT Phraseology

Phraseology associated with RVSM operations has been developed for European wide use. All flights must use this phraseology whilst operating, or intending to operate, between FL290 and FL410 inclusive in the Shannon FIR/UIR, NOTA and SOTA. Aircraft operators are reminded that, within Irish airspace, when responding to ATC the pilot is to append the call sign at the end of the message and not at the beginning. ATC are to use the controller-controller RVSM phraseology for co-ordination between Air Traffic Service Units (ATSUs). In the event of ATC being advised by the pilot that the aircraft is no longer capable of RVSM operations, it is particularly important that the first ATSU that is made aware of the failure generates the appropriate co-ordination, e.g. the pilot calls for start-up and declares 'unable RVSM due equipment' and the airport ATSU then passes this message on to the first Air Traffic Control Centre involved with the flight.

2.8. Irish Specific RVSM Exemptions

2.9. Completion of Flight Plans - Additional Flight Planning Requirements (see ICAO Doc 7030 - EUR Regional Supplementary Procedures

2.9.1. For all Flights, in Item 15 file a maximum level of FL 280 to the point where the flight wishes to enter RVSM airspace (otherwise if GAT the FPL will be rejected by CFMU). Do not enter RFL details at FL290 or above anywhere in item 15. A verbal request to ATC for flight above FL280 will ensure the FPL is not rejected by CFMU.

2.9.2. For all flights, in Item 18 include the RVSM Status and Exemption Serial No. in the Remarks, i.e.: '**STS/NONRVSM**' '**RMK/*(STATE)* RVSM EXEMPT… Serial No**.'

Note 1: Operators of Non-RVSM Approved aircraft are not to enter 'W' in item 10 even with this specific exemption.

Note 2: Having an RVSM Exemption does not confer any right to enter RVSM airspace as GAT unless specifically agreed by the appropriate ATC agency on the day. Any such penetration of RVSM airspace must be subject to the prevailing traffic conditions and controller workload.

2.9.3. Flight Testing or IAA Airworthiness Test Flights by Non-RVSM Approved Aircraft - In Item 15, enter route details within the area in which the flight intends to operate, then the return joining point for the ATS route structure to destination at a level not above FL280. If aerodrome of departure is outside the ATS route structure insert the appropriate routeing; if the final intention is to re-join the ATS route structure, file to re-join at the appropriate point not above FL280. In Item 18, insert RVSM Status and Exemption Serial No. (if applicable) and 'RMK/Flight Testing' or 'RMK/IAA Airworthiness Flight Test' as appropriate with requested flight level in RVSM airspace.

2.10. Air Traffic Control (ATC) Procedures for all Flights

When Non-RVSM aircraft are ready to enter RVSM airspace, the appropriate clearance is to be obtained from ATC. Note that, due to the need to provide 2000 ft separation, controllers need to co-ordinate the flight with other RVSM approved aircraft. These flights therefore create extra workload and a slight delay in receiving such clearances should be anticipated. It would therefore be helpful if pilots can provide as much notice as possible prior to requesting flight levels above FL280. Pilots must comply with any requirements stated in the RVSM Exemption unless otherwise instructed by ATC. Pilots are also reminded to include their Non-RVSM status (call sign: NEGATIVE RVSM) in the initial call on any frequency within RVSM airspace and subsequent frequency changes, when requesting level changes pertaining to flight levels in RVSM airspace and in all read backs to flight level clearances pertaining to flight levels in RVSM airspace.

2.11. Height Monitoring Requirements

2.11.1. There is an on-going requirement for height monitoring within the EUR RVSM airspace in order to monitor safety levels of RVSM operations. Aircraft operators are therefore required to continue participating in on-going monitoring activities and this may involve the re-monitoring of aircraft that have previously gone through the process. Non-participation can result in the withdrawal of RVSM approval. This monitoring requirement is, in its current form, applicable for EUR RVSM operations specifically to fulfil the requirements for on-going EUR RVSM Safety Assessments. However, activities are under way to harmonise the detailed monitoring requirements globally. The IAA is obliged, by ICAO, to keep a database of all Irish registered RVSM approved aircraft. Therefore, operators are to inform the IAA (RVSM Approvals) both when they add aircraft to their fleet and of any aircraft they intend to remove from their fleet of RVSM approved aircraft. The IAA will pass this information to the appropriate Regional Monitoring Agency (RMA). For EUR RVSMA, EUROCONTROL will act as the RMA. This is in addition to any requirements to comply with any EUROCONTROL notification procedures.

2.11.2. In order to have sufficient confidence in safety assessment results sufficient monitoring data is required. Due to the potential changes to altimetry performance over time, there is a limitation on the age of data that can be used for the assessments. Therefore there is a need to obtain new data and this may result in the re-monitoring of certain aircraft types and airframes. Data will be obtained through monitoring by the existing ground based Height Monitoring Units (HMUs) near STRUMBLE (United Kingdom) and GANDER (Canada). Since much of the data is obtained automatically, no specific action is required from operators unless they are approached by the RMA. Where such an approach is made, the operator is required to cooperate by arranging a special flight to over-fly an HMU. Lack of co-operation by an operator would be reported to the state issuing the approval and could result in the withdrawal of RVSM approval for the aircraft and/or operator in question. For aircraft operator specific information, such as how many of his/her aircraft of a particular type need to be monitored and within what time frame, the operator may contact the RMA direct.

2.12. Organisation of Monitoring Activities

On behalf of ICAO the EUROCONTROL Agency acts as the RMA. The information which will be obtained through the monitoring programme on aircraft compliance status and measured height keeping performance will be combined with the information available from monitoring agencies in other regions. The RMA will support operators and approval authorities on any issue related to RVSM approval and monitoring. The RMA will require information on the aircraft which are intended to operate in EUR RVSM airspace, and which will, therefore, need to be monitored on a periodic basis as part of the continuing safety assessment. To this end the RMA will also be in contact with State approval authorities. The RMA is based at the EUROCONTROL headquarters in Brussels, Belgium. The RMA will ensure the continuous operation of the monitoring systems and will manage the measured height keeping

performance data. The RMA will identify any height deviations that are outside the specifications of the ICAO RVSM performance requirements, and will follow-up as required.

2.13. Wake Vortex Issues

2.13.1. The purpose of this section is to present information in respect of wake vortex and to notify pilots and controllers of the relevant procedures in the event of a wake vortex encounter with specific regard to EUR RVSM operations. The EUROCONTROL scheme is recording those encounters that take place in RVSM airspace and does not in any way replace the Irish reporting scheme which records all wake vortex encounters in Irish airspace (including those at RVSM levels).

2.13.2. Wake Vortices in EUR RVSM Airspace

Prior to the implementation of RVSM in the EUR region an independent study concluded that the 'probability of hazardous encounters with wake vortices are not expected to increase but that nuisance encounters would increase'. Since August 2000 EUROCONTROL has been collating wake vortex encounters in the European airspace at FL 245 and above. These encounters have been subject to further independent analysis which has confirmed the findings of the above mentioned study. It is vital, however, that pilots continue to provide reports of wake vortex encounters in RVSM airspace. Any pilot who encounters a wake turbulence incident when flying in EUR RVSM airspace or within an adjacent RVSM transition area should ensure that a detailed report is provided to EUROCONTROL and State Regulation Authorities.

2.13.3. Wake Vortices Encounters

ICAO Document 7030 'Regional Supplementary Procedures' recognises wake turbulence as a factor in European and North Atlantic RVSM operations. In the North Atlantic, due to the special nature of the airspace and frequent poor communications, procedures have been developed which allow action by flight crews independent of ATC involvement. These procedures are not applicable to EUR RVSM airspace, where direct pilot/controller communication exists together with sufficient radar coverage to enable ATC to manage required flight deviations. In addition the vertical separation between aircraft can be increased tactically should this be necessary.

2.13.4. Pilot Actions:

2.13.4.1. When an aircraft is operating in the EUR RVSM airspace and encounters severe turbulence due to weather or wake vortex, and the Pilot-in-Command believes the vertical navigation performance requirements for EUR RVSM airspace cannot be maintained, the pilot shall:

a. inform ATC as soon as possible ('UNABLE RVSM DUE TURBULENCE');
b. obtain a revised ATC clearance prior to initiating any deviation from cleared route or flight level;
c. where such revised ATC clearance could not be obtained prior to such a deviation, obtain a revised clearance as soon as possible thereafter.

2.13.4.2. These procedures should not be interpreted in any way that prejudices the final authority and responsibility of the Pilot-in-Command for the safe operation of the aircraft.

2.13.5. Controller Actions:

The ATC controller:

a. shall establish either an appropriate horizontal separation or an increased vertical separation of 600 M (2000ft);
b. shall, to the extent possible, accommodate the pilot's request for flight level and/or route changes and pass traffic information as required;
c. confirm that the pilot is ready to resume RVSM operations ('REPORT READY TO RESUME RVSM').

3. PERFORMANCE BASED NAVIGATION (PBN)

3.1. Introduction

3.1.1. Performance-Based Navigation (ICAO Doc 9613) specifies that aircraft RNAV and RNP system performance requirements be defined in terms of the accuracy, integrity, continuity and functionality, which are needed for the proposed operations in the context of a particular airspace concept. The PBN concept represents a shift from sensor based to performance-based navigation. Performance requirements are identified in navigation specifications, which also identify the choice of navigation sensors and equipment that may be used to meet the performance requirements.

3.1.2. Whilst the ICAO PBN Manual was published in 2008, the navigation specifications contained within the manual have captured a number of existing navigation applications e.g., ECAC Basic RNAV (en-route) and Precision RNAV (terminal airspace), RNP 4 (oceanic) and RNP Approach (final approach).

3.1.3. At the 37th General Assembly held in 2010, Resolution A37-114 required States to implement navigation applications in accordance with the Assembly Resolution, which requires that States complete a PBN implementation plan (http://www.iaa.ie) as a matter of urgency to achieve:

1. Implementation of RNAV and RNP operations (where required) for en-route and terminal areas and;

2. Implementation of Approach Procedures with Vertical guidance (APV), either Barometric Vertical Navigation (Baro-VNAV) and/or augmented GNSS, including Lateral Navigation (LNAV) only minima for all instrument runway ends, either as the primary approach or as a back-up for precision approaches by 2016;

3. Implementation of straight-in LNAV only procedures (as an exception to 2. above) where the fleet is not APV capable.

3.2. Flight planning of RNAV and RNP designations

Manual or automated notification of an aircraft's qualification to operate along an ATS route, on a procedure or in airspace is provided to ATC via the Flight Plan. Flight Plan procedures are addressed in Procedures for Air Navigation Services — Air Traffic Management (PANS-ATM) (Doc 4444).

3.3. Navaid infrastructure

The NAVAID Infrastructure refers to ground- or space-based NAVAIDs. Ground-based NAVAIDs include DME and VOR. Space-based NAVAIDs include GNSS elements as defined in Annex 10 — Aeronautical Telecommunications

3.4. Airworthiness

The airworthiness element consists of ensuring that the aircraft meets the aircraft eligibility requirements for the functions and performance requirements defined in the navigation specifications (or other referenced certification standards) as well as the installation meeting the relevant airworthiness standards. The airworthiness element may also include applicable non-navigation equipment required to conduct the operation such as communications and surveillance equipment (US 14 CFR / EASA CS Part 25).

3.5. Continued Airworthiness

For the continued airworthiness operational approval, the operator is expected to be able to demonstrate that the navigation system will be maintained compliant with the type design. For navigation system installations there are few specific continued airworthiness requirements other than database and configuration management, systems modifications and software revisions but the element is included here for completeness and consistency with other CNS / ATM operational approvals e.g. RVSM. The continued airworthiness element of the operational approval is not directly addressed in the PBN Manual since it is inherent in the aircraft airworthiness approval through the airworthiness requirements (US 14 CFR / EASA CS Part 25).

3.6. Operational Approval

The operational approval assessment takes account of the following:

a. Aircraft eligibility and airworthiness compliance;

b. Operating procedures for the navigation systems used;

c. Control of operating procedures (documented in the operations manual);

d. Flight crew initial training and competency requirements and continuing competency requirements.

e. Dispatch training requirements;

f. Control of navigation database procedures. Commercial operators need to have documented procedures for the management of navigation databases. These procedures will define the data validation procedures for navigation databases and the installation of new databases into aircraft so that they remain current with the AIRAC cycle; and

g. Continued Airworthiness. Operators should have procedures for assessing and incorporating instructions for continued airworthiness and maintenance or inspection information concerning system modifications, software revisions, etc.

3.7. Minimum navigation performance specifications (MNPS)

3.7.1 Pre-PBN navigation Specifications

3.7.1.1 Area of applicability

3.7.1.1.1 The MNPS shall be applicable in that volume of airspace between FL285 and FL420 within the Oceanic Control Areas of Santa Maria, Shanwick, Reykjavik, Gander Oceanic and New York Oceanic, excluding the area west of 60deg. W and South of 38deg 30'N.
Note: - This volume of airspace is referred to as the '*MNPS airspace*'

3.7.1.1.2 Except for those flights specified in 3.7.1.1.8, aircraft operating within the volumes of airspace specified in 3.7.1.1.1 shall have lateral navigation performance capability such that:

a. The standard deviation of lateral track errors shall be less than 11.7Km (6.3NM);

b. The proportion of the total flight time spent by aircraft 56Km (30NM) or more off the cleared track shall be less than 5.3x10-4; and

c. The proportion of the total flight time spent by aircraft between 93 and 130Km (50 and 70 NM) off the cleared track shall be less than 1.3x10-4

3.7.1.1.3 The State of Registry or the State of the Operator, as appropriate, should verify that the lateral navigation capability of approved aircraft meets the requirements specified in 3.7.1.1.2.

Note.-Guidance material of use to those involved in the initial achievement and continued maintenance of the navigation capability set forth in 3.7.1.1.2 has been issued by ICAO under the title North Atlantic Operations Manual (*NAT Doc 007*) *and will be supplemented and updated as required and as new material becomes available*

3.7.1.1.4 Aircraft that have been approved by the State of Registry or the State of the Operator, as appropriate, for RNP 10 (PBN application of RNAV10) or RNP4 are considered to meet the requirements specified in 3.7.1.1.2.a))

Note.- The performance -based Navigation (PBN) Manual (*Doc 9613) provides guidance on aircraft approval, operations and maintenance programmes for initial achievement and continued compliance with RNAV 10 (Designated and Authorised as RNP) 10 and RNP 4*

3.7.1.1.5 From 1 January 2015 the means of compliance for demonstrating performance to 3.7.1.1.2.a above shall be in accordance with the RNAV 10 or RNP 4 navigation specifications as detailed in the *Performance Based Navigation Manual* (Doc 9613). Aircraft that have been MNPS approved by the State of Registry or the State of the Operator based on standard deviation of lateral track error of 11.7Km (6.3NM) before 1 January 2015 shall be permitted to operate in NAT MNPS airspace until 1 January 2020.

3.7.1.1.6 When granting approval for operations in MNPS airspace, States should take account of the RNP 10 time limits for aircraft equipped with dual INS or inertial reference unit (IRU) systems.

Note. - RNP 10 time limits are discussed in (DOC 9613) *Part B, Volume II Chapter 1.*

3.7.1.1.7 When granting approval for operations in MNPS airspace, State of Registry shall ensure that in-flight operations

drills include mandatory navigation cross-checking procedures which will identify navigation errors in sufficient time to prevent the aircraft inadvertently deviating from the ATC-cleared route. Guidance on procedures are detailed in NAT Doc 007.

3.7.1.1.8 Flights not subject to the submission of an RCL, which flight plan to route through Brest Oceanic Transition Area (BOTA) and/or Shannon Oceanic Transition Area (SOTA), are not subject to MNPS approval.

Note 1.- SOTA is defined as that airspace from DINIM (510000N 0150000W) - LESLU (510000N 0080000W) - 483000N 0080000W - BEDRA (490000N 0150000W) to DINIM (510000N 0150000W)

Note 2. - BOTA is defined as that airspace from 483400N 0084500W - 483000N - 0080000W - 450000N 0080000W - 450000N 0084500W to 483400N 0084500W.

The requirements for MNPS are set out in the Guidance concerning Air Navigation in and above the North Atlantic MNPS Airspace (NAT Doc 007) (available at http://www.paris.icao.int). (Refer to MNPS)

3.8. Area Navigation (RNAV)

Background

3.8.1. RNAV is defined as “a method of navigation which permits aircraft operation on any desired flight path within the coverage of station-referenced NAVAIDs or within the limits of the capability of self-contained aids, or a combination of these.” This removes the restriction imposed on conventional routes and procedures where the aircraft must overfly referenced NAVAIDs, thereby permitting operational flexibility and efficiency. RNAV is the less capable of the two families of PBN navigation specifications. RNAV is suited to current and legacy aircraft operations however as a stand-alone specification it is insufficient to support many of the new Air Traffic Management (ATM) applications envisaged in strategic plans (e.g. 3D, 4D ATM concepts). RNAV specifications do not require on board navigation performance monitoring and alerting. RNAV tracks (e.g.: RNAV 5, RNAV 2, RNAV 1) will normally require monitoring by ATC surveillance systems to achieve desired performance and separation safety standards. This requirement implies near universal surveillance coverage for RNAV specifications. A network of radar systems (PSR & MSSR) is employed to facilitate ATS provision in airspace designated to Irish ANSPs (PSRs providing primary coverage for the Dublin, Shannon and Cork terminal areas supported by longer range Mode S capable SSRs covering en-route airspace). In addition, an ASMGCS is deployed at Dublin airport.

3.8.2. Accommodation of non RNAV Approved Aircraft in the Terminal Airspace

Attention is drawn to the fact that aircraft which are not RNAV approved, may be subject to less optimal routeings, track mileage, fuel burn, and increased delays.

3.9. Required Navigation Performance (RNP)

Basic Functions

3.9.1. An RNP system is an RNAV system whose functionality supports on-board performance monitoring and alerting. Current specific requirements include:

a. Capability to follow a desired ground track with reliability, repeatability and predictability, (including optional curved path); and

b. Where vertical profiles are included for vertical guidance, use of vertical angles or specified altitude constraints to define a desired vertical path.

3.9.2. On-board performance monitoring and alerting capabilities may be provided in different forms depending on the system installation, architecture and configurations, including:

a. Display and indication of both the required and the estimated navigation system performance;

b. Monitoring of the system performance and alerting the crew when RNP requirements are not met; and

c. Cross track deviation displays scaled to RNP, in conjunction with separate monitoring and alerting for

navigation integrity.

3.9.3. An RNP system utilizes its navigation sensors, system architecture and modes of operation to satisfy the RNP navigation specification requirements. It must perform the integrity and reasonableness checks of the sensors and data, and may provide a means to deselect specific types of NAVAIDs to prevent reversion to an inadequate sensor. RNP requirements may limit the modes of operation of the aircraft, e.g. for low RNP, where flight technical error is a significant factor, manual flight by the crew may not be allowed. Dual system/sensor installations may also be required depending on the intended operation or need

3.10. Required Navigation Performance Authorisation required (RNP AR)

Background
RNP AR APCH is a “high-end” instrument approach navigation specification. RNP AR provides an added level of assurance over standard operations and as the designation indicates, a special authorisation is required. ICAO has identified specific instrument approach design criteria in the RNP AR Manual (Doc 9905) and whilst criteria in this and the PBN Manual cater today for approach operations, work is underway to update both to address Departures. The advanced features of RNP AR include operations with navigation accuracy less than 0.3 NM, use of Radius to Fix (RF) Path Terminator in all flight segments and reduced obstacle assessment criteria reflecting the assurance accounted for in a Flight Operations Safety Assessment (FOSA).

3.11. Current Airspace Application / Navigation Specification and Applicable Regulatory Guidance

Airspace Application	Navigation Specification	Applicable Regulatory Guidance
Oceanic & Remote	RNAV 10	FAA order 8400.12A / EASA AMC 20- 12
	RNP 4	FAA order 8400.33 / EASA Rule making Task No. MDM.062 (JAA CNS/ATM SG pp045)
	RNP 2	To Be Developed
	Advanced RNP	
Continental En-route	RNAV 5	FAA AC 20-138B, AC 90-96A / EASA AMC 20-4
	RNAV 2	FAA AC 90-100A
	RNAV 1 / P-RNAV	FAA AC 90-100A / JAA TGL 10 Rev 1
	RNP 2	To Be Developed
	Advanced RNP	To Be Developed
	RNP 0.3	To Be Developed
Terminal Airspace	RNAV 5	FAA AC 20-138B, AC 90-96A / EASA AMC 20-4
	RNAV 2	FAA AC 90-100A
	RNAV 1 / P-RNAV	FAA AC 90-100A / JAA TGL 10 Rev 1
	RNP 1	FAA AC 20-138B, AC 90-105
	Advanced RNP	To Be Developed
	RNP 0.3	To Be Developed

Airspace Application	Navigation Specification	Applicable Regulatory Guidance
Approach Operations	RNAV 1 / P-RNAV	FAA AC 90-100A / JAA TGL 10 Rev 1
	RNP 1	FAA AC 20-138B, AC 90-105
	Advanced RNP	To Be Developed
	RNP APCH (Initial, Intermediate and Missed Approach Segments, with or without RF legs)	FAA AC 20-138B, AC 90-105 / EASA AMC 20-27
	RNP APCH (Final Approach Segment of instrument approach procedure, designed to LNAV and/or LNAV/ VNAV minima)	FAA AC 20-138B, AC 90-105 / EASA AMC 20-27
	RNP APCH (Final Approach Segment of instrument approach procedure, designed to LP or LPV minima)	FAA AC 20-138B, AC 90-107 / EASA NPA 2009-04 (AMC 20-28)
	RNP AR Operations	FAA AC 90-101A / EASA AMC 20-26
	RNP 0.3	To Be Developed

3.12. Contingency Procedures

ICAO Doc 7030 Regional Supplementary Procedures detail the contingency procedures.

4. RNAV (GNSS) INSTRUMENT APPROACH PROCEDURES

To be developed

5. MNPS

5.1. Application of Minimum Navigation Performance Specification (MNPS)

5.1.1. MNPS applies in that part of the Shanwick Oceanic Control Area from FL285 to FL420 inclusive. Aircraft using the MNPS Airspace are required to have a navigation performance capability such that:

a. The standard deviation of lateral track errors shall be less than 6.3 NM;

b. The proportion of the total flight time spent by aircraft 30 NM or more off the cleared track shall be less than 5.3 x 10-4;

c. The proportion of the total flight time spent by aircraft between 50 NM and 70 NM off the cleared track shall be less than 13 x 10-5.

5.1.2. These mathematical standards can be approximated operationally as follows:

a. Aircraft must be operated so that lateral deviations from track remain less than 12.6 NM for at least 95 per cent of the time the system is required for navigation;

b. The navigation system must demonstrate a continuing capability to keep lateral deviations from cleared track in excess of 30 NM to less than 53 per 100 000 flight hours in the system; and

c. Keep lateral deviations between 50nm and 70 NM from cleared track, to less than 13 per 100 000 flight hours in the system.

5.1.3. In order to ensure that the required navigation standards are being observed within the MNPS airspace, a continuous monitoring of the navigation accuracy of aircraft in this airspace takes place using land based radars in Canada, Ireland, France, Iceland and the UK. Where large navigation errors are observed the pilot of the aircraft concerned will be notified by the ATC Unit observing the error. The subsequent investigation to determine the cause of the error will involve the ATC Unit, the operator, and the State of Registry. On the basis of such monitoring it has been agreed that the lateral separation minimum for aircraft operating in the MNPSA shall be 60 NM. It is implicit in the concept of MNPS and essential to the application of this quoted lateral separation minimum, that all operations in the MNPSA - be they Public Transport or General Aviation - achieve the highest standards of navigation

performance accuracy. Thus all flights within the Irish MNPSA must have the specific approval of either the State of Registry of the aircraft, or the State of Registry of the Operator, for such operations. Irish Registered aircraft are approved by the IAA. Such approvals will encompass all aspects of the expected navigation performance accuracy of the aircraft; navigation equipment carried; installation and maintenance procedures and crew navigation procedures and training. The inherent obligations placed upon crews and operators of Irish registered aircraft by the Irish MNPSA requirements can be summarized as follows:

a. The flight MUST have prior approval for operations in Irish MNPSA;
b. The approved aircraft minimum navigation installation MUST be serviceable and MUST have been checked for accuracy prior to entry into MNPSA;
c. Whilst in MNPSA the approved operating procedures MUST be adhered to. Except in emergency, diversions from the ATC cleared track MUST NOT be made without prior approval of the controlling ATC Unit;
d. If subsequent un-serviceability reduces the navigational capability below the required minimum for MNPS operations after entry into MNPS Airspace then the controlling ATC Unit MUST be advised so as to allow for any adjustments of separation from adjacent aircraft;
e. There MUST be a high standard of supervision, monitoring and cross checking of data inserted into automatic navigation system to prevent large errors arising from erroneous waypoint entries;
f. There MUST be a high standard of co-ordination with ATC Units to ensure that misunderstandings over the route to be flown do not occur.

5.1.4. Westbound flights flight planning to enter Shanwick Oceanic Airspace to enter North Atlantic (NAT) Minimum Navigation Performance Specification Airspace (MNPSA) may be invited to confirm that they have been approved for operating within MNPSA by their State of Registry or their State of Operator. The submission of a Flight Plan alone does NOT constitute NAT MNPS operating approval. Pilots/Operators unable to provide such confirmation will be cleared to operate outside MNPSA (below FL 285 or above FL 420). Details of the flight will be passed to the relevant State Aviation Authority for follow-up action.

5.2. Navigation Equipment for Unrestricted MNPS Operations

5.2.1. In order to justify consideration for State approval for future unrestricted operation in the MNPSA an aircraft will be required to be equipped as follows:

a. Two fully serviceable Long Range Navigation Systems (LRNS). A LRNS may be one of the following:
   i. One Inertial Navigation System (INS);
   ii. One Global Navigation Satellite System (GNSS); or
   iii. One navigation system using the inputs from one or more Inertial Reference System (IRS) or any other sensor system complying with the MNPS requirement.
b. Each LRNS must be capable of providing to the flight crew with a continuous indication of the aircraft position relative to desired track.
c. It is highly desirable that the navigation system employed for the provision of steering guidance is capable of being coupled to the auto-pilot.

Note 1: Only two GNSSs currently exist: the Global Positioning System (GPS) and the Global Orbiting Navigation Satellite System (GLONASS).

Note 2: A GPS installation must be approved as follows:
If the two required LRNSs are both GPS, they must be approved in accordance with FAA Notice 8110.60 or equivalent JAA or national documentation and their operation approved in accordance with FAA HBAT 95-09 or equivalent national or JAA documentation. If GPS serves as only one of the two required LRNSs, then it must be approved in accordance with FAA TSO-C129 as Class A1, A2, B1, B2, C1 or C2, or with equivalent national or JAA documentation.

Note 3: Equivalent approved material for GLONASS is under development and must be available prior to approval of any GLONASS equipped aircraft for MNPS operations.

5.3. Application of Reduced Vertical Separation Minima (RVSM) in Shanwick OCA

RVSM applies in the MNPS Area of the Shanwick Oceanic Control Area from FL290 to FL410 inclusive. Aircraft using this Area are required to have a height keeping performance capability as defined in the appropriate ICAO Documents/JAA Temporary Guidance Leaflet. In order to ensure that the overall standard of required height keeping is being achieved within RVSM airspace a technical height keeping monitoring program has been established in accordance with ICAO guidance. In order to ensure that the required altimetry standards are being observed within RVSM airspace, a technical height keeping monitoring programme has been initiated. For the task of monitoring technical height keeping accuracy, a hybrid system comprising of a Height Monitoring Unit (HMU) and GPS Monitoring Systems (GMS) is employed.

5.4. Flight plan

If the flight is certified as being in compliance with Minimum Navigation Performance Specification (MNPS) and intends to operate in MNPS airspace, for any portion of the flight, the letter 'X' shall be inserted after the letter 'S' in Item 10 of the flight plan to indicate that the flight has been approved for operations within the Minimum Navigation Performance Specification Airspace (MNPSA). It is the Captain's responsibility to ensure that specific approval has been given for such operations by the State of Registry of either the aircraft or of the operator.

6. USE OF INSTRUMENT LANDING SYSTEM (ILS) FACILITIES IN IRELAND

6.1 Introduction

The purpose of this section is to provide guidance on the limitations of ILS and to advise pilots of precautions to be taken during operational use.

6.2 General

6.2.1 Instrument Landing System (ILS) facilities in Ireland conform to ICAO Annex 10 Standards appropriate to the promulgated facility performance category unless otherwise indicated by NOTAM or contained in AIP Ireland. They can therefore be relied upon to provide navigational information to the required accuracy providing:

a. they are only used inside specific coverage sectors;

b. the signal-in-space is being adequately protected;

c. due account is taken of any warnings or differences promulgated by NOTAM or contained in AIP Ireland.

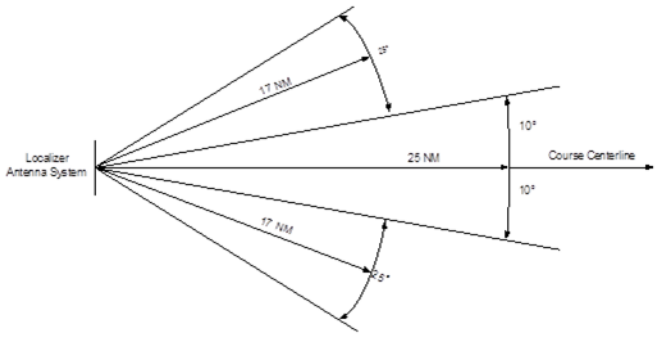
6.2.2 An aerodrome's ILS facility should only be used when an Air Traffic Control Service is available for the airport. No attempt should be made to use the ILS outside the aerodrome's promulgated hours of operation, unless specific arrangements have been made with the aerodrome operating authority for this purpose which includes the provision of an Air Traffic Control Service.

6.3 Localizer

6.3.1 ICAO Annex 10 tolerances for ILS localizers provide for coverage from the centre of the antenna array;

a. out to 25 NM within ± 10º of the front course centreline;

b. out to 17 NM within ± 35º of the front course centreline;



6.3.2 The use of a localizer outside these areas can lead to false course and reverse sense indications being received and such use should not be attempted.

6.3.3 There is no provision for the use of localizer "back beam" in Ireland and any such indication should be ignored.

6.3.4 Certain combinations of localizer beam characteristics and modern receiver/autopilot combinations can cause premature localizer capture; flight crews should be alert to this possibility. Flight deck procedures should be designed to reduce the risk of premature capture by not allowing Flight Director/Autopilot capture modes to be armed too early. Flight crews are advised to confirm the validity of ILS capture by cross-checking with other sources of

navigational information where available.

6.4 Glidepath

6.4.1 The standard ILS Glide Path DOC provides coverage in the following areas:

a. Coverage sectors of 8° in azimuth each side of the Localiser centre-line to a distance of at least 10 nm from threshold;

b. Vertical Coverage is provided from 0.45Ø up to 1.75Ø above the horizontal where Ø is the promulgated Glide Path angle.

This equates to coverage from 1.35° to 5.25° above the horizontal for a 3° Glide Path.

6.4.2 Flight crews are warned that use of the Glide Path outside the coverage areas can lead to intermittent and incorrect indications being received.

6.4.3 Certain Glide Paths may not exhibit correct deflection sensitivity to one side of the Localiser course line. This effect is caused by terrain or other problems and can lead to inadequate Fly Up' indications being received. When this situation exists a warning will be notified in Irish AIP Part III – Aerodromes (AD), 2.19 RADIO NAVIGATION AND LANDING AIDS, specific to that facility or by NOTAM.

6.5 Protection of ILS guidance signals

6.5.1 The use of an ILS in its promulgated Category is subject to the signal in space being adequately protected from interference. Moving objects, particularly large ones like aircraft manoeuvring in close proximity to the runway, may disturb the ILS guidance signals. ATC will apply increased separation and such other methods considered necessary to prevent interference during Low Visibility Procedures (LVP).

6.5.2 Flight crews should be aware of the ILS interference effects that can occur while conducting auto-lands when LVP are not in force. The protection of ILS sensitive areas from intrusion by aircraft and vehicles is included within LVP.

6.5.3 In Category I conditions or better, LVP will not come into force unless specifically requested. Intrusion into the ILS critical and sensitive areas by taxiing aircraft, ground vehicles or overflight of the ILS localizer may cause interference to the ILS signal. This interference may result in deviations from the desired approach path and may be accompanied by a “LOC” warning flag appearing briefly.

6.5.4 When making auto-lands in conditions not necessitating the introduction of LVP, flight crews should closely monitor the flight path of their aircraft and be prepared to disconnect the autopilot immediately if excessive disturbances occur near to the ground.

6.6 ILS/DME

Distance Measuring Equipment (DME) is frequency paired with ILS channels to supplement or replace range information provided by ILS marker beacons. All range information from ILS/DME is zero referenced to the runway threshold but the use of such an ILS-paired DME outside of a promulgated procedure may result in erroneous distance information and/or corrupt or erroneous identification coding.

6.7 Maintenance

6.7.1 When an ILS is undergoing maintenance, or is radiating for test purposes only, the IDENTIFICATION coding will be removed completely or replaced with a continuous tone.

6.7.2 Under these conditions NO ATTEMPT should be made to use the ILS as erroneous indications may be received.

6.8 Further Information

Enquiries regarding the use of Instrument Landing Systems in Ireland should be addressed to:

Post: Aeronautical Services Department
Safety Regulation Division
Irish Aviation Authority
The Times Building
11-12 D’Olier St
Dublin 2
D02 T449

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GEN 3.2 AERONAUTICAL CHARTS

1. RESPONSIBLE SERVICE

Aeronautical Charts for the territory of Ireland are published by

Post: The Irish Aviation Authority,
The Times Building
11-12 D'Olier Street
Dublin 2
D02 T449
Ireland

Phone: + 353 1 671 8655

Fax: + 353 1 679 2934

Email: info@iaa.ie

URL: http://www.iaa.ie

Charts based on ICAO documents: Annex 4, Doc 8697
Differences to these provisions are detailed in GEN 1.7
Topographical information is reproduced under licence by permission of Ordnance Survey Ireland.
Charting service is available during Office hours 0930-1730 Local Time.

2. MAINTENANCE OF CHARTS

2.1 Aeronautical Charts included in the AIP are kept up to date by amendments to the AIP. Significant amendments or revisions in aeronautical information may be promulgated by NOTAM or Aeronautical Information Circular, as appropriate.

2.2. Corrections to Aeronautical Charts are promulgated as hand amendments to the AIP and listed in Sections GEN 0.5 and GEN 3.2.8. Items of information found after publication to have been incorrect at the aeronautical information date are corrected immediately by NOTAM if they are of operational significance.

3. PURCHASE ARRANGEMENTS

3.1 VFR Chart Scale 1:500,000

The Irish Aviation Authority has produced a visual flight rules (VFR) aeronautical encapsulated A4 folded chart Scale 1:500,000. This chart is for VFR navigation within the boundaries of the Shannon FIR. In addition to aeronautical information, the charts provide terrain contours, hydrographic, topographic, cultural and other visual features compatible with legibility at the scale of the chart - this information is supplied by Ordnance Survey Ireland and/or Ordnance Survey Northern Ireland. It is available to order at a cost of €30.00 including VAT from:

Post: OSI,
Map Sales Shop,
Phoenix Park,
Dublin 8,

Phone: + 353 1 802 5379

URL: https://store.osi.ie/index.php/paper-products/aeronautical-charts.html

3.2 VFR Airspace Chart Scale 1:500,000

The Irish Aviation Authority has produced a visual flight rules (VFR) aeronautical airspace chart Scale 1:500,000.
This chart is for VFR navigation within the boundaries of the Shannon FIR.
It is available free to download from the IAA Web Site,

URL: https://www.iaa.ie/commercial-aviation/airspace/aeronautical-charts

3.3 VFR Chart Scale 1:250,000

The Irish Aviation Authority has produced a visual flight rules (VFR) aeronautical encapsulated A4 folded chart Scale 1:250,000. It comprises two charts - front and back (East & West, North & South), covering the Shannon FIR. The charts are

for VFR navigation within the boundaries of the Shannon FIR. In addition to aeronautical information, the charts provide terrain contours, hydrographic, topographic, cultural and other visual features compatible with legibility at the scale of the chart - this information is supplied by Ordnance Survey Ireland and/or Ordnance Survey Northern Ireland. It is available to order at a cost of €30.00 including VAT per chart from:

Post: OSI,
Map Sales Shop,
Phoenix Park,
Dublin 8,

Phone: + 353 1 802 5379

URL: https://store.osi.ie/index.php/paper-products/aeronautical-charts.html

All other aeronautical charts are available to download from:-
URL: http://www.iaa.ie/commercial-aviation/airspace/aeronautical-charts

4. AERONAUTICAL CHART SERIES AVAILABLE

4.1 The following series of aeronautical charts are produced

1. Aeronautical Chart - ICAO 1:500,000
2. Aeronautical Chart 1:250,000
3. Instrument Approach Chart - ICAO *
4. Standard Departure Chart - Instrument (SID) - ICAO *
5. Standard Arrival Chart - Instrument (STAR) - ICAO *
6. Visual Approach Chart - ICAO*
7. Aerodrome Chart - ICAO *
8. Aircraft Parking/Docking Chart - ICAO *
9. Aerodrome Obstacle Chart - ICAO Type “A” (Operating Limitations) *
10. Aerodrome Obstacle Chart - ICAO Type “B”
11. Precision Approach Terrain Chart - ICAO
12. ATC Surveillance Minimum Altitude Chart *

(* included in AIP Ireland)

URL: http://www.iaa.ie

4.2 General Description of Series of Charts

4.2.1 Aeronautical Chart - ICAO 1:500,000

The Irish Aviation Authority has produced a visual flight rules (VFR) aeronautical encapsulated A4 folded chart Scale 1:500,000. This chart is for VFR navigation within the boundaries of the Shannon FIR. In addition to aeronautical information, the charts provide terrain contours, hydrographic, topographic, cultural and other visual features compatible with legibility at the scale of the chart - this information is supplied by Ordnance Survey Ireland and/or Ordnance Survey Northern Ireland.

4.2.2 Aeronautical Chart 1:250,000

The Irish Aviation Authority has produced a visual flight rules (VFR) aeronautical encapsulated A4 folded chart Scale 1:250,000. It comprises two charts - front and back (East & West, North & South), covering the Shannon FIR. The charts are for VFR navigation within the boundaries of the Shannon FIR. In addition to aeronautical information, the charts provide terrain contours, hydrographic, topographic, cultural and other visual features compatible with legibility at the scale of the chart - this information is supplied by Ordnance Survey Ireland and/or Ordnance Survey Northern Ireland.

4.2.3 Instrument Approach Chart – ICAO

These charts are designed to provide the pilot with a graphic presentation of the Instrument Approach, Missed Approach and Holding Procedures and to facilitate the transition from non-visual to visual flight at any point on the final approach.

4.2.4 Visual Approach Chart – ICAO

These charts are designed to assist pilots making a visual approach and to provide pilots with designated holding patterns maintained by visual reference to the ground.

4.2.5 Aerodrome Chart – ICAO

These charts provide flight crew with detailed information on runways, taxiways, lighting and other aerodrome features to

facilitate the surface movement of aircraft.

4.2.6 Aerodrome Obstacle Chart - ICAO - TYPE “A” (Operating Limitations)
These charts are designed to provide the operator with the data necessary to enable compliance with the operating limitations as contained in ICAO Annex 6.

4.2.7 Aerodrome Obstacle Chart - ICAO - TYPE *“B”*
These charts are designed to provide the data necessary or determination of minimum safe altitudes/heights and procedures for use in the event of an emergency during take-off or landing.

