



City of Derry Airport Assessment Meeting

Introduction of GNSS Procedures

20th March 2019

Overview

- Types of Aircraft
- Stakeholders
- Current Approaches
- Modernisation Plans and Proposed Approaches
- Statement of Need
- Issues, opportunities and considerations
- Provisional indications and timescales
- Next Steps

Types of Aircraft using City Of Derry Airport

- Max Aircraft Size
 - Boeing 757 (300)
 - Airbus 321
- Business Aviation
 - Cessna Citation
 - Falcon 50
 - HS125
- Current Scheduled Flights
 - ERJ145
 - B737, B738
 - Saab 340



*Note: Loganair have replaced BMI Regional on the Stansted routes.

**Flights to Manchester are planned from May 2019

City of Derry Airport Stakeholders

- Derry City & Strabane District Council
- Irish Aviation Authority
- City of Derry Airport User Group
- MOD (Danger Area D505)
- NATMAC
- Airlines (eg. Loganair, Ryanair)
- Corporate Aviation
- Cutting Edge Helicopters
- Local Parachute Club - Skydive Wild Geese
- Local Gliding Club - Ulster Gliding Club
- Eglinton Flying Club
- Visiting & airport based GA aircraft
- AONB – Antrim Coast & Glens, Binevenagh, Causeway Coast

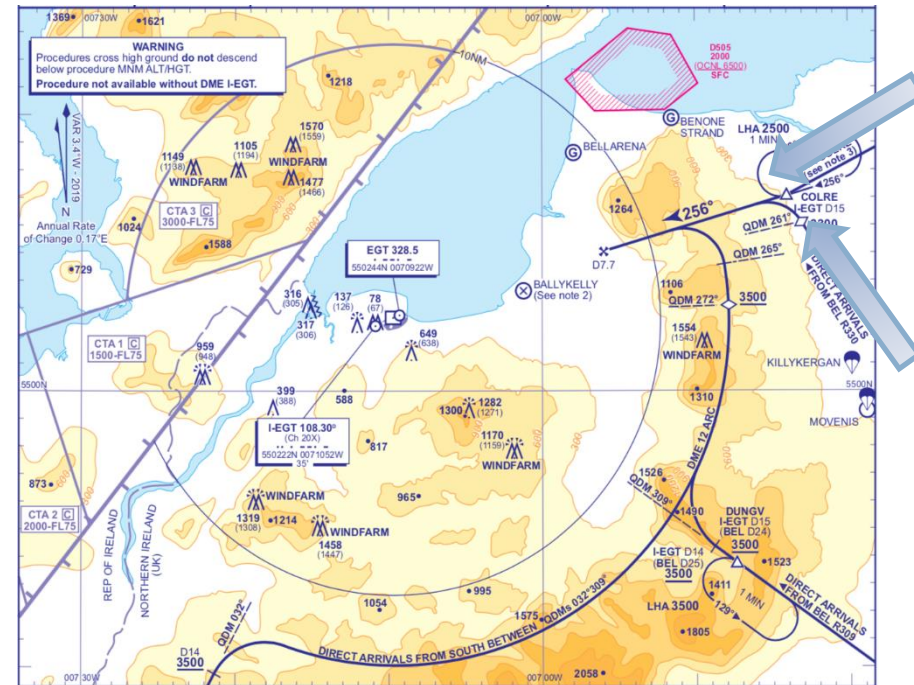
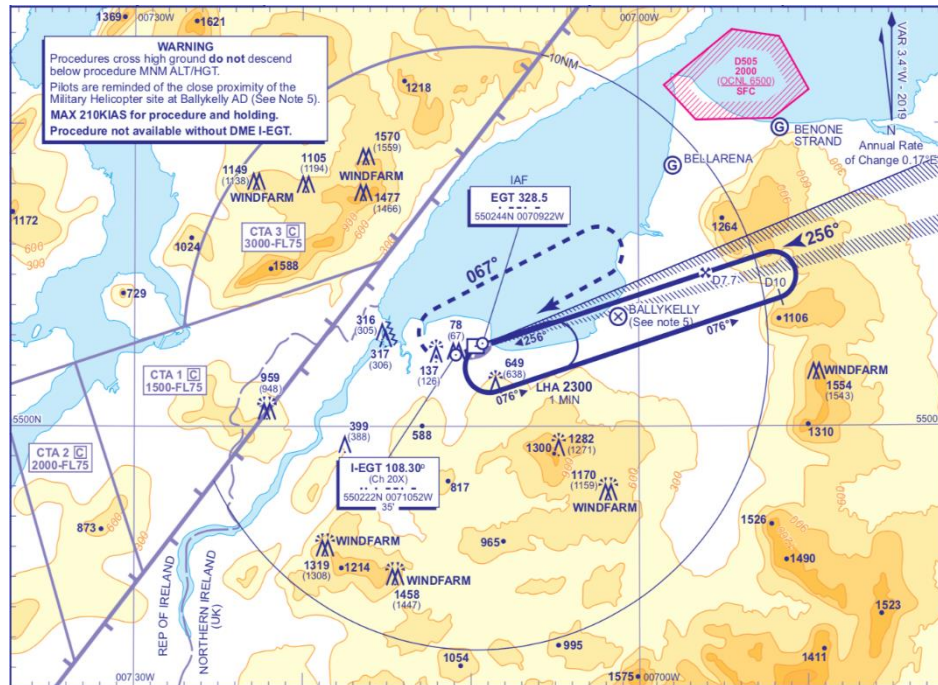




