



StageGate Concluding Report Iteration 4 2024

- 1.1 This report concludes the fourth iteration of the StageGate process for 2024. This cycle focused on the StageGate 1 assessment of **(i) Surface Water Environmental Compliance (The Airfield Drainage Project)** CIP.20.03.052, **(ii) Critical Taxiway South & Taxiway Romeo Widening** CIP.20.03.074, CIP.20.01.003, PACE SCP (17.03.001, 17.03.002, 17.03.003), **(iii) The West Apron Vehicle Underpass** CIP.20.03.051B and the StageGate 2 assessment of **Apron 5H (PFAS)** CIP.20.03.081 at Dublin Airport.¹

StageGate Process

- 1.2 The 2019 Determination on the maximum level of Airport Charges at Dublin Airport introduced a new process for certain large-scale capex projects, known as StageGate. Initially, 17 projects were identified for inclusion in the process. This was increased to 27 projects in the Interim Review of the 2019 Determination in relation to 2023-2026.²
- 1.3 StageGate is a rolling iterative process intended to add flexibility for the scope and/or cost of the StageGate projects to develop over the regulatory period. A key component of the process is the Independent Fund Surveyor (IFS) which provides independent expert views on any such developments to inform airport users and the Irish Aviation Authority (IAA). The IAA has appointed Steer to act as the IFS.
- 1.4 The 2019 Determination (and subsequently the Interim Review of the 2019 Determination in relation to 2023-2026) provided initial allowances for each of the StageGate projects; these are termed the StageGate 0 allowances. When a project has reached a sufficiently detailed level of design and is ready to be progressed, the project is advanced to StageGate 1. At this stage Dublin Airport provides an up-to-date costing, together with supporting detail, to the IFS for assessment. The IFS then assesses the Dublin Airport proposal, and if it considers it to be reasonably costed and effectively scoped, it will agree with the proposal.
- 1.5 There are two factors which drive the decision on the StageGate 1 allowance: the IFS' conclusions on technical scope/cost efficiency, and the views of airport users.
- 1.6 Following the completion of the StageGate 1 phase, the project enters StageGate 2. This phase allows for ongoing consultation as the project is being delivered. Any stakeholder may submit material for IFS consideration during

¹ The StageGate 1 assessment of CIP.20.01.003 – Taxiway Rehabilitation – Whiskey 1 was initially included in the scope of this cycle. However, the submission of this project was withdrawn by Dublin Airport ahead of the consultation meeting.

² https://www.iaa.ie/docs/default-source/car-documents/1c-economic-regulation/final-decision-on-the-maximum-levels-of-airport-charges-at-dublin-airport-2023-2026.pdf?sfvrsn=6b8110f3_1



this phase, which the IFS will report on in the subsequent iteration of the process. In the absence of any further developments being highlighted to the IAA and the IFS, no further assessments will be carried out.

- 1.7 The outcome of the StageGate process drives the final level of remuneration for the project over its asset life. When reconciling actual expenditure against the allowance in the subsequent determination, the IAA's starting point will be the StageGate 1 allowance. The IAA will also consider any developments which may have occurred and been consulted on during the StageGate 2 phase.

2024 – Fourth Iteration

- 1.8 Three projects were included for StageGate 1 assessment in the fourth iteration in 2024:
- Surface Water Environmental Compliance (The Airfield Drainage Project)
 - Critical Taxiway South & Taxiway Romeo Widening
 - The West Apron Vehicle Underpass
- 1.9 One project was included for StageGate 2 in this iteration:
- Apron 5H (PFAS Removal)
- 1.10 The final IFS report on these projects was circulated on **27 January 2025**. A videoconference was then held on **10 February 2025**, with presentations from the IFS, and Dublin Airport.
- 1.11 As per the StageGate process, airport users were invited to provide written submissions, which should include an indication of whether it objected to or supported the proposed project as per the IFS' recommendation.

