



**Consultation Summary Document
for the Introduction of PBN
Approaches**

CAP1616 Stage 3



Background

City of Derry Airport (CoDA) is consulting on the introduction of Performance Based Navigation (PBN) approaches for aircraft arriving at the airport, to meet the governments Airspace Modernisation Strategy (AMS) and provide a contingency for the existing ground-based navigational aid infrastructure.

As part of this consultation, **we are asking for your feedback on our one proposed Airspace Change option, and its associated three missed approach options.** The consultation runs for 14 weeks from;

18 October 2021 – 21 January 2022

What are PBN approaches?

Performance based navigation procedures (PBN) use satellite based technology to improve the accuracy of where aircraft fly, by moving away from outdated conventional ground based navigation. PBN is being introduced across the world. This helps improve operational performance, reduce delays, and improves resilience.

The PBN approaches we are proposing to introduce at CoDA **aim to replicate what happens today**, and the **existing approaches will still be flown by the majority of aircraft.** On average we estimate the **PBN approaches could be flown around 2-3 times per day** in the future.

What are missed approaches?

New PBN approaches require PBN missed approaches. A missed approach is flown when an aircraft is unable to land; pilots follow the missed approach procedure before re-joining the final approach to land.

Missed approaches are flown very infrequently at CoDA. We estimate **PBN missed approaches could be flown around 35 times per year** in the future.

CAP1616 Process

To make these changes, CoDA are required to follow the Civil Aviation Authority (CAA) process called [CAP1616](#), which is a 7-stage process. During Stage 1 we engaged with a selected group of stakeholders to create the design principles for this proposal. During Stage 2 we used the design principles to develop and assess different options and we carried out more detailed analysis work to understand the benefits and impacts of these options.

This consultation is part of Stage 3 of the process.

If you would like more details about the consultation and how we arrived at our options, please see our [main Consultation Document](#).

Key information about this airspace change proposal

Aims to replicate existing arrival routes

There are no changes to departure routes

Does not increase the number of aircraft arrivals or departures

The majority of aircraft will continue to fly as they do today

Our core proposal

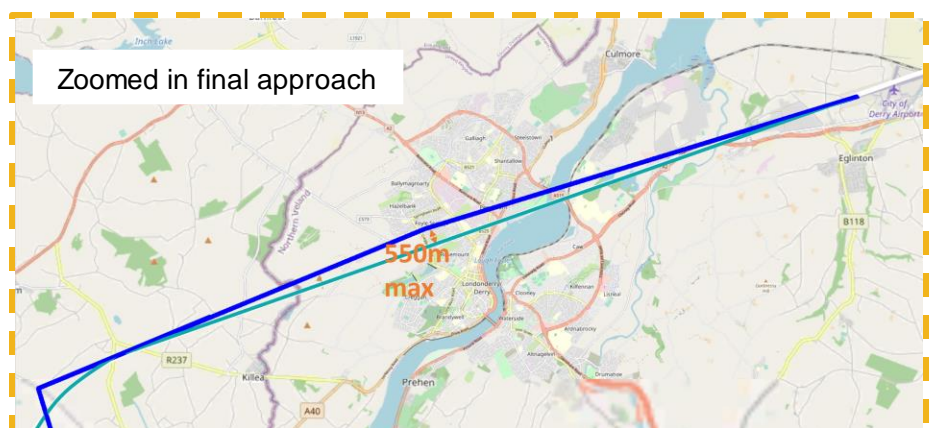
We are proposing to implement PBN approach procedures that largely replicate what is already published today. The figures below show the **proposed approach procedures in blue**, and the tracks currently published for aircraft arriving at the airport in green.

We have aimed to replicate the existing approaches as closely as possible, however due to PBN design criteria, there are some very small changes which had to be made to part of the final approach for aircraft arriving from the west.

Final Approach is the part of an aircraft's flight in which it descends directly towards a runway for landing

We have shown this change in the figure adjacent.

Approaches from the west occur less often than approaches from the east. We estimate that on average less than one flight per day will fly this approach.



If you would like more details about the consultation and how we arrived at our options, please see our main [Consultation Document](#).