4.2.8 Precision Approach Terrain Chart – ICAO
These charts provide detailed terrain profile information within a defined portion of the final approach so as to enable aircraft operating agencies to assess the effect of terrain on decision height determination by the use of radio altimeter.

4.2.9 ATC Surveillance Minimum Altitude Chart
This Supplementary Chart shall provide information that will enable flight crews to monitor and cross check altitudes assigned by a controller using an ATS surveillance system.

5. LIST OF CHART SERIES

Title of series and Scale	Series	Chart Ref	Chart name and/or Number	Date
Aeronautical Chart ICAO 1:500,000	ANC/ 500	Edition 12	Ireland Sheet 2172 ABCD	24 FEB 2022
Aeronautical Chart/West 1:250,000	ANC/ 250	Edition 09	Ireland Sheet 2172 ABCD	24 FEB 2022
Aeronautical Chart/East 1:250,000	ANC/ 250	Edition 09	Ireland Sheet 2172 ABCD	24 FEB 2022
Aeronautical Chart/North 1:250,000	ANC/ 250	Edition 09	Ireland Sheet 2172 ABCD	24 FEB 2022
Aeronautical Chart/South 1:250,000	ANC/ 250	Edition 09	Ireland Sheet 2172 ABCD	24 FEB 2022
Standard Departure Chart-Instrument (SID) ICAO 1:750,000	SID	EIDW AD 2.24-10.1	EIDW RNAV RWY 28L CAT A,B	05 NOV 2020
	SID	EIDW AD 2.24-11.1	EIDW RNAV RWY 28L CAT C, D	08 SEP 2022
	SID	EIDW AD 2.24-12.1	EIDW RNAV RWY 28R CAT A,B	06 OCT 2022
	SID	EIDW AD 2.24-13.1	EIDW RNAV RWY 28R CAT C,D	20 APR 2023
	SID	EIDW AD 2.24-14.1	EIDW RNAV RWY 10L CAT A,B	06 OCT 2022
	SID	EIDW AD 2.24-15.1	EIDW RNAV RWY 10L CAT C,D	20 APR 2023
	SID	EIDW AD 2.24-16.1	EIDW RNAV RWY 10R CAT A, B	11 AUG 2022
	SID	EIDW AD 2.24-17.1	EIDW RNAV RWY 10R CAT C, D	16 JUN 2022
	SID	EIDW AD 2.24-18.1	EIDW RNAV RWY 16 CAT A, B	05 NOV 2020
	SID	EIDW AD 2.24-19.1	EIDW RNAV RWY 16 CAT C, D	06 OCT 2022
	SID	EIDW AD 2.24-20.1	EIDW RNAV RWY 34 CAT A, B	05 NOV 2020
	SID	EIDW AD 2.24-21.1	EIDW RNAV RWY 34 CAT C, D	06 OCT 2022
	SID	EIKY AD 2.24-3	EIKY RWY 26 CAT A, B	25 MAR 2021
	SID	EIKY AD 2.24-4	EIKY RWY 26 CAT C	25 MAR 2021
	SID	EIKY AD 2.24-5	EIKY RWY 08 CAT A, B	25 MAR 2021
	SID	EIKY AD 2.24-6	EIKY RWY 08 CAT C	25 MAR 2021
	SID	EINN AD 2.24-5.1	EINN RNAV RWY 06	31 JAN 2019
	SID	EINN AD 2.24-6.1	EINN RNAV RWY 24	31 JAN 2019

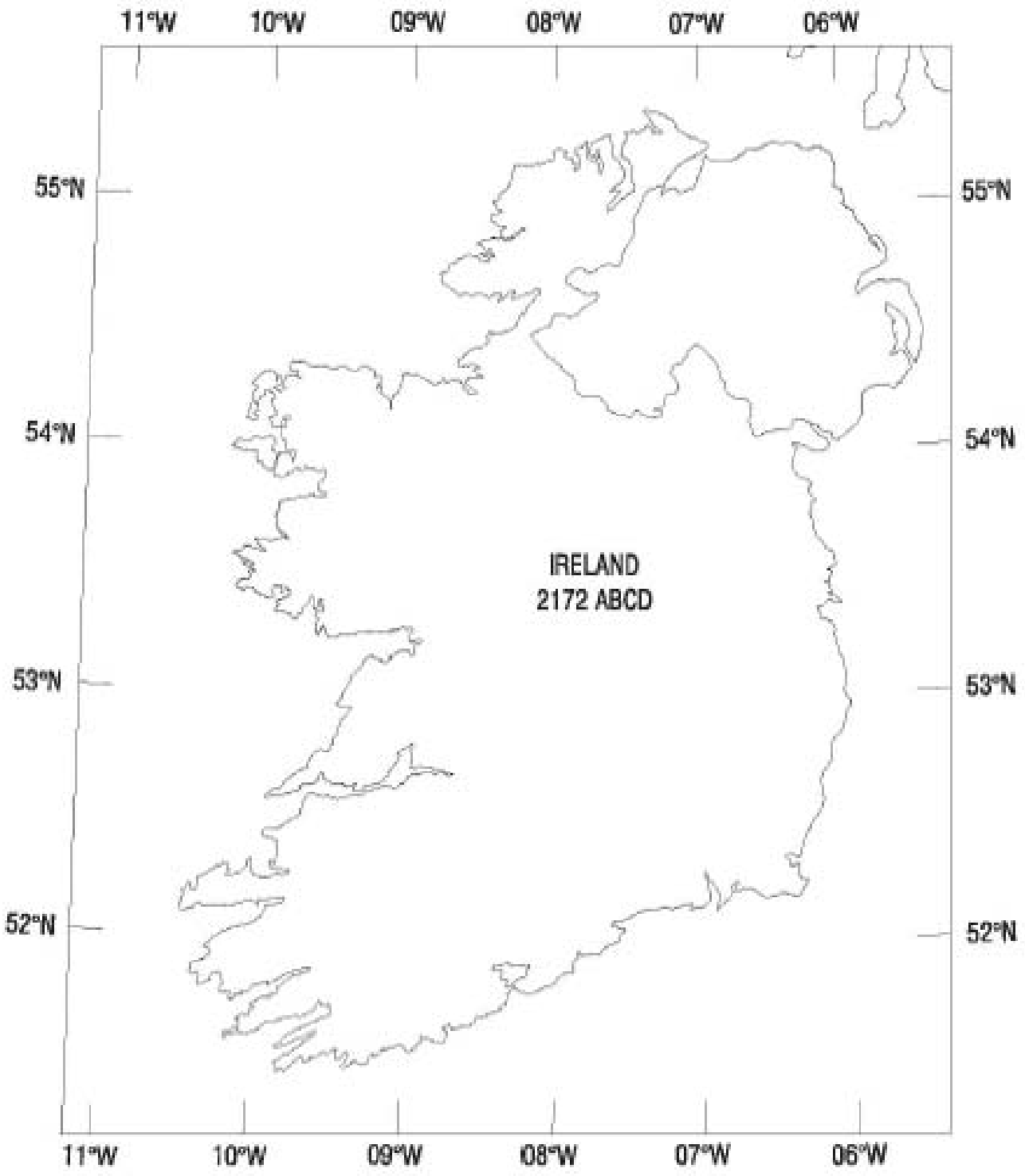
Title of series and Scale	Series	Chart Ref	Chart name and/or Number	Date
Standard Departure Chart-Instrument (SID) ICAO 1:600,000	SID	EICK AD 2.24-6	EICK RNAV (GNSS) RWY 16 CAT A, B,	26 APR 2018
	SID	EICK AD 2.24-7	EICK RNAV (GNSS) RWY 16 CAT C, D,	26 APR 2018
	SID	EICK AD 2.24-8	EICK RNAV (GNSS) RWY 34 CAT A, B,	26 APR 2018
	SID	EICK AD 2.24-9	EICK RNAV (GNSS) RWY 34 CAT C, D,	26 APR 2018
	SID	EICK AD 2.24-10	EICK RNAV (GNSS) RWY 07 CAT A, B,	26 APR 2018
	SID	EICK AD 2.24-11	EICK RNAV (GNSS) RWY 07 CAT C, D,	26 APR 2018
	SID	EICK AD 2.24-12	EICK RNAV (GNSS) RWY 25 CAT A, B,	26 APR 2018
	SID	EICK AD 2.24-13	EICK RNAV (GNSS) RWY 25 CAT C, D,	26 APR 2018
Standard Departure Chart-Instrument (SID) ICAO 1:300,000	SID	EIKN AD 2.24-4	EIKN RNAV RWY26	13 SEP 2018
	SID	EIKN AD 2.24-5	EIKN RNAV RWY08	13 SEP 2018
Standard Arrival Chart-Instrument (STAR) ICAO 1:750,000	STAR	EIDW AD 2.24-22.1	EIDW RNAV RWY 28L/R (With Lateral Holding/Point Merge)	06 OCT 2022
	STAR	EIDW AD 2.24-23.1	EIDW RNAV RWY 10L/R (with Lateral Holding/Point Merge)	06 OCT 2022
	STAR	EIDW AD 2.24-24.1	EIDW RNAV RWY 16	08 OCT 2020
	STAR	EIDW AD 2.24-25.1	EIDW RNAV RWY 34	08 OCT 2020
	STAR	EINN AD 2.24-7.1	EINN RNAV RWY 06	31 JAN 2019
	STAR	EINN AD 2.24-8.1	EINN RNAV RWY 24	06 DEC 2018
Standard Arrival Chart-Instrument (STAR) ICAO 1:600,000	STAR	EICK AD 2.24-14	EICK RWY 16	11 OCT 2018
	STAR	EICK AD 2.24-15	EICK RWY 34	26 APR 2018
	STAR	EICK AD 2.24-16	EICK RWY 07 CAT A, B	26 APR 2018
	STAR	EICK AD 2.24-17	EICK RWY 25 CAT A, B	11 OCT 2018
Standard Arrival Chart-Instrument (STAR) ICAO 1:400,000	STAR	EIKN AD 2.24-7	EIKN RNAV RWY08	20 JUL 2017
Standard Arrival Chart-Instrument (STAR) ICAO 1:300,000	STAR	EIKN AD 2.24-6	EIKN RNAV RWY26	18 AUG 2016
Instrument Approach Chart ICAO 1: 500,000	IAC	EIDW AD 2.24-38	EIDW RNP RWY 16 CAT A, B, C, D	17 JUN 2021
	IAC	EIDW AD 2.24-39.1	EIDW ILS CAT I or LOC RWY 16	08 OCT 2020
	IAC	EIDW AD 2.24-40.1	EIDW VOR RWY 16	08 OCT 2020
	IAC	EIDW AD 2.24-41	EIDW RNP RWY 34	17 JUN 2021
	IAC	EIDW AD 2.24-42.1	EIDW VOR RWY 34	08 OCT 2020
Instrument Approach Chart ICAO 1:450,000	IAC	EIDW AD 2.24-27.1	EIDW ILS CAT I & II or LOC RWY 28L CAT A,B,C,D	11 AUG 2022
Instrument Approach Chart ICAO 1: 400,000	IAC	EIKN AD 2.24-8.1	EIKN RNP RWY26 CAT A, B, C, D	08 SEP 2022

Title of series and Scale	Series	Chart Ref	Chart name and/or Number	Date
	IAC	EIKN AD 2.24-14	EIKN RNP RWY08 CAT A, B, C, D	25 MAR 2021
	IAC	EIDW AD 2.24-35.1	EIDW RNP RWY 10R CAT A, B, C, D	01 DEC 2022
Instrument Approach Chart ICAO 1:350,000	IAC	EINN AD 2.24-10.1	EINN ILS OR LOC RWY 06 CAT A,B,C,D	06 DEC 2018
	IAC	EINN AD 2.24-11.1	EINN VOR RWY 26 CAT A, B, C, D	06 DEC 2018
	IAC	EINN AD 2.24-13.1	EINN ILS CAT I & II or LOC RWY 24 CAT A, B, C, D	06 DEC 2018
	IAC	EINN AD 2.24-14.1	EINN VOR RWY 24 CAT A, B, C, D	06 DEC 2018
	IAC	EIKY AD 2.24-8	EIKY ILS OR LOC RWY 26 ACFT CAT A, B, C	08 DEC 2016
	IAC	EIKY AD 2.24-9	EIKY NDB RWY 26 CAT A,B,C	08 DEC 2016
	IAC	EIKN AD 2.24-9	EIKN ILS A CAT I & CAT II or LOC RWY26	18 AUG 2016
	IAC	EIKN AD 2.24-11	EIKN VOR RWY26	18 AUG 2016
	IAC	EIKN AD 2.24-15	EIKN VOR RWY08	18 AUG 2016
	IAC	EIKN AD 2.24-16	EIKN NDB RWY08	18 AUG 2016
	IAC	EIKN AD 2.24-17	EIKN NDB RWY08	18 AUG 2016
	IAC	EICK AD 2.24-25.1	EICK VOR RWY 07	08 SEP 2022
	IAC	EICK AD 2.24-27.1	EICK VOR RWY 25	08 SEP 2022
	IAC	EIDL AD 2.24-7.1	EIDL RNP RWY 02 CAT A,B,C	30 NOV 2023
	IAC	EIDL AD 2.24-9.1	EIDL RNP RWY 20 CAT A,B,C	30 NOV 2023
	IAC	EIDW AD 2.24-26.1	EIDW RNP RWY 28L	11 AUG 2022
	IAC	EIDW AD 2.24-28.1	EIDW VOR RWY 28L	08 OCT 2020
	IAC	EIDW AD 2.24-29.1	EIDW RNP RWY 28R CAT A, B, C, D	01 DEC 2022
	IAC	EIDW AD 2.24-30.1	EIDW ILS CAT I AND II OR LOC RWY 28R CAT A,B,C,D	06 OCT 2022
	IAC	EIDW AD 2.24-32.1	EIDW RNP RWY 10L	01 DEC 2022
	IAC	EIDW AD 2.24-33.1	EIDW ILS CAT I & II OR LOC RWY 10L CAT A,B,C,D	06 OCT 2022
	IAC	EIDW AD 2.24-36.1	EIDW ILS CAT I & II or LOC RWY 10R CAT A,B,C,D	06 OCT 2022
	IAC	EIDW AD 2.24-37.1	EIDW VOR RWY 10R	08 OCT 2020
	IAC	EIDW AD 2.24-45	EIDW VOR T RWY 28L CAT A, B, C, D	21 APR 2022
	IAC	EISG AD 2.24-7.1	EISG RNP Y RWY 10 CAT A, B	22 APR 2021
	IAC	EISG AD 2.24-8.1	EISG RNP Z RWY 10 CAT A, B	22 APR 2021
	IAC	EISG AD 2.24-9.1	EISG NDB Y RWY 10 CAT A, B	22 APR 2021
	IAC	EISG AD 2.24-10.1	EISG NDB Z RWY 10 CAT A, B	22 APR 2021
	IAC	EISG AD 2.24-11.1	EISG RNP RWY 28 CAT A, B	22 APR 2021
	IAC	EISG AD 2.24-12.1	EISG NDB RWY 28 CAT A, B	22 APR 2021
	IAC	EIWF AD 2.24-8.1	EIWF RNP RWY 02 CAT A,B,C	30 NOV 2023
	IAC	EIWF AD 2.24-9.1	EIWF RNP RWY 20 CAT A,B,C	30 NOV 2023

Title of series and Scale	Series	Chart Ref	Chart name and/or Number	Date
Instrument Approach Chart ICAO 1: 330,000	IAC	EIDL AD 2.24-3	EIDL LOC RWY 21	05 APR 2012
	IAC	EIDL AD 2.24-4	EIDL NDB RWY 21	05 APR 2012
	IAC	EIDL AD 2.24-5	EIDL NDB RWY 03	05 APR 2012
	IAC	EIKN AD 2.24-10	EIKN ILS B CAT I & CAT II RWY26	28 APR 2016
	IAC	EIKN AD 2.24-12	EIKN NDB RWY26	28 APR 2016
	IAC	EIKN AD 2.24-13	EIKN NDB RWY26	28 APR 2016
	IAC	EIWF AD 2.24-3	EIWF ILS CAT 1 OR LOC RWY 21 CAT A,B,C	20 JUL 2017
	IAC	EIWF AD 2.24-5	EIWF NDB/DME RWY 21	30 OCT 2003
	IAC	EIWF AD 2.24-6	EIWF NDB RWY 03 CAT A, B, C	08 DEC 2016
Instrument Approach Chart ICAO 1:300,000	IAC	EICK AD 2.24-18	EICK RNP RWY 16	11 OCT 2018
	IAC	EICK AD 2.24-19.1	EICK ILS CAT I & II or LOC RWY 16	11 OCT 2018
	IAC	EICK AD 2.24-20	EICK VOR RWY 16	11 OCT 2018
	IAC	EICK AD 2.24-21	EICK RNP RWY 34	11 OCT 2018
	IAC	EICK AD 2.24-22	EICK ILS CAT I or LOC RWY 34	11 OCT 2018
	IAC	EICK AD 2.24-23	EICK VOR RWY 34	11 OCT 2018
	IAC	EICK AD 2.24-24	EICK RNP RWY 07	31 JAN 2019
	IAC	EICK AD 2.24-26	EICK RNP RWY 25 (LNAV Only)	11 OCT 2018
Instrument Approach Chart ICAO 1:250,000	IAC	EIKY AD 2.24-7	EIKY RNP RWY 26 CAT A, B, C	25 MAR 2021
	IAC	EIKY AD 2.24-10	EIKY RNP RWY 08 CAT A, B, C	20 MAY 2021
	IAC	EIKY AD 2.24-11	EIKY NDB RWY 08 CAT A, B, C	26 MAY 2016
Visual Approach Chart ICAO 1: 250,000	VAC	EICK AD 2.24-28	CORK	10 SEP 2020
	VAC	EIDL AD 2.24-15	DONEGAL	20 APR 2023
	VAC	EIKN AD 2.24-19	IRELAND WEST/KNOCK	20 MAY 2021
	VAC	EIKY AD 2.24-13	KERRY	25 MAR 2021
	VAC	EINN AD 2.24-15	SHANNON	10 SEP 2020
	VAC	EISG AD 2.24-16	SLIGO	23 MAR 2023
	VAC	EIWF AD 2.24-7	WATERFORD	23 MAR 2023
Visual Approach Chart ICAO 1: 160,000	VAC	EIDW AD 2.24-44	DUBLIN	22 APR 2021
Aerodrome Chart ICAO 1: 25,000	AD	EICK AD 2.24-1	CORK	08 NOV 2018
	AD	EINN AD 2.24-1	SHANNON	26 MAR 2020
Aerodrome Chart ICAO 1: 20,000	AD	EIKN AD 2.24-1	IRELAND WEST	20 MAY 2021
	AD	EIKY AD 2.24-1	KERRY	20 MAY 2021
Aerodrome Chart ICAO 1: 15,000	AD	EIDL AD 2.24-1	DONEGAL	28 MAR 2019
	AD	EIWF AD 2.24-1	WATERFORD	21 MAR 2024
	AD	EIWT AD 2.24-1	WESTON	07 JUN 2007
	AD	EISG AD 2.24-1	SLIGO	28 JAN 2021

Title of series and Scale	Series	Chart Ref	Chart name and/or Number	Date
Aerodrome Chart ICAO As per Published Chart	AD	EIDW AD 2.24-1	DUBLIN	02 NOV 2023
Aerodrome Obstacle Chart ICAO – Type "A" Horizontal Scale 1:10,000 Vertical Scale 1:1,000	AOC	EICK AD 2.24-3	EICK RWY 07/25	26 APR 2018
	AOC	EICK AD 2.24-4	EICK RWY 16/34	26 APR 2018
	AOC	EIDL AD 2.24-2	EIDL RWY 03/21	28 JUN 2012
	AOC	EIDW AD 2.24-3	EIDW RWY 10R/28L	08 OCT 2020
	AOC	EIDW AD 2.24-4	EIDW RWY 10L/28R	11 AUG 2022
	AOC	EIDW AD 2.24-5	EIDW RWY 16/34	08 OCT 2020
	AOC	EIKN AD 2.24-2	EIKN RWY 08/26	18 AUG 2016
	AOC	EIKY AD 2.24-2	EIKY RWY 08/26	09 APR 2009
	AOC	EINN AD 2.24-4	EINN RWY 06/24	28 SEP 2006
	AOC	EISG AD 2.24-2	EISG RWY 10/28	28 JAN 2021
	AOC	EIWF AD 2.24-2	EIWF RWY 03/21	21 MAR 2024
Aerodrome Obstacle Chart ICAO – Type "B"	AOC	EICK/Type B/Ver 1	EICK	-
	AOC	EIDL/Type B/Ver 1	EIDL	-
	AOC	EIDW/Type B/Ver 1	EIDW	-
	AOC	EIKN/Type B/Ver 1	EIKN	-
	AOC	EIKY/ Type B/Ver 1	EIKY	-
	AOC	EINN/Type B/Ver 1	EINN	-
	AOC	EISG/Type B/Ver 1	EISG	-
	AOC	EIWF/Type B/Ver 1	EIWF	-
Precision Approach Terrain Chart Horizontal Scale 1:2,500 Vertical Scale 1:500	PATC	EICK AD 2.24-5	EICK RWY 16	26 APR 2018
	PATC	EIDW AD 2.24-6	EIDW RWY 28L	08 OCT 2020
	PATC	EIDW AD 2.24-7	EIDW RWY 28R	11 AUG 2022
	PATC	EIDW AD 2.24-8	EIDW RWY 10L	11 AUG 2022
	PATC	EIDW AD 2.24-9	EIDW RWY 10R	25 FEB 2021
	PATC	EIKN AD2.24-3	EIKN RWY 27	21 MAR 2002
	PATC	EINN AD 2.24-3	EINN RWY 24	06 DEC 2018
Aircraft Parking/Docking Chart – ICAO 1:5,000	APDC	EICK AD 2.24-2	CORK	26 APR 2018
	APDC	EINN AD 2.24-2	SHANNON	25 APR 2019
Aircraft Parking/Docking Chart – ICAO 1:6,000	APDC	EIDW AD 2.24-2	DUBLIN	02 NOV 2023
ATC Surveillance Minimum Altitude Chart - ICAO 1:850,000		EIDW AD 2.24-43.1	DUBLIN	01 DEC 2022
ATC Surveillance Minimum Altitude Chart - ICAO 1:700,000		EINN AD 2.24-16	SHANNON	17 JUN 2021
ATC Surveillance Minimum Altitude Chart - ICAO 1:600,000		EICK AD 2.24-29.1	CORK	25 MAR 2021

6. INDEX TO WORLD AERONAUTICAL CHARTS – ICAO 1:500,000



7. TOPOGRAPHICAL CHARTS

Refer to GEN 3.2.3

8. CORRECTIONS TO CHARTS NOT CONTAINED IN THE AIP

Chart	Location	Correction
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/North ICAO 1:250,000 Ed 9	544214.17N 0081643.18W	Donegal, Clogheravaddy Windfarm Phase 2 (+3 turbines), Height: 416ft Elevation: 1180ft (No Change)
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/West ICAO 1:250,000 Ed 9	541013.50N 0092947.44W	Mayo, Oweninny Wind Farm, Phase 2(+31 turbines), Height: 578ft Elevation: 949ft (No Change)
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/South ICAO 1:250,000 Ed 9	513846.74N 0095418.92W	Castletownbere Lighthouse, Correction to both Height: 20ft and Elevation: 29ft
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/East ICAO 1:250,000 Ed 9	531747.96N 0070656.88W	Offaly, Cloncreen Wind Farm, Height: 558ft Elevation: 791ft
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/East ICAO 1:250,000 Ed 9	531536.28N 0071841.95W	Offaly, Garryhinch Bog Mast, Clonyhurk, Height: 328ft Elevation: 584ft
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/East ICAO 1:250,000 Ed 9	533742.05N 0070135.65W	Westmeath, Clonmellon Airstrip, Elevation: 85ft
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/East ICAO 1:250,000 Ed 9	535657.94N 0065302.25W	Cavan, Taghart Wind Farm, Height: 411ft Elevation: 1283ft
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/East ICAO 1:250,000 Ed 9	525912.77N 0072051.33W	Laois, Colt Met Mast, Height: 328ft Elevation: 722ft
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/West ICAO 1:250,000 Ed 9	532139.32N 0091833.45W	Galway, Ardderroo Wind Farm, Height: 582ft Elevation: 1267ft
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/East ICAO 1:250,000 Ed 9	533636.30N 0061600.89W	Tobertaskin Airstrip decommission, Dublin.
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/East ICAO 1:250,000 Ed 9	525107.93N 0065549.93W	Carlow, Limekiln at old Irish Sugar Factory Site, Height: 201ft Elevation: 380ft
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/East ICAO 1:250,000 Ed 9	531222.60N 0075147.75W	Offaly, Cloghan Wind Farm, Height: 555ft Elevation: 752ft
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/East ICAO 1:250,000 Ed 9	531220.52N 0071557.96W	Offaly, Moanvane Windfarm, Height: 550ft Elevation: 806ft
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/South ICAO 1:250,000 Ed 9		Lough Currane, Co. Kerry. Position: 514952.35N 0100729.24W
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/East ICAO 1:250,000 Ed 9	532745.55N 0064039.32W	Meath, Summerhill Mast Removed, Height: 818ft Elevation: 1160ft
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/East ICAO 1:250,000 Ed 9	531642.19N 0072218.72W	Offaly, Ballingar Mast Removed, Height: 980ft Elevation: 1222ft
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/East ICAO 1:250,000 Ed 9	532742.06N 0064026.93W	Meath, Existing Summerhill Mast in place, Height: 97ft Elevation: 436ft
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/North ICAO 1:250,000 Ed 9	540811.26N 0071015.90W	Monaghan, Drumlins Wind Farm, Height: 591ft Elevation: 1060ft
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/East ICAO 1:250,000 Ed 9	530218.47N 0071707.51W	EIP8-Laois, Portlaoise Prison, Lat/Long Updated, Position: 530218.47N 0071707.51N, Height: GND, Elevation: 5000ft, Radius: 2NM
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/West ICAO 1:250,000 Ed 9	541957.60N 0081516.80W	Sligo, Unlit Mast, Height: 300ft Elevation: 1137ft
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/South ICAO 1:250,000 Ed 9		Cork, Glounthaune to Midleton Railway lines, Depiction of Railway Lines, Start Position: 515438.01N 0081921.47W Finish Position: 515516.05N 0081024.91W

Chart	Location	Correction
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/West ICAO 1:250,000 Ed 9	541144.54N 0093502.24W	Mayo, Sheskin Wind Farm, Height: 578ft Elevation: 985ft
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/East ICAO 1:250,000 Ed 9	532528.00N 0075652.00W	NEW EIR24-Westmeath, Custume Barracks, Athlone, Height: SFC, Elevation: 2000ft, Radius: 2NM
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/North ICAO 1:250,000 Ed 9	545322.50N 0075131.18W	Donegal, Lenalea Wind Farm, Height: 438ft Elevation: 1398ft
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/West ICAO 1:250,000 Ed 9	525936.30N 0092221.70W	Clare, Doonagore, Doolin, Lighted Mast added, Height: 148ft Elevation: 680ft
Aeronautical Chart ICAO 1:500,000 Ed 12	543830.24N 0061738.70W	Belfast Aldergrove and Langford Lodge Airfield Information Text incorrect on the 1/500,000 series chart
Aeronautical Chart ICAO 1:500,000 Ed 12 Aeronautical Chart/East ICAO 1:250,000 Ed 9	531913.9315N 0070302.3814W, 531723N 0070415W, 531333N 0070330W, 531219.2491N 0070021.6357W, Arc centre/EICL 531459N 0070724W, Radius of 5 nm	Clonbullogue (EICL) Parachute Area Revised Height: SFC Elevation: 4500ft

GEN 3.4 COMMUNICATION SERVICES

1. RESPONSIBLE SERVICE

The Aeronautical Communications Services in Ireland are administered by:

Post: AirNav Ireland,
The Times Building,
11-12 D'Olier Street,
Dublin 2.
D02 T449
Ireland

Phone: + 353 (0)1 671 8655

Fax: + 353 (0)1 679 2934

1.1 Applicable ICAO Documents

ICAO standards, Recommended Practices and Procedures contained in the following documents are applied (subject to any differences recorded in the Supplement there to).

- Annex 2 - Rules of the Air
- Annex 10 - Aeronautical Telecommunications
- Annex 11 - Air Traffic Services
- Annex 15 - Aeronautical Information Services
- DOC 4444 - Procedures for Air Navigation Services - Air Traffic Management (PANS-ATM)
- DOC 7030 - Regional Supplementary Procedures
- DOC 7910 - Location Indicators
- DOC 8400 - Abbreviations and Codes
- DOC 8585 - Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services
- Doc 9694 - Manual of Air Traffic Services (ATS) Data Link Applications. Global Air Navigation Plan for CNS/ ATM Systems (Doc 9750-AN/963,).
- Global Operational Data Link Document (GOLD)(DOC 10037)
- Satellite Voice Operations Manual (SVOM) (DOC 10038)

2. AREA OF RESPONSIBILITY

Aviation Communication, Navigation and Surveillance Services are provided for

2.1. The SHANNON Flight Information Region (FIR) and the SHANNON Upper Flight Information Region (UIR).

2.2. The SHANNON Oceanic Transition Area (SOTA) is an area of UK controlled airspace, where ATS is delegated through international agreement to the nominated ATS provider, The Irish Air Navigation Service who trade as AirNav Ireland.

2.3. The Northern Oceanic Transition Area (NOTA) is an area of UK controlled airspace, where ATS is delegated through international agreement to the nominated ATS provider, The Irish Air Navigation Service who trade as AirNav Ireland.

2.4. Aeronautical Communication Services in the SHANWICK Oceanic Control Area of the ICAO North Atlantic region are provided, through international agreement, by SHANWICK Aeradio, an aeronautical communications facility operated by AirNav Ireland.

The Aeronautical communications Facility is located at:

Post: SHANWICK Aeradio,
AirNav Ireland,
Ballygireen,
Newmarket-on-Fergus,
Co. Clare.
V95 E061
Ireland

Phone: + 353 61 471 199

Fax: + 353 61 472 528

3. TYPES OF SERVICE

3.1 Radio Navigation Services

- MF non-directional Beacon - (NDB)
- Fan-Marker - (MKR)
- Surveillance Radar - (SRH)
- Terminal Area Radar - (TAR)
- Instrument Landing System - (ILS)
- VHF Omnidirectional Radio Range - (VOR)
- Distance Measuring Equipment - (DME)
- Locator - (L)

3.2 Fixed Services

Messages to be transmitted over the Aeronautical Fixed Service are accepted only if they satisfy the relevant requirement of ICAO Annex 10.

Aircraft Operating Agencies having direct connection to the Irish AFTN are required, in accordance with the provisions of Annex 10, to retain copies of all messages transmitted by them for a period of thirty days.

The regulations governing the acceptance and handling of communications on the AFTN are contained in Annex 10 Vol. II Chapters 3 and 4.

3.3 SHANWICK Radio Aeronautical Mobile Radio telephony Operations in the North Atlantic Area (NAT)

- HF Aeromobile operations in the NAT are available for use in groups known as “families” and will be assigned as appropriate on first contact.
- As a general guide, the following frequency allocation principles are used;

Table 1:

NAT Frequency Allocation Principles	
Frequency Family	**Usage**
NAT A	Assigned to aircraft flying routes with reporting coordinates between 43N and 47N
NAT B & C	Assigned to aircraft flying routes with reporting coordinates between 47N and 64N. Primary assignment for aircraft flying central routes
NAT D	Assigned to aircraft flying routes with reporting coordinates north of 62N
NAT F	Assigned to aircraft flying routes entirely within the Gander and SHANWICK Areas. Assigned on a tactical basis and coordinated between SHANWICK Radio and Gander Radio
NAT H, I & J	Regional Domestic Air Route Area: Assigned on a tactical basis

- HF Families are designated as follows

Table 2:

SHANWICK Radio Frequencies And Hours Of Operation		
	Frequency	**Normal Hours of Operation***
NAT Family A	3016 kHz	0100-0900, 1800-2200
	5598 kHz	H24
	8906 kHz	0900-2100
	13306 kHz	As Required
NAT Family B	2899 kHz	0000-0900, 1800-2400
	5616 kHz	H24
	8864 kHz	0900-2100 Daily
	13291 kHz	As Required
NAT Family C	2872 kHz	0000-0900, 1800-2400
	5649 kHz	H24
	8879 kHz	0900-2100
	11336 kHz	As Required
	13306 kHz	As Required
NAT Family D	2971 kHz	0100-0800
	4675 kHz	0100-0800, 1100-1800
	8891 kHz	As Required
	11279 kHz	As Required
NAT Family F	3476 kHz	0100-0800 Daily
	6622 kHz	1000-1800 Daily
	8831 kHz	1000-1800 Daily
	13291 kHz	As Required
	17946 kHz	As Required
VHF GP Frequency	127.900 MHz	H24
	124.175 MHz	H24
	128.360**	H24

*This information is provided for guidance only. Hours of service of individual frequencies, or groups of frequencies, may vary as HF propagation conditions or operational requirements demand.

**Channel 128.360 is reserved for intervention or emergency purposes only for T9 and T290.
See UK AIP ENR 2.2.

- Additionally on a tactical basis, SHANWICK Radio operates Regional and Domestic Air Route Area (RDARA) frequencies. These frequencies are used individually or by common network agreement between the NAT Aeronautical Stations.

Table 3:

Regional Domestic Air Route Area (RDARA) Frequencies						
Family	**Frequencies**					
Family H	2965 kHz	3491 kHz	5583 kHz	6556 kHz	6667 kHz	10021 kHz
	10036 kHz	11363 kHz				
Family I	2860 kHz	2881 kHz	2890 kHz	3458 kHz	3473 kHz	3488 kHz
	5484 kHz	5568 kHz	6550 kHz	6595 kHz	10066 kHz	
Family J	2869 kHz	2944 kHz	2992 kHz	3446 kHz	3473 kHz	4651 kHz
	4666 kHz	4684 kHz	5460 kHz	5481 kHz	5559 kHz	5577 kHz
	6547 kHz	8954 kHz	11276 kHz			

3.4 SELCAL Operation in the NAT Region

During the time that they depended on HF communications, pilots should maintain a listening watch on the assigned frequency. This will not be necessary, however, if SECAL is fitted and used correct
Correct SELCAL use includes:

i. The provision of the SELCAL code in the flight plan:

ii. The issue of a correction to the SELCAL code if subsequently altered due to change of aircraft or equipment and

iii. A check on the operation of the SELCAL equipment at or prior to initial entry into oceanic airspace with the appropriate radio station. This SELCAL check must be completed prior to commencing SELCAL watch.

3.5 Use of VHF Channel 128.360

i. 128.360 is reserved for intervention or emergency purposes only on airways T9 and T290, and is to be continuously monitored to facilitate direct controller pilot communications by Shanwick OAC using the Shanwick Control Callsign.

ii. Prior to entering T9/T290 crews will be requested to monitor Channel 128.360 and shall continuously monitor the frequency while in the Shanwick OCA - there is no requirement to check in on frequency. In the event that Shanwick Radio need to contact an aircraft on this frequency they will use the Shanwick Radio Callsign.

iii. Routine communications, position reports, RCL or flight profile change requests are to be made directly to Shanwick Radio via assigned frequencies on HF

iv. For full conditions of use refer to UK AIP ENR 2.2

3.6 Broadcasting Service

Meteorological Broadcasts designed primarily for aircraft in flight are provided on HF and VHF.
Full details are given in GEN 3.5

3.7 Satellite Voice Services

Pilots of suitably equipped aircraft on North Atlantic (NAT) routes may contact SHANWICK Radio via satellite telephone (SATVOICE). Access Code is 425002.

3.8

SHANWICK Radio also have the HF SAR frequencies 2182 kHz, 3023 kHz and 5680 kHz for co-ordination purposes with SAR/Coastguard aircraft as Scene of Search frequencies.

3.9 Controller Pilot Data Link Communication Services (CPDLC)

Limited Controller Pilot Data Link Communication Services (CPDLC) for suitably equipped aircraft will be available for use in areas of the SHANNON Upper Airspace (SHANNON UIR), NOTA & SOTA under the responsibility of SHANNON ACC.

3.9.1 COMMUNICATION INFRASTRUCTURE

The introduction and Implementation of CPDLC Data Link Service in areas of the SHANNON UIR, NOTA & SOTA, will provide a limited CPDLC message set for FANS 1/A and ATN equipped aircraft.

The initial SHANNON UAC ground communications will be provided by ARINC Communication Service Provider.

SITA airline customers can avail of the SHANNON ACC CPDLC service via the SITA-ARINC ground-ground communications gateway. The address for SHANNON Control CPDLC is EISN

3.9.2 MESSAGES

The following uplink/downlink messages are accommodated by SHANNON.

Message	Description	FANS	ATN
UM0	UNABLE	Yes	Yes
UM1	STANDBY	Yes	Yes
UM3	ROGER	Yes	Yes
UM237	REQUEST AGAIN WITH NEXT ATC UNIT	N/A – Accommodated as UM169	Yes
UM19	MAINTAIN [level]	No	Yes
UM20	CLIMB TO [level]	Yes	Yes
UM23	DESCEND TO [level]	Yes	Yes
UM74	PROCEED DIRECT TO [position]	Yes	Yes
UM79	PROCEED TO [position] VIA [position]	Yes	Yes
UM117	CONTACT [unitname frequency]	Yes	Yes
UM123	SQUAWK [code]	Yes	Yes
UM157	CHECK STUCK MICROPHONE [frequency]	Yes	Yes
UM159	ERROR [errorinformation]	Yes	Yes
UM160	NEXT DATA AUTHORITY	Yes	Yes
UM161	END SERVICE	Yes	N/A
UM162	SERVICE UNAVAILABLE	N/A accommodated using UM159 ERROR+ UM169 freetext MESSAGE NOT SUPPORTED BY THIS ATC UNIT	Yes
UM163	[icaofacilitydesignation]	Yes	N/A
UM169	[freetext]	Yes	Yes
UM179	SQUAWK IDENT	Yes	Yes
UM183	[freetext]	N/A – accommodated as UM169	Yes
UM227	LOGICAL ACKNOWLEDGEMENT	N/A	Yes

Message	Description	FANS	ATN
DM0	WILCO	Yes	Yes
DM1	UNABLE	Yes	Yes
DM2	STANDBY	Yes	Yes
DM3	ROGER	Yes	Yes
DM6	REQUEST [level]	Yes	Yes
DM9	REQUEST CLIMB TO [level]	Yes	Yes
DM10	REQUEST DESCENT TO [level]	Yes	Yes
DM22	REQUEST DIRECT TO [position]	Yes	Yes

Message	Description	FANS	ATN
DM48	POSITION REPORT [positionreport]	Yes	Yes
DM55	PAN PAN PAN	Yes	Yes
DM56	MAYDAY MAYDAY MAYDAY	Yes	Yes
DM62	ERROR [errorinformation]	Yes	Yes
DM63	NOT CURRENT DATA AUTHORITY	Yes	Yes
DM64	[icaofacilitydesignation]	Yes	N/A
DM65	DUE TO WEATHER	Yes	Yes
DM66	DUE TO AIRCRAFT PERFORMANCE	Yes	Yes
DM73	[versionnumber]	Yes	N/A
DM89	MONITORING [unitname][frequency]	Yes	Yes
DM98	[freetext]	N/A	Yes
DM99	CURRENT DATA AUTHORITY	N/A	Yes
DM100	LOGICAL ACKNOWLDEDGEMENT	N/A	Yes
DM107	NOT AUTHORISED NEXT DATA AUTHORITY	N/A	Yes
DM112	SQUAWKING 7500	N/A	Yes

3.9.3 CPDLC SERVICES

ATS Data Link CPDLC will be implemented by SHANNON in the airspace above FL285 in the SHANNON UIR, SOTA and NOTA but may be available in certain sectors from FL160 and above.