StageGate 1

Surface Water Environmental Compliance (The Airfield Drainage Project)

- 1.12 Dublin Airport estimated a StageGate 1 cost of €245.35m for this project.
- 1.13 The IFS' report detailed its main findings at the StageGate 1 phase. These are summarised as follows:
- The IFS assesses that the scope of the ADP will meet its stated objectives of i) providing a net improvement to the degree of protection afforded to the receiving water management system, ii) ensuring optimised performance of the surface water management system and iii) increasing the hydraulic performance of the surface water network.



- The IFS highlights the multiple other projects which interface with the ADP including the West Apron Vehicle Underpass, Apron 5H and the South Apron Expansion. The IFS assesses that the scale of knock-on delays or major scope changes to these projects and the impact this would have on delivering the ADP has not been sufficiently mitigated by Dublin Airport. Based on the IFS' experience with the contaminated ground found on Apron 5H and the substantial cost increases associated, the IFS considers that more work would need to be done to better understand the risks and robustness of the estimated outturn programme and cost. Nevertheless, the IFS concludes that the project design, scope and approach adopted by Dublin Airport for the ADP effectively deals with the complex phasing of the construction programme and will minimise operational disruption on the airfield within critical areas.
- The IFS determined that while most of the costs for the project are reasonable, it concludes that the estimated costs of elements such as manholes, sheet piling, contractor design fees, overhead & profit, and inflation are higher than what the IFS would expect, and it has reduced the cost of these items in its assessment. In total the IFS' estimation of an efficient cost for this project is approximately €6.25m less than that proposed by Dublin Airport.

1.14 The IFS proposed an alternative allowance of €239.1m for this project, which is its estimate of the efficient cost of delivering this project.

Stakeholder Views

- 1.15 Aer Lingus acknowledges the need for improvements in surface water management but is concerned about the inadequate assessment, mitigation, and provisioning for PFAS contamination risk. Aer Lingus asserts that Dublin Airport's failure to address PFAS risks is evident across multiple projects and is concerned that any cost increase or development delay due to soil contamination will be passed on to airport users. It cites the potential for delays due to multiple interfacing projects as referenced in the IFS assessment.
- 1.16 Aer Lingus refers to the expansion of the project scope since SG0 to include additional glycol recovery vehicles, updates to the masterplan, a new north-south foul sewer, and the installation of surface water monitoring instruments yet questions Dublin Airport's approach to incorporate a 30% climate change uplift, rather than a 40% allowance which it says is typically applied to such projects.
- 1.17 Aer Lingus states that Dublin Airport has not sufficiently explained the increase in costs to the ADP project relative to the SG0 allowance. It furthermore asks the IAA to disallow any costs above the efficient SG1 amount estimated by the IFS.



- 1.18 Ryanair rejects Dublin Airport's proposed cost estimates and requests that only the lower IFS amounts enter the RAB.
- 1.19 Dublin Airport contends that its project approach includes a detailed interface management plan incorporating lessons learned from other similar projects to address interdependencies and contamination risks. Nonetheless, it acknowledges the recommendations from the IFS and will progress the project accordingly.

Critical Taxiway South & Taxiway Romeo Widening

- 1.20 Dublin Airport estimated a StageGate 1 cost of €146.06m for this project.
- 1.21 The IFS' report detailed its main findings at the StageGate 1 phase. These are summarised as follows:
- The IFS assesses that the scope of the project as outlined by Dublin Airport will meet its stated objectives which include increasing safety, capacity and efficiency of the taxiway system, relieve airfield congestion at the primary bottleneck/hotspot of the airfield and enabling better utilisation of existing infrastructure by removing current restrictions.
 - The IFS acknowledges that the proposed enhancement of Taxiway B2 as a permanent bi-directional route is additional to the original scope and does not appear absolutely necessary to achieve the objectives of the project. However, the IFS determines that its provision has benefits in terms of taxiway capacity and notes Dublin Airport's position that this work is essential for futureproofing.
 - The IFS assesses that Dublin Airport appears to have largely developed an approach to manage the complex phasing of its construction programme in order to minimise operational disruption on the airfield within critical areas. However, as with the ADP above, the IFS assesses that the risk of knock-on delays due to interfaces with other projects and the potential for the discovery of further ground contamination may not be sufficiently mitigated at this point.
 - The IFS determines that while most of the costs for the project are reasonable, it concludes that the percentage allowances for the Main Contractors preliminaries and the Main Contractors fee are higher than what it would expect and has reduced them in its assessment. This reduction impacted the assessment of design and management costs, phasing allowance, contingency, LVP and inflation costs.
- 1.22 The IFS proposed an alternative allowance of €134.5m for this project, which is its estimate of the efficient cost of delivering this project.