Missed Approaches

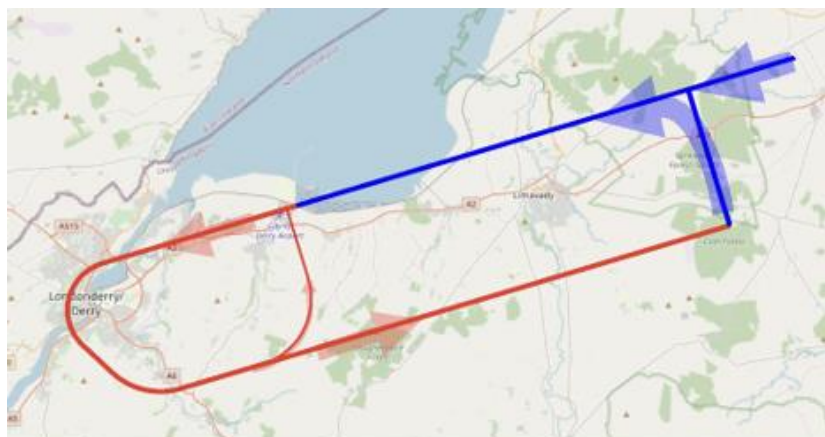
A missed approach is flown when an aircraft is unable to land; pilots follow the missed approach procedure before re-joining the final approach to land. Missed approaches follow published procedures however at CoDA sometimes Air Traffic Controllers direct aircraft to fly differently to the published procedures; we have considered this when developing our options.

Missed approaches are flown very infrequently at CoDA. We estimate PBN missed approaches could be **flown around 35 times per year** in the future. In the following diagrams the **missed approaches are shown in red**. The associated approach procedures, that form part of our core proposal, are shown in blue.

Missed Approach 26 (For arrivals from the East)

This option turns to the south which is different to the published procedure however it partially replicates how some aircraft fly today. There are some marginal impacts and benefits for changing this missed approach. **This is our preferred option for arrivals from the east.**

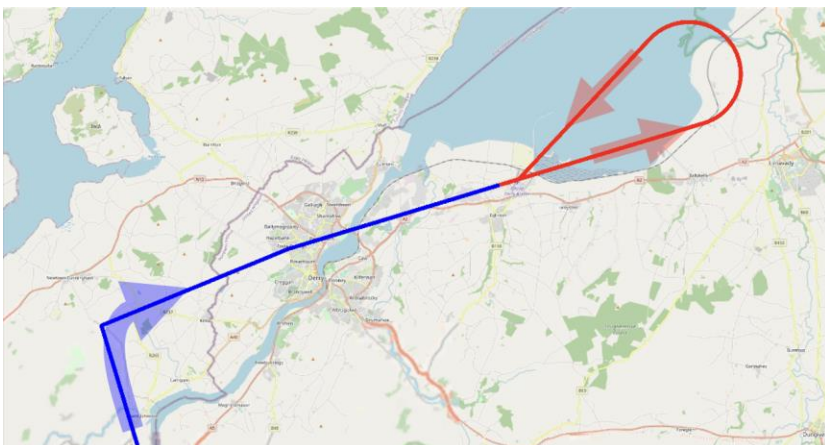
Our consultation document has further details.



Missed Approach 08 Option 1 (For arrivals from the West)

This option as closely as possible replicates the published procedure and how aircraft fly missed approaches today however there are some small differences. **This is not our preferred option.**

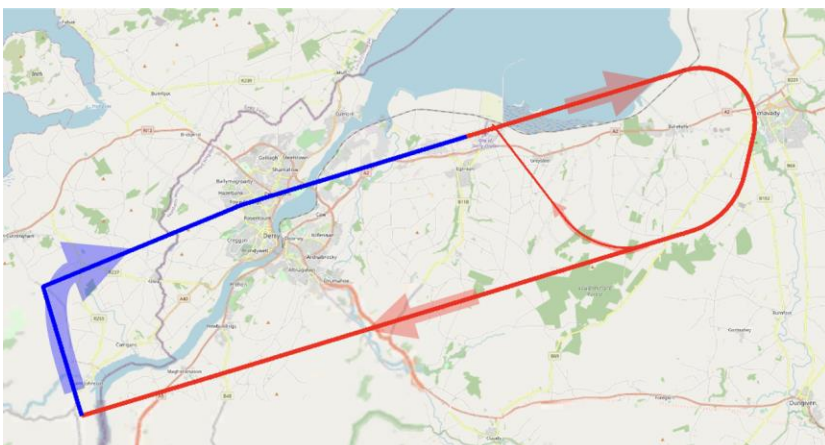
Our consultation document has further details.