The exception is EGAE CTA 1,-3 which are within the Shannon FIR & is Class C (active during ATC hours)



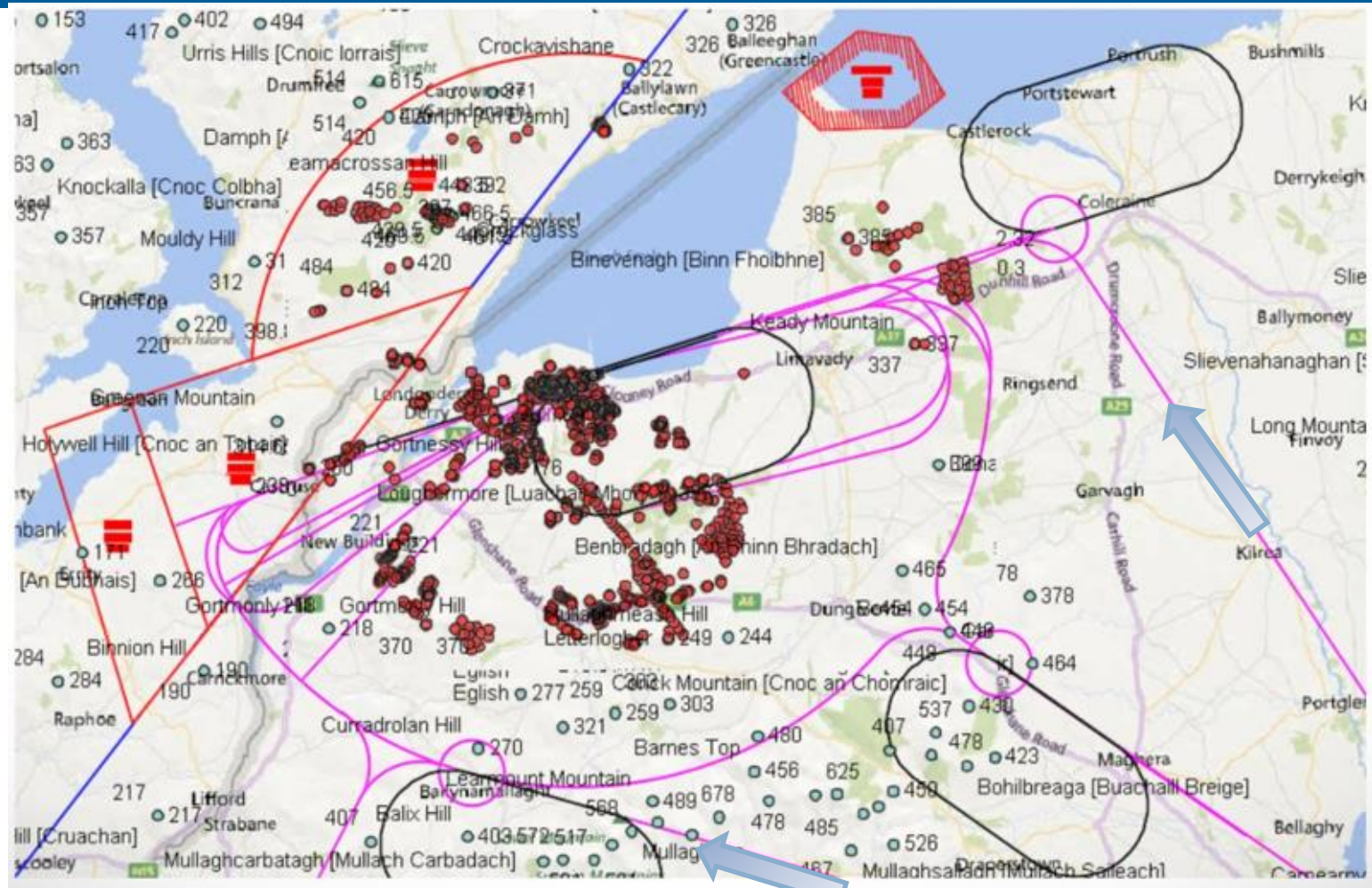
Current Approaches – RWY 26



The exception is EGAE CTA (1500ft-FL075) which is within the Shannon FIR & Class C (SFC-FL075, active during ATC hours)



Summary of Current Approaches



Plans

**INTRODUCTION
OF GNSS (LVP-
200 &
LNAV/VNAV) TO
RWY 08 and 26**

**INTRODUCTION
OF RNAV
DIRECT
ARRIVAL
PROCEDURES
TO RWY 08 and
26**

**INTRODUCTION
OF RNAV
MISSED
APPROACH
PROCEDURES,
AIRCRAFT
HOLDS AND
HOLDING
PROCEDURES**

Reasons for GNSS Procedures

CAT 1 ILS PLUS THE NDB(L) & DME SYSTEMS

- These navigational systems act as the primary method for aircraft to be able to operate in all weather conditions. This equipment does not provide the robust contingency to ensure that following a failure of the ground based navigation equipment, operators would be able to continue to operate in all weather conditions.

GNSS APPROACH PROCEDURES

- To ensure that the required contingencies are available GNSS procedures are to be introduced.

ADDITIONAL BENEFITS OF GNSS PROCEDURES

- Single system to satisfy the operational requirements for both precision and non-precision approaches.
- Performance-based navigation approach method offers advantages over the sensor-specific method. New instrument approach facility becomes available at a significantly lower cost than existing ground based alternatives.

Statement of Need – Discussion & Review

City of Derry Airport is owned by Derry City and Strabane District Council (DC&SDC) and operated on their behalf by CODA Operations Ltd (CoDA). The airport acts as a main gateway for the entire North West of Ireland and provides a vital air access link for the local community, performing a pivotal role in the economics of the region. In 2011 the airport transported 405,000 passengers to a range of destinations across the UK and Europe as well as being a popular inbound tourist destination.