Stakeholder Views

- 1.23 Aer Lingus recognises the need for improvements to taxiway infrastructure but raises concerns about daa's planning and cost management processes, in particular noting its position that Dublin Airport's procurement strategy has resulted in inflated costs. Aer Lingus states that the 2017 simulation study upon which this project assessment is based needs to be updated to reflect current demand.
- 1.24 Like with the ADP, Aer Lingus notes that PFAS risks and risk of delays due to interfaces with multiple adjacent projects remains unmitigated which adds further uncertainty to this project's timeline and costs.
- 1.25 Ryanair rejects Dublin Airport's proposed cost estimates and requests only the lower IFS amounts enter the RAB.
- 1.26 Dublin Airport does not agree with the IFS' reduction of the contractor's fee percentages for this project which it says is based on the most competitive Tenders fee range. Despite this, Dublin Airport accepts the IFS' overall assessment of the project and will proceed with delivery on this basis.

The West Apron Vehicle Underpass

- 1.27 Dublin Airport estimated a StageGate 1 cost of €287.1m for this project.
- 1.28 The IFS' report detailed its main findings at the StageGate 1 phase. These are summarised as follows:
 - The IFS determines that the scope of this project as presented will meet the primary stated objectives of i) removing the effective obstacle to East-West movement of ground transportation caused by the operation of Runway 16/34 and the central Airfield and ii) facilitating more reliable, safer and quicker transport for airside vehicles between the Main and West Aprons.
 - The IFS assesses that the risk of knock-on delays due to interfaces with other projects such as Bravo One Zulu, Critical Taxiway South and the Airfield Drainage Project may not be sufficiently mitigated. It also highlights its previous experience with contaminated ground on other Dublin Airport airfield projects and the substantial cost increases associated with its removal. The IFS therefore concludes that more work would need to be done to better understand the risks and robustness of the estimated outturn programme and cost for the Underpass project.
 - Dublin Airport's cost estimate for the SG1 submission is equal to the SG0 allowance. While the IFS concludes that the majority of the cost estimates are reasonable, it finds that the Main Contractor's Fee is greater than what



it would expect based on projects of this scale and complexity at other European airports. It has reduced this percentage in its assessment.

- 1.29 The IFS proposed an alternative allowance of €282.42m for this project, which is its estimate of the efficient cost of delivering this project.

Stakeholder Views

- 1.30 Aer Lingus states that there is no clear strategy from Dublin Airport to mitigate the risk of delays arising from the interaction of multiple adjacent projects, which it says threatens the timely delivery of critical infrastructure. Aer Lingus also references the “*higher-than-market contractor costs*” presented by Dublin Airport which it claims are a result of inefficient procurement decisions. As above, the risk for knock-on costs arising from unidentified PFAS contamination is mooted.
- 1.31 Ryanair is completely opposed to the West Apron Underpass project, claiming that Dublin Airport has failed to consider safe, lower cost and efficient alternatives to the Underpass. Ryanair says it is “*wasteful and an abuse of Dublin Airport’s monopoly position to proceed with a capital project which is currently under Judicial Review*”.³ Ryanair is of the view that Dublin Airport has not sufficiently mitigated potential risks in the project, particularly of knock-on delays caused by other projects on the airfield.
- 1.32 Ryanair requests that the IAA exclude all costs related to the West Apron Vehicle Underpass project from the RAB.
- 1.33 Dublin Airport disagrees with the IFS’ reduction to the main contractor’s fee as it says this is a known cost which will be incurred as a result of an open market tender. However, Dublin Airport accepts the IFS’ overall assessment of the project and will progress the project accordingly.