In this airspace voice communications and voice instructions shall have precedence over data link communications at all times.

NOTE: With the exception of the requirements outlined in the section **"Aircraft entering from the SHANWICK Area"** No voice read-backs are required for CPDLC messages.

Aircraft departing EI airports

Aircraft departing from Irish airports and planning to enter the SHANNON UIR, SOTA and NOTA above FL285 are requested to only LOG ON climbing through FL160.

Aircraft entering from the SHANWICK area

SHANWICK system shall automatically send the NDA (Next Data Authority) message, followed by the contact advisory (FN-CAD) message to the flight 18 minutes prior to the transfer of control point. This instructs the avionics to logon to SHANNON making SHANNON the Next Data Authority (NDA.). Aircraft will receive the CPDLC connection request (corresponds to IMI CR1 "Connect Request" including the UM163 [icaofacilitydesignation] prior to the SHANNON Boundary. Flights entering SHANNON airspace from Oceanic Airspace will receive a UM123 (Squawk Code) message before the oceanic boundary. The up linked code shall be regarded as valid.
Aircraft shall then try to establish voice communications with SHANNON on the assigned SHANNON Frequency in order to make the required position report. Flights shall include their current Flight Level and uplinked ASSR also for verification by SHANNON Control on first contact on the assigned frequency.

Westbound aircraft entering SHANNON **UIR**/**SOTA** and **NOTA**

Westbound aircraft entering SHANNON UIR, SOTA and NOTA, which are not logged onto another ANSP may log on 5 minutes before the SHANNON boundary. Logged on Aircraft will automatically be offered a CPDLC connection (ATN: the CPDLC connection request corresponds to CPDLC_Start_Request) (FANS: the CPDLC connection request corresponds to IMI CR1 "Connect Request" including the UM163 [icaofacilitydesignation]) prior to the SHANNON boundary. Except for exceptional circumstances, SHANNON shall not uplink messages until aircraft are under the control of SHANNON Control.

Aircraft connected to EISN, routing into Oceanic airspace

For flights connected to SHANNON (EISN) with SHANWICK (EGGX) as next ATC unit a message (UM160)shall be sent by SHANNON to the flight advising of the NDA (next data authority) 18 minutes prior to the boundary. At 17 minutes prior to the boundary a FN_CAD (FN Contact Advisory) will be sent to FANS connected flights specifying the next ATC unit with which the aircraft has to initiate data link logon.

Aircraft connected to EISN and contacting SHANWICK Radio.

SHANNON will transfer suitably equipped aircraft to SHANWICK Radio, via message (UM117) CONTACT [unitname frequency]. SHANWICK Radio will assign an appropriate secondary frequency on first contact.
In the event that crews do not establish contact on the assigned primary frequency attempt to contact on a published frequency as per
GEN 3.4 Table 2 or using the table below.

Frequency	Opening Hours
2872KHZ	0000-0800,1900-2400
5649KHZ	H24
8879KHZ	0800-1200
124.175MHZ	H24

Emergency Messages

The use of CPDLC to indicate emergency situations shall only be used if other methods are not possible/available.

Transition from ATN to FANS for Westbound Oceanic traffic

Westbound Oceanic Aircraft that are connected to SHANNON CPDLC on FANS will receive both an NDA and a contact advisory message (FN-CAD) for SHANWICK Oceanic control.
Westbound Oceanic aircraft that are connected to the ATN network will not be nominated to SHANWICK by SHANNON. Flight crew will be required to Disconnect from SHANNON and log onto SHANWICK manually.

"Important Notes"

IF A FLIGHT CREW HAS ANY DOUBT REGARDING THE CONTENT, VALIDITY OR EXECUTION OF A CPDLC MESSGE THEY MUST REVERT TO VOICE IMMEDIATELY TO CLARIFY THE SITUATION.

Flight crews must ensure that upon receiving an uplink message, the CPDLC address corresponds to the unit name to which the flight is in voice communications.
If a CPDLC instruction is superseded by a voice instruction, in order to avoid a time-out the flight crew are requested to respond 'UNABLE' to close the original CPDLC dialogue and follow the voice instruction.
Controllers may be required to respond to a downlink request with 'UNABLE' to close dialogue.
Due to the potential for FANS message duplication flight crew are requested to report any suspected instances of duplicated CPDLC messages to ATC on the assigned frequency.

3.9.4 DATA LINK EXEMPTIONS AND FLIGHT PLANS

Aircraft which are not required to be CPDLC equipped (Commission Regulation (EC) No. 29/2009, is not applicable in accordance with Article 3(3), or aircraft types/models are exempted by Commission Implementing Decision 2019/2012) shall include the letter "Z" in item 10 and the indicator "DAT/CPDLCX" in item 18 of each flight plan.

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ENR 1.10 FLIGHT PLANNING

The following documentation should be referred to prior to filing a flight plan

- EU Reg. No 923/2012 - Section 4 Flight plans SERA.4001 Submission of a flight plan.
- ICAO DOC 4444 ATM/501 Air Traffic Management.
- ICAO DOC 7030 Regional Supplementary Procedures (Part: EUR).
- Network Operations HANDBOOK and Integrated Initial Flight Plan Processing System (IFPS) Users Manual

1. REQUIREMENT FOR THE SUBMISSION OF A FLIGHT PLAN

1.1 A flight plan shall be submitted in accordance with the above prior to operating,

a. Any flight or portion thereof to be provided with air traffic control service;

b. any IFR flight within advisory airspace;

c. any flight within or into designated areas, joining designated routes, when so required by the appropriate ATS authority to facilitate the provision of flight information, alerting and search and rescue services;

d. any flight within or into designated areas, or joining designated routes, when so required by the appropriate ATS authority to facilitate co-ordination with appropriate military units or with air traffic services units or with air traffic services units in adjacent states in order to avoid the possible need for interception for the purpose of identification;

e. any flight across international borders;

f. within the State, for any flight of which at least a total of 30 nautical miles is over water.

1.2 *VFR flight plan for alerting service only*

An alerting service is, in principle, provided to flights for which a flight plan has been submitted

1.3 Adherence to Airspace Utilization Rules and Availability
No Flight plans shall be filed via the airspace of EISN FIR/UIR or ACC/UAC or CTA/UTA deviating from the state restrictions defined within the route availability document (RAD). This common European Reference Document contains all airspace utilization rules and availability for EISN FIR/UIR or ACC/UAC or CTA/UTA and any reference to them shall be made via

URL: https://www.nm.eurocontrol.int/RAD/index.html

2. CONTENTS AND FORM SUBMISSION OF A FLIGHT PLAN

ICAO flight plan forms are available at ARO's.
The instructions for completing these forms shall be followed.

- A flight plan may be submitted by Telefax on condition that the flight plan is forwarded on an ICAO form.
- A flight plan may be submitted by Email on condition that the flight plan is forwarded on an ICAO form, or that the message complies with AFTN format.
- When filing a flight plan by telephone the sequence of items in the flight plan form shall be strictly followed

3. TIME OF SUBMISSION

Flight plans relating to flights which may be subject to ATFM regulation or which intend to operate in the North Atlantic area (NAT) shall be submitted at least 3 hours before EOBT and may be submitted up to 120 hours before EOBT provided the Date of Flight is included in item 18 of the ICAO flight plan form.

Flight plans for flights other than those described above should be submitted at least 30 MIN before EOBT.

4. PLACE OF SUBMISSION

4.1 IFR or IFR/VFR Flight Plans

Responsibility for the reception, checking, initial processing and distribution of flight plan data relating to IFR GAT flights originating within the SHANNON FIR or overflying the SHANNON FIR, UIR or SOTA/NOTA has been delegated to the IFPS.

IFPS is the sole source for the distribution of IFR GAT flight plan information to ATS units within the IFPS Zone. The Network Manager Flight Planning area provides a flight plan validation service as well as a flight plan management and route finding service for secure access users.

https://www.public.nm.eurocontrol.int/PUBPORTAL/gateway/spec/index.html
https://contentzone.eurocontrol.int/FPL/default.aspx
IFPS also provides the flight plan data necessary for the operation of the Air Traffic Flow Management (ATFM) elements of the CFMU.

Flight plans can be submitted at the Air Traffic Service Reporting Office (ARO) at the departure aerodrome.

Aircraft Operators who have appropriate facilities for communications with IFPS may submit flight plans and associated messages, for flights departing from aerodromes within the SHANNON FIR, or over flying the SHANNON FIR, UIR, SOTA or NOTA directly to the IFPS. This “Direct Filing” is the preferred procedure.

Air Filed Flight Plans (AFIL)

ATS Unit will accept flight plans from aircraft in the air. This procedure (AFIL) should only be used when no other means of submission is practicable.
Flights requesting AFIL may be required to remain clear of controlled airspace until such time as the concerned ATS Unit has sufficient time to accept and process the message.
Rejection of such a flight plan by IFPS may result in subsequent and significant delay to the concerned flight.

Responsibility for Flight Plan Submission (IFR or IFR/VFR flights)

Aircraft Operators (AO) are responsible for all matters associated with the submission of IFR flight plans and associated messages (including correct compilation and submission in addition to reception of IFPS Operational Reply Messages.

IFPS OPERATIONAL REPLY MESSAGES (ORM)

- AO who use the direct filing procedure receive ORM directly from IFPS.
- AO who file through an ARO may – if the AO AFTN/SITA address is known to IFPS – receive ORM directly from IFPS. The ORM will also be sent systematically by IFPS to the ARO Office, which originally transmitted the message to IFPS.

It is the sole responsibility of the AO to make suitable arrangements to determine the contents of ORM and to respond to them accordingly. This responsibility applies regardless of the method used to submit the flight plan.

4.2 VFR Flight Plans

In the case of flights involving a mix of VFR and IFR rules, the procedures relating to flight plan submission for IFR flights must be followed. The addresses of ATS Units affected by VFR portions of the flight must be included in addition to the two IFPS addresses. The re-addressing function may be used to satisfy this requirement.
It is essential that the point on the route where the change of rules is intended to take place is identified correctly in the route field of the flight plan.
Flight plans can be submitted at the Air Traffic Service Reporting Office (ARO) at the departure aerodrome.

Air Filed Flight Plans (AFIL)

ATS Unit will accept flight plans from aircraft in the air, however this procedure (AFIL) should only be used when no other means of submission is practicable.
Flights requesting AFIL may be required to remain clear of controlled airspace until such time as the concerned ATS Unit has sufficient time to accept and process the message.
Note: IFPS does not handle flight plans relating to flights conducted totally in accordance with VFR flight rules, therefore the addresses of the two IFPS units should not be entered on such flight plans.
In the absence of such an office at the departure aerodrome, a flight plan shall be submitted by AFS, Email, Telefax, or in extreme circumstances by telephone to the ARO listed below:

National Air Traffic Services Reporting Office (ARO)

Post: Aeronautical Information Service,
AirNav Ireland,
Ballycasey Cross,
Shannon,
Co. Clare,
V14 C446,
Ireland.

Phone: + 353 (0)61 703 750

Fax: + 353 (0)61 366 245

Email: aisops@airnav.ie

AFS: EINNZPZX

5. COMPLETION OF AN ICAO FLIGHT PLAN AND RELATED MESSAGES

5.1 ICAO Flight Plan

1. General

   Adhere closely to the prescribed formats and manner of specifying data.

   Commence inserting data in the first space provided. Where excess space is available, leave unused spaces blank.

   Insert all clock times in 4 figures UTC.

   Insert all estimated elapsed times in 4 figures (hours and minutes).

   Shaded area preceding Item 3 — to be completed by ATS and COM services, unless the responsibility for originating flight plan messages has been delegated.

   Note.— The term "aerodrome" where used in the flight plan is intended to cover also sites other than aerodromes which may be used by certain types of aircraft, e.g. helicopters or balloons.

2. Instructions for insertion of ATS data

   Complete Items 7 to 18 as indicated hereunder.

   Complete also Item 19 as indicated hereunder, when so required by the appropriate ATS authority or when otherwise deemed necessary.

   Note 1.— Item numbers on the form are not consecutive, as they correspond to Field Type numbers in ATS messages.

   Note 2.— Air traffic services data systems may impose communications or processing constraints on information in filed flight plans. Possible constraints may, for example, be limits with regard to item length, number of elements in the route item or total flight plan length. Significant constraints are documented in the relevant Aeronautical Information Publication.

3. Filed by

   INSERT the name of the unit, agency or person filing the flight plan.

4. Acceptance of the flight plan

   Indicate acceptance of the flight plan in the manner prescribed by the appropriate ATS authority.

5. Instructions for insertion of COM data Items to be completed

   COMPLETE the top two shaded lines of the form, and COMPLETE the third shaded line only when necessary, in accordance with the provisions in PANS-ATM, Chapter 11, 11.2.1.2, unless ATS prescribes otherwise.

Item 7 **AIRCRAFT IDENTIFCATION (MAXIMUM 7 CHARACTERS)**

INSERT one of the following aircraft identifications, not exceeding 7 alphanumeric characters and without hyphens or symbols:

a. the ICAO designator for the aircraft operating agency followed by the flight identification (e.g. KLM511, NGA213, JTR25) when in radiotelephony the call sign to be used by the aircraft will consist of the ICAO telephony designator for the operating agency followed by the flight identification (e.g. KLM511, NIGERIA 213, JESTER 25); Or

b. the nationality or common mark and registration mark of the aircraft (e.g. EIAKO, 4XBCD, N2567GA), when:

   1. in radiotelephony the call sign to be used by the aircraft will consist of this identification alone (e.g. CGAJS), or preceded by the ICAO telephony designator for the aircraft operating agency (e.g. BLIZZARD CGAJS);
   2. the aircraft is not equipped with radio

Note 1. — Standards for nationality, common and registration marks to be used are contained in Annex 7, Chapter 2.

Note 2. — Provisions for the use of radiotelephony call signs are contained in Annex 10, Volume II, Chapter 5. ICAO designators and telephony designators for aircraft operating agencies are contained in Doc 8585 — Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services.

Item 8 **FLIGHT RULES AND TYPE OF FLIGHT (ONE OR TWO CHARACTERS)**

Flight rules

INSERT one of the following letters to denote the category of flight rules with which the pilot intends to comply:

I	if it is intended that the entire flight will be operated under the IFR
V	if it is intended that the entire flight will be operated under the VFR
Y	if the flight initially will be operated under the IFR, followed by one or more subsequent changes of flight rules*
Z	if the flight initially will be operated under the VFR, followed by one or more subsequent changes of flight rules*
	*** Specify in Item 15 the point or points at which a change of flight rules is planned.**

Type of flight

INSERT one of the following letters to denote the type of flight when so required by the appropriate ATS authority:

S	if scheduled air service
N	if non-scheduled air transport operation
G	if general aviation
M	if military
X	if other than any of the defined categories above.

Specify status of a flight following the indicator STS in Item 18, or when necessary to denote other reasons for specific handling by ATS, indicate the reason following the indicator RMK in Item 18.

Item 9 **NUMBER AND TYPE OF AIRCRAFT AND WAKE TURBULENCE CATEGORY**

Number of aircraft
(1 or 2 characters)

INSERT the number of aircraft, if more than one

Type of aircraft
(2 to 4 characters)

INSERT the appropriate designator as specified in ICAO Doc 8643, Aircraft Type Designators,
OR, if no such designator has been assigned, or in case of formation flights comprising more than one type,
INSERT ZZZZ, and SPECIFY in Item 18, the (numbers and) type(s) of aircraft preceded by TYP/.

Wake turbulence category
(1 character)

INSERT an oblique stroke followed by one of the following letters to indicate the wake turbulence category of the aircraft:

H	HEAVY to indicate an aircraft type with a maximum certificated take-off mass of 136 000 kg or more;
M	MEDIUM to indicate an aircraft type with a maximum certificated take-off mass of less than 136 000 kg but more than 7 000 kg;
L	LIGHT to indicate an aircraft type with a maximum certificated take-off mass of 7 000 kg or less.

Item 10 **EQUIPMENT AND CAPABILITIES**

Capabilities comprise the following elements:

a. presence of relevant serviceable equipment on board the aircraft;

b. equipment and capabilities commensurate with flight crew qualifications; and

c. where applicable, authorization from the appropriate authority.

Radio communication, navigation and approach aid equipment and capabilities

INSERT one letter as follows:

N	if no COM/NAV/approach aid equipment for the route to be flown is carried, or the equipment is unserviceable, Or
S	if standard COM/NAV/approach aid equipment for the route to be flown is carried and serviceable (see Note 1), And/Or

INSERT one or more of the following letters to indicate the serviceable COM/NAV/approach aid equipment and capabilities available:

A	GBAS landing system	J7	CPDLC FANS 1/A SATCOM (Iridium)
B	LPV (APV with SBAS)	K	MLS
C	LORAN C	L	ILS
D	DME	M1	ATC RTF SATCOM (INMARSAT)
E1	FMC WPR ACARS	M2	ATC RTF (MTSAT)
E2	D-FIS ACARS	M3	ATC RTF (Iridium)
E3	PDC ACARS	O	VOR
F	ADF	P1 - P9	Reserved for RCP
G	GNSS (See Note 2)	R	PBN approved (See Note 4)
H	HF RTF	T	TACAN
I	Inertial Navigation	U	UHF RTF
J1	CPDLC ATN VDL Mode 2 (See Note 3)	V	VHF RTF
J2	CPDLC FANS 1/A HFDL	W	RVSM approved
J3	CPDLC FANS 1/A VDL Mode 4	X	MNPS approved
J4	CPDLC FANS 1/A VDL Mode 2	Y	VHF with 8.33 kHz channel spacing capability
J5	CPDLC FANS 1/A SATCOM (INMARSAT)	Z	Other equipment carried or other capabilities (See Note 5)
J6	CPDLC FANS 1/A SATCOM (MTSAT)		
Any alphanumeric characters not indicated above are reserved			

Note 1.— If the letter S is used, standard equipment is considered to be VHF RTF, VOR and ILS, unless another combination is prescribed by the appropriate ATS authority.

Note 2.— If the letter G is used, the types of external GNSS augmentation, if any, are specified in Item 18 following the indicator NAV/ and separated by a space.

Note 3.— See RTCA/EUROCAE Inter-operability Requirements Standard for ATN Baseline 1 (ATN B1 INTEROP Standard – DO-280B/ED-110B) for data link services air traffic control clearance and information/air traffic control communications management/air traffic control microphone check.

Note 4.— If the letter R is used, the performance-based navigation levels that can be met are specified in Item 18 following the indicator PBN/. Guidance material on the application of performance-based navigation to a specific route segment, route or area is contained in the Performance-based Navigation (PBN) Manual (Doc 9613).

Note 5.— If the letter Z is used, the other equipment carried or other capabilities shall be specified in item 18.preceded by “COM/”, “NAV/”, and/or “DAT/”, as appropriate. Exemptions for CPDLC and 8.33KHZ are to be indicated by inserting the letter Z in item 10a and then inserting the appropriate descriptors in the following indicators in item 18 (“DAT/CPDLCX or “COM/EXM833”)

Note 6.— Information on navigation capability is provided to ATC for clearance and routing purposes.

Surveillance equipment and capabilities

INSERT N

if no surveillance equipment for the route to be flown is carried, or the equipment is unserviceable,
OR

INSERT one or more of the following descriptors, to a maximum of 20 characters, to describe the serviceable surveillance equipment and/or capabilities on board:

SSR Modes A and C	
A	Transponder Mode A (4 digits — 4 096 codes)
C	Transponder Mode A (4 digits — 4 096 codes) and Mode C

SSR Mode S	
E	Transponder Mode S, including aircraft identification, pressure-altitude and extended squitter (ADS-B) capability
H	Transponder Mode S, including aircraft identification, pressure-altitude and enhanced surveillance capability
I	Transponder Mode S, including aircraft identification, but no pressure-altitude capability
L	Transponder Mode S, including aircraft identification, pressure-altitude, extended squitter (ADS-B) and enhanced surveillance capability
P	Transponder Mode S, including pressure-altitude, but no aircraft identification capability
S	Transponder Mode S, including both pressure altitude and aircraft identification capability
X	Transponder Mode S with neither aircraft identification nor pressure-altitude capability
Note.— Enhanced surveillance capability is the ability of the aircraft to down-link aircraft derived data via a Mode S transponder.	

ADS-B	
B1	ADS-B with dedicated 1 090 MHz ADS-B “out” capability
B2	ADS-B with dedicated 1 090 MHz ADS-B “out” and “in” capability
U1	ADS-B “out” capability using UAT
U2	ADS-B “out” and “in” capability using UAT
V1	ADS-B “out” capability using VDL Mode 4
V2	ADS-B “out” and “in” capability using VDL Mode 4

ADS-C	
D1	ADS-C with FANS 1/A capabilities
G1	ADS-C with ATN capabilities

Alphanumeric characters not indicated above are reserved.

Example: ADE3RV/HB2U2V2G1

Note.— Additional surveillance application should be listed in Item 18 following the indicator SUR/.

Item 13 DEPARTURE AERODROME AND TIME
(8 CHARACTERS)

INSERT the ICAO four-letter location indicator of the departure aerodrome as specified in Doc 7910, Location Indicators,
OR, if no location indicator has been assigned,
INSERT ZZZZ and SPECIFY, in Item 18, the name and location of the aerodrome preceded by DEP/,
OR, the first point of the route or the marker radio beacon preceded by DEP/…, if the aircraft has not taken off from the aerodrome,
OR, if the flight plan is received from an aircraft in flight,
INSERT AFIL, and SPECIFY, in Item 18, the ICAO four-letter location indicator of the location of the ATS unit from which supplementary flight plan data can be obtained, preceded by DEP/.
THEN, WITHOUT A SPACE,
INSERT for a flight plan submitted before departure, the estimated off-block time (EOBT),
OR, for a flight plan received from an aircraft in flight, the actual or estimated time over the first point of the route to which the flight plan applies.

Item 15 **ROUTE**

INSERT the first cruising speed as in (a) and the first cruising level as in (b), without a space between them.
THEN, following the arrow,
INSERT the route description as in (c).

a. **Cruising speed**
(maximum 5 characters)

INSERT the True airspeed for the first or the whole cruising portion of the flight, in terms of:

•Kilometres per hour, expressed as K followed by 4 figures (e.g. K0830), or
•Knots, expressed as N followed by 4 figures (e.g. N0485), or
•True Mach number, when so prescribed by the appropriate ATS authority, to the nearest hundredth of unit Mach, expressed as M followed by 3 figures (e.g. M082).

b. **Cruising level**
(maximum 5 characters)

INSERT the planned cruising level for the first or the whole portion of the route to be flown, in terms of:

• Flight level, expressed as F followed by 3 figures (e.g. F085; F330), or
• *Standard metric level in tens of metres, expressed as S followed by 4 figures (e.g. S1130), or
• * When so prescribed by the appropriate ATS authorities.
• Altitude in hundreds of feet, expressed as A followed by 3 figures (e.g. A045; A100), or
• Altitude in tens of metres, expressed as M followed by 4 figures (e.g. M0840), or
• for uncontrolled VFR flights, the letters VFR.

c. **Route**
(including changes of speed, level and/or flight rules)

Flights along designated ATS routes

INSERT, if the departure aerodrome is not on or connected to the ATS route, the letters DCT followed by the point of joining the first ATS route, followed by the designator of the ATS route.
THEN **INSERT** each point at which either a change of speed and/or level is planned to commence, or a change of ATS route, and/or a change of flight rules is planned,
Note. When a transition is planned between a lower and upper ATS route and the routes are oriented in the same direction, the point of transition need not be inserted.
FOLLOWED IN EACH CASE
by the designator of the next ATS route segment, even if the same as the previous one,
OR by DCT, if the flight to the next point will be outside a designated route, unless both points are defined by geographical coordinates.

Flights outside designated ATS routes

INSERT points normally not more than 30 minutes flying time or 370 km (200 NM) apart, including each point at which a change of speed or level, a change of track, or a change of flight rules is planned.
OR, when required by appropriate ATS authority(ies),
DEFINE the track of flights operating predominantly in an east-west direction between 70ºN and 70ºS by reference to significant points formed by the intersections of half or whole degrees of latitude with meridians spaced at intervals of 10 degrees of longitude. For flights operating in areas outside those latitudes the tracks shall be defined by significant points formed by the intersection of parallels of latitude with meridians normally spaced at 20 degrees of longitude. The distance between significant points shall, as far as possible, not exceed one hours flight time. Additional significant points shall be established as deemed necessary.
For flights operating predominantly in a north-south direction, define tracks by reference to significant points formed by the intersection of whole degrees of longitude with specified parallels of latitude which are spaced at 5 degrees.
INSERT DCT between successive points unless both points are defined by geographical coordinates or by bearing and distance.

USE ONLY the conventions in (1) to (5) below and SEPARATE each sub-item by a space.

ATS route (2 to 7 characters)

The coded designator assigned to the route or route segment including, where appropriate, the coded designator assigned to the standard departure or arrival route (e.g. BCN1, BI, R14, UB10, KODAP2A).

Note. Provisions for the application of route designators are contained in Annex 11, Appendix 1.

Significant point (2 to 11 characters)

The coded designator (2 to 5 characters) assigned to the point (e.g. LN, MAY, HADDY),
or, if no coded designator has been assigned, one of the following ways:

Degrees only (7 characters):

2 figures describing latitude in degrees, followed by N (North) or S (South), followed by 3 figures describing longitude in degrees, followed by E (East) or W (West). Make up the correct number of figures, where necessary, by insertion of zeros, e.g. 46N078W

Degrees and minutes (11 characters):
4 figures describing latitude in degrees and tens and units of minutes followed by N (North) or S (South), followed by 5 figures describing longitude in degrees and tens and units of minutes, followed by E (East) or W (West). Make up the correct number of figures, where necessary, by insertion of zeros, e.g. 4620N07805W.

Bearing and distance from a reference point:

The identification of the reference point, followed by the bearing from the point in the form of 3 figures giving degrees magnetic, followed by the distance from the point in the form of 3 figures expressing nautical miles. In areas of high latitude where it is determined by the appropriate authority that reference to degrees magnetic is impractical, degrees true may be used. Make up the correct number of figures, where necessary, by insertion of zeros. e.g. a point 180º magnetic at a distance of 40 nautical miles from VOR DUB should be expressed as DUB180040.

Change of speed or level (maximum 21 characters)

The point at which a change of speed (5% TAS or 0.01 Mach or more) or a change of level is planned to commence, expressed exactly as in (2) above, followed by an oblique stroke and both the cruising speed and the cruising level, expressed exactly as in (a) and (b) above, without a space between them, even when only one of these quantities will be changed.
Examples: LN/N0284A045
MAY/N0305Fl80
HADDY/N0420F330
4602N07805W/N0500F350
46N078W/M082F330
DUB180040/N0350M0840

Change of flight rules (maximum 3 characters)

The point at which the change of flight rules is planned, expressed exactly as in (2) or (3) above as appropriate, followed by a space and one of the following:
• VFR if from IFR to VFR
• IFR if from VFR to IFR
Examples: LN VFR
LN/N0284A050 IFR

Cruise climb (maximum 28 characters)

The letter C followed by an oblique stroke; THEN the point at which cruise climb is planned to start, expressed exactly as in (2) above, followed by an oblique stroke; THEN the speed to be maintained during cruise climb, expressed exactly as in (a) above, followed by the two levels defining the layer to be occupied during cruise climb, each level expressed exactly as in (b) above, or the level above which cruise climb is planned followed by the letters PLUS, without a space between them.
Examples: C/48N050W/M082F290F350
C/48N050W/M082F290PLUS
C/52N050W/M220F580F620.

Item 16 DESTINATION AERODROME AND TOTAL ESTIMATED ELAPSED TIME, DESTINATION ALTERNATE AERODROME(S)

Destination aerodrome and total estimated elapsed time
(8 characters)

INSERT the ICAO four-letter location indicator of the destination aerodrome as specified in Doc 7910, Location Indicators,
OR, if no location indicator has been assigned,

INSERT ZZZZ and SPECIFY in Item 18 the name and location of the aerodrome, preceded by DEST/.
THEN WITHOUT A SPACE
INSERT the total estimated elapsed time.

Note. — For a flight plan received from an aircraft in flight, the total estimated elapsed time is the estimated time from the first point of the route to which the flight plan applies to the termination point of the flight plan.

Destination alternate aerodrome(s)

INSERT the ICAO four-letter location indicator(s) of not more than two destination alternate aerodromes, as specified in Doc 7910, Location Indicators, separated by a space,
OR, if no location indicator has been assigned to the destination alternate aerodrome(s),
INSERT ZZZZ and SPECIFY in Item 18 the name and location of the destination alternate aerodrome(s), preceded by ALTN/.

Item 18 **OTHER INFORMATION**

Note. — Use of indicators not included under this item may result in data being rejected, processed incorrectly or lost.

Hyphens or oblique strokes should only be used as prescribed below.

INSERT 0 (zero) if no other information,

OR, any other necessary information in the sequence shown hereunder, in the form of the appropriate indicator selected from those defined hereunder followed by an oblique stroke and the information to be recorded:

STS/	Reason for special handling by ATS, e.g. a search and rescue mission, as follows
ALTRV	for a flight operated in accordance with an altitude reservation;
ATFMX	for a flight approved for exemption from ATFM measures by the appropriate ATS authority;
FFR	fire-fighting;
FLTCK	flight check for calibration of navaids;
HAZMAT	for a flight carrying hazardous material;
HEAD	a flight with Head of State status;
HOSP	for a medical flight declared by medical authorities;
HUM	for a flight operating on a humanitarian mission;
MARSA	for a flight for which a military entity assumes responsibility for separation of military aircraft;
MEDEVAC	for a life critical medical emergency evacuation;
NONRVSM	for a non-RVSM capable flight intending to operate in RVSM airspace;
SAR	for a flight engaged in a search and rescue mission;
STATE	for a flight engaged in military, customs or police services.
Other reasons for special handling by ATS shall be denoted under the designator RMK/.	

PBN/ Indication of RNAV and/or RNP capabilities.

Include as many of the descriptors below, as apply to the flight, up to a maximum of 8 entries, i.e. a total of not more than 16 characters.

RNAV SPECIFICATIONS	
A1	RNAV 10 (RNP 10)
B1	RNAV 5 all permitted sensors
B2	RNAV 5 GNSS
B3	RNAV 5 DME/DME
B4	RNAV 5 VOR/DME
B5	RNAV 5 INS or IRS
B6	RNAV 5 LORANC
C1	RNAV 2 all permitted sensors

RNAV SPECIFICATIONS	
C2	RNAV 2 GNSS
C3	RNAV 2 DME/DME
C4	RNAV 2 DME/DME/IRU
D1	RNAV 1 all permitted sensors
D2	RNAV 1 GNSS
D3	RNAV 1 DME/DME
D4	RNAV 1 DME/DME/IRU

RNP SPECIFICATIONS	
L1	RNP 4
O1	Basic RNP 1 all permitted sensors
O2	Basic RNP 1 GNSS
O3	Basic RNP 1 DME/DME
O4	Basic RNP 1 DME/DME/IRU
S1	RNP APCH
S2	RNP APCH with BARO-VNAV
T1	RNP AR APCH with RF (special authorization required)
T2	RNP AR APCH without RF (special authorization required)

Combinations of alphanumeric characters not indicated above are reserved.

NAV/ Significant data related to navigation equipment, other than specified in PBN/, as required by the appropriate ATS authority. Indicate GNSS augmentation under this indicator, with a space between two or more methods of augmentation, e.g. NAV/GBAS SBAS.

COM/ Indicate communications applications or capabilities not specified in Item 10 a).

DAT/ Indicate data applications or capabilities not specified in 10 a).

SUR/ Include surveillance applications or capabilities not specified in Item 10 b).

DEP/ Name and location of departure aerodrome, if ZZZZ is inserted in Item 13, or the ATS unit from which supplementary flight plan data can be obtained, if AFIL is inserted in Item 13. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location as follows:
With 4 figures describing latitude in degrees and tens and units of minutes followed by “N” (North) or “S” (South), followed by 5 figures describing longitude in degrees and tens and units of minutes, followed by “E” (East) or “W” (West). Make up the correct number of figures, where necessary, by insertion of zeros, e.g. 4620N07805W (11 characters).
OR, Bearing and distance from the nearest significant point, as follows:
The identification of the significant point followed by the bearing from the point in the form of 3 figures giving degrees magnetic, followed by the distance from the point in the form of 3 figures expressing nautical miles. In areas of high latitude where it is determined by the appropriate authority that reference to degrees magnetic is impractical, degrees true may be used. Make up the correct number of figures, where necessary, by insertion of zeros, e.g. a point of 180° magnetic at a distance of 40 nautical miles from VOR “DUB” should be expressed as DUB180040.
OR, The first point of the route (name or LAT/LONG) or the marker radio beacon, if the aircraft has not taken off from an aerodrome.

DEST/ Name and location of destination aerodrome, if ZZZZ is inserted in Item 16. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described under DEP/ above.

DOF/ The date of flight departure in a six-figure format (YYMMDD, where YY equals the year, MM equals the month and DD equals the day).

REG/ The nationality or common mark and registration mark of the aircraft, if different from the aircraft identification in Item 7.

EET/ Significant points or FIR boundary designators and accumulated estimated elapsed times from take-off to such points or FIR boundaries, when so prescribed on the basis of regional air navigation agreements, or by the appropriate ATS authority.
Examples: EET/CAP0745 XYZ0830
EET/EINN0204

SEL/ SELCAL Code, for aircraft so equipped.

TYP/ Type(s) of aircraft, preceded if necessary without a space by number(s) of aircraft and separated by one space, if ZZZZ is inserted in Item 9.
Example: TYP/2F15 5F5 3B2

CODE/ Aircraft address (expressed in the form of an alphanumerical code of six hexadecimal characters) when required by the appropriate ATS authority. Example: “F00001” is the lowest aircraft address contained in the specific block administered by ICAO.

DLE/ Enroute delay or holding, insert the significant point(s) on the route where a delay is planned to occur, followed by the length of delay using four-figure time in hours and minutes (hhmm).
Example: DLE/MDG0030

OPR/ ICAO designator or name of the aircraft operating agency, if different from the aircraft identification in item 7.

ORGN/ The originator’s 8 letter AFTN address or other appropriate contact details, in cases where the originator of the flight plan may not be readily identified, as required by the appropriate ATS authority.
Note.— In some areas, flight plan reception centres may insert the ORGN/ identifier and originator’s AFTN address automatically.

PER/ Aircraft performance data, indicated by a single letter as specified in the Procedures for Air Navigation Services — Aircraft Operations (PANS-OPS, Doc 8168), Volume I — Flight Procedures, if so prescribed by the appropriate ATS authority.

ALTN/ Name of destination alternate aerodrome(s), if ZZZZ is inserted in Item 16. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described in DEP/ above.

RALT/ ICAO four letter indicator(s) for en-route alternate(s), as specified in Doc 7910, Location Indicators, or name(s) of en-route alternate aerodrome(s), if no indicator is allocated. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described in DEP/ above.

TALT/ ICAO four letter indicator(s) for take-off alternate, as specified in Doc 7910, Location Indicators, or name of take-off alternate aerodrome, if no indicator is allocated. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described in DEP/ above.

RIF/ The route details to the revised destination aerodrome, followed by the ICAO four-letter location indicator of the aerodrome. The revised route is subject to re-clearance in flight. Examples:
RIF/DTA HEC KLAX
RIF/ESP G94 CLA YPPH

RMK/ Any other plain-language remarks when required by the appropriate ATS authority or deemed necessary.

Item 19 SUPPLEMENTARY INFORMATION

Endurance After **E/**
INSERT a 4-figure group giving the fuel endurance in hours and minutes.

Persons on board After **P/**
INSERT the total number of persons (passengers and crew) on board, when required by the appropriate ATS authority.
INSERT TBN (to be notified) if the total number of persons is not known at the time of filing.

Emergency and survival equipment

(RADIO) **R/**

- CROSS OUT U if UHF on frequency 243.0 MHz is not available.
- CROSS OUT V if VHF on frequency 121.5 MHz is not available.
- CROSS OUT E if emergency locator transmitter (ELT) is not available.

(SURVIVAL EQUIPMENT) **S/**
• CROSS OUT all indicators if survival equipment is not carried.
• CROSS OUT P if polar survival equipment is not carried.
• CROSS OUT D if desert survival equipment is not carried.
• CROSS OUT M if maritime survival equipment is not carried.
• CROSS OUT J if jungle survival equipment is not carried.

(JACKETS) **J/** • CROSS OUT all indicators if life jackets are not carried.
• CROSS OUT L if life jackets are not equipped with lights.
• CROSS OUT F if life jackets are not equipped with fluorescein.
• CROSS OUT U or V or both as in R/ above to indicate radio capability of jackets, if any.

(DINGHIES) **D/** (NUMBER)

CROSS OUT indicators D and C if no dinghies are carried, or INSERT number of dinghies carried; and
(CAPACITY) INSERT total capacity, in persons, of all dinghies carried; and
(COVER) CROSS OUT indicator C if dinghies are not covered; and
(COLOUR) INSERT colour of dinghies if carried.

(AIRCRAFT COLOUR AND MARKINGS) **A/**
INSERT colour of aircraft and significant markings.

(REMARKS) **N/**
CROSS OUT indicator N if no remarks, or INDICATE any other survival equipment carried and any other remarks regarding survival equipment.

(PILOT) **C/**
INSERT name of pilot-in-command.

5.2 Flight Plan Associated Messages

5.2.1 Modification Message (CHG)

All significant changes to flight plans submitted for both IFR and VFR flights shall be notified to ATS as follows;-

- before Departure;
  utilizing, where possible the same procedures used to submit the original flight plan.
- after departure;
  through the responsible ATS unit.

Items in the flight plan that cannot be modified by a CHG message.

- Aircraft Identification.
- Departure Aerodrome.
- Destination Aerodrome.
- Estimated Off-Block Date.
- Estimated Off-Block Time.

5.2.2 Cancellation Message (CNL)

Flight plan originators shall ensure that flight plans which are no longer required or which relate to flights for which a new flight plan has or will be submitted, are cancelled at the earliest opportunity by means of a cancellation message (CNL) addressed to all addressees on the original flight plan.

Failure to cancel redundant flight plans may result in unnecessary delay to air traffic since such flight plans will be dealt with by the ATFM service as though the flights are taking place.

A replacement flight plan (RFP) in the form of an FPL with identical call sign shall be transmitted with a delay not less than 5 minutes.

The RFP shall contain, as the first element of Item 18, the indication RFP/Qn, where RFP signifies "Replacement Flight Plan" and "n" is "1" for the first replacement, "2" for the second replacement.

The last RFP shall be filed at least 30 minutes before EOBT.

5.2.3 Delay Message (DLA)

In the event of a delay in excess of fifteen (15) minutes in the estimated off-block time, for an IFR flight (except if the IFR flight has a SLOT allocated) or in excess of thirty (30) minutes for a VFR controlled flight, a DLA message must be sent.

5.2.4 Departure Message (DEP)

Departures messages are sent for IFR/VFR flights when requested.

5.2.5 Arrival Message (ARR)

Arrival messages are sent for IFR/VFR flights when requested.

6. FLIGHT PLANNING IN SHANNON UTA, NOTA AND SOTA

6.1 No upper ATS routes exist in the SHANNON UTA, NOTA or SOTA except areas where the provision of ATM is delegated to another ANSP.

