StageGate Concluding Report Iteration 4 2025

1.1 This report concludes the fourth iteration of the StageGate process for 2025. This cycle focused on the StageGate 1 assessment of **(i) T2 Early Bag Store and Transfer Lines** CIP 20.03.028, the StageGate 1 assessment of **(ii) Airport Charging- South Apron EV** CIP.20.09.001 and the StageGate 2 assessments of **(iii) Upgrade to Hold Baggage Sortation related to Area 14 Carousel 5 Replacement and T1 6-Bay Sorter Replacement** CIP.20.07.036.

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 ("2022 Review Decision").[1]

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 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 the project 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 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 assessment will be conducted.

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.

2025- Fourth Iteration

1.8 Two projects were included for StageGate 1 assessment in the fourth StageGate cycle in

[1] 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

2025:

- T2 Early Bag Store and Transfer Lines
- Airport Charging - South Apron EV bussing

1.9 Two elements of the Upgrade to Hold Baggage Sortation project were included for StageGate 2 assessment in this iteration:

- Area 14 Carousel 5 Replacement and
- T1 6-Bay Sorter Replacement

1.10 The final IFS report on these projects was circulated on the **3rd of November 2025.** A videoconference was then held on the **12th of November 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

T2 Early Bag Store and Transfer Lines

1.12 Dublin Airport estimated a StageGate 1 cost of €63.71m for this project.

1.13 The IFS detailed its main findings at the StageGate 1 phase. These are as follows:

- The IFS assesses that the scope of the project will meet the project objectives and is reasonably efficient. However, the IFS notes that the targeted EBS and baggage system performance may be compromised if there is insufficient headroom within the identified building spatial envelope. The IFS considers it would be sensible for Dublin Airport to undertake its own Baggage Storage System (BSS) scheme design development to confirm that an AS/RS technical solution with a storage capacity of 700 bags can be installed.
- The IFS recognises the efficient change from a lane-based system as proposed at StageGate 0 to an AS/RS system which it says should provide an improved MUP utilisation for the T1 and T2 BHS through the adoption of compressed flight build durations at the Makeup carousels.
- The IFS highlights further risks for Dublin Airport to address in this project including a full fire risk assessment for the EBS and supporting platform, and an assessment of the suitability of the level 15 mezzanine platform for the dynamic loads of the AS/RS crane movements.
- The IFS considers the rates for steelworks proposed by Dublin Airport are higher than it would expect and has reduced them accordingly in its assessment. The IFS also assesses that the allowances for Baggage Integration management and OH&P are duplicated in the allowances for preliminaries and it has omitted these allowances in its assessment. In total, the IFS' estimation of an efficient cost for this project is approximately €10.35m less than that proposed by Dublin Airport.

1.14 The IFS proposed an alternative allowance of €53.36m which is its estimate of the efficient cost of delivering this project.

Stakeholder Views

1.15 Aer Lingus raises the concern that this project has been advanced prematurely to adhere with StageGate scheduling. It refers to the potential for the programme credibility and overall cost efficiency to be undermined if the preferred solution cannot be accommodated in the area identified.

1.16 Aer Lingus agrees with the downward adjustments applied to several provisions deemed excessive by the IFS. It considers that Dublin Airport has yet to demonstrate sufficient control over design maturity, cost definition or risk management in the project. Aer Lingus asks the IAA to disallow any overspend above the IFS threshold, stating that Dublin Airport should resubmit the project when a more credible and technically grounded status is reached.

1.17 Dublin Airport says that capacity and spatial requirements have been rigorously assessed by means of a comprehensive option selection report and a RIAI Stage 3 design. It states that any separate design development exercise would only be a duplicate and inefficient.

1.18 Dublin Airport stands by the current rate applied to structural steelwork noting the rate reflects bespoke fabrication and erection in a highly constrained environment. It also disagrees with the omission of overhead and profit allowances for Baggage Integrator Management which it says reflect standard industry practice and are essential for efficient delivery. Dublin Airport maintains this is particularly relevant in Ireland, where no baggage integrators are based locally, necessitating mobilisation of specialist resources from overseas.