City of Derry Airport is situated in Class G airspace and the ATS unit is non-radar. The available FIS to participating aircraft are Procedural Service and Basic Service. Commencing 2008 DC&SDC replaced all of the airports existing ground based navigational equipment included CAT 1 ILS on Runway 26 and Runway 08 plus the NDB(L) and DME systems.

Statement of Need – Discussion & Review

These navigational systems act as the primary method for aircraft to be able to operate into the airport in all weather conditions

Due to the limitations of ground based navigational aids this equipment alone does not provide the robust contingency required to ensure that following a failure of critical elements of the ground based navigational equipment, operators would be able to continue to operate in all weather conditions.

To ensure that the required contingencies are available, CoDA intends to introduce GNSS approach procedures to both Runway 26 and Runway 08 as follows:

Statement of Need – Discussion & Review

Introduction of GNSS (LVP-200 and LNAV/VNAV) to RWY 08 & RWY 26
Introduction of RNAV direct arrival procedures to compliment the above
Introduction of RNAV Missed Approach Procedures, Aircraft Holds and holding procedures.

As EGAE is non-radar, the design of approaches and direct arrival procedures to as far as practicable replicate the existing procedures at EGAE.

Note that the existing approach procedures to Runway 08 enters the Shannon FIR. Within the Shannon FIR the responsibility for the provision of ATS in accordance with the airspace classification has been delegated from Shannon ACC to Eglinton during the aerodrome opening hours.

Londonderry/ Eglinton is the ICAO designated name of City of Derry Airport. Eglinton is also the RTF callsign.



