Financeability Assessment of the Draft Price Determination in relation to Dublin Airport - The Commission for Aviation Regulation

October 2019
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Centrus Advisors Limited (“Centrus”) has been appointed as the financial consultants to CAR with regard to assisting it in the assessment of financeability. Centrus Advisors Limited is a limited liability company incorporated in Republic of Ireland number 547394 and its registered office is WeWork Iveagh Court, Block D, Harcourt Road, Dublin 2, D02 VH94.
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1. Executive Summary

The Commission for Aviation Regulation (“CAR”) is tasked with setting a maximum level of revenue that Dublin Airport can collect in airport charges levied on users. In May 2019, CAR issued a draft determination with a proposed price cap of €7.50 per passenger for each of the 5 years from 2020 to 2024. Before making the draft determination, CAR undertook a financeability assessment on the proposed draft price and as a result made a financeability allowance of €133m through accelerated depreciation. Several stakeholders in their response on the draft determination suggested engaging financial advisors to assist CAR with the financeability assessment and, therefore, CAR procured the services of Centrus Advisors Limited to provide it with assistance on financeability before it makes its final determination.

In our financeability assessment we considered the regulated entity only (referred to as “Dublin Airport” throughout this report), rather the daa plc which is the group entity that has a credit rating. The steps undertaken included the following:

- We have obtained information regarding the price determination process including CAR’s pricing set model and outputs under various scenario
- Reviewed the regulated accounts for Dublin Airport and financial statements for the related entities within the group (together “daa plc”), alongside Dublin Airport’s forecasts and model financial projections under various scenarios
- Assessed the ratings methodologies and credit rating reports from Standard & Poor’s (“S&P”), and other ratings agencies
- Tested CAR’s pricing model to assess the likely impact of various adverse outcomes on the forecast financials and key financial ratios
- Examined market data regarding new debt issuance and pricing levels for relevant traded bonds along with consideration of funding conditions in other debt products e.g. private placements

Our conclusions can be summarised as follows:

- Standard and Poor’s do not provide a credit rating for the regulated entity but, by considering the components of its ratings methodology for business risk profile, it is reasonable that its business risk profile may be assessed as “strong”. Furthermore, analysis of the forecast profitability based on the financial ratios produced by the pricing model using CAR’s preliminary price determination forecast that profitability would not decline to a level that would likely lead to a downgrade of this assessment, as long as the regulatory regime itself remains stable.
- Funders may assess the standalone credit profile (“SACP”) of the regulated entity as an ‘a-/bbb+’ rating category currently. If the SACP were to move toward ‘bbb+’ at the end of the price determination period, it is likely many of Dublin Airport’s funders would also give consideration to the government support uplift which could continue to place its overall credit rating in the ‘A’- category. These are rating levels which
could be considered to support continued access to debt markets over the pricing period.

- In order to understand debt funders’ likely requirements for the appropriate credit rating and financial thresholds for the regulated entity over the price determination period, we also undertook a level of market analysis. Having considered same, we conclude that based on current market conditions a minimum BBB+ credit rating and financial ratios with FFO/Net Debt in the mid-teens and Net Debt/EBITDA of less than 6.0x may be required to provide a reasonable level of comfort in accessing debt markets. In addition, CAR is setting a price cap for a 5-year period and we note that market conditions remain subject to change. Therefore, there is a risk that funder appetite at these levels may not persist over the full pricing period during which Dublin Airport will need to raise new debt.

- To increase confidence that Dublin Airport should be able to raise the full requirement for c.€1bn of new debt to fund a significant programme of capital expenditure forecast over the pricing period, CAR could consider enabling a path to Dublin Airport achieving an FFO/Net Debt above 15%, and a Net Debt/EBITDA of less than 5.0x

- in the later years of the forecast period. This would take account of both company specific adverse scenarios and in a potentially deteriorated debt market, while also moving it closer to the financial ratios of many of the airport operators with government ownership in its peer group.