1.19 Despite differences with the IFS' assessment, Dublin Airport acknowledges the assessment value and will progress the project within the proposed allowance. However, between what it considers to be a significant variance in the StageGate 1 allowance and with the tender process still to finish, it reserves its position to seek adjustments to the ultimate outturn cost at StageGate 2, supported by evidence and in accordance with the StageGate 2 process.

1.20 IATA questions whether the current design allows for easy expansion of the facility given the anticipated forecast of 40 mppa by 2028/2029 and if additional MUP's will be required beyond 40mppa.

1.21 IATA agrees with the IFS' assessment that it would be sensible for Dublin Airport to conduct its own Baggage Storage System (BSS) design development exercise to confirm that its proposed technical solution with a storage capacity of 700 bags can be installed in the identified location.

1.22 IATA asks for further detail on the 50% increase in cost estimate relative to the SG0 allowance, noting that T2 is a relatively new building and EBS is a widely used system. While IATA supports the reduction in the allowance from the IFS, it comments that the risk allowance should also be reduced citing that it should only be added to a cost when a risk happens.

Airport charging- South Apron EV bussing

1.23 Dublin Airport estimated a StageGate 1 cost of €2.22m.

1.24 The IFS detailed its main findings at the StageGate 1 phase. These are detailed as follows:

- The IFS assesses that the project scope will meet the objectives set out and will deliver the necessary infrastructure required.
- The IFS deems the efficiency of the scope of the project to be well defined.
- The IFS considers certain provisions within the Order of Cost estimate to be higher than expected and has reduced them accordingly.

1.25 Therefore, the IFS proposed an alternative allowance of €2.13m, which is its estimate of the efficient cost in delivering this project. The IFS' estimation of an efficient cost for this project is approximately €0.08m less than that proposed by Dublin Airport.

Stakeholder Views

1.26 Aer Lingus acknowledges the strategic rationale for this project, particularly the decision to install a 20- way duct bank sized to accommodate long-term airport master planning rather than only the immediate requirements of the South Apron. It supports the IFS' downward adjustments to the cost estimate.

1.27 Dublin Airport welcomes the IFS acknowledgement that the installation of a 20-way duct will provide sufficient capacity and support the demands of Airport masterplan developments. It acknowledges the IFS' assessment value and will progress the project accordingly within the proposed allowance.

1.28 IATA comments that completing this project before StageGate 1 consultation contradicts the StageGate process. It also remarks that an estimate of the full cost of the project is necessary to understand the overall cost of providing EV bus charging.

1.29 IATA questions the practicality of stationing the charging points in an area which is remote from the general operating area for the airside buses.

StageGate 2

Upgrade to Hold Baggage Sortation

1.30 The IFS assessment of Dublin Airport's StageGate 1 submission for this project was shared with users on 11 June 2024 and a videoconference was held on 18 June 2024.[2] Dublin Airport's SG1 submission proposed a cost of €5.46m for the Area 14 Carousel 5 replacement and a cost of €9.83m for the T1 6 Bay Sorter. Following its assessment, the IFS recommended an alternative StageGate 1 allowance of €4.98m for the Area 14 Carousel 5 replacement and a cost of €9.05m for the T1 6 Bay Sorter.

1.31 We note that at StageGate 1 phase, no airline user objected to the elements of the Upgrade to HBS project presented in Cycle 2 2024 and so in line with the StageGate process permutations, the StageGate 1 allowances were set according to the IFS assessment, €4.98m for the Area 14 Carousel 5 replacement and €9.05m for the T1 6 Bay Sorter.

Area 14 Carousel 5 replacement

1.32 Dublin Airport estimated a StageGate 2 cost of €6.4m for this project, thus an increase of €1.42m above the StageGate 1 allowance. Additional costs were incurred due to changes in scope after it was identified that a like-for-like replacement was not possible. Dublin Airport also cites cost increases arising from fees related to the new design and changes in the contractor and sub contractor's fees.

1.33 The IFS detailed its main findings at the StageGate 2 phase. These are detailed as follows:

- The IFS assesses that Dublin Airport has dealt with the issues it encountered with this project, in a reasonably efficient manner. The IFS considers that the Design & Build contracting approach during tender allowed Baggage Integrators sufficient flexibility to propose alternative compliant solutions which were then evaluated by the Dublin Airport team.