Issues, Opportunities & Considerations arising from proposed change

- Issues

- No radar or even FR24 coverage to be able to demonstrate current tracks

- Opportunities

- Reduce reliance on ground based navigation aids, increase airport's resilience, support the Airspace Modernisation Strategy

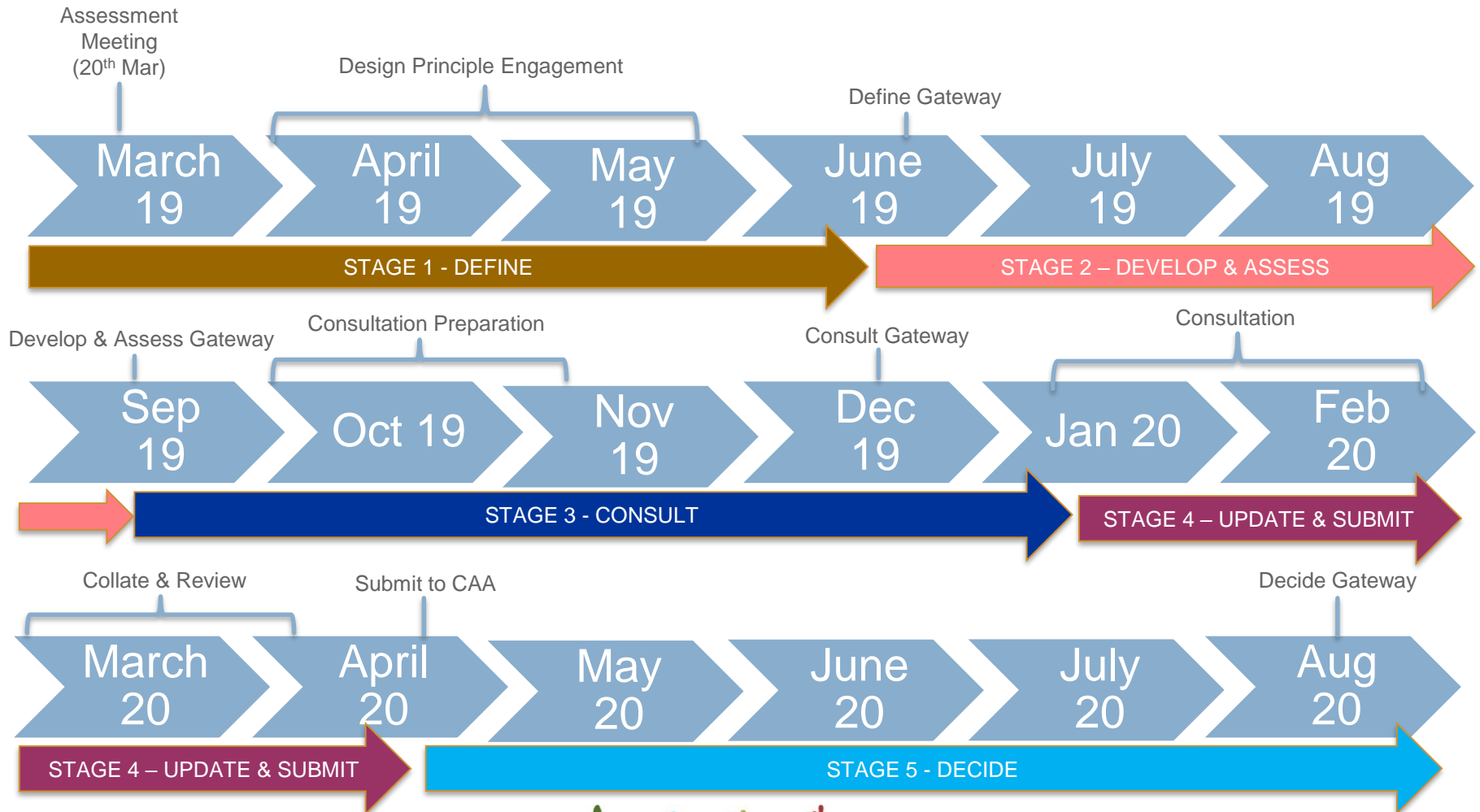
- Considerations

- Cost of an ACP proportionate to the benefits
 - Ability to demonstrate the nature of the actual change without surveillance data
 - Proximity to airspace boundaries (Shannon FIR)

Provisional indication of the level and process requirements

City of Derry Airport considers this to be a Level 1 ACP - to be scaled appropriately, as it is largely a replication and due to the low numbers of aircraft.

Provisional process timescales



Next Steps & AOB

City of Derry Airport - Next Steps

- Produce Assessment Meeting Minutes
- Stage 1B – Design Principles

CAA – Next Steps

- Review Minutes
- Define Gateway – 28th June