StageGate 2

Apron 5H (PFAS Removal)

- 1.34 The IFS assessment of Dublin Airport’s StageGate 1 submission for this project was shared with users on **5 July 2023** and a videoconference was held on **13 July 2023**.⁴ Dublin Airport’s SG1 submission had proposed a cost of **€125.27m**, an increase of €13.85m over its StageGate 0 allowance. Following its assessment, the IFS recommended an alternative StageGate 1 allowance of

³Ryanair was unsuccessful in its Judicial Review challenge to the planning permission granted to Dublin Airport to proceed with the Underpass. The airline has indicated it will ask the presiding Judge to re-open the judgement. This application has not yet been heard. We note that the conclusion in relation to the StageGate 1 allowance, as to be confirmed in this report, does not depend on these proceedings.

⁴https://www.iaa.ie/docs/default-source/1c-economic-regulation/stagegate-concluding-report-2023-2.pdf?sfvrsn=4b49ecf3_1



€122.26m.

- 1.35 We note that at StageGate 1 phase, no airline user objected to the Apron 5H project and so in line with the StageGate process permutations, the StageGate 1 allowance was set according to the IFS assessment, €122.26m. Now, as part of the I4 2024 cycle, Dublin Airport submitted a proposal for a StageGate 2 allowance of €27.7m for this project which is required to remove and export PFAS material discovered on site.
- 1.36 The IFS report detailed its main findings on the main issues in respect of which the additional allowance was requested. These are summarised as follows:
- Since the Apron 5H project has progressed onsite, Dublin Airport has discovered PFAS contaminated materials over and above the levels assumed at the time of the StageGate 1 submission.
 - The IFS concludes that the scope of the StageGate 2 submission will meet the required outputs of the project but may not be the most efficient option, as opportunities to deliver those stands at a lower cost were not explored early enough in the project development.
 - The IFS also assesses that a number of the scope items contributing to the latest increase in off-site disposal of earthworks materials appear to have resulted from omissions in earlier estimates presented at SG1.
 - The IFS determines that while the further increase in costs due to the additional quantity of PFAS contaminated material is in line with the cost information provided at StageGate 1, the increase in the quantity of contaminated material only exacerbates the overall cost position of the project. The IFS reiterates that it may have been more efficient for Dublin Airport to estimate the full extent of the PFAS issue before appointing a contractor. This may have resulted in Dublin Airport exploring options to provide stand capacity elsewhere at a more efficient cost.

Stakeholder Views

- 1.37 Aer Lingus claims that Dublin Airport has not learned from the PFAS-related expenditure incurred in delivering this project stating that “*similar un-mitigated risks*” exist in other projects across this StageGate cycle. It states that Dublin Airport’s lack of planning continues to expose airport users to significant cost risk. Aer Lingus asks the IAA to consider disallowing any cost increases resulting from daa’s failure to adequately account for contamination risks upfront.
- 1.38 Dublin Airport states that while the additional PFAS material contributes to an overall cost increase, the approach prioritises risk mitigation while maintaining the integrity of the project. It plans to monitor and address any further



developments through ongoing assessments and cost control measures.