[2] stagegate-concluding-report-2024-i2.pdf

- Since construction has been completed and the final amount should be known imminently, the IFS has reduced the costs associated with risk and inflation.

1.34 The IFS proposed an overall alternative allowance of €5.27m for the project, thus an increase of €0.3m relative to the StageGate 1 allowance.

Stakeholder Views

1.35 Aer Lingus recognises the operational importance of the T1 Hold Baggage Sortation programme but remains concerned about the accuracy of Dublin Airport's cost submissions. Considering construction on this project is complete, both Aer Lingus and IATA strongly oppose the retention of a €1.1m balance in inflation and risk and agrees with the IFS that this element should only be included if proven to have been genuinely incurred. Aer Lingus supports the IFS's approach of stripping out unsupported provisions to ensure cost discipline.

1.36 Dublin Airport confirms that bespoke Employer's Requirement Documents have been developed for each project, an approach which it asserts mitigates risk without duplication of work or delay of procurement. It also disagrees with the IFS' recommendation to appoint a single contractor for all three projects stating that certain elements, such as the T1 Tilt Tray Sorter, require highly specialised expertise that is not typically offered by a single provider.

1.37 Dublin Airport notes the IFS' position on the treatment of risk and inflation and states that it will align with this approach for the final cost position. It agrees that the final provisions for risk and inflation can be consolidated within the overall allowance as per the IFS recommendation.

1.38 Dublin Airport agrees with the IFS' assessment value and will progress the project within the proposed allowance but reserves the possibility to submit a further StageGate 2 submission.

1.39 IATA makes the point that simulation modelling on the performance of the proposed project (and the T1 6 Bay Sorter) is essential to understand what can be achieved by the project. In response, Dublin Airport contends that the value of simulation modelling is maximised only once a design scheme has been established. It notes that during the tender process, baggage integrators indicated that simulation is most effective and relevant once their proposed solution is defined, allowing for accurate modelling of the actual system configuration and controls. Simulation and emulation for the T1 6 Bay Sorter has since been carried out.

1.40 IATA has concerns about the efficiency of the layout of the new carousels in terms of circulation space between the wall and the belt and consequently, the reclaim hall itself and questions whether the scheme has been developed any further since the previous consultation on this project. Dublin Airport remarks that the T1 baggage reclaim hall and its carousel layouts were submitted and approved as part of cycle 2 2025 at SG1 and are therefore not included as part of this cycle. In addition, Dublin Airport states that it has sought to maximise the layout of the reclaim system to maximise their use by passengers in the area. The schemes have since been delivered through tender responses.

T1 6 Bay Sorter Replacement

1.41 Dublin Airport estimated a StageGate 2 cost of €11.14m for this project, an increase of €2.1m above the StageGate 1 allowance. Higher costs were incurred due to works carried out at night and over the weekend to ensure project completion during the airport's winter period and increases to the budgeted contractor's fee % and sub-contractor's OH&P, based on tender returns.

1.42 The IFS detailed its main findings at the StageGate 2 phase. These are detailed as follows:

- The IFS assesses this project has been progressed efficiently and should achieve the outcomes anticipated despite the technical programme and commercial risks associated with the tender process.
- The IFS considers it would have been prudent for Dublin Airport to undertake a pretender design exercise to ensure there was a viable TTS replacement product solution with minimal risk available from the wider market.
- The IFS assesses that the management and supervision costs should be removed from the construction costs estimate. The reallocation of these costs to the preliminary and design costs and the subsequent cascading effect onto prelims and design costs has reduced the overall assessment. Given the project is close to completion, the IFS also removed the inflation allowance and reduced the risk allowance relative to Dublin Airport's submission.

1.43 The IFS proposed an alternative allowance of €9.61m for this project, an increase of €0.6m relative to the StageGate 1 allowance.