6.2 General Procedures

The following condition apply

- Airspace users are permitted to flight plan direct routeing “DCT” between any of the published 5 letters waypoints or radio navigation aids within the SHANNON UTA, NOTA or SOTA.
- Routeing between these points should be indicated by means of the “DCT” instruction subject to a max distance limit of 600 nautical miles.
- Cross UIR boundary DCT is not permitted. Airspace users may connect to the lower ATS network by flight planning “DCT” to any significant point on the lower ATS network.
- Airspace may connect from the lower ATS route by flight planning “DCT” from any significant point on that network to any of the exit points in the SHANNON UTA, SOTA and NOTA.
- Airspace users should flight plan clear of Danger Areas which are notified active. Waypoints are established which allow flight plan routes to remain clear of active Danger Areas and may be used for flight planning purposes. For EID1 ULTAG, ASKUP, LAPMO, and GIMRO. For EID13 BIBLA, ORTOM, LILNO and KOMAG. For EID14 LODLA, AMDEP, UNLID and LINRA

These points are depicted on Charts ENR 6-2, ENR 6-3 and ENR 6-4

Radar monitoring is provided to ensure separation from Danger areas when active.

- Flights not entering Shanwick OCA which Flight Plan to route through SHANNON Oceanic Transition Area are not subject to MNPS approval. ICAO State Letter PFA/SUP/NAT/2009/S09-05-09-0336.SLG refers.

6.3 Overflights

Over flight traffic should plan directly from entry point to exit point, except as required to remain clear of Active Danger areas. The following conditions do however apply:

i. Airspace Users entering the SHANNON UTA from the Shanwick OCA should plan direct from the last point (Landfall) on their Oceanic Route to exit point of the UTA or delegated airspace.

ii. Airspace users intending to enter the Shanwick Oceanic Area should plan direct routes from entry points of the SHANNON UTA to entry points on the Oceanic boundary

6.3.1 Waypoints for overflight flight planning of UTA, NOTA and SOTA (See Table 1: below)

Table 1:

Name-code Designator	Route
BOFUM, ENDEQ, LIFFY, NORLA, ROTEV	Eastbound only
BAGSO, MOPAT, NIMAT, VATRY	Westbound only
ARKIL, BOYNE, MORAG, SAMON, TURLU, KUGUR	Night Route only
ASKUP, GIMRO, LAPMO, ULTAG	EID1 avoidance
ADMUP, GURGA, KOMER, LUSAT	EID5 avoidance
BIBLA, KOMAG, LILNO, ORTOM	EID13 avoidance
AMDEP, LINRA, LODLA, UNLID	EID14 avoidance

Table 1:

Name-code Designator	Route
ADARA, AGORI, ALUTA, ATSUR, BAKUR, BAMLI,	
BANBA, BEDRA, BEGID, BEXET, BILTO, BIMGO	
DEGOS, DINIM, DOGAL, ELSOX, EMPER, ENJEX, EPUNA	
ERNAN, ETARI, EVBAK, EVRIN, GAPLI, GELPO, GISTI	
GOMUP, GUNSO, IBROD, JABEX, KESIX, KOGAD, KOKIB	
LARLA, LASNO, LEDGO, LEKVA, LESLU, LIMRI	
LIPGO, LULOX, MALOT, MAPAG, MIMKU, MOGLO	
MOLAK, NASBA, NEBIN, NERTU, NETKI, NEVRI	
NIBOG, NIPIT, OLGON, OMOKO, OSBOX	
PIKIL, RATKA, RESNO, REVNU, RILED, RODEL	
SLANY, SOMAX, SOVED, SUNOT, TAKAS, TAMEL,	
TOBOR, TUGSI, TULTA, VENER, XETBO	

6.4 Traffic landing at aerodromes within the SHANNON FIR

Traffic landing at aerodromes within the SHANNON FIR should plan from the SHANNON UTA entry point or from the last point (Landfall) on their flight plan (if entering from the SHANWICK Oceanic Area) as follows;

6.4.1 If the destination aerodrome has published STAR then flight plan to the initial way-point on the most appropriate STAR.

6..4.2 If the destination aerodrome does not have published STAR then flight plan to the radio navigational aid or significant point associated with the destination aerodrome.(See Table 2: below)

Table 2:

Aerodrome	ICAO Code	Radio Navigational Aid	Significant point
Donegal	EIDL	CFN	
Sligo	EISG	SLG	
Ireland West	EIKN	CON	ENULA
SHANNON	EINN	SHA	
Kerry	EIKY	KER	INRAD
Cork	EICK	CRK	
Waterford	EIWF	WTD	

•Note; Aircraft not equipped to fly a STAR shall flight plan as per 6.4.2 and expect Radar vectoring.

6.5 Traffic departing aerodromes within the SHANNON FIR

Traffic departing aerodromes within the SHANNON FIR and flight planning FL250 and above should

6.5.1 If the departing aerodrome has published SID then flight plan from last point on the SID procedure to the exit point of the UTA

6.5.2 If the departing aerodrome has not published SID then flight plan from the radio navigational aid serving the

departure aerodrome to the exit point of the UTA. (See Table 3:below)

Table 3:

Aerodrome	ICAO Code	Radio Navigational Aid
Donegal	EIDL	CFN
Sligo	EISG	SLG
Ireland West	EIKN	CON
SHANNON	EINN	SHA
Kerry	EIKY	KER
Cork	EICK	CRK
Waterford	EIWF	WTD

•*Note; Aircraft not equipped to fly a SID shall flight plan as per 6.5.2 and expect Radar vectoring.*

7. FLIGHT PLANNING FOR DEPARTING/ARRIVING TRAFFIC WITHIN THE SHANNON FIR

7.1 Dublin

Standard Instrument Departure (SID) and Standard Instrument Arrival (STAR) routes are published for Dublin (EIDW). Departing/Arriving flights should file the SID/STAR appropriate to their planned route.

RWY 10L/R STARs

Each STAR length from CTA boundary to the STAR Termination waypoint (IFBAP or OSLEX, as appropriate) is provided in Table 4 below. These include the full sequencing leg length for each STAR. Normally only a section of the sequencing leg will be flown before the aircraft is cleared to either IFBAP (from the northern sequencing leg) or OSLEX (from the southern sequencing leg).

Table 4:

STAR EIDW RNAV 10L/R (with lateral Holding/Point Merge) AD2.24-23.1	STAR EIDW RNAV 10L/R (with lateral Holding/Point Merge) length NM including Sequencing Leg (CTA BDR - IFBAP OR OSLEX)
LIPGO2R	71 (to OSLEX)
BAGSO2R	73 (to IFBAP)
BAMLI2R	56 (to IFBAP)
BOYNE2R	75 (to IFBAP)
BUNED2R	69 (to OSLEX)
NIMAT2R	82 (to IFBAP)
OLAPO2R	61 (to IFBAP)
OSGAR2R	68 (to OSLEX)
SUTEX2R	61 (to OSLEX)
NIRIF1R	111 (to OSLEX)
VATRY2R	96 (to OSLEX)

RWY 28L/R STARs

Each STAR length from CTA boundary to the STAR Termination waypoint (PIZSA or OBINU as appropriate) is provided in Table 5 below. These include the full sequencing leg length for each STAR. Normally only a section of the sequencing leg will be flown before the aircraft is cleared to the relevant IF for the runway in use: ABIVU or LAPMO.

Table 5:

STAR EIDW RNAV 28L/R (with lateral Holding/Point Merge) AD2.24-22.1	STAR EIDW RNAV 28L/R (with lateral Holding/Point Merge) length NM including Sequencing Leg (CTA BDR - PIZSA or OBINU)
ABLIN3L	73 (to PIZSA)
BAGSO3L	49 (to OBINU)
BAMLI3L	94 (to OBINU)
BOYNE3L	51 (to OBINU)
BUNED3L	103 (to PIZSA)
NIMAT3L	58 (to OBINU)
OLAPO3L	93 (to OBINU)
OSGAR3L	102 (to PIZSA)
SUTEX3L	95 (to PIZSA)
VATRY3L	82 (to PIZSA)
NIRIF1L	97 (to PIZSA)

Dublin Oceanic arrivals and departures flight plans shall use the SID and STAR in accordance with Table 6:

Transatlantic Dublin Arrivals

In order to enable Aircraft Operators to manage their descent profiles as efficiently as possible, between the hours of 0600Z-0800Z (Winter) & 0500Z-0700Z (Summer) EIDW transatlantic arrivals shall plan their flight to be at 250kts indicated airspeed and FL170 prior to the commencement of the Dublin STAR.

Pilots should request descent in accordance with this procedure however actual descent and speed control shall be as directed by ATC.

Table 6:

Route/Entry/Exit point	SID	STAR
NEBIN and North of NEBIN	via SUROX	via OLAPO
MALOT and TOBOR	via INKUR	via OLAPO or OSGAR as appropriate
LIMRI and South of LIMRI	via INKUR or OLONO as appropriate	via OSGAR or SUTEX as appropriate

Dublin SID and STAR for the following aerodromes are specified in Table 7:

Table 7:

Aerodromes	SID	STAR
EICK	via OLONO	via SUTEX
EIDL, EGAE	via BAMLI	via BAMLI
EIKN, EISG	via SUROX	via OLAPO

Table 7:

Aerodromes	SID	STAR
EIKY	via OLONO	via SUTEX/OSGAR
EINN	via INKUR	via OSGAR or OLAPO
EIWF	via OLONO	via SUTEX
EIWT	N/A	N/A

Operators should note that the listed SID and STAR are for flight planning purposes only. The SID or STAR contained in ATC clearances may differ depending on Runway in use and/or Hold in use.

7.2 SHANNON

Standard Instrument Departures (SID) and Standard Terminal Arrivals (STAR) routes are published for SHANNON (EINN). Departing/Arriving flights should file the SID/STAR appropriate to their planned route.

Flight plans for flights *NOT capable* of flying SHANNON SID or STAR or where SID or STAR do not exist should contain “SHA” in item 15 of the ICAO flight plan form as a start point for departures and an end point for arrivals.

7.3 Cork

Standard Instrument Departures (SID) and Standard Terminal Arrivals (STAR) routes are published for Cork (EICK). Departing/Arriving flights should file the SID/STAR appropriate to their planned route.

Flight plans for flights *NOT capable* of flying Cork SID or STAR or where SID or STAR do not exist should contain “CRK” in item 15 of the ICAO flight plan form as a start point for departures and an end point for arrivals.

7.4 Kerry

Runway For Filing,
Runway 26 is the designated runway for filing both arrivals and departures.
Instruction for IFR traffic:

a. Arriving aircraft will normally be cleared to INRAD for the appropriate approach.
b. The designated hold for runway 26 is at ROTSO.
c. Departures to the Southwest or southeast should file on a CRK3A or CRK3B SID,
d. Departures to the Northwest or northeast should file on a SHA3A or SHA3B SID.
e. Where the reciprocal runway (08) is in use arriving traffic will be routed to the *“KER”* for approach to runway 08,
f. The designated hold for runway 08 is at KER.
g. Where 08 is active ATC will clear departing aircraft on the associated SID, CRK3C,CRK3D, SHA3C, SHA3D.
h. Kerry ATC shall utilise the KER SID for contingency procedures.

7.5 Weston

Standard Instrument Arrivals (STAR) routes are published for the Dublin CTA. For Flight Planning for Weston flights should file the Dublin (EIDW) RWY34 STAR to SORIN or KERAV as appropriate.
Flight plans for flights not capable of flying Dublin (EIDW) RWY34 STAR should contain “WST” in item 15 of the ICAO flight plan form as an end point for arrivals.

7.5 Waypoints on the FIR boundary available for flight planning direct routes from EIDL and EISG (See Table 8: below)

Table 8:

Name-code Designator	Route
GILAN	CFN (NDB) to MAC (DVOR)

8. FLIGHT PLANNING INVOLVING 8.33 KHZ CHANNEL SPACING CAPABLE RADIO EQUIPMENT

IFR Flight Plans for flights planned to operate in SHANNON FIR, UIR, SOTA, and NOTA, should in respect of items 10 and 18 of the ICAO flight plan form, be completed as follows;

Whenever an aircraft is equipped with 8.33KHz channel spacing radio equipment, the letter Y shall be inserted in Item 10 (Equipment), of the filed flight plan;

If Item 10 (Equipment) of the submitted IFR flight plan contains Y, then that flight is considered to be 8.33 Channel compliant and the flight plan is automatically processed by the IFPS;

With the exception of STATE aircraft; if Item 10 (Equipment) of the submitted IFR flight plan does not contain Y, then the flight plan is **NOT** processed by the IFPS.

For non 8.33 equipped, but UHF equipped State aircraft planning to fly in 8.33KHz airspace where UHF coverage is provided, the letters U and Z shall be inserted in item 10a and “COM/EXM833” shall be inserted in Item 18 of the flight plan. State aircraft operating below F195 (non UHF and non 8.33) are exempted. The letters Y and U shall not be inserted in item 10 equipment, STS/STATE shall be inserted in item 18 of the filed flight plan.

The ACK message for exempted STATE aircraft flights shall contain the following comment: ”THIS FLIGHT MAY REQUIRE SPECIAL HANDLING BY ATC DUE TO 8.33KHz CARRIAGE REQUIREMENT”;

Medical flight specifically declared by the medical authorities and aircraft engaged in search and rescue missions, are automatically exempted from the 8.33KHz mandatory carriage requirements (i.e no error is raised if item 10a does not contain Y and item 18 contains STS/SAR or STS/HOSP);

Additional information on how non 8.33 equipped STATE aircraft flights are processed by the IFPS is published in section 38 of the IFPS USERS Manual https://www.eurocontrol.int/publications/ifps-users-manual

8.33KHz Change of Status: Where the status of the 8.33KHz radio capability changes prior to departure, they shall be notified to the IFPS by means of a modification message (CHG) or by cancelling the existing flight plan and filing a new flight plan.

VFR flights planned to operate in SHANNON FIR, SOTA and NOTA, below FL195 should, in respect of Field 10 of the ICAO flight plan form, be completed as follows:

Whenever an aircraft is equipped with 8.33KHz channel spacing radio equipment, the letter Y shall be inserted in Item 10 (Equipment), of the filed flight plan: and

Requirements for VFR flights related to VHF 8.33KHz channel spacing radio equipage are described in GEN 1.5

ENR 2.2 OTHER REGULATED AIRSPACE

SPECIAL PROCEDURES WITHIN THE SHANNON UTA/SOTA/NOTA FOR NORTH ATLANTIC TRAFFIC

1. INTRODUCTION

A significant proportion of NAT traffic transits the SHANNON UTA/SOTA/NOTA to and from major European destination areas. The following paragraphs describe the procedures for NAT traffic transiting this Airspace.

2. ATS ROUTEING PROCEDURES FOR WESTBOUND NAT TRAFFIC

In the Westbound NAT OTS signal SHANWICK OAC promulgates the track structure(s) applicable together with such other information as may be considered useful for operators to identify the route to be flown.

3. ATS ROUTEING PROCEDURES FOR EASTBOUND NAT TRAFFIC

3.1 The domestic Landfall points KESIX, OSBOX, BEGID, SOVED, MOGLO, NETKI, KOKIB, BEXET, OLGON, GISTI, RILED, XETBO, LEKVA, ELSOX, EPUNA, ATSUR, BIMGO, NASBA, GUNSO and EMPER, which are associated with the Oceanic Exit points, are promulgated in the eastbound OTS message. Use of these points may vary from day to day depending on the published OTS.

3.1.1 If an Eastbound NAT Flight operating to a specified destination is rerouted via an oceanic Landfall different to that filed in the flight plan, the flight may route DCT from the new Landfall to the original filed exit point from Irish Airspace. In the event of an alternative route being issued by IFPS SHANNON ATC will advise the flight on first contact.

3.1.2 Due to a number of flights deviating from clearances prior to exiting SHANWICK Oceanic Controlled Airspace, Flight crew are reminded of the following, Eastbound route clearances issued by SHANNON Control for Aircraft exiting Oceanic Airspace apply from AGORI, SUNOT, BILTO, PIKIL,ETARI,RESNO,VENER,DOGAL, NEBIN,MALOT,TOBOR,LIMRI, ADARA,DINIM,RODEL,SOMAX,KOGAD,BEDRA,OMOKO,TAMEL, GELPO and LASNO. Flights shall not turn before these points.

4. IDENTIFICATION OF NAT TRACK MESSAGES & OCEANIC RCL SUBMISSION PROCEDURES

4.1 **Track Message Identification (TMI)**
See UK AIP

4.2 **Oceanic RCL Procedures for Transit Westbound Aircraft**
See UK AIP

4.2.1 Aircraft in communication with Shanwick Oceanic on VHF or HF in relation to Oceanic entry conditions are to maintain communication with SHANNON Control on the appropriate frequency.

4.3 **Aircraft sending an Oceanic RCL Request from Irish Aerodromes before departure.**
See UK AIP

NOTE: EICK departures for LASNO must be in receipt of an acknowledged RCL prior to departure.

5. OCEANIC FLIGHT PLANS

5.1 Flight plans in respect of Oceanic flights which are planned to enter SHANNON FIR/UIR/SOTA/NOTA must be submitted to IFPS.

5.2 Jet aircraft intending to operate in the SHANWICK OCA must indicate the MACH number planned to be used for any portion of the flight within the area in Item 15 of the ICAO flight plan.

Jet aircraft should indicate their proposed speeds in the following sequence:

a. Cruising speed (TAS) in knots;

b. Oceanic Entry point and cruising MACH number;

c. Landfall Fix and cruising speed (TAS) in knots.

5.3 All other aircraft: speed in terms of TAS in knots.

6. RADIO COMMUNICATIONS FAILURE PROCEDURES FOR OCEANIC AIRCRAFT INTENDING TO ENTER OR EXIT NAT AIRSPACE VIA SHANNON FIR/UIR/SOTA/NOTA

6.1 The following procedures apply to oceanic aircraft intending to enter or exit NAT airspace via the SHANNON FIR/ UIR/SOTA/NOTA. These procedures are intended to complement and not supersede State procedures/regulations. It is not possible to provide guidance for all situations associated with a communications failure.

6.2 General

6.2.1 The pilot of an aircraft experiencing a two-way radio communications failure shall operate the secondary radar transponder on identity Mode A Code 7600 and Mode C.

6.2.2 The pilot shall also attempt to contact any ATC facility (on VHF or HF) or another aircraft and inform them of the difficulty and request they relay information to the ATC facility with whom communications are intended.

6.3 Communications Failure Prior To Entering NAT Oceanic Airspace
Due to the potential length of time in oceanic airspace, it is strongly recommended that a pilot experiencing communications failure whilst still in SHANNON FIR/UIR/SOTA/NOTA does not enter SHANWICK Oceanic Control Area but adopts the procedure specified at Procedure A below. However, if the pilot elects to continue, then to facilitate the provision of adequate separation, adopt Procedure B below.

NOTE: A controlled IFR flight being vectored by radar away from the route specified in its current flight plan and experiencing two-way radio communication failure should proceed in the most direct manner to the route specified in the current flight plan.

Procedure A

For this procedure the pilot is deemed to have selected SHANNON as the aerodrome of intended landing. Proceed, maintaining the last assigned and acknowledged flight level, to the appropriate hold specified for SHANNON and hold for a period of not less than five minutes. Then commence descent and complete a normal instrument approach. For the procedure as outlined in this paragraph and in order to avoid ambiguity SHANNON is the only Irish aerodrome which may be used.

Procedure B

If the pilot elects to continue the flight, continue at the last assigned and acknowledged flight level to the oceanic entry point in their current flight plan, then, follow the procedure as detailed in UK AIP “Communications failure after entry to NAT oceanic airspace”.

6.4 **Communications Failure Prior To Exiting NAT Oceanic Airspace**

6.4.1 Cleared on Flight Plan Route

The pilot shall maintain the currently cleared route, flight level and speed until reaching the Oceanic landfall Point. Unless the pilot elects to adopt the procedure outlined at ENR 2.2.6.4.2 below, after landfall proceed in accordance with the filed flight plan (Level/speed/route).

6.4.2 Diversion to SHANNON

In the event of the pilot electing to divert to SHANNON, after landfall proceed direct to the appropriate hold specified for SHANNON in Table 1: here under, maintaining the last assigned oceanic level and hold for a period of not less than five minutes. Then commence descent and complete a normal instrument approach. For the procedure as outlined in this paragraph and in order to avoid ambiguity SHANNON is the only Irish aerodrome which may be used.

Table 1: Appropriate Holds specified for SHANNON

HOLD	RWY
DERAG for ILS approach	24
ELPOM for ILS approach	06

7. REQUEST FOR AMENDMENT TO RCL FOR AIRCRAFT TRANSITING THE SHANNON FIR/UIR/ NOTA AND SOTA.

Flight crews are reminded that a change in Flight Level, Speed or Route can be requested at any time after the Oceanic Entry Point.

8. STRATEGIC LATERAL OFFSET PROCEDURE

The Strategic Lateral Offset Procedure (SLOP) is now a standard operating procedure throughout the North Atlantic (NAT) Region. This procedure mitigates collision risk and wake turbulence encounters. Pilots conducting oceanic flight within the NAT Region with automatic offset programming capability are recommended to fly lateral offsets of either 1 or 2 NM right of centre line.

The introduction of very accurate aircraft navigation systems, along with sophisticated flight management systems, has drastically reduced the number of risk bearing lateral navigation errors reported in NAT airspace. Paradoxically, the capability of aircraft to navigate to such a high level of accuracy has led to a situation where aircraft on the same track but at different levels, are increasingly likely to be in lateral overlap. This results in an increased risk of collision if an aircraft departs from its cleared level for any reason.

SLOP reduces risk by distributing aircraft laterally. It is applicable within the New York Oceanic, Gander Oceanic, SHANWICK Oceanic, Santa Maria Oceanic, Nuuk and Reykjavik flight information regions, and within the Bodo Oceanic flight information region when flights are operated more than 185km (100 NM) seaward from the shoreline.

SLOP conforms to direction in the International Civil Aviation Organization's (ICAO) Procedures for Air Navigation Services–Air Traffic Management (PANS–ATM, Doc 4444, 15.2.4) and is subject to the following guidelines:

- Aircraft without automatic offset programming capability must fly the route centre line.
- Operators capable of programming automatic offsets may fly the centre line or offset one or two nautical miles right of centre line, allowing for 3 possible positions along route. Offsets are not to exceed 2 NM right of centre line and offsets to the left of centre line are not permitted. An aircraft overtaking another aircraft should offset within the confines of this procedure, if capable, so as to create the least amount of wake turbulence for the aircraft being overtaken. The pilot should take into account wind and estimated wake vortex drift and time to descend. (Nominal descent rates for wakes are 300-600 FPM).
- Pilots should use whatever means is available (e.g. TCAS, communications, visual acquisition) to determine the best flight path to fly. Pilots may contact other aircraft on frequency 123.450MHz, as necessary, to coordinate the best wake turbulence offset option.
- Pilots may apply an offset outbound after the oceanic entry point and must return to centre line before the oceanic exit point. Position reports transmitted via voice should be based on the way-points of the current ATC clearance and not the offset positions.
- Aircraft transiting oceanic radar areas may remain on their established offset positions.
- There is no ATC clearance required for this procedure and it is not necessary that ATC be advised.

9. SHANNON OCEANIC TRANSITION AREA (SOTA)

9.1 The SHANNON Oceanic Transition Area (SOTA)

consists of that portion of the SHANWICK Flight Information Region/Oceanic Control Area with lateral and vertical limits specified at Table 2:

Table 2: SHANNON Oceanic Transition Area

Name, Lateral limits, Vertical limits, Class of Airspace	Unit providing service	**Call Sign. Languages. Area and conditions of use. Hours of Service**	Frequency /Purpose	Remarks
1	2	3	4	5
SHANNON Oceanic Transition Area (**SOTA**) 5100N 01500W, 5100N 00800W, 4830N 00800W, 4900N 01500W, 5100N 01500W FL055/FL660 - Class A FL660/UNL - Class G	ATS SHANNON	SHANNON Control English H24	135.600MHz	FRA FL055 to UNL (Class G/A)

9.2 Addressing of Flight Plan Messages

Flight plans required for the SOTA should be addressed to the IFPS addresses EUCHZMFP and EUCBZMFP.

9.3 Delegation of Control within Airspace Contiguous with SOTA

9.3.1 Control of GAT above FL245 within the airspace bounded by lines joining the coordinates listed below is delegated by the UK authorities to SHANNON UAC.
4935.00N 00800.00W: 4933.38N 00656.04W: 4855.70N 00734.46W: 4850.00N 00800.00W: 4935.00N 00800.00W

9.3.2 Control of GAT above FL245 within the airspace bounded by lines joining the coordinates listed below is delegated by the French authorities to SHANNON UAC.
4850.00N 00800.00W: 4855.70N 00734.46W: 4830.00N 00800.00W: 4850.00N 00800.00W.

9.3.3 Procedures applicable within the airspace described at ENR 2.2 9.3.1 and ENR 2.2 9.3.2 above are those procedures applicable within SOTA. The following applies:

- Controlling Authority - SHANNON UAC
- Call sign - SHANNON Control
- Frequency - As allocated by ATS

9.3.4 Due to the risk of two aircraft using the same squawk leading to a mis-ident, Northbound traffic entering the SHANNON Oceanic Transition Area (SOTA) via T9, LASNO, T290 GELPO, or T213, TAMEL are instructed to set Transponder code A2000 at least 10 minutes before the above points.

9.4 Position Reports

All designated points on the SOTA boundary are compulsory position reporting points, unless otherwise advised by SHANNON ACC.

9.5 Oceanic RCL Procedures

Requirements regarding submission of RCL, detailed above, ENR 2.2 4.2 and or ENR2.2 7 should be complied with.

9.6 Met Reporting Procedures in SOTA

9.6.1 Pilots of aircraft in the SOTA are required to comply with the MET reporting procedures in ICAO DOC 8896 Chapter 7”Aircraft Observations and Reports”.

9.6.2 If the aircraft is designated to report meteorological information, the pilot will be advised by the inclusion of the phrase “SEND MET REPORTS” in the message.

9.6.3 Westbound North Atlantic (NAT) Random flights and NAT Oceanic Track System (OTS) flights, designated as MET reporting flights, are to treat W008 as a mid-point and W015 as a designated Reporting point. Pilots are to transmit their W015 and W008 MET reports with their W015 position Report to SHANWICK on HF

9.6.4 Eastbound flights are not required to make routine MET reports when flying in the SOTA.

Note: The UK Met Office provides meteorological watch and issues relevant SIGMET in the SOTA.
Special aircraft reports relating to meteorological conditions in SOTA received by Shannon ACC are forwarded to the UK Met Office and to SHANWICK.

9.7 Secondary Surveillance Radar

Aircraft intending to fly in the SOTA must be equipped with an SSR transponder capable of responding to Mode A interrogations with 4096 codes and Mode C interrogations with Automatic Pressure Altitude Reporting.

9.8 Communications

Communications between aircraft in the SOTA and SHANNON ACC are via VHF. The appropriate frequencies are listed in ENR 2.1 unless otherwise advised by SHANWICK, Scottish or SHANNON ACC. Flights unable to contact SHANNON ACC on VHF should use the appropriate HF facility, addressing their message to SHANNON ACC.

9.9 Communications Failure

Flights experiencing radio communications failure should proceed according to the procedures in ENR 1.1 General Rules, where appropriate, by procedures described in ENR2.2 6

9.10 High Level Airspace (HLA)

HLA shall be applicable in that volume of airspace between FL285 and FL420 within the Oceanic Control Areas of Santa Maria, SHANWICK, Reykjavik, Gander Oceanic and New York Oceanic. SOTA airspace is not included in NAT HLA. Details of HLA are contained in North Atlantic Operations and Airspace Manual (ICAO DOC 007) and Regional Supplementary Procedures.
SOTA has the same vertical extent as the SHANWICK OCA, and is bounded by lines joining successively the following points: N5100 W01500 – N5100 W00800 – N4830 W00800 – N4900 W01500 – N5100 W01500

10. NORTHERN OCEANIC TRANSITION AREA (NOTA)

10.1 The Northern Oceanic Transition Area (NOTA)

consists of that portion of the SHANWICK Flight Information Region/Oceanic Control Area with lateral and vertical limits specified at Table 3:

Table 3: Northern Oceanic Transition Area

Name, Lateral limits, Vertical limits, Class of Airspace	Unit providing service	Call Sign. Languages. Area and conditions of use. Hours of Service	Frequency /Purpose	Remarks
1	2	3	4	5
Northern Oceanic Transition Area (NOTA) 5700N 01500W, 5700N 01000W, 5434N 01000W, 5400N 01500W, 5700N 01500W FL055/FL660 - Class A FL660/UNL - Class G	ATS SHANNON	SHANNON Control English H24	122.980MHz	FRA FL055 to UNL (Class G/A)

10.2 Addressing of Flight Plan Messages

Flight plans required for the NOTA should be addressed to the IFPS addresses EUCHZMFP and EUCBZMFP.

10.3 Position Reports

All designated points on the NOTA boundary are compulsory position reporting points, unless otherwise advised by SHANNON ACC.

10.4 Oceanic RCL Procedures

Requirements regarding submissions of RCL, detailed above, ENR 2.2 4.2 and or ENR2.2 7 should be complied with.

10.5 Met Reporting Procedures in NOTA

10.5.1 Pilots of aircraft in the NOTA are required to comply with the MET reporting procedures in ICAO DOC 8896 Chapter

7 “Aircraft Observations and Reports”.

10.5.2 If the aircraft is designated to report meteorological information, the pilot will be advised by the inclusion of the phrase “SEND MET REPORTS” in the message.

10.5.3 Westbound North Atlantic (NAT) Random flights and NAT Oceanic Track System (OTS) flights, designated as MET reporting flights, are to treat W010 as a mid-point and W015 as a designated Reporting point. Pilots are to transmit their W015 and W010 MET reports with their W015 position Report to SHANWICK on HF

10.5.4 Eastbound flights are not required to make routine MET reports when flying in the NOTA.

Note: The UK Met office provides meteorological watch and issues relevant SIGMET in the NOTA.
Special aircraft reports relating to meteorological conditions in NOTA received by SHANNON ACC are forwarded to the UK Met Office and to SHANWICK.

10.6 Secondary Surveillance Radar

Aircraft intending to fly in the NOTA must be equipped with an SSR transponder capable of responding to Mode A interrogations with 4096 codes and Mode C interrogations with Automatic Pressure Altitude Reporting.

10.7 Communications

Communications between aircraft in the NOTA and SHANNON ACC are via VHF. The appropriate frequencies are listed in ENR 2.1 unless otherwise advised by SHANWICK, Scottish or SHANNON ACC. Flights unable to contact SHANNON ACC on VHF should use the appropriate HF facility, addressing their message to SHANNON ACC.

10.8 Communications Failure

Flights experiencing radio communications failure should proceed according to the procedures in ENR 1.1 General Rules, where appropriate, by procedures described in ENR2.2 6

10.9 High Level Airspace (HLA)

The HLA shall be applicable in that volume of airspace between FL 285 and FL420 within the Oceanic Control Areas of Santa Maria, SHANWICK, Reykjavik Oceanic and New York Oceanic.
Parts of the SHANWICK OCA are designated as the Shannon Oceanic Transition Area (SOTA) and the Northern Oceanic Transition Area (NOTA). NOTA airspace is included in the NAT HLA and hence NAT HLA airspace requirements are still applicable from FL285 to FL420 in NOTA. However, SOTA is not included in the NAT HLA. Therefore flights within SOTA routeing such that they are entering SHANWICK OCA and are subject to an RCL submission, are required to be NAT HLA MNPS Approved.

NOTA has the same vertical extent as the SHANWICK OCA and is bounded by the lines joining successively the following points. N5400 W01500 - N5700 W01500 - N5700 W01000W - N5434 W01000 - N5400 W01500

NOTA airspace is included in MNPS Airspace. Details of HLA MNPS Operations and Procedures are contained in North Atlantic Operations and Airspace Manual (ICAO DOC 007) and Regional Supplementary Procedures (DOC 7030) available on Paris ICAO Regional Office Website,

URL: https://www.icao.int/EURNAT/Pages/EUR-and-NAT-Document.aspx

11. FREE ROUTE AIRSPACE

11.1 The Ireland Free Route Airspace

consists of those of the Shannon FIR, Shannon FIR (Excluding Dublin CTA)/UIR/UTA, SHANNON Oceanic Transition Area (SOTA), The Northern Oceanic Transition Area (NOTA) and the LARLA triangle/TAKAS box with lateral and vertical limits specified at Table 4:

Table 4: Ireland Free Route Airspace

Name, Lateral limits, Vertical limits, Class of Airspace	Unit providing service	Call Sign. Languages. Area and conditions of use. Hours of Service	Frequency / Purpose	Remarks
1	2	3	4	5
Shannon FIR/UIR/UTA 5520N 00655W, 5425N 00810W, 5355N 00530W, 5220N 00530W, 5100N 00800W, 5100N 01500W, 5400N 01500W, 5434N 01000W, 5445N 00900W, 5520N 00815W, 5525N 00720W, 5520N 00655W, FRA FL075 to UNL (Class G/C/A)	ATS SHANNON	SHANNON Control English H24	134.260MHz 122.980MHz 131.150MHz	See ENR 2.1 Shannon FIR & Shannon UIR/UTA NOTE: Excludes Dublin CTA see EI ENR 2.1
NOTA 5700N 01500W, 5700N 01000W, 5434N 01000W, 5400N 01500W, 5700N 01500W FL055/FL660 - Class A FL660/UNL - Class G	ATS SHANNON	SHANNON Control English H24	122.980MHz	See ENR 2.2.10.1 The Northern Oceanic Transition Area (NOTA)
SOTA 5100N 01500W, 5100N 00800W, 4830N 00800W, 4900N 01500W, 5100N 01500W FL055/FL660 - Class A FL660/UNL - Class G	ATS SHANNON	SHANNON Control English H24	135.600MHz 135.230MHz	See ENR 2.2.9.1 The SHANNON Oceanic Transition Area (SOTA)
LARLA triangle/TAKAS box 493500N 0080000W, 493323N 0065617W, 492241N 0070715W, 490019N 0072953W, 485542N 0073430W, 483000N 0080000W, 483437N 0080000W, 485000N 0080000W, 490000N 0080000W, 493000N 0080000W, FL245/FL660 Class C	ATS SHANNON	SHANNON Control English H24	135.230MHz	

11.2 Addressing of Flight Plan Messages

Flight plans required for the Ireland FRA should be addressed to the IFPS addresses EUCHZMFP and EUCBZMFP.

11.3 Position Reports

Oceanic Entry/Exit Points on the Ireland FRA Boundary are compulsory position reporting points, unless otherwise advised by Shannon ACC.

11.4 Oceanic RCL Procedures

Requirements regarding submission of RCL, detailed above, ENR 2.2 4.2 and or ENR 2.2 7 should be complied with.

11.5 Met Reporting Procedures in NOTA

11.5.1 Pilots of aircraft in the Ireland FRA are required to comply with the MET reporting procedures in ICAO DOC 8896 Chapter 7 “Aircraft Observations and Reports”.

11.5.2 If the aircraft is designated to report meteorological information, the pilot will be advised by the inclusion of the phrase “SEND MET REPORTS” in the message.

11.5.3 Westbound North Atlantic (NAT) Random flights and NAT Oceanic Track System (OTS) flights, designated as MET reporting flights, are to treat W010 as a mid-point and W015 as a designated Reporting point. Pilots are to transmit their W015 and W010 MET reports with their W015 position Report to SHANWICK on HF

11.5.4 Eastbound flights are not required to make routine MET reports when flying in the Ireland FRA.

11.6 Secondary Surveillance Radar

Aircraft intending to fly in the Ireland FRA must be equipped with an SSR transponder capable of responding to Mode A interrogations with 4096 codes and Mode C interrogations with Automatic Pressure Altitude Reporting.

11.7 Communications

Communications between aircraft in the Ireland FRA and SHANNON ACC are via VHF. The appropriate frequencies are listed in ENR 2.1 unless otherwise advised by SHANNON ACC.

11.8 Communications Failure

Flights experiencing radio communications failure should proceed according to the procedures in ENR 1.1 General Rules, where appropriate, by procedures described in ENR2.2 6

12. AERODROME TRAFFIC ZONES (ATZ)

Aerodrome Traffic Zone: An airspace of defined dimensions established around an aerodrome for the protection of aerodrome traffic.

Table 5: Aerodrome Traffic Zone

Name **Lateral Limits** **Vertical Limits** **Class of Airspace**	**Unit Providing Service**	**Callsign** **Language** **Hours of Service** **Conditions of Use**	**Frequency** **Channel** **Purpose**	**Remarks**
EINC Newcastle ATZ A circle, 1.5nm radius, Centred at 530422N,0060211W Upper limit: 1500FT AMSL Lower Limit: SFC Class: G	Newcastle	Newcastle Zone English Summer 08.00 - CET Winter 0800 - SS Prior Permission Required (PPR)	122.550 MHz	Elev.: 1FT Runway Length: 690m Licensed Aerodrome

13. RADIO MANDATORY ZONE (RMZ) / TRANSPONDER MANDATORY ZONE (TMZ)

Table 6: Radio/Transponder Mandatory Zones

Name	**Geographical Coordinates**	**Lateral Limits**	**Vertical Limits**	**Remarks**
Sligo RMZ/TMZ	541649N 0083557W	Circle with radius of 10NM	SFC to 5000ft	See Sligo AD Sections EISG AD 2.17 and EISG AD 2.20.1
Waterford RMZ/TMZ	521114N 0070513W	Circle with radius of 10NM	SFC to 5000ft	See Waterford AD Sections EIWF AD.2.17 and EIWF AD.2.20.8

EICK AD 2.1 AERODROME LOCATION INDICATOR AND NAME

EICK – CORK/International

EICK AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	**ARP and its site**	515029N 0082928W Mid Point RWY 16/34
2	**Direction and distance from (city)**	6.5KM (3.5 NM) south of Cork city
3	**AD Elevation, Reference Temperature & Mean Low Temperature**	502 ft AMSL/18.5°C (Max Temp) 1.6°C (MNM Temp)
4	**Geoid undulation at AD ELEV PSN**	187ft
5	**MAG VAR/Annual change**	3° W (2021)/11' decreasing
6	**AD Operator, address, telephone, telefax, email, AFS, Website**	Post: daa plc, Cork Airport, Co. Cork. T12 P5NF Phone:+ 353 21 431 31 31 URL: www.corkairport.com Email: cork.feedback@corkairport.com Telex: 75085 AFS: EICKYDYX
7	**Types of traffic permitted (IFR/VFR)**	IFR/VFR
8	**Remarks**	Forward all Commercial correspondence to the Managing Director, Cork Airport.

EICK AD 2.3 OPERATIONAL HOURS

1	**AD Operator**	H24
2	**Customs and immigration**	H24
3	**Health and sanitation**	H24
4	**AIS Briefing Office**	H24 In conjunction with AIS Shannon
5	**ATS Reporting Office (ARO)**	H24 In conjunction with AIS Shannon
6	**MET Briefing Office**	H24
7	**ATS**	H24
8	**Fuelling**	H24
9	**Handling**	H24
10	**Security**	H24
11	**De-icing**	H24

12	**Remarks**	Airport closed on Christmas Day. Exact HR advised by NOTAM

EICK AD 2.4 HANDLING SERVICES AND FACILITIES

1	**Cargo handling facilities:**	Facilities AVBL from Swissport
2	**Fuel/oil types**	Fuel: Jet A1, AVGAS 100LL / Oil Grades: W80, W100
3	**Fuelling facilities/capacity**	Full facilities are available daily 0530-2200HR local time all year. Outside these HR varying surcharges may apply depending on the type of aircraft, quantity of fuel required, time that the refuelling facility is required and on whether prior notice is received from the operator during the above stated hours. Details are available from Aerodrome Administration.
4	**De-icing facilities**	Contact Aerodrome Administration
5	**Hangar space available for visiting aircraft**	Single hangar approx 1000 sq ft to accommodate up to Challenger 300 type aircraft (or approx 17 tonne) managed by Weston Aviation.
6	**Repair facilities for visiting aircraft**	Nil
7	**Remarks**	Passenger Handling is AVBL from Aer Lingus and Swissport. General Aviation handling is AVBL from Swissport Executive Aviation and Weston Aviation.