Conclusions

StageGate 1

Surface water environmental compliance (ADP)

- 1.39 The ADP is being delivered under CIP.20.03.052 and will have a StageGate 1 allowance that is €6.25m less than the proposal submitted by Dublin Airport. Dublin Airport has acknowledged the IFS' assessment value and will progress the project accordingly within the proposed allowance while seeking any deviations supported by evidence through the StageGate 2 process.
- 1.40 We note Aer Lingus' support for the project and its concern over the lack of provision in this project for the possibility of PFAS contamination especially given the challenges it has presented with the cost and delivery of other projects. We acknowledge both Aer Lingus and Ryanair's requests to disallow any costs above the efficient amount determined by the IFS.
- 1.41 No airport user has objected to this project. As per the StageGate 1 rules, the StageGate 1 allowance is in line with the IFS' assessment of €239.1m, as shown in Table 1 below.

Critical Taxiway South & Taxiway Romeo Widening

- 1.42 Critical Taxiway South & Taxiway Romeo Widening is being funded from the allowances of a number of different CIP2020 and PACE projects: CIP 20.03.074, CIP 20.01.003, PACE SCP 17.03.001, PACE SCP 17.03.002, PACE SCP 17.03.003. It will have a StageGate 1 allowance that is €11.6m below the proposal submitted by Dublin Airport.
- 1.43 Dublin Airport has said that while it does not agree with the IFS' cost assessment, it intends to progress this project based on this allowance and will seek any deviations, if necessary, through the StageGate 2 process.
- 1.44 We note Aer Lingus' support for this project and its concern over daa's planning and cost management for this project which it says has not adequately accounted for knock-on delays in other inter-connected projects.
- 1.45 As no airport user has objected to this project, and Dublin Airport has agreed to proceed with the IFS' cost assessment, as per the StageGate 1 rules, the StageGate 1 allowance is therefore in line with the IFS' assessment of €134.5m, as shown in Table 1 below.



The West Apron Vehicle Underpass

- 1.46 The West Apron Vehicle Underpass project is being delivered under CIP.20.03.051B at a StageGate 1 allowance that is €4.7m below the proposal submitted by Dublin Airport. We note that the IFS's cost recommendation has been accepted by Dublin Airport.
- 1.47 We note Ryanair's objection to this project which it says is not suitable or cost effective. However, we also note that this is a continuing objection from Ryanair at SG0, and that the SG1 allowance is lower than the SG0 allowance. The StageGate 1 allowance is, therefore, in line with the IFS estimate, as shown below.

Table 1: StageGate 0 and StageGate 1 allowances in nominal prices

CIP Code	Project	StageGate 0 Allowance	IFS recommendation	StageGate 1 Allowance
CIP.20.03.052	Surface Water Environmental Compliance	€102.67m	€239.1m	€239.1m
CIP 20.03.074, CIP 20.01.003, PACE SCP 17.03.001, PACE SCP 17.03.002, PACE SCP 17.03.003	Critical Taxiway South & Taxiway Romeo Widening	€54.86m	€134.5m	€134.5m
CIP.20.03.051B	West Apron Vehicle Underpass	€287.1m	€282.42m	€282.42m

- 1.48 WestJet also submitted some queries on the operational impacts of progressing the projects presented in this iteration. The questions largely related to the impact of construction on the current airfield capacity. Dublin Airport clarified that the airfield projects are scheduled to maintain uninterrupted aircraft movement and slot allocation capacity with a view to only one of three possible taxiway routes being out of service at any one time.
- 1.49 The Surface Water Environmental Compliance, Critical Taxiway South & Taxiway Romeo Widening and West Apron Vehicle Underpass projects are all now considered to be at the StageGate 2 phase. Any further developments which are identified during the StageGate 2 phase will also be considered at the time of the next determination.

StageGate 2

- 1.50 The IAA notes the IFS recommended efficient estimate of €149.96m for Apron 5H, which is €27.7m higher than the IFS' estimate at SG1. When reconciling



actual expenditure against the allowance in the subsequent determination, the IAA's starting point will be the StageGate 1 allowance, €122.26m. Ultimately the final allowance for this project will be set by the IAA at the time of the next determination.

- 1.51 We note Aer Lingus' comments on the cost of PFAS removal incurred in delivering this project and what it sees as a failing from Dublin Airport to adequately account for contamination risks upfront.