Stakeholder Views

1.44 Since T1 Bay 6 Sorter Replacement is also near completion, Aer Lingus and IATA also oppose the retention of inflation and risk allowances. IATA notes that should the project incur risk-related costs between now and project close, Dublin Airport can submit a separate StageGate 2 application in respect of same.

1.45 In relation to the IFS recommendation for a pre-tender design exercise, Dublin Airport clarifies that a 'like for like' replacement was recommended through an option selection report and that design challenges were only identified during the tender process. It believes that this approach secured specialist expertise and delivered value for money without introducing unnecessary pre-tender design costs or delays.

1.46 Dublin Airport does not see inflation as a risk item and believes that the allowance should be retained in the overall StageGate 2 assessment. It further disagrees with the reduction in risk provision considering the project remains in delivery and residual risks will persist until completion and commissioning. Despite the reductions, Dublin Airport acknowledges the IFS assessment value and will progress the project within the proposed allowance and will return with a further StageGate 2 submission, if required.

Conclusions

T2 Early Bag Store and Transfer Lines

1.47 This project is being funded from CIP .20.03.028 T2 Early Bag Store and Transfer lines. It will have a StageGate 1 allowance which is €10.35m below the Dublin Airport submission.

1.48 Aer Lingus notes the centrality of this project to Terminal 2 operations and states that any spend above the IFS-validated level should be disallowed.

1.49 In response to IATA's question regarding the possibility to expand the facility beyond 40 mppa, Dublin Airport notes there is limited potential for future expansion within the current T2 Baggage Hall and that ultimately, any future expansion will depend on the availability of new space and would need to be planned in the context of the entire baggage system.

1.50 To cater for passenger volumes beyond 40 mppa, Dublin Airport is looking to add some additional carousel capacity at Carousel 4 and 5 within T2 as part of another non StageGate

CIP project. It notes that the improved connectivity between T1 and T2 on completion of this project will support utilising the MUPs across both terminals to maximise capacity and efficiency. It submits that batch building and compressed make up plans are the best strategies for maximising capacity within the existing constraints.

1.51 Addressing the IFS' and IATA's comments that it would be sensible for Dublin Airport to conduct its own Baggage Storage System (BSS) design development exercise, Dublin Airport notes that an independent, manufacturer-agnostic assessment was completed as part of the Options Selection Report and the Functional Brief. It remarks that the proposed solution was found to best meet the operational requirements within the available envelope.

1.52 In response to IATA's question about the over 50% uplift in cost estimate relative to the StageGate 0 allowance, Dublin Airport states this is due to post feasibility, supplier engagement and scope refinement, where it was better able to gauge the projects true requirements. The StageGate 0 allowance included a lane-based storage concept which has since been expanded to include a dynamic EBS, a larger structural support system, significant MEP upgrades and integration work. It also attributes part of the uplift to updated market rates and benchmarking of similar projects.

1.53 Responding to IATA's assertion that the risk allowance be reduced in the IFS' StageGate assessment in favour of recouping realised risk through a StageGate 2 submission, Dublin Airport contends that having an appropriate risk allowance available at StageGate 1 stage enables it to proactively manage risks as they arise. It maintains that if the allowance were removed or significantly reduced, there is a risk that project delivery could be delayed or costs could escalate, as risks would not be able to be addressed promptly within the approved budget and timeline.

1.54 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 €53.36m. Dublin Airport agrees to progress the project in line with this allowance.

Airport charging- South Apron EV bussing

1.55 This project is being funded from CIP 20.09.001 Airport Charging. It will have a StageGate 1 allowance that is €0.084m below the Dublin Airport submission.

1.56 Aer Lingus supports the strategic move by Dublin Airport to install a 20-way duct bank sized to accommodate long-term airport master planning rather than only the immediate requirements of the South Apron.

1.57 Dublin Airport notes the comment regarding the completion of this project before the StageGate 1 process.

1.58 Responding to IATA's request for an estimate of the full project cost, Dublin Airport submits that EV chargers will be installed as part of a separate project and a cost estimate will be provided at the time this project commences. Recent design revisions suggest that 5 no. Power units can supply the 14no. dispensers, which will result in a reduction in the cost estimate which was based on 14 power units supplying 14 dispensers.