EICK AD 2.5 PASSENGER FACILITIES

1	**Hotel(s) at or in the vicinity of AD**	At airport and in Cork city.
2	**Restaurant(s) at or in the vicinity of AD**	At airport both landside & airside.
3	**Transportation**	Buses, Taxis, self-drive cars.
4	**Medical facilities**	First Aid treatment. Hospitals in Cork 6.5KM.
5	**Bank and Post Office at or in the vicinity of AD**	ATM facilities available. No Post office or Bank at Airport.
6	**Tourist Office**	Cork city
7	**Remarks**	Short term multi-storey car park. Long term surface car park. Executive Lounge: see www.corkairport.com

EICK AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	**AD category for fire fighting**	CAT 7
2	**Rescue equipment**	Hydraulic cutting equipment, Emergency Lighting and other equipment in compliance with Category 7 requirements

3	**Capability for removal of disabled aircraft**	Coordinators: Head of Airside Infrastructure Resident Engineer Phone: + 353 (0)21 4329 659/ + 353 (0)87 602 9011 Capability: Up to Code C aircraft (Utilising equipment available at Dublin Airport) - Details available from Coordinators.
4	**Remarks**	CAT 9 AVBL 48HR PN Communication with Rescue and Fire Fighting Service: Frequency 121.600MHz AVBL for direct communication between ACFT and Rescue and Fire Fighting Service. 121.600MHz should be requested initially via ATC. Call sign for the Rescue and Fire Fighting Service is 'Fire 1'. It is mandatory for both ACFT and Rescue and Fire Fighting Service to maintain contact with ATC at all times. ATC do not have access to 121.600MHz. Frequency 121.600MHz is H24 and is AVBL within 8NM radius of Cork Airport.

EICK AD 2.7 RUNWAY SURFACE CONDITION ASSESSMENT AND REPORTING AND SNOW PLAN

1	**Type(s) of clearing equipment**	Snow clearing and anti-icing equipment including: Sweeper-blowers Tractors equipped with ploughs or brushes Sprayers of de-icing fluid Snow blower Snow ploughs Granular spreaders Suction Sweeper Tipper Truck
2	**Clearance priorities**	1. Duty runway and associated taxiways, aircraft stands, together with apron areas. 2. Other areas.
3	**Use of material for movement area surface treatment**	De/anti-icing of aircraft movement areas carried out as required using potassium acetate fluids (KAC) and/or UREA.
4	**Specially prepared winter runways**	Not applicable.
5	**Remarks**	Annual snow plan available from the Aerodrome Operator on request. See also AD 1.2

EICK AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATION DATA

1	**Apron surface and strength**	Surface: CONC / Strength: PCN 50/R/B/W/U			
2	**Taxiway width, surface and strength**	TAXIWAY	WIDTH	SURFACE	STRENGTH
		A	27M	CONC/ ASPH	PCN 63/R/B/ W/T
		B	23M	CONC	PCN 50/R/B/ W/U
		C	30M	CONC/ ASPH	PCN 50/R/B/ W/U
		E	13M	ASPH	Light Aircraft MTOW 5,700kg
		F	10.5M	ASPH	PCN 12/F/B/ W/U
3	**ACL location and elevation**	Location: Terminal Apron / Elevation: 490ft AMSL			
4	**VOR checkpoint**	Nil			
5	**INS checkpoint**	EICK AD 2.24-2			
6	**Remarks**	Nil			

EICK AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	**Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands**	Taxiing guidance signs at all intersections and at holding points. Mandatory signs lighted. Guidelines on aprons and taxiways. Taxiway information markings. Marshalling on aircraft stands.
2	**RWY/TWY markings and LGT**	RWY 16/34 Designation THR, TDZ, centreline, side stripe, aiming point. Holding positions at RWY/RWY intersection. RWY 07/25 Designation, THR, TDZ, centreline, side stripe, aiming point. Holding positions at RWY/RWY intersection. Taxiways Centreline - All taxiways Holding Point - TWY A, B, C, E, F
3	**Stop bars**	Controllable stop-bar on TWY A Fixed stop-bars on TWY B, C, and E and F.Runway guard lights on TWY A, B, C, E, F and on RWY16/34 and RWY 07/ 25 at RWY/RWY intersection.
4	**Other RWY Protection measures**	-
5	**Remarks**	See also EICK AD 2.14 and 2.15 for lighting

EICK AD 2.10 AERODROME OBSTACLES

In Area 2					
OBST ID/ Designation	**OBST Type**	**OBST Position**	**ELEV/HGT**	**Markings/Type Colour**	Remarks
a	**b**	**c**	**d**	**e**	**f**
Air Navigation Obstacles (iaa.ie) - https://www.iaa.ie/commercial-aviation/airspace/air-navigation-obstacles					

In Area 3					
OBST ID/ Designation	**OBST Type**	**OBST Position**	**ELEV/HGT**	**Markings/Type Colour**	Remarks
a	**b**	**c**	**d**	**e**	**f**
Air Navigation Obstacles (iaa.ie) - https://www.iaa.ie/commercial-aviation/airspace/air-navigation-obstacles					

EICK AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	**Associated MET Office**	Cork Airport
2	**Hours of service**	H24
3	**Office responsible for TAF preparation** **Periods of validity** **Interval of issuance**	MET Eireann Central Aviation Office, Shannon 24 HR 6 HR
4	**Type of landing forecast** **Interval of issuance**	TREND
5	**Briefing/consultation provided**	Computer-based self-briefing facility Personal briefing by telephone from Central Aviation Office, Shannon
6	**Flight documentation** **Language(s) used**	Charts and tabular English
7	**Charts and other information available for briefing or consultation**	6-hourly synoptic chart, 6-hourly prognostic chart (surface), prognostic chart of significant weather, prognostic chart of wind/temperature at upper levels, prognostic chart of tropopause levels.
8	**Supplementary equipment available for providing information**	Remote displays AVBL from Shannon and Dublin weather RADAR. IRVR RWY 16 and 34 (touchdown, midpoint, stop-end) Satellite Display available.
9	**ATS units provided with information**	Cork TWR

10	**Additional information (limitation of service, etc.)**	Additional information on request from Post: Central Aviation Office, Shannon Phone:+ 353 61 712 950 Fax: + 353 61 712 962 Email: avops@met.ie AIC Telephone access for OPMET data Phone:1570 202 122 Telephone access for Forecaster briefing Phone:1570 234 234 Telephone access for Weather dial Fax Phone:1570 131 838 **Premium Rate Calls** METAR - Interval of issuance 30mins.

EICK AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimensions of RWY (M)	Strength (PCN) and surface of RWY and SWY	THR coordinates RWY end coordinates THR Geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY
1	2	3	4	5	6
16	159.87°	2133 x 45	55/F/B/W/T ASPH -	515100.97N 0082947.18W 514956.16N 0082908.84W 187ft	THR 477ft
34	339.88°	2133 x 45	55/F/B/W/T ASPH -	514956.16N 0082908.84W 515100.97N 0082947.18W 187ft	THR 461ft
07	062.61°	1310 x 45	55/R/C/W/U CONC/ASPH -	515029.78N 0082945.59W 515049.27N 0082844.84W 187ft	THR 471ft
25	242.62°	1310 x 45	55/R/C/W/U CONC/ASPH -	515049.27N 0082844.84W 515029.78N 0082945.59W 187ft	THR 502ft

Slope of RWY-SWY	SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RWY End Safety Area dimensions (M)	Location and description of Arresting System	OFZ	Remarks
7	8	9	10	11	12	13	14
Refer to Aerodrome Obstacle Chart Type A	NIL	61 x 150	2255 x 300	RWY 16 THR: 147 long x 150 wide. RWY16 END: 178 long x 150 wide	NIL	Yes	RWY 16/34 is provided with 7.5M wide asphalt shoulders. Runway surface grooved asphalt.
	NIL	61 x 150	2255 x 300	RWY 34 THR: 178 long x 150 wide RWY34 END: 147 long x 150 wide	NIL	Yes	
	NIL	61 x 150	1432 x 150	90 long x 90 wide at both ends of RWYstrip	NIL	N/A	
	NIL	61 x 150	1432 x 150	90 Long x 90 Wide at both ends of RWY strip	NIL	N/A	

EICK AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
16	2133	2194	2133	2133	NIL
34	2133	2194	2133	2133	
07	1310	1371	1310	1310	NIL
25	1310	1371	1310	1310	

EICK AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	APCH LGT type LEN INTST	THR LGT colour WBAR	VASIS (MEHT) PAPI	TDZ Length	RWY Centre Line LGT Length, spacing, colour, INTST	RWY edge LGT LEN, spacing, colour, INTST	RWY End LGT colour WBAR	SWY LGT LEN (M) colour	Remarks
1	2	3	4	5	6	7	8	9	10
16	CAT II 804M LIH	Green LIH -	PAPI Both sides/3° MEHT 21M (365M)	914.5M 30.5M LIH	2133M 15M coded 0-1218.5M White, 1218.5M-1828M Red/ White 1828M-2133M Red	2133M 60M nom White (last 609.5M Yellow) LIH	Red LIH -	Nil	Turnaround blue omni-directional
34	SIAL 420M LIH	Green LIH -	PAPI Both sides/3° MEHT 19M (400M)	Nil	2133M 15M coded 0-1218.5M White, 1218.5M-1828M Red/ White, 1828M-2133M Red	2133M 60M nom White (last 609.5M Yellow) LIH	Red LIM -	Nil	Turnaround blue omni-directional
07	Nil	Green LIH -	PAPI Both sides/3° MEHT 13M (253M)	Nil	Nil	1310M 60M nom White (last 700M Yellow) LIH	Red LIM -	Nil	Nil
25	SIAL 450M LIH	Green LIH -	PAPI Both sides/3.7° MEHT 17M (270M)	Nil	Nil	1310M 60M nom White (last 700M Yellow) LIH	Red LIM -	Nil	Nil

NOTE - All runway lighting on Runway 16 - 34 with the exception of the approach lights to Runway 34 are LED.

EICK AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	**ABN/IBN location, characteristics and hours of operation**	ABN Flashing White/Green, 24 per Min.
2	**LDI location and LGT** **Anemometer location and LGT**	WDI's 2 Nr.(1 lighted) 1 Nr.
3	**TWY edge and centre line lighting**	Edge, blue, TWY A, B, C and on RWY 07/25 from TWY B to RWY 16/34 Edge retro-reflective markers blue TWY E and F Centreline TWY A and C
4	**Secondary power supply/switch-over time**	Secondary power supply provided, switch-over time 15 SEC (1 SEC in Low Visibility Procedures). Electric battery lamps

5	**Remarks**	Apron: Floodlights Apron edge: Blue, omni-directional Obstacles: Fixed red

EICK AD 2.16 HELICOPTER LANDING AREA

Nil - Helicopter landing area on Apron

EICK AD 2.17 ATS AIRSPACE

1	**Designation and lateral limits**	Cork Control Zone Circle, radius 15 NM 515029N 0082928W
2	**Vertical limits**	5000ft AMSL
3	**Airspace classification**	C
4	**ATS unit call sign Language(s)**	APP: Cork Approach TWR Cork Tower English
5	**Transition altitude**	5000ft
6	**Remarks**	Nil

EICK AD 2.18 ATS COMMUNICATIONS FACILITIES

Service designation	Call sign	Channel(s)	SAT Voice No	Logon Address	Hours of Operation	Remarks
1	2	3	4	5	6	7
GND	Cork Ground	121.85 MHz			H24	Nil
TWR	Cork Tower	119.3 MHz			H24	Nil
		121.7 MHz				
APP	Cork Approach	119.9 MHz			H24	Nil
APP (RADAR)	Cork Radar	118.8 MHz			H24	Nil
ATIS	Cork Information	120.925 MHz			0600-2300	Nil
D-ATIS	Cork Information				0600-2300	Operators equipped with AEEC623 compliant ACARS-MU can interface with the service through ARINC and SITA service provider's network

EICK AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid, MAG VAR, Type of supported OP (for VOR/ ILS/MLS/ GNSS/SBAS and GBAS, give declination)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna or SBAS: ellipsoid height of LTP/ FTP	Service Volume Radius from the GBAS Reference Point	Remarks
1	2	3	4	5	6	7	8
DVOR/DME 3°W (2021)	CRK	114.6MHz	H24	515026.19N 0082939.37W	500ft		Designated Operational Coverage 80 NM
ILS LOC RWY 16 CAT II 4° W (2018)	ICS	109.9 MHz	H24	514950.47N 0082905.47W			Coverage is restricted to 35° either side of course line. Signals received outside the coverage sector including back beam radiation should be ignored. Use at 3000 feet AMSL restricted to 18NM, due low signal coverage. LLZ Flags may be observed below 3000ft AMSL outside 10NM range from threshold.
ILS GP RWY 16		333.8 MHz	H24	515050.04N 0082947.93W			GP Angle 3.0° RDH 57ft Perturbations might be observed between 3NM and touchdown. Flight calibration reported perturbations to be well within tolerances.
ILS DME RWY 16	ICS	CH36X	H24	515050.04N 0082947.93W	530ft *		The DME Zero range is indicated at THR RWY 16 * Data whose quality is not assured
ILS LOC RWY 34 CAT I 4° W (2018)	ICN	109.15 MHz	H24	515104.83N 0082949.45W			Coverage is restricted to 35° either side of course line. Signals received outside the coverage sector including back beam radiation should be ignored.
ILS GP RWY 34		331.25 MHz	H24	515005.74N 0082921.33W			GP Angle 3.0° RDH 54ft
ILS DME RWY 34	ICN	CH28Y	H24	515005.74N 0082921.33W	512ft *		The DME zero range is indicated at THR RWY 34 * Data whose quality is not assured
SBAS (LPV, LNAV/VNAV, LNAV RWY16)	GPS & EGNOS E16A	1575.42 MHz CH 55007	H24	N/A	LTP/FTP Ellipsoid Height 202.9 M	N/A	Transmitting antennas are satellite based. CCCCCCCCCCCCCCC CCCCCCCCC

Type of aid, MAG VAR, Type of supported OP (for VOR/ ILS/MLS/ GNSS/SBAS and GBAS, give declination)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna or SBAS: ellipsoid height of LTP/ FTP	Service Volume Radius from the GBAS Reference Point	Remarks
1	2	3	4	5	6	7	8
SBAS (LPV, LNAV/VNAV, LNAV RWY34)	GPS & EGNOS E34A	1575.42 MHz CH 44276	H24	N/A	LTP/FTP Ellipsoid Height 197.6 M	N/A	Transmitting antennas are satellite based.
SBAS (LPV, LNAV/VNAV, LNAV RWY07)	GPS & EGNOS E07A	1575.42 MHz CH 76871	H24	N/A	LTP/FTP Ellipsoid Height 201.1 M	N/A	Transmitting antennas are satellite based.
SBAS (LNAV RWY25)	GPS	1575.42 MHz	H24	N/A	LTP/FTP Ellipsoid Height N/A	N/A	Transmitting antennas are satellite based.

EICK AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Taxiing Restrictions

- The apron taxiway south of TWY C is only suitable for aircraft of wingspan less than 36M.
- TWY E is only suitable for use during daylight hours and for aircraft of wingspan less than 24M and MTOW less than 5700kg.
- TWY F is only suitable for aircraft of wingspan less than 24M.
- 180° turns by wide-bodied aircraft on RWY 16/34 are permitted only at runway ends.
- Runway 16/34 - 180° turns by aircraft with a wingspan less than 52m are permitted on Runway 16/34 on condition that the aircraft is turned at a low constant speed (5-8 kts) with minimal thrust, to avoid the inboard main landing gear wheel becoming stationary (Spot turns must be avoided).

2. Taxiway A
Taxiway A slopes downwards from the apron to RWY 16/34 at a gradient of 2% (1 in 50).

3. Aircraft Training
Local General Aviation night training operations at aerodrome subject to prior permission from Aerodrome Administration.

4. Mandatory Ground Handling
All aircraft must avail of ground handling. All aircraft of less than 2 tonnes maximum certified AUW must avail of minimum handling, i.e. crew and passenger marshalling between departures/arrivals and the aircraft.

EICK AD 2.21 NOISE ABATEMENT PROCEDURES

1. Aircraft operators shall ensure at all times that aircraft are operated in a manner calculated to cause the least disturbance practicable in areas surrounding the airport. The following procedures are provided to ensure that the necessary safety of flight operations is maintained while minimising exposure to noise on the ground.

2. CAT A, B Aircraft.
All CAT A, B aircraft departures from all runways must maintain straight ahead after take-off until passing 1000ft QNH before commencing turn. No take-off turn shall be commenced before the departure end of runway.

3. CAT C, D Aircraft.
CAT C, D aircraft departures must maintain straight ahead after take-off until passing 2500ft QNH before

commencing turn.

Take-off climb should comply with the recommendations for Aeroplane Operating Procedures-Take-Off, Procedure NADP1 or NADP2 detailed in Part I, Section 7, Chapter 3 of Pans-Ops ICAO Doc 8168, Volume 1.

EICK AD 2.22 FLIGHT PROCEDURES

1. General

1.1 Holding Areas
Protected airspace is provided for Holding Areas in accordance with the criteria contained in PANS-OPS ICAO Doc 8168, Volume II for basic holding areas.

1.2 SID and STAR

1.2.1 RNAV Equipped Aircraft

SIDs and STARs for RWY16 and RWY34 have been developed in accordance with ICAO Doc 8168 (PANS OPS) and comply with Eurocontrol guidelines for the design of Terminal Procedures for Area Navigation.

The supporting navigation infrastructure is GNSS and INS/IRS as permitted by the Aircraft Flight Manual (AFM) and/ or approved by the appropriate regulatory authority.

Use of DME/DME is acceptable at higher levels, where navigation accuracy of +/- 1NM can be maintained, however due to the lack of DME facilities DME/DME can not be relied upon to provide a navigation solution at lower levels.

Operators which have obtained operational and airworthiness approval, from their regulatory authority, may operate the RNAV SID and STAR procedures in accordance with the conditions of approval including:

- P-RNAV certified aircraft;
- B-RNAV certified aircraft only above MSA;

Climb to MSA on the initial segments of the RNAV SIDs may be conducted using conventional navigation.

If the RNAV equipment fails, or navigation accuracy of +/-1 NM can not be maintained, inform ATC as soon as possible. Radar vectoring will be provided.

1.2.2 RTF Phraseology

Phraseology used will be as provided in the European Regional Supplementary Procedures (ICAO Doc 7030) and outlined in Eurocontrol Guidance material for RNAV SIDs and STARs.

Examples of phraseology for ATC are:

{CALLSIGN} CLEARED {STAR designator} ARRIVAL, RUNWAY {designator}

Note: On such a clearance flight crew shall continue on route until reaching start point of the STAR.

{CALLSIGN} ADVISE IF ABLE {designator} DEPARTURE [or ARRIVAL].

If ATC are unable to issue a requested SID or STAR:

{CALLSIGN} UNABLE TO ISSUE (designator) DEPARTURE [or ARRIVAL] DUE [Reason]

Examples of pilot phraseology in the event of being unable to accept SID or STAR:

UNABLE (designator) DEPARTURE [or ARRIVAL] DUE TO RNAV TYPE

UNABLE RNAV DUE EQUIPMENT

1.2.3 Non RNAV Equipped aircraft

Non RNAV equipped aircraft will be assigned a clearance based on conventional navigation aids and/or vectoring.

1.3 Visual manoeuvring (circling) approaches

Visual manoeuvring (circling) approaches are permissible, on request, to all runways.

2. Speed Control - General Provisions

Speed Restrictions

General	Routeing to Holds	Intermediate Approach Segment (BTN IF and FAP)	Final Approach	Remarks
Below FL 100, Max IAS 250KT	ATLAM Max IAS 210KT BARNU, Max IAS 220KT	RWY 34 Max IAS 210KT RWY 16 Max IAS 220KT	Nil	1. *ATC may request specific speeds for accurate spacing. Comply with speed adjustments as promptly as feasible within operational constraints.* 2. *If unable to comply with the above, advise ATC as soon as possible.*

3. Arrival Procedures

3.1 Clearance to enter the CTA and CTR

Aircraft flying the ATS Route system will be cleared into the CTA/CTR associated with Cork without having to request a specific entry clearance.

Arriving Aircraft for RWY 16/34 capable of flying STARs will normally be cleared on a STAR appropriate to the route by ATC. On occasions ATC may radar vector aircraft for arrival (Due traffic or technical reasons).

Arriving aircraft for RWY 07/25 will be vectored to join the approach.

3.2 Initial Approach Procedures

- With Radar Control
  In order to expedite the flow of traffic, aircraft may be cleared on STARs, or may receive radar vectors on to final approach track from the hold or earlier on the Standard Arrival Route.
  Pilots should plan their flight profile in such a manner as to be able to achieve the Minimum Holding Level at the appropriate hold
  Actual descent clearance will be as directed by ATC.

- Without Radar Control
  When RADAR is not serviceable, aircraft will be cleared to join the instrument approach procedure appropriate to the landing direction from the appropriate hold.

- Communications failure procedures for arriving aircraft
  Aircraft experiencing communications failure in the Shannon CTR/CTA shall set transponder code A7600 and comply with standard ICAO procedures.
  Supplemented by the following:

  - Traffic cleared on STAR
    Aircraft cleared on a STAR and experiencing a Communications failure shall follow the route of the STAR at the last cleared level or altitude. On reaching the appropriate hold fix, descend to 3000ft and complete the instrument approach procedure appropriate to the Runway in use.

  - Traffic Radar vectored to final approach

    1. *Aircraft being radar vectored to final approach should join, in the most expeditious manner, and complete the Instrument Approach procedure appropriate to the Runway in use.*

    2. *If unable to comply with the above, or uncertain of position, climb to 3000ft QNH, proceed in the most expeditious manner to the hold appropriate to the Runway in use and complete the Instrument Approach Procedure appropriate to the Runway in Use.*

3.3 Surveillance Minimum Altitude Chart (EICK AD 2.24-29)

ALTITUDE TEMPERATURE CORRECTION to -5°C taken into account in determining minimums. For temperatures below -5°C altitude correction will be managed by ATC.

4. Departure Procedures

4.1 RWY 16 AND 34

Aircraft capable of complying with Standard Instrument Departures will proceed in accordance with the SID.

If an aircraft is unable to comply with Standard Instrument Departure the phraseology “Unable to comply with {departure} due {reasons}”

Pilots who cannot comply with Standard Instrument Departures shall advise ATC in good time using the phraseology “Unable to comply with {departure} due {reasons}, so that alternative clearances can be issued.

4.2 Communications failure procedures for departing aircraft

Departing aircraft experiencing communications failure shall set transponder code A7600 and comply with the following procedures:

RFL below FL080: Departing traffic cleared by ATC to a level/altitude below the RFL, shall comply with Communication failure procedures as outlined in ICAO Annex 2.

RFL FL080 or above: Departing traffic cleared by ATC to a level or altitude below FL080 shall maintain the cleared level for a period of three minutes following the time the altitude/level is reached and thereafter adjust level and speed in accordance with filed flight plan.

Departing Traffic experiencing a communications failure above FL080 shall comply with communications failure procedures as outlined in ICAO Annex 2.

Note: CAT A, B aircraft may be assigned a Departure appropriate to CAT C, D aircraft at the discretion of ATC.

5. Low Visibility Procedures

5.1 Low Visibility Procedures apply at Cork Airport when the cloud ceiling is below 200ft (60M) and either the IRVR is less than 550M or the meteorological visibility is less than 800M.

5.2 Only RWY 16 may be used for CAT II (arrival) operations. The CAT II holding position on TWY A must be used. When these Procedures are in operation and RWY 16 is in use the following standard taxi route system applies:

- Departing aircraft shall normally use TWY A.
- Arriving aircraft shall normally use TWY C.

5.3 Low Visibility Take-off (LVTO) Procedures

During LVP Operations, LVTOs are permitted from both Runway 16 and Runway 34. It is at the discretion of the PIC to depart based on their airline operation procedures in LVP conditions.

Take-offs are not available in IRVR conditions below 125M

ATC shall inform departing pilots if and when any IRVR value falls below 125M

5.4 TWY Stopbar/Centreline Lighting

TWY stopbar/centreline lighting will be in use.

At no time shall an aircraft or vehicle cross an illuminated stop bar and any instruction to do so should be challenged. In Exceptional circumstances when the stop bar cannot be extinguished the authorisation to cross the illuminated stop bar may be given by ATS. This shall always be challenged and confirmation received that this instruction is part of a contingency arrangement due to a failure of the stop bar. All aircraft and vehicle operators shall request for the instruction to cross an illuminated stop bar to be reconfirmed by ATS and read back before proceeding.

Pilots will be informed by RTF when Low Visibility Procedures are in operation.

Caution: Operational evaluation has indicated that the performance of automatic landing systems may be affected by the profile of the terrain under the approach to RWY 16. Operators' procedures should take account of this during CAT II approaches.

Aircraft operator requirements for CAT II operations at Cork may be obtained from Aerodrome Administration.

6. Visual Approach Chart (VAC)

Chart EICK AD 2.24-28 (VAC) provides data for VFR pilots.

Visual Reporting Point (VRP) Holds:

- Carrigaline Town Hold: 514858.94N 0082326.97W (WGS84). Left-hand pattern, based on Carrigaline Town. Outbound leg is 1 minute, flown at 120KT TAS, Inbound track 246°M. Minimum holding altitude is 1500ft QNH.
- Classis Lake Quarry Hold: 515256.46N 0083748.90W. Right-hand pattern, based on quarry lake near Oven village. Outbound leg is 1 minute, flown at 120KT TAS. Inbound track 163°M. Minimum holding altitude is 1500ft QNH.
- Dunkettle Roundabout Hold: 515414.76N 0082316.64W. Left-hand pattern, based on Dunkettle Roundabout. Outbound leg is 1 minute, flown at 120KT TAS. Inbound track 163°M Minimum holding altitude is 1500ft QNH.
- Halfway Roundabout Hold: 514806.24N 0083425.70W. Right-hand pattern, based on Halfway village. Outbound leg is 1 minute, flown at 120KT TAS, inbound track 066°M. Minimum holding altitude is 1500ft QNH.

Note: VFR Pilots may be requested to report at the above reference VRP's if flight planned to land at EICK and will be issued with joining instructions as required.

EICK AD 2.23 ADDITIONAL INFORMATION

Refer to ENR 5.6 for bird hazard information

Runway 07/25
The runway strip width and obstacle limitation surfaces for Runway 07/25 are appropriate to a Code 3 Non-instrument runway.
ICAO Categories A, B aircraft can perform certain Type-A Approaches only, to runway 07/25-see EICK AD 2.24
A Type A Approach being that having a minimum descent height or decision height at or above 75M (250ft)

EICK AD 2.24 CHARTS RELATED TO AERODROME

EIDW AD 2.1 AERODROME LOCATION INDICATOR AND NAME

EIDW – DUBLIN/International

EIDW AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	**ARP and its site**	532517N 0061612W Midpoint RWY 10R/28L
2	**Direction and distance from (city)**	10 KM (5.4 NM) N of Dublin
3	**AD Elevation, Reference Temperature & Mean Low Temperature**	243 ft AMSL / 19.7°C (Max Temp) 0.1°C (MNM Temp)
4	**Geoid undulation at AD ELEV PSN**	184 ft
5	**MAG VAR/Annual change**	2° W (2023) /13' decreasing
6	**Contact Details**	Post: Resource Allocation Unit (for stand allocation) Phone: +353 1 944 5228 Email: POD@dublinairport.com Post: Airport Duty Manager Phone: + 353 87 2892222 Email: airportdm@daa.ie Post: Service Delivery Manager Airside Phone: + 353 6312669 Email: sdm-a@daa.ie
7	**Types of traffic permitted (IFR/VFR)**	IFR/VFR
8	**Remarks**	Nil

EIDW AD 2.3 OPERATIONAL HOURS

1	**AD Operator**	H24
2	**Customs and immigration**	Customs/Irish Immigration: H24 Department of Agriculture, Food and the Marine: H24 US Customs and Border Protection: By prior negotiation with Dublin US Embassy, USCBP 0700 - 1700
3	**Health and sanitation**	H24
4	**AIS Briefing Office**	See Remarks
5	**ATS Reporting Office (ARO)**	H24
6	**MET Briefing Office**	H24
7	**ATS**	H24
8	**Fuelling**	H24

9	**Handling**	H24
10	**Security**	H24
11	**De-icing**	H24
12	**Remarks**	Airport closed on 25th December. Exact hours advised by NOTAM. PIB AVBL from AIS, Shannon see GEN 3.1.5

EIDW AD 2.4 HANDLING SERVICES AND FACILITIES

1	**Cargo handling facilities:**	Available from IAG Cargo, Swissport Cargo and WFS
2	**Fuel/oil types**	JET A1Fuel Oil Grades 100, 100W, 100U, 100E, 120, W80, E80. Turbo Oils 750, 390, 2380
3	**Fuelling facilities/capacity**	JET A1 H24 No limitations. Hydrant fuelling available on Pier 1 and Pier 4 stands. Fuelling by bowser available on all other stands.
4	**De-icing facilities**	On request from Signature and Swissport.
5	**Hangar space available for visiting aircraft**	On request from Dublin Aerospace and Aer Lingus.
6	**Repair facilities for visiting aircraft**	Repair facilities from Dublin Aerospace.
7	**Remarks**	Passenger Handling: Available from Swissport, Sky Handling, Signature Flight Support (Corporate), Universal Aviation (Corporate). Catering: Available from Gate Gourmet and Dnata Catering. General Aviation Handling: Signature Flight Support, Universal Aviation, (Other ground handlers listed above on request). Fixed ground power: Pier 1: Stands 121 to 127 inclusive, Stands 108L to 111R inclusive Pier 3: Stands 311C/311R, 312, 313C, 314, 315C, 316, 317, 318L, 318C and 318R Pier 4: Stands 400L to 409R inclusive Aircraft Power Plant Test Runs: See EIDW AD 2.20

EIDW AD 2.5 PASSENGER FACILITIES

1	**Hotel(s) at or in the vicinity of AD**	Hotels At Airport and in Dublin area. See www.booking.com Link in doc
2	**Restaurant(s) at or in the vicinity of AD**	See www.dublinairport.com
3	**Transportation possibilities**	Buses, taxis, car hire AVBL at Airport

4	**Medical facilities**	First aid treatment, All Airport Police are trained Emergency first Responders (ERFs), Rescue and Fire Fighting Services Personnel (RFFS) Paramedics with 1 domestic ambulance. Hospitals in Dublin, 8km.
5	**Bank and Post Office at or in the vicinity of AD**	ATM and Bureau De Change available at Airport No Post Office at Airport
6	**Tourist Office**	At Airport
7	**Remarks**	Short term Car Parking - 3750 spaces Long term Car Parking - 18600 spaces Executive lounges - See www.dublinairport.com

EIDW AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	**AD category for fire fighting**	Required CAT 9 Available CAT 9
2	**Rescue equipment**	Emergency lighting and other equipment adequate to meet Category 9 requirements
3	**Capability for removal of disabled aircraft**	Aircraft Recovery Coordinator Airfield Delivery Manager Phone:+353 (0)87 203 5950 Capability Up to Code C aircraft (nosewheel recovery up to Code E) Details available from Coordinator (Utilising equipment available at Dublin Airport)
4	**Remarks**	**Communication with Rescue and Fire Fighting Service:** Frequency 121.600 MHz AVBL for direct communication between ACFT and Rescue and Fire Fighting Service. 121.600 MHz should be requested initially via ATC. Call sign for the Rescue and Fire Fighting Service is 'Dublin Fire'. It is mandatory for both ACFT and Rescue and Fire Fighting Service to maintain contact with ATC at all times. ATC do not have access to 121.600 MHz. Frequency 121.600 MHz is H24 and AVBL within 10 NM radius of Dublin Airport

EIDW AD 2.7 RUNWAY SURFACE CONDITION, ASSESSMENT AND REPORTING, AND SNOW PLAN

1	**Type(s) of clearing equipment**	Snow clearing and anti-icing equipment including: Sweeper-blowers Tractors equipped with ploughs or brushes Sprayers of de-icing fluid Snow blowers Ramp ploughs/brushes Motorised brushes
2	**Clearance priorities**	1. Duty runway(s) and associated taxiways, aircraft stands, together with apron areas. 2. Other areas.

3	**Use of material for movement area surface treatment**	De/anti-icing of aircraft movement areas carried out as required using potassium acetate fluids (KAC) and potassium formate (KFOR) See also AD 1.2.
4	**Specially prepared winter runways**	Nil
5	**Remarks**	Annual snow plan available from the Aerodrome Operator on request. AD Operator H24, Airport closed on 25th December. Exact hours advised by NOTAM.

EIDW AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATION DATA

1	**Apron surface and strength**	Surface: CONC Strength: PCN 70/R/C/W/U			
2	**Taxiway width, surface and strength**	TAXIWAY	WIDTH	SURFACE	STRENGTH
		A	23 M	ASPH	PCN 97/R/C/W/T
		B1	24 M	CONC	PCN 108/R/B/W/T
		B2	24 M	CONC	PCN 97/R/B/W/T
		C	23 M	CONC	PCN 107/R/C/W/T
		DN	15 M	CONC	PCN 107/R/C/W/T
		DS	15 M	CONC	PCN 107/R/C/W/T
		E1	23 M	CONC/ASPH	PCN 120/F/B/W/T
		E2	32 M	CONC/ASPH	PCN 85/R/B/W/T
		F-Inner	23 M	CONC	PCN 100/R/B/W/T
		F-Outer	23 M	CONC	PCN 109/R/B/W/T
		F1	25 M	CONC/ASPH	PCN 88/R/C/W/T
		F2	23 M	CONC	PCN 98/R/B/W/T
		F3	23 M	CONC	PCN 98/R/B/W/T
		H1	23 M	CONC/ASPH	PCN 84/R/B/W/T
		K	23 M	CONC	PCN 114/R/C/W/T
		M	23 M	CONC	PCN 114/R/C/W/T
		M1	25 M	CONC/ASPH	PCN 120/R/A/W/T

		N	23 M	CONC	PCN 114/R/C/W/T
		N1	24 M	CONC	PCN 114/R/C/W/T
		N2	27 M	CONC	PCN 114/R/C/W/T
		N3	23 M	CONC	PCN 114/R/C/W/T
		N4	23 M	CONC/ASPH	PCN 98/F/C/W/T
		N5	23 M	CONC	PCN 114/R/C/W/T
		N6	26 M	CONC	PCN 114/R/C/W/T
		N7	25 M	CONC	PCN 114/R/C/W/T
		P1	23 M	CONC/ASPH	PCN 68/R/B/W/T
		S	23 M	CONC/ASPH	PCN 95/R/B/W/T
		S1	23 M	CONC	PCN 60/R/B/W/T
		S2	23 M	ASPH	PCN 70/R/C/W/U
		S3	23 M	ASPH	PCN 48/R/B/W/T
		S4	23 M	CONC	PCN 60/R/B/W/T
		S5	30 M	CONC	PCN 55/R/B/W/T
		S6	23 M	CONC	PCN 59/R/B/W/T
		S7	23 M	ASPH	PCN 95/R/B/W/T
		W1	25 M	ASPH	PCN 120/R/A/W/T
		W2	23 M	ASPH	PCN 120/F/A/W/T
		W3	23 M	CONC	PCN 73/R/A/W/T
		W4	15 M	ASPH	PCN 52/R/B/W/T
		Z	23 M	ASPH	PCN 114/R/C/W/T
		LINK 1	33 M	CONC	PCN 110/R/C/W/T
		LINK 2	65 M	CONC/ASPH	PCN 70/R/C/W/U
		LINK 3	42 M	CONC	PCN 79/R/B/W/T
		LINK 4	73 M	CONC	PCN 84/R/A/W/T
		LINK 5	23 M	CONC/ASPH	PCN 108/R/B/W/T
		LINK 6	23 M	CONC	PCN 109/R/C/W/T
		LINK 7	23 M	CONC	PCN 114/R/C/W/T
		AT 1	47 M	CONC	PCN 70/R/C/W/U

		AT 2	47 M	CONC	PCN 70/R/C/W/U
		AT 3	61 M	CONC	PCN 70/R/C/W/U
		AT 4	59 M	CONC	PCN 70/R/C/W/U
		AT 5	81 M	CONC/ASPH	PCN 70/R/C/W/U
		AT 6	58 M	CONC	PCN 70/R/C/W/U
		West Apron	86 M	CONC	PCN 70/R/C/W/U
		North Apron	48 M	CONC	PCN 70/R/C/W/U
		South Apron	30 M	CONC	PCN 70/R/C/W/U
3	**Altimeter checkpoint location and elevation**	Location: South Apron / Elevation: 201ft AMSL			
4	**VOR checkpoint**	Nil			
5	**INS checkpoint**	EIDW AD 2.24-2			
6	**Remarks**	Nil			

EIDW AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	**Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands**	Taxiing guidance signs at all intersections and at holding points. Mandatory signs lighted. Guidelines on aprons and taxiways. Taxiway information markings. AVDGS is installed on majority of stands. Where AVDGS is available and operational, it is mandatory for it to be used. On stands where AVDGS is not available or not operational Marshallers must be provided. No aircraft should enter a stand without guidance. If AVDGS is not operational on the stands listed below, the aircraft listed cannot taxi onto stand due to reduced clearances. Aircraft will be allocated an alternative stand or must shut down engines and tow on. Stand Restrictions: Stand 313C - B777-300. Stand 314 - B787-900, A330-200 and A330-300. Stand 316 - All A/C types. Stand 409C - All A/C types.
2	**RWY/TWY markings and LGT**	RWY 10R/28L Designation, THR, TDZ, centreline, side stripe, aiming point. RWY 10L/28R Designation, THR, TDZ, centreline, side stripe, aiming point. RWY 16/34 Designation, THR, TDZ, centreline, side stripe, aiming point. For the purposes of Taxiing Intermediate holding positions. Taxiways Centreline, edge stripes, holding positions, intersection markings except TWY S1. Intermediate holding position lights on TWY H1, M1, W2, E2 Link 1, Link 2, Link 3, Apron Taxiway 6 and RWY 16/34 at 16-1 and 34-2, 16-2, K, N, M, F-Outer.