Missed Approach 08 Option 2 (For arrivals from the West)

This option turns to the south which is different to the published procedure and how aircraft fly today. There are some marginal impacts and benefits for changing this missed approach. **This is our preferred option for arrivals from the west.**

Our consultation document has further details.



Summary Table of the Benefits and Impacts

As part of Stage 3 of the CAP1616 process, we are required to assess the benefits and impacts of our proposals against a baseline. As we aim to replicate what happens today as closely as possible, there are only very marginal impacts and benefits associated with this ACP.

The following table shows a very high level summary of our assessment:

Group	Impact	Our Core Proposal (Our Preferred)	Missed Approach 26 (Our Preferred)	Missed Approach 08 Option 1	Missed Approach 08 Option 2 (Our Preferred)
Communities	Noise impact on health and quality of life	Minor impacts and benefits	Minor impacts and benefits	Minor impacts and benefits	Minor impacts and benefits
	Air Quality	Minor impacts and benefits	No impact	No impact	No impact
Wider Society	Greenhouse gas impact	Minor impacts and benefits	Minor benefits	Minor impacts or benefits	Minor benefits
Wider Society	Capacity / resilience	Improves resilience	Improves resilience	Improves resilience	Improves resilience
	Tranquillity	No impact	Minor impacts	Minor benefits and impacts	Minor benefits
	Biodiversity	Minor impacts and benefits	No impact	No impact	Minor benefits and impacts
General Aviation	Access	No impact	No impact	No impact	Minor benefits
General Aviation/ Commercial Airlines	Economic impact from increased effective capacity	No impact	No impact	No impact	No impact
	Fuel burn	Minor impacts and benefits	Minor benefits	Minor impacts or benefits	Minor benefits
Commercial airlines	Training costs	No costs	No costs	No costs	No costs
	Other costs	No costs	No costs	No costs	No costs
Airport/ Air Navigation Service Provider	Infrastructure costs	No costs	No costs	No costs	No costs
	Operational costs	Ongoing maintenance of the new procedures estimated £4-10k every five years.			
	Deployment costs	Business as usual – no additional costs			
All	Safety	Improves safety	Minor benefits	No impact	Minor benefits
Negative impacts Our appraisal has identified significant impacts or costs		Neutral impact Our appraisal has identified minor benefits or impacts which overall are considered neutral		Positive benefits Our appraisal has identified significant benefits	

Our Consultation Questions

Our Core Proposal (Our preferred)

Do you have any concerns, or are there any further considerations we should take into account for our core proposal?

Runway 26 Missed Approach (Our preferred)

Do you have any concerns, or are there any further considerations we should take into account for the runway 26 missed approach?

Runway 08 Missed Approach Option 1

Our preferred Runway 08 missed approach is option 2 where the missed approach turns to the right (the south). Do you agree with this? Please provide more details if required.

Runway 08 Missed Approach Option 2 (Our preferred)

Do you have any concerns, or are there any further considerations we should take into account for the runway 08 missed approach options?

There is also an additional section, for you to provide any other feedback for this ACP.

Online Events

We will be holding 2 online events, where we will brief you on our consultation material and you will have the opportunity to ask questions. These events will be held online via Microsoft TEAMS on;

03 November 2021 13:00 – 14:30
09 December 2021 18:00 – 19:30

To book a place at one of these events, please email coda-acp@traxinternational.co.uk at least two days prior to your chosen date.

Further Questions?

This summary document forms part of a set of three documents created for our Stage 3 consultation. To read our other documents, please use the link to our consultation site below. To respond to the consultation, please also use the link below.

We have created a 'Frequently Asked Questions' document, which is on our consultation site. This will be updated throughout the consultation, based on any questions or points that are raised in consultation responses. If you have any questions about the consultation, you can send an email to; coda-acp@traxinternational.co.uk. Please note we cannot accept email consultation responses.

How do I respond to this consultation?

If you are unable to view the material online, you can request a hard copy of the consultation documents by phoning the CoDA telephone line (0287 1810784) or by emailing us at coda-acp@traxinternational.co.uk. Please note this email address is for consultation questions or requests only; we are unable to accept email responses to this consultation and all consultation responses must be submitted through the website link below:

[CoDA ACP Consultation Site](#)