1.59 Addressing IATA's concerns about how the remote location of the airside buses will operate in practice and the charging requirements of the buses, Dublin Airport states that the design was based on expected bussing requirements for 40m pax and submits that 14 buses can charge simultaneously at 60kW, providing a charge that lasts 2 days based on the average mileage per bus. Drivers access to the area will be the responsibility of the individual operators.

1.60 We acknowledge IATA's comment that projects should not be presented at StageGate 1 for consultation when works are already complete. However, in this instance we note that it was efficient for Dublin Airport to carry out ducting and cabling works needed to support the new South Apron site as part of the South Apron relocation project which avoids the need to re-visit/remobilise a different contractor to provide EV infrastructure in future. The substantial works relating to the EV bus charging dispenser units, including civil works will form part of a future StageGate submission. We expect that submission to come at a stage where "*there is a good degree of definition in relation to the proposed scope and costs, allowing for meaningful discussion and user contribution, but also before substantial costs have been committed to, and consequently options have been closed off*" in line with the StageGate guidance.

1.61 No airport user has objected to this project. As per the StageGate 1 rules, the StageGate allowance is in line with the IFS assessment of €2.13m. Dublin Airport agrees to progress the project in line with this allowance.

Summary

1.62 In table 1 Below, the column 'StageGate0 CIP' refers to the StageGate 0 allowance for the overall CIP code. In circumstances where the CIP code is divided into sub-elements and a sub-element or group of elements have been submitted in separate StageGate 1 submissions where possible we present the StageGate 0 allowance relating to the specific submission in the column 'StageGate 0 current'. The StageGate 0 allowance for a project may be set at a time when the individual specifications of the project are not well developed. As a result, it is not always accurate to estimate a specific StageGate 0 allowance for each sub element of the overall CIP project.

1.63 Column 'IFS current recommendation' and 'StageGate 1 current allowance' refer to the IFS recommendation on the StageGate 1 submission as presented.

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

CIP Code	Project	StageGate 0 CIP	StageGate 0 current	IFS current recommendation	StageGate1 current allowance
CIP 20.03.028	T2 Early Bag Store and Transfer Lines	€40.47	€40.47m	€53.36	€53.36m
CIP 20.09.001	Airport Charging- South Apron EV bussing	€87.1m	€70.08m[3]	€2.13m	€2.13m[4]

Source: IAA

1.64 The two above projects are 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

[3] €17.04m allocated to Landside EV Bus project in June 2025
[4] This StageGate 1 allowance relates only to a small portion of the overall CIP value. The remainder of the scope will be progressed to StageGate assessment when it has reached a sufficient advanced stage.

the time of the next determination.

StageGate 2

1.65 The IAA notes the IFS' recommended efficient estimate of €5.27m for the Area 14 carousel 5 replacement, which is €0.29m higher than IFS estimate at SG1 and the IFS' recommended efficient estimate of €9.61m for T1 6 Bay Sorter Replacement, which is €0.56m higher than IFS estimate at SG1. Ultimately the final allowances for the projects will be set by the IAA at the time of the next determination.

1.66 Table 2 below records the StageGate allowances to date relating to the various aspects of CIP.20.07.036.

Table 2 CIP.20.07.036 Upgrade to Hold Baggage Sortation

Project Name	SG0	SG1	SG2
Area 14 Carousel 5 replacement	€3.29m	€4.98m	€5.27m
T1 6 Bay Sorter Replacement	€8.76m	€9.05m	€9.61m
T2 Sorter Redundancy Line Enhancement	€10.94m	€9.78m	
Replacement of end-of-life T1 Arrivals carousels 2 to 5 Replacement of end-of-life T1 Arrivals delivery lines and carousels 6 to 10 End of life Terminal 1 Check In outbound delivery conveyor replacement	€25.84m	€45.56m	

Source: https://www.iaa.ie/docs/default-source/1c-economic-regulation/stagegate-concluding-report-2024-i2.pdf?sfvrsn=ca49ecf3_1, https://www.iaa.ie/docs/default-source/1c-economic-regulation/concluding-report-i1_i2_2025.pdf?sfvrsn=eced6d57_1