3	**Stop bars**	Switchable Stop bars at CAT II/III Runway Holding Position on TWY E1, S7, N2. Switchable Stop Bars at CAT I Runway Holding Position for Runway 10R/28L on TWY E1, RWY 34, TWY S1, TWY S2, TWY S3, TWY S4, TWY S5, TWY S6, TWY S7 & Maintenance Base. Switchable Stop bars at CAT I Runway Holding Position for Runway 16/34 on TWY E1, E2,TWY B2, TWY A, TWY H1, TWY M1, TWY P1, TWY N, TWY N4 (on RWY 28R), TWY M, TWY W4, TWY W3, TWY W2, TWY W1, TWY S1, RWY 10R & Fire Station Road to RWY16. Switchable Stop bars at CAT I Runway Holding Position for Runway 10L/28R on TWY N2. Switchable Stop bars at co-located CAT I/II/III Runway Holding Position for Runway 10L/28R on TWY N1, TWY N6 & TWY N7. Fixed Stop bars for CAT I conditions to Runway 16/34 is RWY 10L. Fixed Stop bars for CAT II/III conditions for Runway 10R/28L on RWY 34 (CAT III), RWY 34 (CAT I), TWY S1, TWY S2, TWY S3, TWY S4, TWY S5, TWY S6, Maintenance Base, TWY B2, TWY A & H1. Fixed Stop bars for CAT II/III conditions for Runway 10L/28R on TWY N3, TWY N4, RWY 16, TWY N5. No Entry bars for Runway 10L/28R on TWY N3, TWY N4, RWY 16 & TWY N5. Runway Guard Lights on Runway 10R/28L on TWY E1 CAT I, TWY E1 CAT III, RWY 34, TWY S1, TWY S2, TWY S3, TWY S4, TWY S5, TWY S6, TWY S7 CAT I, TWY S7 CAT III & Maintenance Base. Runway Guard Lights for Runway 16/34 on TWY E1, TWY B2, TWY A, TWY H1, TWY M1, TWY P1, TWY N, TWY M, TWY W4, TWY W3, TWY W2, TWY W1, TWY S, TWY S1, RWY 10R & Fire Station Road to RWY 16. Runway Guard Lights for 10L/28R on TWY N1, TWY N2 CAT I, TWY N2 CAT III, TWY N3, TWY N4, RWY 16, TWY N6, TWY N7.
4	**Remarks**	See also EIDW AD 2.14 and 2.15 for lighting

EIDW AD 2.10 AERODROME OBSTACLES

In Area 2					
OBST ID/ Designation	**OBST Type**	**OBST Position**	**ELEV/HGT**	**Markings/Type, Colour**	**Remarks**
a	**b**	**c**	**d**	**e**	**f**
Air Navigation Obstacle (iaa.ie) - https://www.iaa.ie/commercial-aviation/airspace/air-navigation-obstacles					

In Area 3					
OBST ID/ Designation	**OBST Type**	**OBST Position**	**ELEV/HGT**	**Markings/Type, Colour**	**Remarks**
a	**b**	**c**	**d**	**e**	**f**
Air Navigation Obstacle (iaa.ie) - https://www.iaa.ie/commercial-aviation/airspace/air-navigation-obstacles					

EIDW AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	**Associated MET Office**	Dublin Airport
2	**Hours of service**	H24
3	**Office responsible for TAF preparation** **Periods of validity**	MET Eireann Central Aviation Office, Shannon 24 HR 6 HR
4	**Trend forecast** **Interval of issuance**	TREND 30 MIN
5	**Briefing/consultation provided**	Computer-based self-briefing facility Personal briefing by telephone from Central Aviation Office, Shannon
6	**Flight documentation** **Language(s) used**	Charts and tabular English
7	**Charts and other information available for briefing or consultation**	6-hourly synoptic chart, 6-hourly prognostic chart (surface), prognostic chart of significant weather, prognostic chart of wind/temperature at upper levels, prognostic chart of tropopause levels
8	**Supplementary equipment available for providing information**	Weather RADAR, satellite cloud picture receiver, IRVR RWYs 10R and 28L (touchdown, midpoint, stop-end) IRVR RWYs 10L and 28R (touchdown & midpoint) IRVR RWY 16 (touchdown, midpoint) Satellite Display available.
9	**ATS units provided with information**	Dublin TWR
10	**Additional information (limitation of service, etc.)**	GEN 3.5.4.2 to request additional information. METAR available every 30mins.

EIDW AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimensions of RWY (M)	Strength (PCN) and surface of RWY and SWY	THR coordinates RWY end coordinates THR Geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY
1	2	3	4	5	6
10R	095.24°	2637 x 45	92/R/B/W/T ASPH ASPH	532520.75N 0061724.27W 532512.94N 0061502.08W 184 ft	THR 243ft
28L	275.27°	2637 x 45	92/R/B/W/T ASPH ASPH	532512.94N 0061502.08W 532520.75N 0061724.27W 184 ft	THR 203ft
10L	095.25°	3109 x 45	114/R/C/W/T CONC	532613.79N 0061650.22W 532605.39N 0061417.60W 184 ft	THR 235ft
28R	275.28°	3109 x 45	114/R/C/W/T CONC	532606.73N 0061441.87W 532614.62N 0061705.32W 183 ft	THR 213ft
16	156.59°	2072 x 45	84/R/B/W/T ASPH -	532613.16N 0061543.12W 532511.66N 0061458.54W 184 ft	THR 218ft
34	336.60°	2072 x 45	84/R/B/W/T ASPH -	532511.66N 0061458.54W 532613.16N 0061543.12W 184 ft	THR 202ft

Slope of RWY-SWY	SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RWY End Safety Area dimensions (M)	Location and description of Arresting System	OFZ	Remarks
7	8	9	10	11	12	13	14
Slope of 0.47% Refer to Aerodrome Obstacle Chart Type A EIDW AD 2.24-3	91 x 45	213 x 150	2904 x 280	240 x 150	Nil	Yes	RWY 10R/28L, pavement surface is grooved asphalt. RWY 10R/28L is provided with 7.5 M wide asphalt shoulders. Periodic closure for maintenance - Approximately every eight weeks, RWY 10R/28L will be closed for essential maintenance, including rubber removal, grass cutting, painting of day markings etc. The RWY will be closed for approximately four nights between 2230 HR and 0530 HR (local). These closures for maintenance will be promulgated by NOTAM.
	56 x 45	213 x 150	2904 x 280	240 x 150	Nil	Yes	
Slope of 0.18% Refer to Aerodrome Obstacle Chart Type A EIDW AD 2.24-3	Nil	60 x 150	3229 x 280	240 x 150	Nil	Yes	RWY 10L/28R pavement surface is grooved. RWY 10L/28R is provided with 7.5M wide concrete shoulders. CWY starts at end of RWY surface.
	Nil	60 x 150	3229 x 280	240 x 150	Nil	Yes	
Slope of 0.24% Refer to Aerodrome Obstacle Chart Type A EIDW AD 2.24-5	Nil	183 x 150	2192 x 280	RWY16 THR (north end of RWY strip) 140 x 150. RWY16 END (south end of RWY strip) 138 x 150.	Nil	Yes	RWY 16/34, pavement surface is grooved asphalt. RWY 16/34 is provided with 8M wide asphalt shoulders. Runway Slope - Sharp slope change approximately 100m south of RWY 16 THR/ RWY 34 END, and runway slope of up to 1.1%.
	Nil	61 x 150	2192 x 280	RWY34 THR (south end of RWY strip) 138 x 150. RWY34 END (north end of RWY strip) 140 x 150.	Nil	Nil	

EIDW AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
10R	2637	2850	2728	2637	
28L	2637	2850	2693	2637	
10L	3109	3169	3109	2829	THR RWY 10L Displaced 280M
28R	3109	3169	3109	2659	THR RWY 28R Displaced 450M
16	2072*	2255	2072	2072	*Departures from RWY 16 are only available from intersection take off Twys N4 and N.
34	2072	2133	2072	2072	

INTERSECTION TAKE-OFF					
RWY Designator	TWY	TORA (M)	TODA (M)	ASDA (M)	Remarks
10R	S6	2156	2369	2247	see EIDW AD 2.20
10R	S4	1352	1565	1443	
28L	S1	2415	2628	2471	
10L	N6	2860	2920	2860	
28R	N2	2641	2701	2641	
16	N4	2026	2209	2026	
16	N	1653	1836	1653	
34	A	1815	1876	1815	
34	B2	1815	1876	1815	
34	S1	1815	1876	1815	

EIDW AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	APCH LGT type LEN INTST	THR LGT colour WBAR	VASIS (MEHT) PAPI	TDZ Length	RWY Centre Line LGT Length, spacing, colour, INTST	RWY edge LGT LEN, spacing, colour, INTST	RWY End LGT colour WBAR	SWY LGT LEN (M) colour	Remarks
1	2	3	4	5	6	7	8	9	10
10R	CAT II/III 900M LIH	Green LIH Green LIH	PAPI Both sides/ 3° MEHT 20M (439M)	900M 30M LIH	2637M 15M coded 0-1737M White, 1737M-2337M Red/White, 2337M-2637M Red LIH	2637M 60M nom White (last 600M Yellow) LIH	Red LIH -	Red LIH	Nil

Note: All runway lighting with the exception of the PAPI's on Runway 10R/28L are LED.

RWY Designator	APCH LGT type LEN INTST	THR LGT colour WBAR	VASIS (MEHT) PAPI	TDZ Length	RWY Centre Line LGT Length, spacing, colour, INTST	RWY edge LGT LEN, spacing, colour, INTST	RWY End LGT colour WBAR	SWY LGT LEN (M) colour	Remarks
1	2	3	4	5	6	7	8	9	10
28L	CAT II/III 900M LIH	Green LIH Green LIH	PAPI Both sides/3° MEHT 21M (374M)	900M 30M LIH	2637M 15M coded 0-1737M White, 1737M-2337M Red/White, 2337M-2637M Red LIH	2637M 60M nom White (last 600M Yellow) LIH	Red LIH -	Red LIH	RETILs (yellow) Prior to exit to TWY S5
10L	CAT II/III 900M LIH	Green LIH Green LIH	PAPI Both sides/3° MEHT 17.6M (398M)	900M 30M LIH	3109M 15M coded 0-2220M White, 2220M-2820M Red/White, 2820M-3109M Red LIH	3109M 60M nom White (last 600M Yellow) LIH	Red LIH	n/a	RETILs (yellow) Prior to exit to TWY N3
28R	CAT II/III 900M LIH	Green LIH Green LIH	PAPI Right side only 3° MEHT 16.8M (398M)	900M 30M LIH	3109M 15M coded 0-2205M White, 2205M-2805M Red/White, 2805M-3109M	3109M 60M nom White (last 600M Yellow) LIH	Red LIH	n/a	RETILs (yellow) Prior to exit to TWY N5
16	CAT I 910M LIH	Green LIH Green LIH	PAPI Both sides/3° MEHT 19M (380M)	Nil	Nil	2073M 60M nom White (last 600M Yellow) LIH	Red LIH -	Nil	Nil
34	SALS 426M LIL	Green LIH	PAPI Both sides/3° MEHT 20M (380M)	Nil	Nil	2073M 60M nom White (last 600M Yellow) LIH	Red LIH -	Nil	For small aircraft (A & B) Runway 34 end lights may not be sighted until the last 400 metres.

Note: All runway lighting with the exception of the PAPI's on Runway 10R/28L are LED.

EIDW AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	**ABN/IBN location, characteristics and hours of operation**	Nil
2	**LDI location and LGT** **Anemometer location and LGT**	Nil 2 Nr.

3	**TWY edge and centre line lighting**	Edge; blue all TWY and intersections except M1, S3, W2, W4. Edge, blue, RWY 16/34 from TWY A to THR 34 and TWY N to THR 16. Edge, blue, retroreflective markers TWY W4. Centreline, green(green/yellow on exit TWYs) TWY B1, B2, E1, E2, F1, F2, F3, F-inner, F-outer, H1, M1, S, S1, S2, S5, S7, W1, W2 Link 2, Link 3, Link 4, K, N, N1, N2, N3, N4, N5, N6, N7, M. Note: All Taxiway Centreline lights are LED, all Stopbars are LED with the exception of S1 CAT III stopbar. Taxiway edge lights are a mixture of LED (circa 90%) and Halogen.
4	**Secondary power supply/switch-over time**	Secondary power supply provided, switch-over time 15 SEC (1 SEC in Low Visibility Procedures). Electric battery lamps.
5	**Remarks**	Apron - Floodlights Apron edge - Blue, omni-directional (mixture of LED & Halogen). Apron centreline lighting - Green bi-directional on all apron taxiways and taxilanes except Apron TWY 6 and West Apron (all LED). Obstacles: Fixed red (mixture of Neon & LED lights). WDIs 4-6 Nr. (2-4 lighted). See Aerodrome Chart EIDW AD 2.24-1

EIDW AD 2.16 HELICOPTER LANDING AREA

NIL

EIDW AD 2.17 ATS AIRSPACE

1	**Designation and lateral limits**	533445N 0055420W, arc 15NM radius centre 532621N 0061508W, 531152N 0062130W, 531439N 0062130W, 531437N 0063707W, 532202N 0064237W, 532127N 0063758W, arc 5NM radius centre 532110N 0062938W, 532403N 0063626W, 532347N 0063117W, arc 10NM radius centre 532621N 0061508W, 533445N 0062411W.
2	**Vertical limits**	5000 ft
3	**Airspace classification**	C
4	**ATS unit call sign Language(s)**	Dublin Tower - English
5	**Transition altitude**	5000 ft
6	**Hours of applicability**	-
7	**Remarks**	Nil

EIDW AD 2.18 ATS COMMUNICATIONS FACILITIES

Service designation	Call sign	Channel(s)	SAT VOICE No	Logon Address	Hours of Operation	Remarks
1	2	3	4	5	6	7
Clearance Delivery Frequency	Dublin Delivery	122.985 MHz			0600-1800 local time	Aircraft Contact Minimum 15 Min before start-up. 8.33kHz Channel.
GND	Dublin Ground	121.800 MHz			0600-2400 local time	Non-8.33kHz equipped aircraft shall contact 121.8 MHz for ATC Clearance minimum 15 minutes prior to requested start up.
		125.885 MHz				GND NTH.
		130.790 MHz			H24	
TWR	Dublin Tower	118.600 MHz			H24	Primary TWR Frequency. Note: TWR STH when segregated runway mode in use (Monitor NOTAM for further information).
		124.680 MHz			H24	TWR NTH. Note: TWR NTH when segregated runway mode in use (Monitor NOTAM for further information).
		128.800 MHz			H24	Non 8.33kHz TWR NTH Frequency.
		119.805 MHz			H24	Dublin Tower Backup Channel. When instructed by ATC.
APP	Dublin Approach	121.100 MHz			H24	
		119.555 MHz			06:00 to 24:00L	
		133.280 MHz			06:00 to 24:00L	
		119.930 MHz			H24	Final Controller
ACC	Dublin Control	129.180 MHz			All H24	Upper North
		135.655 MHz				Upper South
		132.580 MHz				Lower North
		120.755 MHz				Lower South
		124.650 MHz			H24	Backup Frequency available Upper and Lower North and South.
		126.250 MHz				
FIS	Dublin Flight Information Service	118.500 MHz			As promulgated on ATIS	As required.
ATIS	Dublin Information Arrival	124.530 MHz			0515-2200 Local time	
	(Dublin Information Departure)	129.640 MHz			0515-2200 Local time	Not notified as yet operationally available (Monitor NOTAM for further information).
VOLMET	Dublin VOLMET	127.005 MHz			H24	

Service designation	Call sign	Channel(s)	SAT VOICE No	Logon Address	Hours of Operation	Remarks
1	2	3	4	5	6	7
D-ATIS	Dublin Information				0515-2200 Local time	Operators equipped with AEEC623 compliant ACARS-MU can interface with the service through ARINC and SITA service provider's network.

EIDW AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid, MAG VAR, Type of supported OP (for VOR/ILS/ MLS/GNSS/ SBAS and GBAS, give declination)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna or SBAS: ellipsoid height of LTP/ FTP	Service Volume Radius from the GBAS Reference Point	Remarks
1	2	3	4	5	6	7	8
DVOR/DME 2° W (2021)	DUB	114.9MHz CH 96X	H24	532957.8N 0061825.6W	200ft		100/500, 300/700 (180° T-360° T) with purpose A,T,E
DVOR/DME 2° W (2021)	DAP	111.20MHz CH 49X	H24	532525.0N 0061810.0W	300ft		Designated Operational Coverage 150NM
DVOR/DME 2° W (2020)	BAL	115.8MHz CH105X	H24	531759.6N 0062652.0W	300ft		Designated Operational Coverage 60 NM Operating Authority Minister for Defence. BAL DVOR unusable in sector R150 to R170 below 5500 ft AMSL outside 20 NM due to terrain. Due to rising terrain to the south of facility, aircrew may observe BAL DME unlocks in sectors R150 to R175 and R195 to R205 below 4500 ft AMSL outside 20 NM.
NDB	KLY	378kHz	H24	531610.4N 0060623.2W			Designated Operational Coverage 50NM ACFT may not obtain guidance beyond 45NM below 8,000ft, in the sector between bearings 180° T and 270° T.
NDB	GMN	334kHz	H24	533853.2N 0061336.0W			Designated Operational Coverage 30NM Operating Authority Minister for Defence.
DME	GMN	76X 112.9MHz	H24	533848.5N 0061405.7W	100ft		Designated Operational Coverage 30NM. Operating Authority Minister for Defence.

Type of aid, MAG VAR, Type of supported OP (for VOR/ILS/ MLS/GNSS/ SBAS and GBAS, give declination)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna or SBAS: ellipsoid height of LTP/ FTP	Service Volume Radius from the GBAS Reference Point	Remarks
1	2	3	4	5	6	7	8
ILS LOC RWY 10R CAT IIIa 2° W (2020)	IDE	108.9MHz	H24	532511.8N 0061440.8W *			Coverage restricted to 35° either side of course line. Signals received outside the coverage sector including back beam radiation should be ignored * Data whose accuracy has not been quality assured
ILS GP RWY 10R		329.3MHz	H24	532515.5N 0061705.5W			GP angle 3° RDH 54ft
ILS DME RWY 10R	IDE	CH 26X (108.9MHz)	H24	532515.5N 0061705.5W	290ft		DME zero range is indicated at THR RWY 10R
LO RWY 10R	OE	316kHz	H24	532548.6N 0062543.7W			
OM RWY 10R	2 dashes per sec.	75MHz	H24	532547.8N 0062543.5W			
MM RWY 10R	Dots and dashes	75MHz	H24	532523.6N 0061816.8W			
ILS LOC RWY 28L CAT IIIa 2° W (2020)	IDW	111.35MHz	H24	532521.8N 0061743.7W *			Coverage restricted to 35° either side of course line. Signals received outside the coverage sector including back beam radiation should be ignored * Data whose accuracy has not been quality assured
ILS GP RWY 28L		332.15MHz	H24	532509.6N 0061518.4W			GP angle 3° RDH 54ft
ILS DME RWY 28L	IDW	CH 50Y (111.35MHz)	H24	532509.6N 0061518.4W	260ft		DME zero range is indicated at THR RWY 28L
LO RWY 28L	OP	397kHz	H24	532449.7N 0060818.1W			
OM RWY 28L	2 dashes per sec	75MHz	H24	532450.5N 0060818.4W			
MM RWY 28L	Dots and dashes	75MHz	H24	532510.0N 0061409.2W			
ILS LOC RWY 10L CAT IIIb 2° W (2022)	INDL	109.55MHz	H24	532604.5N 0061401.4W			Coverage restricted to 35° either side of course line. Signals received outside the coverage sector including back beam radiation should be ignored.
ILS GP RWY 10L		332.45MHz	H24	532616.9N 0061630.2W			GP angle 3° RDH 51ft.
ILS DME RWY 10L	INDL	CH 32Y (109.55MHz)	H24	532616.9N 0061630.2W	250ft		DME zero range is indicated at THR RWY 10L

Type of aid, MAG VAR, Type of supported OP (for VOR/ILS/ MLS/GNSS/ SBAS and GBAS, give declination)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna or SBAS: ellipsoid height of LTP/ FTP	Service Volume Radius from the GBAS Reference Point	Remarks
1	2	3	4	5	6	7	8
ILS LOC RWY 28R CAT IIIb 2° W (2022)	INDR	110.15MHz	H24	532615.5N 0061721.6W			Coverage restricted to 35° either side of course line. Signals received outside the coverage sector including back beam radiation should be ignored.
ILS GP RWY 28R		334.25MHz	H24	532611.9N 0061458.7W			GP angle 3° RDH 51ft.
ILS DME RWY 28R	INDR	CH 38Y (110.15MHz)	H24	532611.9N 0061458.7W	230ft		DME zero range is indicated at THR RWY 28R
ILS LOC RWY 16 CAT I 2° W (2020)	IAC	111.5MHz	H24	532505.7N 0061454.2W *			Coverage restricted to 35° either side of course line. Signals received outside the coverage sector including back beam radiation should be ignored. * Data whose accuracy has not been quality assured
ILS GP RWY 16		332.9MHz	H24	532602.7N 0061543.2W			GP angle 3°
ILS DME RWY 16	IAC	CH 52X	H24	532602.7N 0061543.2W	280ft		DME zero range is indicated at THR RWY 16.
SBAS (LPV, LNAV/VNAV, LNAV RWY28L)	GPS & EGNOS E28A	1575.42 MHz CH 59277	H24	N/A	LTP/FTP Ellipsoid Height 117.1 M	N/A	Transmitting antennas are satellite based.
SBAS (LPV, LNAV/VNAV, LNAV RWY 10R)	GPS & EGNOS E10A	1575.42 MHz CH 41225	H24	N/A	LTP/FTP Ellipsoid Height 130.3 M	N/A	Transmitting antennas are satellite based.
SBAS (LPV, LNAV/VNAV, LNAV RWY 28R)	GPS & EGNOS E28B	1575.42 MHz CH 74379	H24	N/A	LTP/FTP Ellipsoid Height TBC	N/A	Transmitting antennas are satellite based.
SBAS (LPV, LNAV/VNAV, LNAV RWY 10L)	GPS & EGNOS E10B	1575.42 MHz CH 52341	H24	N/A	LTP/FTP Ellipsoid Height TBC	N/A	Transmitting antennas are satellite based.
SBAS (LPV, LNAV/VNAV, LNAV RWY16)	GPS & EGNOS E16A	1575.42 MHz CH 44282	H24	N/A	LTP/FTP Ellipsoid Height 122.6 M	N/A	Transmitting antennas are satellite based.
SBAS (LPV, LNAV/VNAV, LNAV RWY34)	GPS & EGNOS E34A	1575.42 MHz CH 86156	H24	N/A	LTP/FTP Ellipsoid Height 117.9 M	N/A	Transmitting antennas are satellite based.

EIDW AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Ground Movement

1.1 General

i. Stop-bars are provided at all runway entry/exit points and are illuminated to protect active runways. When a runway is inactive the associated stop-bar is normally not illuminated. However, specific clearance from ATC must still be obtained before entering or crossing an inactive runway.

ii. Pilots should use the minimum power necessary while taxiing. In apron areas, pilots should operate at the minimum power commensurate with the intended manoeuvre, due to the effect of jet blast on personnel, equipment and buildings.

iii. Flight crew are responsible for wing tip clearance and are reminded of the importance of maintaining a careful lookout at all times, regardless of location and visibility conditions.

iv. ATC may require aircraft to manoeuvre in close proximity to other aircraft. Avoidance of other aircraft is the responsibility of the flight crew involved. If doubt exists as to whether an aircraft can be passed safely, the flight crew should stop, advise ATC, and request alternative instructions if available.

v. In order to assist in the maintenance of safe separation of aircraft, when flight crew are instructed to stop at any runway-holding or intermediate holding position they should position the aircraft as close as possible to the relevant pavement marking while ensuring that the marking remains visible from the cockpit.

1.2 Turning

No turns should be made at the following runway/taxiway intersections:

- No turns should be made by aircraft from RWY 28R to TWY N3 or vice versa.
- No turns should be made by aircraft from RWY 28R to TWY N4 or vice versa.
- No turns should be made by aircraft from RWY 28R to RWY 16 or vice versa.
- No turns should be made by aircraft from RWY 10L to TWY N5 or vice versa.
- No turns should be made by aircraft from RWY 10L to RWY 16 or vice versa.
- No left turns should be made by aircraft from TWY M to RWY 34 or vice versa.

No turns should be made at taxiway/taxiway intersections where taxi centreline markings are not provided.
Particular attention is drawn to the following:

- No turns should be made by aircraft from TWY W1 to TWY S East of TWY W1 or vice versa.
- No turns should be made by aircraft from TWY F1 to TWY B2 or vice versa.
- No turns should be made by aircraft from TWY B2 to TWY E1 or vice versa.
- No turns should be made by aircraft from TWY A to TWY F1 or vice versa.
- No turns should be made by aircraft from TWY W1 to TWY W2 or vice versa at intersection with TWY S.
- No turns should be made by aircraft from TWY M to TWY N5.
- No turns should be made by aircraft from TWY N to TWY N3.

1.3 Taxiing Restrictions

Location	Situation	Restriction
TWY A	Outbound aircraft holding on TWY A	Aircraft movement not permitted between TWY F1 and Link 2 / TWY F2 or vice versa
TWY B1	Aircraft with wingspan 36m or greater operating on TWY B1	Aircraft not permitted on TWY Z
TWY B2	Outbound aircraft (wingspan less than 36m) holding on TWY B2	Aircraft movement not permitted between TWY F1 and TWY E1 / TWY B1 or vice versa
TWY B2	Outbound aircraft (wingspan 36m or greater) holding on TWY B2	Aircraft movement not permitted between TWY F1 and TWY E1 / TWY B1 or vice versa and Aircraft are not permitted to taxi between TWY E1 and TWY B1 / TWY Z or vice versa
TWY B2	Inbound aircraft (wingspan less than 36m) holding on TWY B2	Movement between TWY A and RWY16-34 / TWY S / TWY S1 or vice versa restricted to aircraft with wingspan less than 36m
TWY B2	Inbound aircraft with wingspan 36m or greater holding on TWY B2	Aircraft movement not permitted between TWY A and RWY16-34 / TWY S / TWY S1 or vice versa
APRON TAXIWAY C	Aircraft operating on Apron Taxiway C	Aircraft not permitted on Apron Taxiway DN or Apron Taxiway DS
APRON TAXIWAY DN	All operations	Restricted to aircraft with wingspan less than 36m
APRON TAXIWAY DN	Aircraft operating on Apron Taxiway DN	Aircraft not permitted on Apron Taxiway C
APRON TAXIWAY DS	All operations	Restricted to aircraft with wingspan less than 36m
APRON TAXIWAY DS	Aircraft operating on Apron Taxiway DS	Aircraft not permitted on Apron Taxiway C
TWY E1	Outbound aircraft (wingspan less than 36m) holding on TWY E1	Movement between TWY B1 and TWY B2 / TWY F1 or vice versa restricted to aircraft with wingspan less than 36m
TWY E1	Outbound aircraft (wingspan 36m or greater) holding on TWY E1	Aircraft movement not permitted between TWY B1 and TWY B2 / TWY F1 or vice versa
TWY F1	Aircraft travelling towards LINK1 / TWY B1 / TWY E1 holding on TWY F1	Aircraft movement not permitted between TWY A and LINK 2 / TWY F2 or vice versa
TWY F1	Aircraft travelling towards LINK 2 / TWY F2 holding on TWY F1	Aircraft movement not permitted between TWYs B1 and B2 or vice versa or between TWY E1 and TWY B1 / TWY Z or vice versa
APRON TAXIWAY F-INNER	All operations	Restricted to aircraft with wingspan less than 36m
TWY K	All operations	Restricted to Code E aircraft (less than 65m wingspan) Note A340 operations are prohibited on TWY K
TWY K	All operations	Aircraft movement not permitted on to TWY N behind holding aircraft on N1
TWY K	All operations	Aircraft movement not permitted on to TWY N if aircraft holding on N2
TWY N	All operations	Aircraft movement not permitted to pass behind aircraft holding on TWY N awaiting intersection take-off on RWY 16
TWY N	All operations	Aircraft movement not permitted to pass behind aircraft holding on TWY N1 onto TWY K
TWY N1	All operations	Aircraft movement not permitted on to TWY N2 behind holding outbound aircraft
TWY N1	All operations	Aircraft movement not permitted on to TWY N behind holding aircraft on TWY K
TWY N2	All operations	Aircraft movement not permitted on to TWY N1 behind holding aircraft

Location	Situation	Restriction
TWY N2	All operations	Aircraft movement not permitted on to TWY N2 if aircraft holding on TWY N1
TWY N3	All operations	No Entry allowed for aircraft from TWY N
TWY N3	All operations	No Entry allowed for aircraft towing or taxiing on R28R from a westerly direction
TWY N4	All operations	Restricted to code E aircraft (less than 65m wingspan)
TWY N4	All operations	No Entry allowed for aircraft on to TWY N4 when 28R is the active runway
TWY N4	All operations	No Entry allowed for aircraft towing or taxiing on RWY 28R in a westerly direction from
TWY N5	All operations	No Entry allowed for aircraft from TWY M
TWY N5	All operations	No Entry allowed for aircraft towing or taxiing on RWY10L in an easterly direction
TWY N6	All operations	Aircraft movement not permitted from TWY M on to TWY N7 behind holding aircraft
TWY N7	All operations	Aircraft movement not permitted from TWY M on to TWY N6 behind holding aircraft
TWY S3	All operations	Restricted to daylight hours only and aircraft with wingspan 30m or less
TWY S5	Outbound aircraft (wingspan less than 36m) holding on TWY S5	Movement on TWY S behind holding aircraft restricted to aircraft with wingspan less than 36m
TWY S5	Outbound aircraft (wingspan 36m or greater) holding on TWY S5	Aircraft movement not permitted on TWY S behind holding aircraft
TWY S6	Outbound aircraft (wingspan less than 36m) holding on TWY S6	Movement on TWY S behind holding aircraft restricted to aircraft with wingspan less than 36m
TWY S6	Outbound aircraft (wingspan 36m or greater) holding on TWY S6	Aircraft movement not permitted on TWY S behind holding aircraft
TWY Z	Aircraft operating on TWY Z	TWY B1 restricted to aircraft with wingspan less than 36m
RWY 16-34 CAT I Runway Holding position for RWY 10R-28L	Outbound aircraft (wingspan less than 36m) holding on RWY 16-34 for entry to RWY 10R-28L	Movement through the intersection of RWY 34 and TWYs A, B2, S, S1 restricted to aircraft with wingspan less than 36m
RWY 16-34 CAT I Runway Holding position for RWY 10R-28L	Outbound aircraft (wingspan 36m or greater) holding on RWY 16-34 for entry to RWY 10R-28L	Aircraft movement not permitted through the intersection of RWY 34 and TWYs A, B2, S, S1.

1.4 Apron Operations

Apron Taxiway1 and Apron Taxiway 2, the aircraft stand taxilanes serving Stands 121L-127, 130-131S, and 200L-203L are restricted to aircraft with a maximum wingspan of 36m.

Apron Taxiway 3, the aircraft stand taxilane serving Stands 205R-207T and 311L-313L, is restricted to aircraft with a maximum wingspan of 41.10m.

The aircraft stand taxilane serving Stands 412-418 is restricted to aircraft with a maximum wingspan of 36m.

1.5 Use of Runways (General)

1.5.1 The parallel runways (10R-28L and 10L-28R) shall be used in preference to the crosswind runway, 16-34,

1.5.2 When winds are westerly, Runway 28L shall be preferred for arriving aircraft. Either Runway 28L or 28R shall be used for departing aircraft as determined by air traffic control,

1.5.3 When winds are easterly, either Runway 10L or 10R as determined by air traffic control shall be preferred for arriving aircraft. Runway 10R shall be preferred for departing aircraft, and

1.5.4 Runway 10L-28R shall not be used for take-off or landing between 2300 hours and 0700 hours, except in cases of safety, maintenance considerations, exceptional air traffic conditions, adverse weather, technical faults in air traffic control systems or declared emergencies at other airports.

1.6 Runway 16-34 Operations

Unless otherwise instructed by ATC, aircraft vacating the runway must not stop on any of the following adjoining taxiways: E1, E2, B2, A, H1, M1, P1 or N. Aircraft vacating the runway and stopping in any of these taxiways are not clear of the runway.
Aircraft exiting the runway via TWY N4 must continue on to the section of taxiway parallel to the runway to clear the runway. Aircraft on the adjacent parallel taxiways must give way to aircraft vacating the runway.

1.7 Runway 28L Operations

Unless otherwise instructed by ATC, aircraft vacating the runway must not stop on any of the following taxiways: S3, S4, S5, S6. Aircraft vacating the runway and stopping on any of these taxiways are not clear of the runway. Aircraft exiting onto TWY S7 must continue on to the section of TWY S parallel to the runway to clear the runway. Aircraft on the adjacent parallel taxiways must give way to aircraft vacating the runway.

1.8 Runway 10R Operations

Unless otherwise instructed by ATC, aircraft vacating the runway must not stop on any of the following taxiways: S2, S3 and S4. ATC may instruct arrivals to stop on taxiways E1 or S1 on a tactical basis. Aircraft vacating the runway and stopping on any of these taxiways are not clear of the runway. Aircraft on the adjacent parallel taxiways must give way to aircraft vacating the runway.

1.9 Runway 28R Operations

Unless otherwise instructed by ATC, aircraft vacating the runway must not stop on any of the following taxiways: N5, N6 and N7. Aircraft vacating the runway and stopping on any of these taxiways are not clear of the runway. Aircraft exiting these taxiways must continue on to the section of TWY M parallel to the runway to clear the runway. Aircraft on the adjacent parallel taxiways must give way to aircraft vacating the runway.

1.10 Runway 10L Operations

Unless otherwise instructed by ATC, aircraft vacating the runway must not stop on any of the following taxiways: N4, N3, N2 and N1. Aircraft vacating the runway and stopping on any of these taxiways are not clear of the runway. Aircraft exiting these taxiways must continue on to the section of TWY N parallel to the runway to clear the runway. Aircraft on the adjacent parallel taxiways must give way to aircraft vacating the runway.

2. Availability of Intersection Take-Off

Take-offs using less than the full length of the runway are available (except during Low Visibility Operations) from TWY/RWY intersections as listed in EIDW AD 2.13

During Low Visibility Operations, intersection take-offs using less than the full length are NOT permitted from RWY10R/28L.

The datum from which the reduced declared distances on RWY10R/28L, RWY 10L/28R and RWY16 are measured is the downwind edge of the specific taxiway projected perpendicular to the runway centreline as per section III-3 of the European Air Navigation Plan

The datum from which the reduced declared distances on RWY34 are measured is the intersection of the extended downwind edge of Taxiway S with the runway edge projected perpendicular to the runway centreline.

The take-off run available (TORA) is displayed on an illuminated sign adjacent to the taxiway.

2.1 RWY10R/28L and RWY 16/34

Intersection take-offs are subject at all times to pilots' discretion and aircraft operational requirements. Pilots should advise as early as possible of their ability to accept intersection take-offs.

Approval for intersection take-offs is subject to the air traffic situation.

2.2 RWY 10L/28R

Intersection take-offs from N2 and N6 are considered the primary line up points for RWY28R and RWY10L respectively in normal operations and also in Low Visibility Operations. Taxiways N1 and N7 are NOT available for departure in LVOs. Pilots should advise as early as possible if unable to accept departure from these points. Further information refer to 3.3 HIRO Departures.

Intersection take-offs are not available during Low Visibility Operations.

3 High Intensity Runway Operations (HIRO)

High Intensity Runway Operations (HIRO) are valid from 0600 to 2400HR (local time) unless otherwise advised by ATC (e.g. via ATIS). The HIRO system optimises separation of aircraft on final approach in order to minimise runway occupancy time for both arriving and departing aircraft, thereby maximising runway utilisation and minimising "go-around".

3.1 Arrivals

Pilots are reminded that by leaving the runway at the fastest speed commensurate with safety and standard operating procedures, ATC will be able to guide aircraft on final approach using minimum radar separation or separation minimum according to wake vortex category. Extended runway occupancy may result in a missed approach.

In order to reduce runway occupancy times, pilots shall apply the following procedure:

Pilots should pre-plan their landing and roll out to target the appropriate exit taxiway, weather permitting, that provides for a safe and expeditious exit from the runway to reduce delays and maximise utilisation at all times

Pilots are to ensure runway fully vacated before stopping i.e. aircraft are not to stop on any runway exit awaiting instructions from ATC but should continue on to the next available taxiway (unless instructed to do so by ATC)

Tactical requests to extend the landing roll to reduce ground taxi/exit nearer to parking stands are not to be made to ATC

Aircraft unable to vacate the runway via the preferred taxiways should notify ATC when the aircraft is between 8 and 4 NM from touchdown, or at the earliest opportunity after which it has been determined that it is unable to comply.

The preferred exit taxiways for RWY10R and RWY28L are:

RWY	Aircraft Type	Preferred exit TWY	Distance from threshold to exit point (m)
10R	Wingspan less than 36m and B757	TWY S2	1690
	All other aircraft	TWY S1	2240
28L	Wingspan less than 24m and all turboprops	TWY S4*	1240
	All other aircraft	RET S5	1597
10L	Up to Code E aircraft type	TWY N4	1469
	All other aircraft	RET N3	1700
28R	All aircraft	RET N5	1600
* TWY S4 and N4 are not available as a runway exit during Low Visibility Operations			

Pilots may plan their arrival using the threshold-to-exit-point distances set out in the table above. The distances are measured from the landing threshold to the point of the intersection of the runway centreline and the extended exit taxiway centreline pavement marking.

If the pilot of a landing aircraft cannot contact ATC due to RTF congestion, the pilot should fully vacate the runway and taxi into the next available taxiway. The pilot should then hold position until contact with ATC can be established.

3.2 Departures

ATC will consider every ACFT at the runway holding point as able to commence line-up and take-off roll immediately after clearance is issued, unless otherwise instructed. Pilots not ready when reaching the holding point (no ACFT in front on the same taxiway) shall advise ATC on Tower frequency as early as possible before entering the RWY. When cleared for take-off, ATC will expect and has planned on seeing movement within 10 seconds (of take-off clearance being issued). Wake vortex separation is applied by ATC in accordance with the published requirements. If more separation than the prescribed minima is requested, pilots shall notify ATC before entering the RWY.

Where possible, cockpit checks and cabin readiness should be completed before line-up and any checks needing completion on the runway should be kept to the minimum required. Pilots should not back-track when entering the runway unless specifically requested at the runway holding position.

Note: Pilots shall not cross the runway-holding position until the illuminated red stop bar has been extinguished. ATC do not issue conditional line-up clearances where stop bars are operational at line-up points.

3.3 Preferred Use of Intersection Take-Offs

Based on aircraft type and performance characteristics, ATC may issue instructions for aircraft to depart from runway intersections from which adequate take-off run is available. Intersection take-offs are subject at all times to pilots' discretion and aircraft operational requirements. Pilots unable to accept departure from an intersection point may request an alternate take-off position from ATC. Pilots requiring departure from the beginning of the runway should request it at the time of push-back/start-up, and such requests will be considered by ATC subject to delay.

The preferred use of intersection take-offs are set out in the table below.

Aircraft Type	RWY	Preferred TWY Intersection
All aircraft	10L	TWY N6
	28R	TWY N2
RJ85 type and all turboprops	10R	TWY S6*
	28L	TWY S1*
* Intersection take-offs RWY 10R/28L are not available during Low Visibility Operations		

3.4 Additional information on runway usage is available EIDW AD 2.21 NOISE ABATEMENT PROCEDURES Section 5

4. Mandatory ground handling of aircraft at Dublin Airport
All aircraft must avail of ground handling. All aircraft of less than 2 tonnes maximum certified AUW must avail of minimum handling i.e. ramp transport to/from departures and the aircraft

5. Aircraft Engine Test Runs

Permission for all test runs must be obtained from the Aerodrome Operator.

LOCATION	NOTES
ENGINE TEST SITE 1 (Adjacent to TWY W1)	Up to full power engine runs. Available for aircraft up to Code C plus Boeing 757 (max wingspan 42M). Operational hours 0730 - 2000HR Local Time Monday to Friday 0900 - 2000 HR Local Time Saturday, Sunday and Bank Holidays Lighting and movable jet blast fence available. Movable jet blast fence allows for engine runs to be carried out on the following heading range: 230° - 280°. Positioning outside the headings is not permitted for any aircraft type, other than ATR.
ENGINE TEST SITE 2 (Forecourt Cityjet Hangar)	Check starts, idle engine runs, running one engine at idle, for maintenance and post engine wash run are permissible. Ground engine runs WILL NOT exceed thirty minutes in duration and not above idle power. If a new engine is to be run for the first time, the Airside Operations and Safety Officers (AOSO) must be informed of this fact at the time of the request.

LOCATION	NOTES
ENGINE TEST SITE 3	Withdrawn from service.
ENGINE TEST SITE 4 (Apron Taxiway 6)	Available for all aircraft. Check starts, idle engine runs, running two engines at idle, for maintenance and post engine wash run are permissible. *Caution: No lighting or acoustic/safety barriers available.*
ENGINE TEST SITE 5 (Adjacent to Hangar 1)	Idle engine runs at Engine Test Site 5 are permitted for operators, running two engines, at idle, for maintenance and post engine wash runs. Permission required from the Resource Allocation Unit. *Caution: No acoustic/safety barriers available.*
Aircraft Stands	Aircraft engine test runs at idle speed not exceeding five minutes duration are permitted on all stands. Permission required from the Resource Allocation Unit. If greater then than 5mins up to 30mins permission is required from the AOSO. Only one engine is permitted to be running at any stage during the engine run. *Caution: No acoustic/safety barriers available.*
Location to be agreed	For aircraft larger than code C/B757 contact Resource Allocation Unit for agreed location and available times. Code C aircraft: 0800 - 2000HR local Monday to Friday, 0900 - 2000HR, Saturday, Sunday and Bank Holidays. Code D aircraft: 0900 - 2000HR local, Monday to Sunday, but not outside daylight hours. *Caution: No lighting or acoustic/safety barriers available.*

6. Apron Parking and Marshalling of Aircraft

6.1 Aircraft are prohibited from entering any stand without the guidance of a marshaller, or the Advanced Visual Docking Guidance System (AVDGS) where provided. For availability of AVDGS, see EIDW AD 2.9.1

6.2 In order to prevent dazzling the marshaller or the push-back crew, pilots are requested to switch off the aircraft landing lights when reaching or leaving the parking position and, when equipped with both a conventional red anti-collision light and a sequenced white strobe light system, to switch off the latter system as well.

7. Building Served Stands
Aircraft using building served stands are required to vacate stand immediately at scheduled departure time.

8. Rapid Exit Taxiway – S5, N3, N5
Rapid Exit Taxiways (RETs) at Dublin Airport are designed for a maximum exit speed of 50 KT. However it is expected that aircraft using the RET will normally exit the runway at circa 35KT.
Rapid Exit Taxiway Indicator Lights (RETILs) are provided.

9. Aerodrome Hotspot Facilities in the vicinity of thresholds Runways 28L and 34

9.1 The following details and associated diagram are provided for ease of familiarity with the aerodrome hotspot on this complex area of the aerodrome. The attention of all aircrews is drawn to the layout of taxiways, the location of holding positions, and the proximity of the thresholds of Runway 28L and Runway 34. Close attention must be paid to visual aids (markings, lighting, signage).

9.2 All taxiways are provided with location signs (yellow inscription on black background) and direction signs (black on yellow). Centreline markings and edge markings are also provided.

9.3 Mandatory signs, (white inscription on red background), are provided to identify locations which aircraft shall not pass unless authorised by ATC. These signs include runway designation signs, runway-holding position signs etc.

9.4 For normal visibility conditions, CAT I runway-holding positions are established on all taxiways which intersect with runways. The CAT I runway-holding position on Taxiway E1 is a combined position for Runway 10R/28L and Runway 16/34. CAT I runway-holding positions are also established on Runway 16/34, for aircraft taxiing along Runway 16/34 towards Runway 10R/28L, and on Runway 10R/28L for aircraft taxiing along Runway 10R/28L towards Runway 16/34. These holding positions are denoted by:

i. Yellow painted holding-position markings;

ii. Red mandatory markings, Indicating the Designation of the runway ahead;
iii. Red mandatory signs, including the designation of the runway ahead;
iv. Red controllable stop bar lights (where shown on Aerodrome Chart);
v. Yellow flashing runway guard lights (ICAO Configuration A);
vi. Location sign indicating the taxiway designation in yellow on a black background;

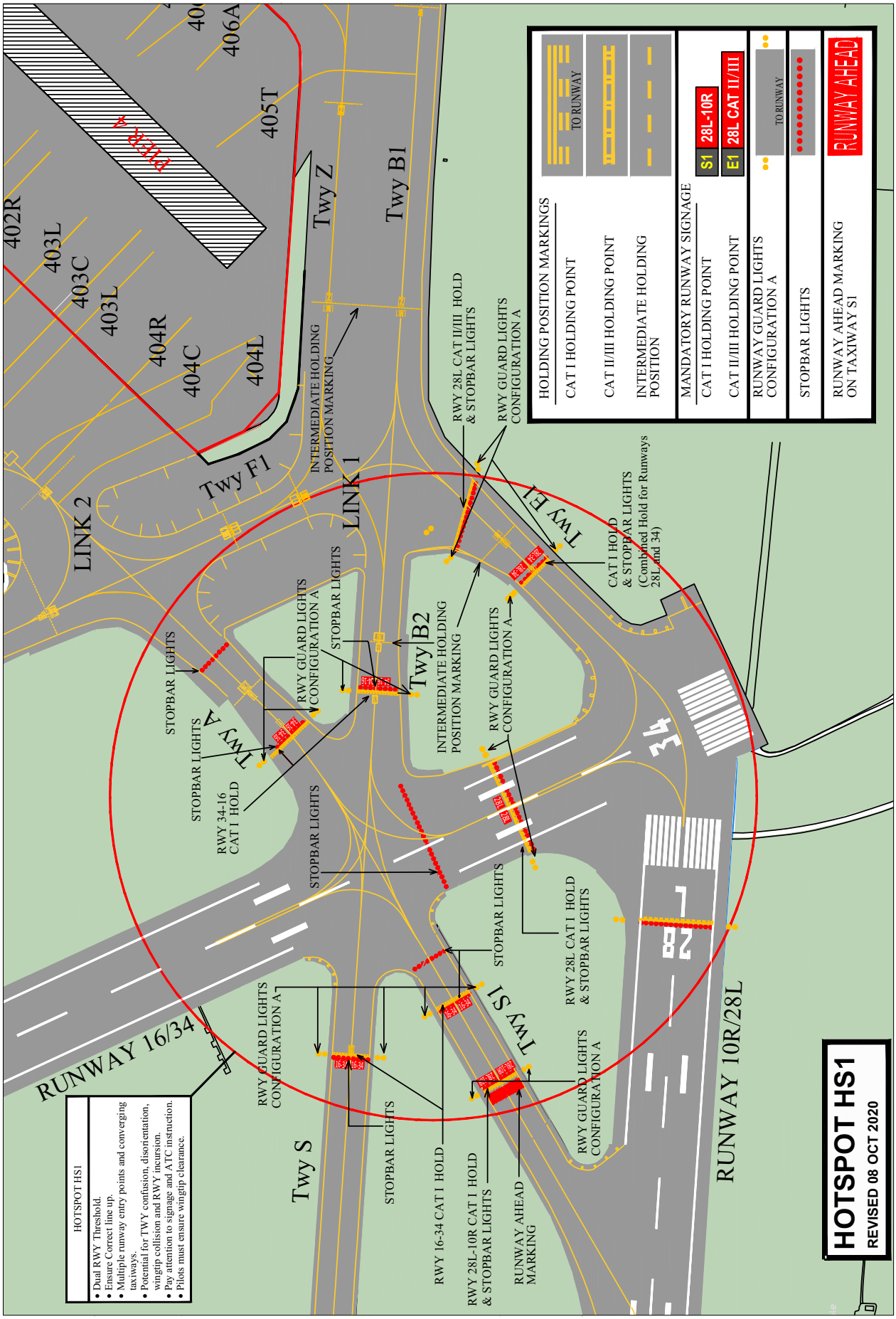
For low visibility conditions, a CAT II/III runway-holding position is established on Taxiway E1. This holding position is denoted by:

i. Yellow painted markings;
ii. Red mandatory signs with the inscription 28L CAT II/III;
iii. Red controllable stopbar lights;
iv. Yellow flashing runway guard lights (ICAO Configuration A);
v. Location sign indicating E1 in yellow on a black background;

9.5 Runway-holding positions cannot be passed without permission from ATC.

9.6 Aircrews are advised that should they become unsure of their position while taxiing, they should contact ATC immediately and request assistance.

9.7 Due to the close proximity of the two runways Runway 28L and Runway 34, aircrews taking off from Runway 28L or Runway 34 are advised to ensure that they are lined up on the correct runway before commencing take-off run.


HOTSPOT HS1
REVISED 08 OCT 2020
HOTSPOT HS1
• Dual RWY Threshold.
• Ensure Correct line up.
• Multiple runway entry points and converging taxiways.
• Potential for TWY confusion, disorientation, wingtip collision and RWY incursion.
• Pay attention to signage and ATC instruction.
• Pilots must ensure wingtip clearance.
HOLDING POSITION MARKINGS
CAT I HOLDING POINT
CAT II/III HOLDING POINT
INTERMEDIATE HOLDING POSITION
MANDATORY RUNWAY SIGNAGE
CAT I HOLDING POINT
CAT II/III HOLDING POINT
RUNWAY GUARD LIGHTS CONFIGURATION A
STOPBAR LIGHTS
RUNWAY AHEAD MARKING ON TAXIWAY S1
RUNWAY AHEAD
TO RUNWAY
S1 28L-10R
E1 28L CAT II/III
RUNWAY 16/34
RUNWAY 10R/28L
Twy S
Twy S1
Twy A
Twy E1
Twy F1
Twy Z
Twy B1
Twy B2
LINK 1
LINK 2
INTERMEDIATE HOLDING POSITION MARKING
RWY 28L CAT II/III HOLD & STOPBAR LIGHTS
RWY GUARD LIGHTS CONFIGURATION A
CAT I HOLD & STOPBAR LIGHTS (Combined Hold for Runways 28L and 34)
RWY 34-16 CAT I HOLD
RWY 16-34 CAT I HOLD
RWY 28L-10R CAT I HOLD & STOPBAR LIGHTS
RWY 28L CAT I HOLD & STOPBAR LIGHTS
RUNWAY AHEAD MARKING
402R
403L
403C
403L
404R
404C
404L
405T
406A
16
34
28
10

10 Stop bars

Pilots shall not cross illuminated stop bars. A pilot receiving instructions which imply that an illuminated stop bar should be crossed shall wait until the stop bar is extinguished. If the stop bar remains illuminated, the pilot shall request confirmation from ATC that the stop bar is to be crossed. Instructions to cross illuminated stop bars will only be given in exceptional circumstances.

In the event of failure of the stop bar control mechanism, only TWY E1 (Runways 28L and 34), TWY S7 (Runway 10R) and TWY N4 (Runway 16) shall be used as line-up points.

In the event of failure of the stop bar control mechanism, the following line up points shall be used:

Runway	Line up Points
28L	E1 and RWY 16
10R	S7
16	N4
34	E1
28R	N2 and N1
10L	N6 and N7

The following phraseology shall be used by ATC to instruct pilots or vehicle drivers to cross an illuminated stop bar:

ATC: “[Callsign] Due to a failure of the control system, the stop bar will remain illuminated. Taxi/proceed across the stop bar on taxiway [designator] / runway [designator] Echo 1/Sierra 7/November 4 and line up RWY [designator] 34,28L,10R,16”

Reply:“[Call-sign] Lining up Runway [10R/28L/34/16 Designator] crossing stop bar” shall not cross illuminated stop bars. A pilot receiving instructions which imply that an illuminated stop bar should be crossed shall wait until the stop bar is extinguished. If the stop bar remains illuminated, the pilot shall request confirmation from ATC that the stop bar is to be crossed. Instructions to cross illuminated stop bars will only be given in exceptional circumstances. In the event of failure of the stop bar control mechanism, only TWY E1 (Runways 28L and 34), TWY S7 (Runway 10R) and TWY N4 (Runway 16) shall be used as line-up points.

11 **Airport Collaborative Decision Making (A-CDM)**

11.1 **Flight Plan Validation**

Three hours prior to the Estimated Off-Block Time (EOBT) of a flight, checks will be performed to verify the consistency between the ATC Flight Plan, Airport Slot and Airport Flight Data.

If the Scheduled Off-Block Time (SOBT) deviates from the EOBT, the relevant contact person will be informed and advised to adjust the times accordingly. Aircraft Operator (AO) or their Handling Agent (HA) is responsible for timely update of aircraft registration in the A-CDM portal (AOS).

11.2 **Target Off-Block Time (TOBT)**

This is the time that an Aircraft Operator or their Handling Agent estimates that an aircraft will be ready, all doors closed, boarding bridge removed, push back vehicle available, de-icing completed, and ready to start up/push back immediately upon reception of clearance from the Tower.
TOBT= Prediction of “Aircraft Ready”

11.3 **Automated TOBT**

120 minutes prior to the Estimated Off-Block Time (EOBT), the A-CDM portal (AOS) system will automatically generate a default Target Off-Block Time (TOBT).

11.4 **Person Responsible for TOBT**

The Aircraft Operator or their agent is responsible for entry, update and if necessary deletion of TOBT’s. It is the responsibility of the AO/HA to communicate and ensure the pilot of a flight has the correct TOBT prior to calling for

clearance. TSAT will also be included in DCL messages. If it becomes obvious that the TOBT cannot be respected, it shall be corrected or re-entered by the person responsible for the TOBT. Since the TOBT is used for various ground processes, it shall be updated by the person responsible for the TOBT when deviations of more than 5minutes occur.
For deviations of 15minutes or more from the EOBT, it will still be mandatory to send a delay message (DLA) to the Network Manager.

11.5 **TOBT Update/Deletion**

Until the TSAT has been issued (TOBT minus 40 minutes) the TOBT can be updated as often as desired. After the TSAT has been issued, the TOBT can be updated up to three times. If a sixth TOBT update is required the flights TSAT will be removed and the flight will get re-sequenced. It is important to recognise that once sequenced, changes to TOBT are likely to impact the aircraft's position in the Pre-Departure Sequence (PDS). TOBTs require updating if they differ by 5mins from the previous declared TOBT.
If a flight is to be taken out of the TOBT/TSAT calculation, the TOBT shall be deleted. The TOBT shall be re-entered by the person responsible for the TOBT.

11.6 **TOBT Reporting Routines**

The TOBT is viewed and or adjusted in one of the following ways:

- A-CDM Portal (AOS)
- AOS Mobile Application
- Internal system of the Airline/Handling Agent (via interface)
- By telephone via the Dublin Airport Control Centre (ACC), Phone + 353 (0) 1 814 4352
- Advanced Visual Docking Guidance System (A-VDGS) (specific stands)

11.7 **Target Start-up Approval Time (TSAT)**

The TSAT is the target time for start-up approval according to the Dublin A-CDM Operational procedures, taking into account TOBT, Calculated Take Off Time (CTOT), and/or the traffic situation. The earliest time for the TSAT calculation (by the PDS) is 40 minutes prior to TOBT.
TOBT is the time at which an Aircraft Operator, or his duly accredited representative expect the flight will be ready to commence movement; whereas the TSAT is the time at which Ground will grant the start-up.
It is the responsibility of the AO/HA to communicate the most up to date TSAT to the pilot, prior to doors closing.
The "Pre-Departure Sequence" is a result of the calculated TSATs.

11.8 **TSAT Reporting Routines**

The TSAT is transmitted in one of the following ways, via:

- A-CDM Portal (AOS)
- AOS Mobile application
- Internal system of the airline/Handling agent (via interface)
- Datalink Clearance (DCL). If a TSAT changes post clearance, ATC will communicate the revised TSAT verbally to the pilot. A revised DCL message will not be issued, post ATC clearance.
- Advanced Visual Docking Guidance System (A-VDGS) (specific stands)

11.9 **Start-up and Push-back**

The sequence of push and start is based on the TSAT sequence. The following rules apply:

- The Pilot shall report ready to push and start at TOBT (+/-) 5 minutes. (ATC clearance (including DCL) shall be requested any time prior to TOBT from delivery)
- The aircraft has to be ready for start-up at TOBT
- Ground will issue push and start approval at TSAT (+/-) 5 minutes
- If pilots have received their ATC clearance and called at TOBT and Ground has not called to give push and start approval by TSAT + 5minutes, pilots are requested to call Ground requesting push and start approval.

In case of delays (>5 minutes) after ATC clearance has been received and/or a call ready at TOBT has been made, pilot shall inform clearance of the delay and a new TOBT must be sent by the AO/HA.

11.10 **Datalink Clearances (DCL)**

For datalink departure clearance (DCL), the published procedures and the time parameters published in the AIP will remain valid. The TSAT will also be transmitted in DCL messages.

11.11 **De-icing**

De-icing must be completed before an aircraft can report ready for push and start. De-icing times shall be taken into account, to calculate the TOBT.

11.12 **Coordination with the Network Manager (NMOC)**

A permanent and fully automatic data exchange with the Network Operations will be established. This data transfer will enable highly accurate early predictions of landing and departure times. Furthermore, this will allow for more accurate and efficient calculation of the CTOT (when applicable) due to the use of local target take-off times. The following messages are used:

- Flight Update Message (FUM)
- Early Departure Planning Information Message (E-DPI)
- Target Departure Planning Information Message (T-DPI)
- ATC Departure Planning Information Message (A-DPI)

The basic Network Operations procedures continue to apply. The Network operations will generally take those local Target Take -Off Times (TTOT) into consideration, when updating the flights' profiles in its system. In some cases Clearance Delivery position will offer to coordinate a new CTOT (if applicable) in agreement with the pilot.

11.13 **Remote Holding**

In the event of a contact stand not being available, Dublin Airport will request a remote hold stand position from ATC. The Pre-departure Sequencer (PDS) will recalculate the variable taxi time from this new remote hold location.

11.14 **Contact and Information**

For the TOBT dialogue and the TSAT submission, all Aircraft Operators/Handling Agents have to appoint a person responsible for TOBT and give the details to the airport company.
VFR flights are not part of the A-CDM process and therefore do not require TOBTs to be entered.

11.15 **Contact Details**

For additional information and support documents on Dublin A-CDM, see link:
https://www.dublinairport.com/regulation-and-planning/regulatory/airport-cdm
Contact persons for the A-CDM procedure at Dublin Airport, are as follows:

Dublin Airport
Resource Allocation Unit
Phone: + 353 (0) 1 944 5228
Email: POD@dublinairport.com

AIRNAV Ireland
ATC Duty Station Manager
Phone: + 353 (0) 1 8445962
Email: atcdub@airnav.ie

EIDW AD 2.21 NOISE ABATEMENT PROCEDURES

1. Aircraft operators shall ensure at all times that aircraft are operated in a manner calculated to cause the least disturbance practicable in areas surrounding the airport.

2. Standard Instrument Departures

Strict compliance with SID is mandatory.

3. Other Instrument Departures

3.1 Cat A, B Aircraft

3.1.1 Cat A, B Aircraft (Non Jet)
After take-off, pilots should ensure that they are at a minimum altitude of 750ft QNH before initiating any turn. No take-off turn shall be commenced before the departure end of the runway.

3.1.2 Cat A, B Aircraft (Jet)
Departures must track the runway extended centreline after take-off until passing 750QNH before commencing turn. No take-off turn shall be commenced before the departure end of the runway.

3.2 Cat C, D Aircraft

3.2.1 Departures from all runways except Runway 10R, must track the runway extended centreline after take-off until passing 750ft and then proceed in accordance with the relevant Instrument Flight Procedure published departure track and adhere to published altitude/level restrictions unless otherwise cleared by ATC.

3.2.2 Departures from Runway 10R must track the runway extended centreline to 5NM before commencing turn to the north, or to 6NM before commencing turn to the south.

3.2.3 Take-off climb shall comply with the procedure detailed below, which is based on noise abatement departure climb guidance contained in PANS OPS Doc 8168 Vol 1 - Appendix to Chapter 3 - NADP2.

3.2.4 Take-off thrust, speed V^2 + 20 to 40 km/h (V^2 + 10 to 20kt).

3.2.4.1 At 240m (800ft) and while maintaining a positive rate of climb, body angle is reduced and flaps/slats are retracted on schedule as the aircraft is accelerated towards Vzf.

3.2.4.2 Power/thrust is reduced during the flap/slat retraction sequence at a point that ensures satisfactory acceleration performance.

3.2.4.3 (3000ft) Transition smoothly to en-route climb speed.

3.2.4.4 Cat C and D aircraft operating from Runway 28L directly to Weston or Baldonnel aerodromes are exempt from Sections 3.2.1, 3.2.2 and 3.2.3. These aircraft must not leave the environmental corridor below 1,500ft QNH.

4. Jet aircraft (Cat C/D) on visual approach to all runways must join final approach no closer than 6NM from touchdown. Aircraft must follow a descent path which will not result in being at any time lower than the approach path which would otherwise be followed using the ILS glide-path.

5. Runway 10L/R or 28L/R are the required Runways between 0600 and 2300HR Local Time when the crosswind component is 20KT or less. Runway 28L/R will be the preferential Runways when the tailwind component is 10KT or less and braking action is assessed as good. Aircraft will be required to use these Runways except when operational reasons dictate otherwise.
If the crosswind component on Runway 10L/R or Runway 28L/R is greater than 20KT Runway 16 or Runway 34 may become the active Runway. If the forecast crosswind component on Runway 10L/R or 28L/R is greater than 20KT Runway 16 or 34 may become the active Runway.
The use of Runway 16/34 will be kept to an absolute minimum subject to operational conditions.

6. Runways will be prioritised for noise abatement purposes between 2300 and 0600HR Local Time, subject to the same wind calculation method and values as used between 0600 and 2300HR Local time (see Section 5).

7. Reverse thrust should not be used during landing operations on any runway between 2300-0600HR Local Time, except where operational or safety reasons dictate otherwise.

8. Cat C and D aircraft using Runways 28L, 28R, 10L,16 and 34 shall operate within environmental corridors which are based on runway take-off flight path areas. The corridors have a width of 180 M at the departure end of the clearway, diverging at 12.5% on each side to a maximum width of 1800 M, and extending in length to 5 NM from the point of origin. The corridors extend vertically from surface to 3000 ft AMSL.

Cat C and D aircraft using Runway 10R shall operate within an environmental corridor which is based on the runway take-off flight path area. The corridor has a width of 180 M at the departure end of the clearway, diverging at 12.5% on each side to a maximum width of 1800 M, and extending in length from the point of origin to 5 NM for the northern boundary of the corridor and 6 NM for the southern boundary of the corridor. There is no upper vertical limit to this corridor

The corridors apply for departures from each runway and also for approaches to the reciprocal runway, except for circling approaches.

EIDW AD 2.22 FLIGHT PROCEDURES

1. Holding Areas

Protected airspace is provided for Holding Areas in accordance with the criteria contained in PANS-OPS ICAO Doc 8168, Volume II for basic holding areas.

For RNAV procedures, holding basic areas are based on aircraft having RNAV holding system functionality.

2. SID and STAR and IAP's

2.1 **RNAV Equipped Aircraft**

SIDs and STARs and initial and Missed Approach segments of IAPs for all runways have been developed in accordance with ICAO Doc 8168 (PANS OPS).

The RNAV Specification is RNAV 1.
The supporting navigation infrastructure provided is DME/DME or GNSS.
Operators which have obtained operational and airworthiness approval, from their regulatory authority, may operate the RNAV SID and STAR procedures in accordance with the conditions of approval.

If the RNAV equipment fails, or navigation accuracy of +/-1 NM can not be maintained, inform ATC as soon as possible. Radar vectoring will be provided.

2.2 **RTF Phraseology**

Phraseology used will be as provided in the European Regional Supplementary Procedures (ICAO Doc 7030) and outlined in Eurocontrol Guidance material for RNAV SIDs and STARs.

Examples of phraseology for ATC are:

- {CALLSIGN} CLEARED {STAR designator} ARRIVAL, RUNWAY {designator}

Note: On such a clearance flight crew shall continue on route until reaching start point of the STAR.

- {CALLSIGN} ADVISE IF ABLE {designator} DEPARTURE [or ARRIVAL].

If ATC are unable to issue a requested SID or STAR:

- {CALLSIGN} UNABLE TO ISSUE (designator) DEPARTURE [or ARRIVAL] DUE [Reason]

Examples of pilot phraseology in the event of being unable to accept SID or STAR:

- UNABLE (designator) DEPARTURE [or ARRIVAL] DUE TO RNAV TYPE
- UNABLE RNAV DUE EQUIPMENT

2.3 **Non RNAV Equipped aircraft**

Non RNAV equipped aircraft will be assigned a clearance based on conventional navigation aids and/or vectoring.

2.4 Expected Approach Distance RWY 10L/R and RWY 28L/R
The expected approach distances are listed for all runways in ENR 1.10. The Lateral Holding/Point Merge STAR procedures (Chart AD 2.24-23.1 and AD 2.24-22.1) must be available in the aircraft navigation database.

3. Speed Control

Speed Restrictions

<table>
<tr><th>General</th><th>STAR</th><th>Holds</th><th>Initial Approach Segment (BTN HLDG Fix and IF)</th><th>Intermediate Approach Segment (BTN IF and FAP)</th><th>Final Approach Segment</th><th>Remarks</th></tr>
<tr><td>Below FL100, Max IAS 250KT or less.</td><td>As specified waypoints.</td><td>As specified on chart</td><td>IAS 210KT</td><td>IAS 180KT</td><td>BTN FAP and 4NM from THR IAS 160KT</td><td rowspan="2">1. ATC may request specific speeds for accurate spacing. Comply with speed adjustments as promptly as feasible within operational constraints.
2. If unable to comply with the above, advise ATC as soon as possible.</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td>4NM to THR IAS as performance requires.</td></tr>
<tr><td colspan="7">Warning
Operators are advised of the probability of encountering a GPWS Terrain alert, for aircraft which are exceeding the standard speed restrictions, while at or below 5,000FT and which are in the vicinity of the hight terrain to the south of Dublin Airport.</td></tr>
</table>

4. Recommended Flight Planning for Peak Arrival Periods

For further information refer to ENR 1.10.7.1

5. Arrival Procedures

5.1 Clearance to enter the CTA and CTR

Aircraft flying the ATS Route system will be cleared into the CTA/CTR without having to request a specific entry clearance.

Arriving Aircraft will normally be cleared on a STAR appropriate to the route by ATC. On occasions ATC may radar vector aircraft for arrival (Due traffic or technical reasons).

5.2 Initial Approach Procedures

5.2.1 With radar control

In order to expedite the flow of traffic, aircraft may receive radar vectors on to final approach from the STAR.
For RWYs 16 & 34 pilots should plan their flight profile in such a manner as to be able to achieve 6000ft QNH at the appropriate hold.
For RWY 28L/R & 10L/R pilots should plan their flight profile on the sequencing leg to achieve level constraints.
ACTUAL DESCENT CLEARANCE WILL BE AS DIRECTED BY ATC.

5.2.2 Without radar control

When arriving traffic cannot be sequenced by radar, aircraft will be cleared to join the Instrument Approach Procedure appropriate to the landing from the hold.

5.3 Communications failure procedures for arriving aircraft

5.3.1 RWY16 & 34

Aircraft experiencing communications failure in the Dublin CTA/CTR shall set transponder code A7600 and comply with standard ICAO procedures.

5.3.2 RWY 28L/R and 10L/R

RWY 28L/R

5.3.2.1 Aircraft prior to Sequence Leg Entry

a. Squawk 7600.
b. Proceed via the STAR to enter the appropriate Sequence Leg Entry Hold (i.e. KERAV or SORIN) at the last cleared Flight Level.
c. Commence descent in the Hold to the Sequence Leg entry Flight Level (FL080 or FL070 as appropriate) specified on the chart at, or as close as possible to the expected approach time (EAT). If no EAT has been received and acknowledged descend at, or as close as possible to the estimated time of arrival resulting from the current flight plan.
d. Proceed onto the appropriate Sequence Leg, complete the full STAR as filed or last cleared by Dublin ATC, to LAPMO. After turning off the Sequence Leg descend to 3000ft QNH and complete the approach for landing on RWY28L.
e. **Aircraft flying the ABLIN(L) STAR losing R/T contact should squawk A7600 and should continue to fly the STAR (including the sequence leg from SIVNA onwards) and complete the approach.**

5.3.2.2 Aircraft on Sequence Leg

a. Squawk 7600.
b. Complete the full STAR to LAPMO or ABIVU, depending on the runway in use.
c. After turning off the Sequence Leg descend to 3000ft QNH and complete the approach for landing on RWY28L/R, depending on the runway in use.

5.3.2.3 Aircraft turned off the Sequence Leg

a. Squawk 7600
b. Descend to 3000ft QNH
c. In the most expeditious manner route to LAPMO/ABIVU to complete the instrument approach procedure for RWY28L/R, depending on the runway in use.

RWY 10L/R

5.3.2.4 Aircraft prior to sequence Leg Hold (ADNAL or BABON as appropriate) Squawk 7600

1. Proceed via the STAR to enter the appropriate Sequence Leg Hold (ie ADNAL or BABON) at the last cleared Flight Level

2. Commence descent in the Hold to the Sequence Leg Fight

3. Level (FL080 or FL070 as appropriate) specified on the chart at, or as close as possible to the expected approach time (EAT). If not EAT has been received and acknowledge descend at, or as close as possible to the estimated time of arrival resulting from the current flight plan.

4. Continue on the appropriate STAR Sequence Leg, complete the full STAR as filed or last cleared by Dublin ATC, to IFBAP or OSLEX as appropriate. After turning off the Sequence Leg descend to comply with the constraint altitude at IFBAP or OSLEX and complete the approach for landing on RWY10L/R, depending on the runway in use.

5.3.2.5 Aircraft on Sequence Leg.

a. Squawk 7600
b. Complete the full STAR and approach for RWY 10L/R, depending on the runway in use.
c. After turning off the Sequencing leg descend to comply with the constraint altitude at IFBAP or OSLEX and complete the approach on RWY 10L/R, depending on the runway in use.

5.3.2.6 Aircraft turned off the Sequence Leg

a. Squawk 7600
b. Descend to comply with the constraint altitude at IFBAP or OSLEX and complete the approach for landing on RWY 10L/R, depending on the runway in use.

5.3.3 Non RNAV capable Cat C/D aircraft.

Non RNAV capable Cat C/D aircraft should route, in the most expeditious manner, to the appropriate hold for the runway in use and hold using best navigation means available. From the hold proceed to, and complete in the most expeditious manner, the IAP for the runway in use.

6. Departure Procedures

6.1 Departure Clearance Service using Datalink (DCL)

6.1.1 Introduction

6.1.1.1 The DCL service uses the Aircraft Communications Addressing and Reporting System (ACARS). DCL messages are described in EUROCAE ED-85A Appendix A and ARINC 623-2.

6.1.1.2 DCL departure clearances are provided solely to those flights departing Dublin Airport.

6.1.1.3 Clearance Delivery Procedures via RT (voice) will be utilised in the event of datalink transaction failure.

6.1.1.4 Oceanic traffic can receive domestic clearances via ACARS.

6.1.2 Datalink procedure

6.1.2.1 The pilot will send a departure clearance request utilising the on-board datalink interface. Minimum 15 minutes before start-up. **Any slot times will be taken into account by the pilot in the request if appropriate**.

6.1.2.2 If the clearance is not received by the pilot within 3 minutes of the request the pilot will contact ATC through the normal RT communication channels and obtain a clearance on RT.

6.1.2.3 Where the pilot receives a Datalink reply and cannot accept the clearance he will contact ATC through the normal RT channels to obtain, an alternate clearance on RT.

6.1.2.4 If the pilot is satisfied with the Datalink clearance an acknowledgement message will be sent to the ground system.

6.1.2.4.1 If the ground system does not receive the acknowledgement message within 3 minutes after the clearance has been transmitted, or if an invalid message is received, ATC will contact the pilot through the normal VHF channels and issue the clearance via RT (voice).

6.1.2.5 All departure clearances issued through the normal VHF RT voice channels will cancel the DCL service.

6.2 RWY 28L, 28R, 10L, 10R, 16 and 34 - Standard Instrument Departures (SID)

Aircraft on IFR flights departing from RWY 28L, 28R, 10L, 10R, 16 and 34 will proceed in accordance with Standard Instrument Departures (SID) WHICH ALSO INCLUDE MANDATORY NOISE ABATEMENT ELEMENTS for jet aircraft.
Category C and D departures shall remain on DUBLIN TOWER frequency until passing 2,000ft, then contact DUBLIN ACC Lower North/DUBLIN ACC Lower South as appropriate.

Where ICAO obstacle clearance criteria require minimum climb gradient greater than 3.3% the required values will be included in the SID.

As a cross check to confirm the correct SID has been selected in the FMS, Category C and D departures will be requested by CDS to confirm the first waypoint on the SID e.g. RWY 10R “DW553”.

Non-Standard Departure Instructions - Pilots who cannot comply with any of the Standard Instrument Departure procedures must inform ATC in good time so that alternative clearances can be issued. A minimum climb gradient of 4.1 per cent applies to all alternate clearances.

Note: CAT A, B aircraft may be assigned a SID appropriate to CAT C, D aircraft at the discretion of ATC.
Note: CAT E aircraft will be assigned a SID appropriate to CAT C, D aircraft at the discretion of ATC

6.3 Communications failure procedures for departing aircraft

Aircraft experiencing communications failure in the Dublin CTA/CTR shall set transponder code A7600 and comply with standard ICAO procedures,

Supplemented by the following:

i. For aircraft departing on a SID where no cruising level has been specified in the enroute clearance (and therefore no level specified in the Current Flight Plan) the climb, after the appropriate time interval, shall be to the level contained in the Filed Flight Plan.

ii. Aircraft routeing on a ROTEV SID expecting transition to BOYNE
Aircraft routeing on a ROTEV SID experiencing communications failure, and expecting transition to BOYNE, should continue to ROTEV, then, in the most expeditious manner, route to BOYNE to join the Current Flight Plan route. Maintain the last assigned level for a period of three minutes, and then climb to the level specified in the Current Flight Plan.

7. Low Visibility Procedures

7.1. Low Visibility Procedures

Low Visibility Procedures apply when the cloud ceiling is below 200 ft (60M) and/or the IRVR is less than 550M or the meteorological visibility is less than 800M.

When Low Visibility Procedures are in force the following standard taxi route system applies:

Table 1: Single Runway Operations Runway 28L

RUNWAY	TO/FROM	ARRIVAL TAXI ROUTE	DEPARTURE TAXI ROUTE	APRON TAXI ROUTES
28L	South and Main Apron (South of Link 4)	S5 or S7 to S, W2, M1	B1 to E1 or Link 2, F1 to E1 or Link 3, F2, F1 to E1	All except Z
28L	Main Apron (Link 4 to Link 6)	S5 or S7 to S, W2, RWY34, N, F-Outer	F3, F2, F1 to E1	All except Z
28L	North Apron	S5 or S7 to S, W2, RWY34, N, K	AT6, DN/DS/C, F-Outer/Inner, F3, F2, F1 to E1	All except Z
28L	West Apron (Northern stands)	S5 or S7 to S, W2, W3	W3, W2, M1, F3, F2, F1 to E1	All except Z
28L	West Apron (Southern stands)	S5 or S7 to S, W2	W2, M1, F3, F2, F1 to E1	All except Z
28L	Main Apron If Holding for a stand	S5 or S7 to S, W1	N/A	All except Z

Table 2: Single Runway Operations Runway 10R

RUNWAY	TO/FROM	ARRIVAL TAXI ROUTE	DEPARTURE TAXI ROUTE	APRON TAXI ROUTES
10R	South and Main Apron (South of Link 4)	E1, B1/F1 or S2, W1, H1	B1, F1, F2, F3, M1, W2, S to S7 or Link 2, F2, F3, M1, W2, S to S7 or Link 3, F3, M1, W2, S to S7	All except Z
10R	To South Apron if Holding for a stand	S1, B2	N/A	B1
10R	Main Apron (Link 4 to Link 6)	E1, F1, F2, F3 or S2, W1, H1	F-Outer/Inner, N, RWY16, W2, S to S7	All except Z
10R	North Apron	E1, F1, F2, F3, F-Outer/Inner or S2, W1, H1, F-Outer/Inner	AT6 or DN/DS/C, K, N, RWY16, W2, S to S7	All except Z
10R	West Apron (Northern stands)	E1, Link 4, M1, W2, W3 or S2, W1, H1, M1, W2, W3	W3, W2, S to S7	All except Z
10R	West Apron (Southern stands)	E1, Link 4, M1, W2 or S2, W1, H1, M1, W2	W2, S to S7	All except Z

Table 3: Single Runway Operations Runway 28R

RUNWAY	TO/FROM	ARRIVAL TAXI ROUTE	DEPARTURE TAXI ROUTE	APRON TAXI ROUTES
28R	South and Main Apron (South of Link 4)	N5 or N7 to M, RWY16-M1	B1, F1, F2, F3, F-Outer-N to N2 or Link 2, F2, F3, F-Outer-N to N2 or Link 3, F3, F-Outer-N to N2	All except Z
28R	Main Apron (Link 4 to Link 6)	N5 or N7 to M, RWY16, M1	F-Inner, F-Outer, N, N2	All except Z
28R	North Apron	N5 or N7 to M, RWY16-M1	AT6, DN/DS/C, F-Outer, N, N2	All except Z
28R	West Apron (Northern stands)	N5 or N7 to M, RWY16, W2, W3	W3, W2, M1, F-Outer, N, N2	All except Z
28R	West Apron (Southern stands)	N5 or N7 to M, RWY16, W2	W2, M1, F-Outer, N, N2	All except Z

Table 4: Single Runway Operations Runway 10L

RUNWAY	TO/FROM	ARRIVAL TAXI ROUTE	DEPARTURE TAXI ROUTE	APRON TAXI ROUTES
10L	South and Main Apron (South of Link 4)	N3 or N1 to N, F-Outer	B1, F1, F2, F3, M1, RWY34, M, N6 or Link 2, F2, F3, M1, RWY34, M, N6 or Link 3, F3, M1, RWY34, M, N6	All except Z
10L	Main Apron (Link 4 to Link 6)	N3 or N1 to N, F-Outer	F-Outer/Inner, M1, RWY34, M, N6	All except Z
10L	North Apron	N3, N, F-Outer or N1, K	AT6, DN/DS/C, F-Outer/Inner, M1, RWY34, M, N6	All except Z
10L	West Apron (Northern stands)	N3 or N1 to N, F-Outer M1, W2,W3	W3, W2, RWY34, M, N6	All except Z
10L	West Apron (Southern stands)	N3 or N1 to N, F-Outer M1, W2	W2, RWY34, M, N6	All except Z

Table 5: Segregated Parallel Runway Operations Runway 28

RUNWAY	TO/FROM	ARRIVAL TAXI ROUTE RWY 28L	DEPARTURE TAXI ROUTE RWY 28R	APRON TAXI ROUTES
28	South and Main Apron (South of Link 4)	S5 or S7 to S, W2, M1	B1, F1, F2, F3, H1, RWY34, N to N2 or Link 2, F2, F3, H1, RWY34, N to N2 or Link 3, F3, H1, RWY34, N to N2	All except Z
28	Main Apron (Link 4 to Link 6)	S5 or S7 to S, W2, M1	F-Outer, N to N2	All except Z
28	North Apron	S5 or S7 to S, W2, M1	AT6, DN/DS/C, F-Outer, N to N2	All except Z

Table 5: Segregated Parallel Runway Operations Runway 28

RUNWAY	TO/FROM	ARRIVAL TAXI ROUTE RWY 28L	DEPARTURE TAXI ROUTE RWY 28R	APRON TAXI ROUTES
28	West Apron (Northern stands)	S5 or S7 to S, W2, W3	W3, W2, RWY34, N to N2	All except Z
28	West Apron (Southern stands)	S5 or S7 to S, W2	W2, RWY34, N to N2	All except Z
28	Main Apron If Holding for a stand	S5 or S7 to S, W1	N/A	All except Z

Table 6: Segregated Parallel Runway Operations Runway 10

RUNWAY	TO/FROM	ARRIVAL TAXI ROUTE RWY 10L	DEPARTURE TAXI ROUTE RWY 10R	APRON TAXI ROUTES
10	South and Main Apron (South of Link 4)	N3 or N1 to N, RWY16, M1	B1, F1, F2, F3, H1, W1, S to S7 or Link 2, F2, F3, H1, W1, S to S7 or Link 3, F3, H1, W1, S to S7	All except Z
10	Main Apron (Link 4 to Link 6)	N3 or N1, F-Outer	H1, W1, S to S7	All except Z
10	North Apron	N3, N, F-Outer or N1, K, ATC or AT6	AT6 or DN/DS/C, F-Outer, H1, W1, S to S7	All except Z
10	West Apron (Northern stands)	N3 or N1 to N, RWY16, W2, W3	W3, W2, S to S7	All except Z
10	West Apron (Southern stands)	N3 or N1 to N, RWY16, W2	W2, S to S7	All except Z

Note: Code C aircraft shall not be instructed to push back onto Taxiway Foxtrot Outer during Low Visibility Operations.

CAT II/III holding positions will apply as follows:

Departure Runway	CAT II/III Holding Position
RWY 28L	TWY E1
RWY 10R	TWY S7
RWY 28R	TWY N2
RWY 10L	TWY N6

TWY/stopbar/centreline lighting will be in use.

Pilots will be informed by ATIS broadcast or RTF when Low Visibility Procedures have been initiated.

Full details of low visibility operations are available on request from AD Administration (EIDW AD 2.2)

A maximum taxiing speed limit of 15KT applies to all aircraft during the periods when Low Visibility Procedures are in force.

7.2. Low Visibility Take Offs (LVTOs)

During LVP Operations, LVTOs are permitted from Runway 10R/28L and Runway 10L/28R.
It is the at the discretion of the PIC to depart based on their airline operating procedures in LVP conditions.
Take-offs are not available when IRVR values fall below 125m for the runway in use.
All IRVR readings for the departure runway in use must show 125m or greater.
ATC shall inform departing pilots when any IRVR values for the departure runway falls below 125m.

8. Holding Procedures

A standard rate of descent of between 500ft and 1000ft per min in holding patterns will be used unless otherwise instructed by ATC.

9. Operation of Mode S transponders on the Movement Area.

Mode S transponders shall be operated on the Movement Area in accordance with the following provisions:

9.1 Departing aircraft:

i. Set aircraft identification and, when received, set assigned Mode A code.
ii. Immediately prior to request for push back or taxi, or when advising Clearance Delivery that you are ready for push and start, whichever is earlier, select: “Automatic mode” (e.g.: AUTO) or, if automatic mode is not available, select “on” (e.g. ON or XPDR),
iii. Only when approaching the holding position of the departure runway, select “TCAS” (e.g.: TA/RA).

9.2 Arriving aircraft:

i. As soon as practicable after landing de-select “TCAS” (e.g.: deselect TA/RA),
ii. Select “automatic mode” (e.g.: AUTO) or, if automatic mode is not available, select “on” (e.g. ON or XPDR),
iii. Continue to squawk last assigned Mode A code until fully parked, When fully parked, select “standby” (e.g.: STBY).

10. VFR Procedures, Dublin CTR/CTA and environs

10.1 Flight Plan

Flight Plans are mandatory for flights within Dublin CTR/CTA. Flights planned to transit EIR23, EIR15, EIR16 should include this information in field 15 of the Flight Plan
Flights planning to enter or leave Dublin CTR should, when practicable, indicate in item 16 of the Flight Plan, an alternate aerodrome situated outside Dublin CTR.
Where the flight destination is not an aerodrome licensed for public use, the address of the place of intended landing together with the name and telephone number of the property owner should be indicated in field 18 of the Flight Plan.

10.2 Special VFR is available within Dublin CTR in accordance with the provisions of EU Reg. No 923/2012 - SERA.5010 Special VFR in control zones.

10.3 Flight Information Service is provided H24. When required and as promulgated by ATIS, a discrete frequency (118.500 MHz) is allocated to the provision of FIS for aircraft in class G airspace.

10.4 Landing Lights should be shown at all times during flight within Dublin CTR.

10.5 ATC Clearances for flights departing from within Dublin CTR.

Prior to departure
i. From Dublin Airport by request for start up to Dublin Ground, 122.985MHz or 121.800 MHz if non 8.33kHz equipped.
ii. Other than Dublin Airport

- Contact Dublin ATC by telephone for prior approval
- Request for start/lift to Dublin Tower from frequency issued in prior approval
- If no RTF two-way communication can be established, contact Dublin ATC by telephone and request a time for take off / Lift off.

Take off / Lift without prior two-way communications with Dublin ATC is not permitted.

10.6 **ATC Clearances for flights arriving to destinations within Dublin CTA/CTR**

Prior to penetration of Dublin CTA/CTR, by submitting a request at least 10 minutes before ETA at the airspace boundary to the relevant ATSU as follows:

a. Dublin Tower:

- 118.600 MHz for entry to the Dublin CTR **South** of Dublin Airport
- 124.680 MHz for entry to the Dublin CTR **North** of Dublin Airport (non 8.33kHz equipped aircraft contact 128.800);

b. Dublin ACC Lower North, Channel 132.580 for entry to the Dublin CTA, North Sector;

c. Dublin ACC Lower South, 120.755 for entry to the Dublin CTA, South Sector.

d. Dublin ACC, for entry to the Dublin CTA, non 8.33 kHz equipped, 124.650 MHz or 126.250 MHz

Note: Dublin ACC Lower North Sector is divided from Dublin South Sector by a boundary line extending along the extended centreline of *RWY 10R/28L.*

10.7 VFR Routes

10.7.1 **Flights departing/arriving at Dublin Airport are normally cleared as follows:**

i. North arrivals/departures: via Skerries VFR Route or Naul Town VRP
ii. West arrivals/departures: via Skerries VFR Route, Dunshaughlin VFR Route or Naul Town VRP
iii. South arrivals: As instructed by Dublin Tower
iv. South West arrivals
- Fixed wing flights to enter the Dublin CTR at The Square, Tallaght, Dunshaughlin VRP, Naul Town VRP or Skerries VRP
- Helicopter flights to enter Dublin CTR at Redcow Roundabout or The Square, Tallaght

v. South departures
- As instructed by Dublin Tower,
  or
- Flights intending to transit EIR15 are cleared to either Palmerston Roundabout Hold or Marley Park Hold to await onwards clearance from Baldonnel Tower.

10.7.2 **Flights with departure/destination other than Dublin Airport are normally cleared as follows:**

i. North arrivals/departures
- As directed by Dublin ATC, or
- Skerries VFR route or Naul Town VRP.

ii. West arrivals/departures
- As instructed by Dublin ATC, or
- Skerries VFR Route, Dunshaughlin VFR route or Naul Town VRP.

iii. South west arrivals
- As instructed by Dublin ATC, or
- Helicopter VFR flights to enter Dublin CTR at Red Cow Roundabout or The Square, Tallaght. or

- Fixed-wing VFR flights to enter the Control Zone at Dunshaughlin VRP, Naul Town VRP or Skerries VRP.

iv. South arrivals as instructed by Dublin ATC.

v. South departures
- As instructed by Dublin ATC, or
- Flights intending to transit EIR15 route to either the Palmerston Roundabout Hold or the Marley Park Hold to await onwards clearance from Baldonnel Tower

vi. Weston arrivals from the East
- As instructed by Dublin ATC, or
- Weston VFR Route

10.8 Visual Holding Patterns

Visual Holding Patterns for category A aircraft are established as follows:

10.8.1 Broad Meadow Bridge (532756.45N 0061125.11W (WGS-84)

Left-hand pattern, based on the M1 motorway bridge, which crosses the Broad Meadow estuary.
Outbound leg is 1 minute, flown at 90KT IAS. Inbound track 187° M. Minimum holding altitude is 1000ft QNH.
The following criteria also apply:
On arriving overhead the Fix, left turn onto the outbound leg should be initiated before the southern shore of the Broad Meadow estuary.
Left turn onto the inbound leg to the Fix should be completed to the east of the M1/N1 road.
The inbound leg to the fix should remain east of the M1/N1 road at all times.
Broad Meadow Bridge Holding Pattern is not available when Runway 10L is in use.

10.8.2 Palmerston Roundabout (532124.26N 0062303.57W (WGS-84)

Left-hand pattern, based on the Palmerston roundabout, which intersects the M50 motorway and the M4/N4 road.
Outbound leg is 1 minute, flown at 90 KT IAS. Inbound track 277° M. Minimum holding altitude is 1700ft QNH.

10.8.3 Marley Park House (531636.19N 0061601.09W (WGS-84)

Right hand pattern, based on Marley Park House, a large manor house inside the grounds of Marley Public Park.
Outbound leg is 1 minute, flown at 90KT IAS. Inbound track 284° M. Minimum holding altitude is 1700ft QNH.

10.8.4 Other Visual Reporting Points (VRPs) (WGS-84)

- VRP Ashbourne Town 533043.95N 0062354.93W
- VRP Baily Lighthouse 532141.65N 0060308.76W
- VRP Ballymun Centre 532339.93N 0061554.74W
- VRP Bray Head 531119.49N 0060503.83W
- VRP Cellbridge Town 532020.42N 0063222.16W
- VRP Donadea Wood 532021.28N 0064449.03W
- VRP Dunboyne Town 532517.22N 0062836.15W
- VRP Dunshaughlin Town 533051.04N 0063228.82W
- VRP Dunsoghly Castle 532537.48N 0061910.36W

- VRP Garristown Village 533400.27N 0062258.13W
- VRP Heuston Station 532046.18N 0061746.66W
- VRP Kilcock Town 532358.13N 0064005.43W
- VRP Killiney Hill 531555.09N 0060714.33W
- VRP Kilteel Village 531410.34N 0063128.07W
- VRP Lambay Island 532929.64N 0060057.65W
- VRP Malahide Town 532704.80N 0060859.56W

10.9 Circuit Operation,

Dublin Airport Circuit training is not permitted at Dublin Airport.

10.10 Radio Communications Failure Procedures – VFR Traffic

10.10.1 Departure Traffic

Proceed in accordance with the ATC clearance last received and acknowledged and land at the most suitable aerodrome located outside Dublin Control Zone. Report arrival to an appropriate ATC unit by the most expeditious means.

10.10.2 Arrival Traffic

If outside the control Zone, proceed with the flight plan route, remaining clear of the Control Zone and comply with flight plan closure procedures, or

If within the Control Zone, EXIT, ensuring that the aircraft remains clear of Dublin Aerodrome and the approach and Take off path of the Runway(s) in use.

EIDW AD 2.23 ADDITIONAL INFORMATION

Refer to ENR 5.6 for bird hazard information.

Bird Hazard Information

Migrating birds over flying airfield between 1000ft to 10000ft. Possible strikes for both arriving and departing aircraft. Also possible increase in bird strikes from seagulls on days of low pressure due to gulls coming inland.

Refer to ENR 1.6 2.8 Monitoring Codes

Code F

Dublin Airport has a minimal capacity to handle Code F aircraft for diversions, exceptional and planned movements. Operators should give as much advance notice as possible to ensure sufficient resources are in place.

Dublin Airport is available for B777-800 and B777-900 aircraft operation. If the wing tips fail to fold after the landing at Dublin Airport, pilot is required to inform ATC and request a follow-me service to stand. Pilots must proceed with caution and follow all the instructions from the follow-me provider.

Helicopter Operations

Helicopter operations are not permitted at Dublin Airport, unless, prior approval has been granted and the Helicopter has originated from an Aerodrome with a CPSRA. Only Search and Rescue Helicopters are exempt from this requirement.

Provision of information to the IATA Standard for AOS:

1. daa requires that airlines and handling agents submit messages for inbound and outbound Dublin Flights, in the standard format described in the IATA Airport Handling Manual.

2. The address that all the SITA messages shall be sent to is DUBRN7X.

3. The following are the three principal message types to be submitted to daa:

   a. Load messages (AHM 583).

   b. Statistical load summary (AHM 588).

   c. Aircraft movement message (AHM 780).

4. Passenger Services Messages (PSMs) and Passenger Transfer Messages (PTMs) are also processed by the AOS. A standard format is required. Examples of the appropriate formats for these and other message types, including those related to passengers are available on the Dublin Airport Operations Library.

EIDW AD 2.24 CHARTS RELATED TO AERODROME

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EIKY AD 2.1 AERODROME LOCATION INDICATOR AND NAME

EIKY – KERRY

EIKY AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	**ARP and its site**	521051N 0093126W Mid-point RWY 08/26
2	**Direction and distance from (city)**	8NM SE of Tralee / 7NM N of Killarney
3	**AD Elevation, Reference Temperature & Mean Low Temperature**	112 ft/20.7°C (Max Temp) 0.9°C (MNM Temp)
4	**Geoid undulation at AD ELEV PSN**	191ft
5	**MAG VAR/Annual change**	3° (2022) / 11' decreasing
6	**AD Operator, address, telephone, telefax, email, AFS, Website**	Post: Kerry Airport Plc, FarranFore, Co. Kerry. Email: info@kerryairport.ie Phone:+ 353 66 976 46 44 Phone:+ 353 66 976 43 50 Fax: + 353 66 976 41 34 Fax: + 353 66 976 49 88
7	**Types of traffic permitted (IFR/VFR)**	IFR/VFR
8	**Remarks**	Nil

EIKY AD 2.3 OPERATIONAL HOURS

1	**AD Operator**	Winter 0900-1800 UTC Summer 0800-1700 UTC Variations promulgated by NOTAM. Check NOTAM
2	**Customs and immigration**	24HR PN required to AD Operator.
3	**Health and sanitation**	As per ATS
4	**AIS Briefing Office**	See Remarks
5	**ATS Reporting Office (ARO)**	As per ATS
6	**MET Briefing Office**	See Remarks
7	**ATS**	Winter 0900-1800 UTC Summer 0800-1700 UTC Variations promulgated by NOTAM. Check NOTAM.
8	**Fuelling**	As per ATS
9	**Handling**	As per ATS
10	**Security**	H24
11	**De-icing**	As per ATS

12	**Remarks**	ATS AVBL outside published HR, 24 HR PN to AD Operator. Fuelling - Last fuelling as ATS HR - 30MIN. PIB AVBL from AIS, Shannon see GEN 3.1.5 MET briefing AVBL from Central Aviation Office, Shannon Airport see GEN 3.5.4 Airport closed on Christmas Day. Exact hours advised by NOTAM. PPR required in advance for all flights, contact AD operator. Surcharges apply for operations outside Winter 0900-1800 UTC and Summer 0800-1700 UTC, contact AD operator.

EIKY AD 2.4 HANDLING SERVICES AND FACILITIES

1	**Cargo handling facilities:**	Contact AD Operator
2	**Fuel/oil types**	JET A1, AVGAS 100LL
3	**Fuelling facilities/capacity**	1 truck 18,000L; 1 truck 7,500L; Avgas available from kerb side pump.
4	**De-icing facilities**	AVBL Mobile Unit
5	**Hangar space available for visiting aircraft**	Nil
6	**Repair facilities for visiting aircraft**	Nil
7	**Remarks**	Handling services AVBL within AD HR by arrangement with the AD

EIKY AD 2.5 PASSENGER FACILITIES

1	**Hotel(s) at or in the vicinity of AD**	In Tralee or Killarney B+B Near AD
2	**Restaurant(s) at or in the vicinity of AD**	At AD and in local towns
3	**Transportation possibilities**	Taxis and Car Hire from the AD
4	**Medical facilities**	First Aid at AD. Hospitals in Tralee & Killarney
5	**Bank and Post Office at or in the vicinity of AD**	Foreign Exchange and ATM at AD. Tralee & Killarney
6	**Tourist Office**	At AD
7	**Remarks**	Nil

EIKY AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	**AD category for fire fighting**	CAT 6
2	**Rescue equipment**	Hydraulic cutting equipment. Emergency lighting and other equipment in compliance with Category 7 requirements.

3	**Capability for removal of disabled aircraft**	The airport manager is the co-ordinator and can be contacted on the following numbers; Phone: Manager Direct 087 933 4569 Phone: Main Switch + 353 66 976 4644 For information on the removal of aircraft. Phone: Fire Station coordination +353 66 979 3014 Fax: + 353 66 976 4134 Fax: + 353 66 976 4988 Email: info@kerryairport.ie Airlines to make their own arrangements through IATA pool or other. Assistance (unskilled) available through local contractors. No on-site lifting capability provided and all resources are external. Capability 10,000kg (using outside contractor) Phone: +353 66 979 3014 Phone: +353 86 604 4127
4	**Remarks**	Category 7 fire fighting AVBL with 24HR Notification to AD Operator. During periods of reduced activity available fire fighting level may be reduced. AVBL protection shall be no less than that needed for the highest category aircraft (to MAX CAT 7) planned to use the aerodrome during that time subject 24HR Notification to the AD ADMIN

EIKY AD 2.7 RUNWAY SURFACE CONDITION ASSESSMENT AND REPORTING, AND SNOW PLAN

1	**Type(s) of clearing equipment**	2 snow blade AVBL as required.
2	**Clearance priorities**	RWY 08/26 and associated TWY to Apron
3	**Use of material for movement area surface treatment**	KAC, NAFO as required
4	**Specially prepared winter runways**	Not applicable
5	**Remarks**	Nil

EIKY AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATION DATA

1	**Apron surface and strength**	East Apron Surface CONC/ASPH Strength PCN 44/F/C/W/T West Apron Surface CONC/ASPH Strength PCN 44/F/C/WU			
2	**Taxiway width, surface and strength**	TAXIWAY	WIDTH	SURFACE	STRENGTH
		A	23M	CONC/ASPH	PCN 44/F/C/W/T
3	**Altimeter checkpoint location and elevation**	Location: Terminal Apron / Elevation:78ft AMSL			
4	**VOR checkpoint**	Nil			
5	**INS checkpoint**	Nil			
6	**Remarks**	Taxilane Bravo Surface ASPH Strength PCN 25/F/C/W/T Taxilane B Width 15M Maximum wingspan 36M			

EIKY AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	**Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands**	Taxiing Guidance System Sign boards at intersection of TWY and RWY and at the Holding Point. Guide Lines at Apron
2	**RWY/TWY markings and LGT**	RWY: Marked: Designator, THR, TDZ, C/L, Edge. Lighted: Runway, Edge.
		TWY: Marked: Centre line, Edge, Holding position. Lighted: Edge
3	**Stop bars and RWY Guard Lights**	Stop bars Nil Runway Guard Lights at TWY A
4	**Other RWY Protection measures**	-
5	**Remarks**	Nil

EIKY AD 2.10 AERODROME OBSTACLES

In Area 2					
OBST ID/ Designation	**OBST Type**	**OBST Position**	**ELEV/HGT**	**Markings/Type Colour**	**Remarks**
a	**b**	**c**	**d**	**e**	**f**
Air Navigation Obstacles (iaa.ie) - https://www.iaa.ie/commercial-aviation/airspace/air-navigation-obstacles					

In Area 3					
OBST ID/ Designation	**OBST Type**	**OBST Position**	**ELEV/HGT**	**Markings/Type Colour**	**Remarks**
a	**b**	**c**	**d**	**e**	**f**
Air Navigation Obstacles (iaa.ie) - https://www.iaa.ie/commercial-aviation/airspace/air-navigation-obstacles					

EIKY AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	**Associated MET Office**	Central Aviation Office, Shannon Airport see GEN 3.5.4
2	**Hours of service**	Forecasts valid from 05:00-24:00
3	**Office responsible for TAF preparation** **Periods of validity** **Interval of issuance.**	Met Éireann Central Aviation Office, Shannon. 9 HR 3 HR
4	**Trend Forecast** **Interval of issuance**	Nil
5	**Briefing/consultation provided**	Personal
6	**Flight documentation** **Language(s) used**	Charts and Tabular English
7	**Charts and other information available for briefing or consultation**	6-hourly synoptic chart; 6-hourly prognostic chart (surface); prognostic chart of significant weather; prognostic chart of wind/temperature at upper levels; prognostic chart of tropopause levels.
8	**Supplementary equipment available for providing information**	Weather surveillance RADAR; Ceilometer; Automatic Weather Station; Receiver for satellite cloud pictures.
9	**ATS units provided with information**	EIKY TWR

10	**Additional information (limitation of service, etc.)**	METAR issued every 30 minutes during published HR of operation. Refer to GEN 3.5.4.2 for additional information

EIKY AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimensions of RWY (M)	Strength (PCN) and surface of RWY and SWY	THR coordinates RWY end coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY
1	**2**	**3**	**4**	**5**	**6**
08	071.23°	2000 x 45	44/F/C/W/T ASPH	521040.75N 0093215.46W 521101.56N 0093035.78W 191ft	25M/82ft
26	251.25°	2000 x 45	44/F/C/W/T ASPH	521101.56N 0093035.78W 521040.75N 0093215.46W 192ft	34M/112ft

Slope of RWY-SWY	SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RWY End Safety Area dimensions (M)	Location and description of Arresting System	OFZ	Remarks
7	**8**	**9**	**10**	**11**	**12**	**13**	**14**
Slope of 0.4% Refer to Aerodrome Obstacle Chart Type A EIKY AD 2.24-2	Nil	60 x 150	2120 x 300	150 x 90	-	Nil	Nil
	Nil	60 x 150	2120 x 300	240 x 90	-	Yes	

EIKY AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	**2**	**3**	**4**	**5**	**6**
08	2000	2060	2000	2000	Nil
26	2000	2060	2000	2000	

EIKY AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	APCH LGT type LEN INTST	THR LGT colour WBAR	VASIS (MEHT) PAPI	TDZ Length	RWY Centre Line LGT Length, spacing, colour, INTST	RWY edge LGT LEN, spacing, colour, INTST	RWY End LGT colour WBAR	SWY LGT LEN (M) colour	Remarks
1	2	3	4	5	6	7	8	9	10
08	LIH, one crossbar	Green	PAPI, Slope 3.26º MEHT 55.12ft	Nil	Nil	White 40-50M	Red	Nil	Lighting as indicated in columns 2,3,7,8 are light emitting diode (LED)
26	LIH 900M, 5 crossbars	Green	PAPI, Slope 3.5º MEHT 51.5 ft	Nil	Nil	White 40-50M	Red	Nil	Lighting as indicated in columns 2,3,7,8 are light emitting diode (LED)

EIKY AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	**ABN/IBN location, characteristics and hours of operation**	Nil
2	**LDI location and LGT** **Anemometer location and LGT**	WDI Near THR 26 and THR 08 lighted Near THR 26 lighted
3	**TWY edge and centre line lighting**	TWY Edge Only
4	**Secondary power supply/switch-over time**	Secondary Power Supply to all equipment at AD/10 seconds.
5	**Remarks**	TWY Edge, Apron Edge, and Apron mast lighting all Light Emitting Diode (LED)

EIKY AD 2.16 HELICOPTER LANDING AREA

NIL

EIKY AD 2.17 ATS AIRSPACE

1	**Designation and lateral limits**	Kerry Control Zone Circle radius 10NM 521051N 0093126W (Kerry ARP)
2	**Vertical limits**	5000 ft AMSL
3	**Airspace classification**	C G (outside hours of operation of ATC)
4	**ATS unit call sign Language(s)**	Kerry Tower English
5	**Transition altitude**	5000 ft

6	**Remarks**	Flight plans mandatory during ATS hours of operation. Airspace Classification outside hours of operation of ATS is uncontrolled Class G.

EIKY AD 2.18 ATS COMMUNICATIONS FACILITIES

Service designation	Call sign	Channel	SAT VOICE No.	Logon Address	Hours of Operation	Remarks
1	2	3	4	5	6	7
TWR	Kerry Tower	123.325 MHz	-	-	As per ATS EIKY AD 2.3	Nil
GND	Kerry Ground	121.600 MHz	-	-	As per ATS EIKY AD 2.3	Nil
ATIS	Kerry Information	118.025 MHz	-	-	As per ATS EIKY AD 2.3	Nil

EIKY AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid, MAG VAR, Type of supported OP (for VOR/ILS/ MLS/GNSS/ SBAS and GBAS, give declination)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna or SBAS: ellipsoid height of LTP/FTP	Service Volume Radius from the GBAS Reference Point	Remarks
1	2	3	4	5	6	7	8
NDB	KER	334 kHz	H24	521055.8N 0093128.2W			Designated Operational Coverage 25
DME	IKR	CH 24X	H24	521055.6N 0093128.1W	110ft		DME zero ranged at THR 26/08
LLZ 26	IKR	108.7 MHz	H24	521037.7N 0093230.1W			Designated Operational Coverage 18
GP 26	IKR	330.5 MHz	H24	521102.2N 0093052.8W			GP Angle 3.5º RDH 56ft GP flags on and to the right of centreline as well as beyond 9nm may be experienced.

EIKY AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Aircraft Taxiing

Pilots should use the minimum power necessary while taxiing. On west apron stands 1 to 5, pilots should operate at the minimum power commensurate with the intended manoeuvre, due to the effect of jet blast on personnel, equipment and buildings.

2. Aircraft Engine Test Runs

Permission for all test runs must be obtained from the ATC

Aircraft engine test runs at idle speed not exceeding five minutes duration are permitted on the west apron stand 1 and stand 2, and on the east apron stand E2 and stand E3 locations as indicated on Kerry aerodrome chart EIKY AD 2.24-1.

Engine test runs up to full power shall take place in the isolated area parking (IAP) location as indicated on Kerry aerodrome chart EIKY AD 2.24-1.

EIKY AD 2.21 NOISE ABATEMENT PROCEDURES

Turbojet aircraft may operate only between the hours of 0730 and 2300 (UTC) during the period 1st October to 31st May. Operation is unrestricted during the period 1st June to 30th September.

EIKY AD 2.22 FLIGHT PROCEDURES

1. Arrival Procedures

Clearance to enter the CTR

Arrival routes may be varied at the discretion of ATC.

Arrival Routes are based on holding patterns established at KER NDB and ROTSO.

Shannon ATS will descend arriving traffic to the lowest usable flight level within controlled airspace (FL 080 / Shannon Transition level if higher).

A lower level/altitude within controlled airspace may be coordinated with Kerry ATC.

Descent into the FIR (Class G Uncontrolled airspace)
Caution: Descent below FL080 or Transition level if higher, before the lateral limits of the Shannon CTA, Kerry Control Zone or associated stubs as outlined in ENR 2.1 will bring the flight into Shannon Class G (uncontrolled) airspace. There may be traffic operating in this airspace that is unknown and not operating with a transponder. Such descent, if requested, may be given at pilot's discretion with a clearance to re-enter controlled airspace at or descending to a specified level/altitude agreed with ATC. Flight information in the FIR is available from Shannon ATS on 127.500MHz

2. Communication Failure

In the event of communication failure, the pilot shall act in accordance with the communication failure procedures in ICAO Annex 2 supplemented by the following:

Traffic departing on Kerry SID SHA3A, SHA3B, SHA3C, SHA3D, CRK3A, CRK3B, CRK3C, CRK3D, KER3A, KER 3B, KER3C & KER3D, experiencing radio communication failure in the Kerry CTR/Shannon CTA shall maintain the maximum altitude specified in the SID for a period of three minutes following the time the altitude is reached and thereafter adjust level and speed in accordance with filed flight plan

3. OMNI-DIRECTIONAL DEPARTURE PROCEDURE FOR RUNWAYS 08/26

RWY	TRACK	A/C Category	Minimum Climb Gradient	Routing
26	256	A,B,C	Minimum Climb Gradient of 6%	Climb straight ahead until 4500ft and then as directed by ATC
08	076	A,B,C	Minimum Climb Gradient of 5.0%	Climb straight ahead until 4500ft and then as directed by ATC

Pilots who cannot comply with any of the SID's or Omnidirectional departure procedures must inform ATC in good time so alternative clearances can be issued.

Terrain

a. Departing aircraft requiring a deviation from there clearance, published SID or Omnidirectional departure, should exercise caution due high ground.

b. Deviation from the published procedures required by departing aircraft will, on request, be approved by ATC "At pilots Discretion". Warning of high ground.

4. Reduced Aerodrome Visibility Procedures and Low Visibility Procedures

Reduced Aerodrome Visibility Procedures are approved for operations on Runway 26 and for Runway 08.

4.1 Reduced Aerodrome Visibility Procedures (RAVP)

Reduced Aerodrome Visibility Procedures come into effect when

A. The IRVR and/or Met Visibility falls below 1500m and/or

B. When all or part of the manoeuvring area is not visible to the Duty Air Traffic Control Officer (DATCO) from the control tower.

The Maximum allowable movement rate on the manoeuvring area when RAVPs are in force is 3 (2 aircraft and 1 vehicle or 2 vehicles and 1 aircraft).

4.2 Low visibility procedures (LVP)

Kerry airport are not approved for low visibility procedures and therefore do not operate in low visibility conditions (LVC)

Where the reported conditions are below the operational minima of RVR ≤550M or height of cloud ≤200ft, Aircraft arrival and departure operations shall be suspended.

EIKY AD 2.23 ADDITIONAL INFORMATION

NIL

EIKY AD 2.24 CHARTS RELATED TO AERODROME

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AERODROME CHART - ICAO

AD ELEVATION 24FT ARP 52 11 14N 007 05 13W

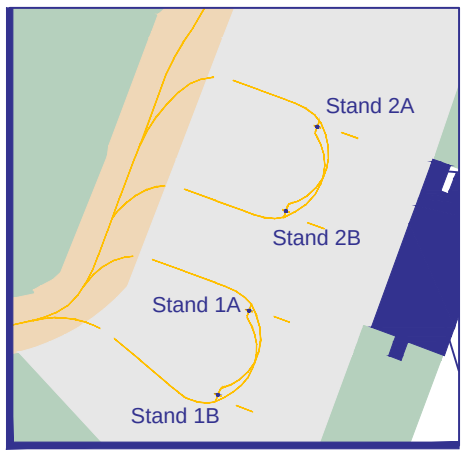
CONSULT NOTAM FOR LATEST INFORMATION

WATERFORD - EIWF IRELAND

RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS			
APRON/RWY	**SURFACE**	**BEARING STRENGTH**	**WIDTH (M)**
RWY 03/21	Asphalt	PCN 30/F/C/Y/T	30
TAXIWAY A, B	Asphalt	PCN 19/F/C/Y/T	15
APRON	Concrete	PCN 19/F/C/Y/T	-

LIGHTING	
APCH 03	SALS 420M, 1 crossbar at 300M
APCH 21	CAT I 750M, 4 crossbars
THR 03/21	WBAR Green
RWY 03/21	LGT LEN White Edge, Amber 450M from runway end End Lights Red
TWY	Blue TWY Edge Only

STAND	COORDINATES		CONDITIONS
1A	52 11 18.58N	007 04 54.29W	Self Manoeuvring
1B	52 11 17.81N	007 04 54.78W	Self Manoeuvring
2A	52 11 20.27N	007 04 53.23W	Self Manoeuvring
2B	52 11 19.50N	007 04 53.72W	Self Manoeuvring



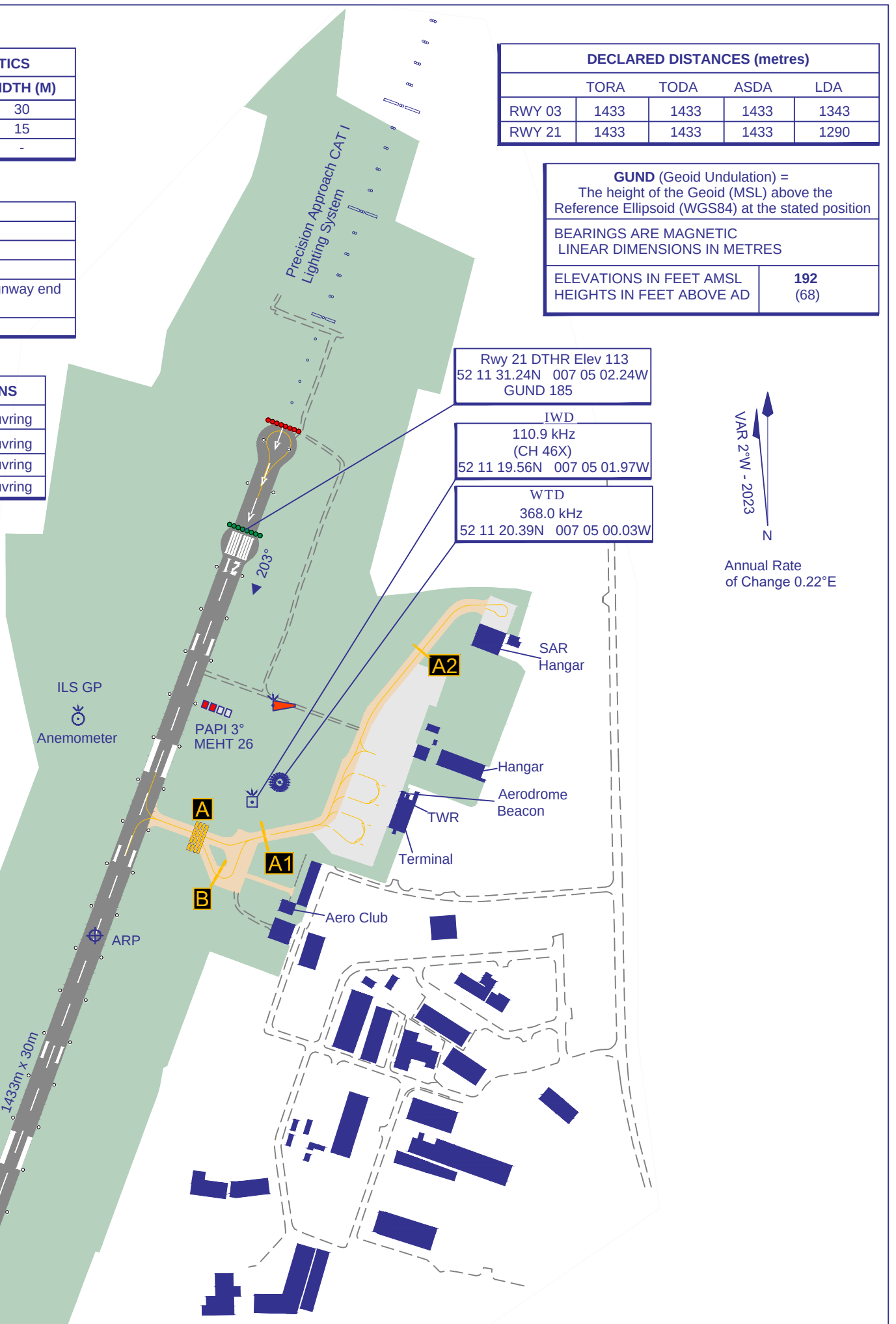
Scale
Metres
50 25 0 50 100 150
125 0 250 500
Feet

DECLARED DISTANCES (metres)				
	TORA	TODA	ASDA	LDA
RWY 03	1433	1433	1433	1343
RWY 21	1433	1433	1433	1290

GUND (Geoid Undulation) =
The height of the Geoid (MSL) above the Reference Ellipsoid (WGS84) at the stated position

BEARINGS ARE MAGNETIC
LINEAR DIMENSIONS IN METRES

ELEVATIONS IN FEET AMSL
HEIGHTS IN FEET ABOVE AD — **192** (68)



ATS COMMUNICATION FACILITIES		
Service	Call Sign	Channel
TWR	Waterford Tower	129.850MHz
GND	Waterford Ground	121.600MHz
AFIS	Waterford Information	129.850MHz
ATIS	Waterford ATIS	121.150MHz

LEGEND

Aerodrome Reference Point (ARP)	
Building	
Wind Direction Indicator Lit	
Non-Directional Radio Beacon (NDB)	
Distance Measuring Equipment (DME) Lit	
ILS - Glipde Path (GP), Localizer (LOC) Lit	
Runway Holding Position Pattern A	
Intermediate Holding Position IHP	
Runway Holding Position Designator	A
RWY End Lights	
RWY THR Identification Lights	
Precision Approach Path Indicator (PAPI)	

CHANGE (01/23): New Chart (SLC July 2023)

DIMENSIONS AND ELEVATIONS IN METRES

AERODROME OBSTACLE CHART - ICAO

TYPE A - OPERATING LIMITATIONS

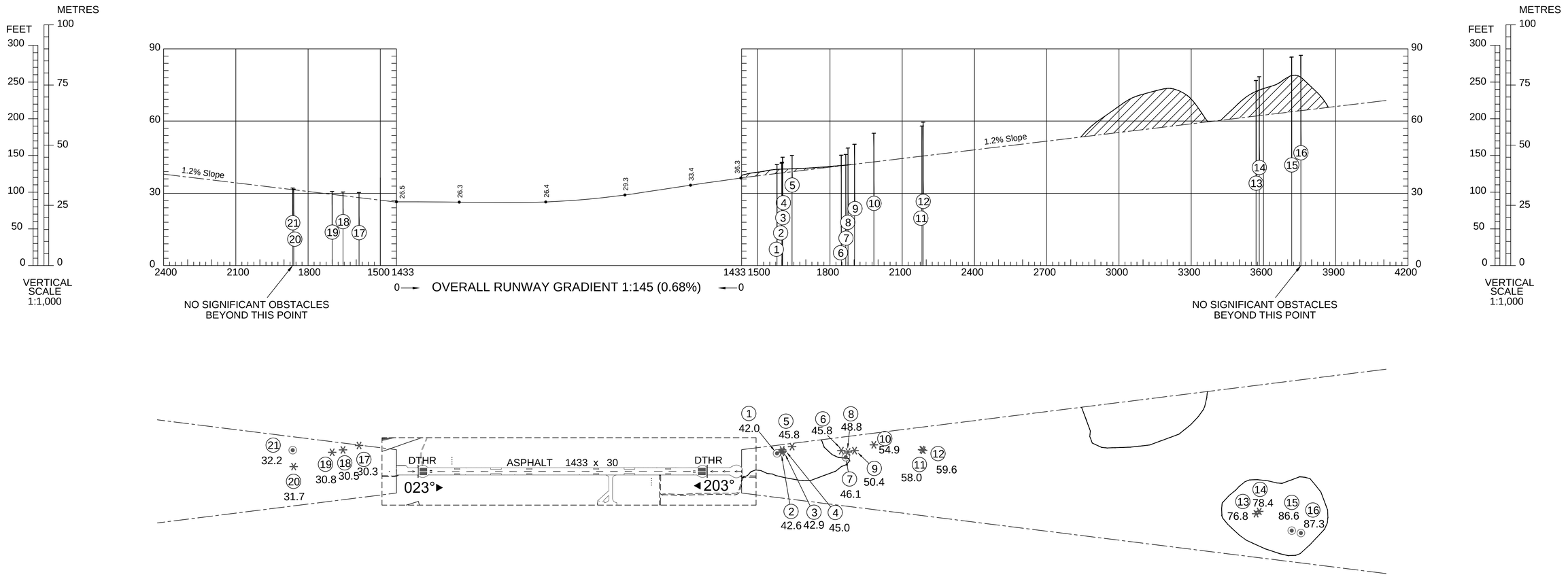
WATERFORD / IRELAND

CONSULT NOTAM FOR LATEST INFORMATION

MAGNETIC VARIATION 1° 51' W JULY 2023
ANNUAL CHANGE 00° 13' East/Year

RUNWAY 03-21

DECLARED DISTANCES (METERS)		
RWY 03		RWY 21
1433	TAKE-OFF RUN AVAILABLE	1433
1433	TAKE-OFF DISTANCE AVAILABLE	1433
1433	ACCELERATE-STOP DISTANCE AVAILABLE	1433
1343	LANDING DISTANCE AVAILABLE	1290



HORIZONTAL SCALE 1:10,000

METRES

500 400 300 200 100 0 500 1000 1500 2000 2500 3000

FEET

1000 500 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

LEGEND		
	PLAN	PROFILE
IDENTIFICATION NUMBER	⑤	⑥
HEIGHT AMSL	25	
ILS		
TREE / BUSH	✳	
POLE, AERIAL, TOWER, ETC	◉	

ORDER OF ACCURACY: Horizontal 3m; Vertical 0.3m

Aerodrome information current JULY 2023

Based on survey dated JULY 2023

AERO INFO DATE 21 MAR 24

CHANGE (01/23): New Chart (SLC July 2023)