- Any proposed move from a target FFO/Net Debt from 13% to above 15% and to a Net Debt/EBITDA target move from less than 6.0x to below 5.0x, needs to be carefully balanced to ensure users are not being asked to pay more for financial viability than is required. CAR has a number of levers to enable this path, for example a further increase in accelerated depreciation, consideration of the timing or size of capex, etc.

- For price adjustments to facilitate these targets, such as accelerated depreciation, CAR could consider sculpting the adjustment to target a higher price in the later years where ratios come under most pressure.

- CAR could give consideration to re-evaluating financeability midway through the period to examine if the financial viability adjustment allowed at the start is still required towards the end of the period. If it is not required it could be then removed from the price for the final 2 to 3 years. This would provide confidence to debt funders at the outset of the price determination period that the forecast capital expenditure programme will remain financeable if Dublin Airport performs in line with the base case scenario but could also help ensure that passengers do not overpay if the out-turn performance due to factors beyond Dublin Airport’s control does not warrant the allowances made. It is important that funders have certainty and hence the removal (to work from a funder perspective) would need to be structured in such a way as to only be removed if ratios were being met and forecast to be met over the period. For example, this could be implemented as a form of reverse trigger which is used following an assessment for delays in capital
expenditure which in turn reduces the overall debt requirement over the remaining period.

The downside scenarios and required ratios are estimates based on the various building block inputs for the draft determination which we understand remain subject to change before the final determination. Furthermore, they do take account of other levers within Dublin Airport's control that could be used over the period to enhance financeability.
2. Introduction

Overview

Centrus Advisors Limited (“Centrus”) have been engaged by the Commission for Aviation Regulation (“the Commission” or “CAR”) to assist it in undertaking a financeability assessment of the regulated Dublin Airport business for the regulatory period 2020-2024 (inclusive) in accordance with a consultancy engagement dated 15th July 2019. Details of the scope of this engagement is attached in Appendix A and further information on Centrus have been included in Appendix B.

Background

CAR is tasked with setting a maximum level of revenue that Dublin Airport can collect in airport charges levied on users. Amongst other things, when making a price determination, CAR has three statutory objectives:

- To facilitate the efficient and economic development of Dublin Airport which meets the requirements of current and prospective users of Dublin Airport;
- To enable daa plc to operate and develop Dublin Airport in a sustainable and financially viable manner; and
- To protect the reasonable interests of current and prospective users of Dublin Airport in relation to Dublin Airport.

The price cap is derived from a series of inputs known as the regulatory building blocks calculated by CAR at the time of a determination. The required revenue is then divided by a forecast of passengers (which itself is a building block) to derive the maximum airport charge per passenger. Before confirming the resulting output as the appropriate draft or final price, CAR undertakes a financeability assessment to demonstrate that it will enable Dublin Airport to operate in a sustainable and financially viable manner or make adjustments to same which it considers are required to deliver on that objective. During the period, the risk of underperforming or outperforming the various building blocks has to date been assigned to Dublin Airport.

In May 2019, CAR issued a draft determination with a proposed price cap of €7.50 per passenger for each of the 5 years from 2020 to 2024 and expects to issue a final determination in October with the price determination coming into effect on 1st January 2020.

Prior to setting the price cap in its draft determination, CAR undertook a financeability assessment and concluded that the airport charges would need to rise above those resulting from the building block approach in order to provide lenders with confidence over the price determination period when the Dublin Airport would need to raise debt finance to fund its capital investments. As a result, it allowed an adjustment through providing for accelerated
Depreciation of €133m into the period to deliver a flat price and more favourable financial ratios consistent with a targeted investment grade rating.

In response to the draft determination, CAR received multiple submissions from various stakeholders including Dublin Airport and many airlines. In their response, Dublin Airport Authority suggest that CAR’s draft determination, in respect of the financeability analysis, introduces a high risk that the proposed price determination could result in their capital expenditure (“capex”) programme for the period 2020-2024 not being financeable and outlined its concerns with regard to risks to its credit rating.

Dublin Airport and other stakeholders such as Aer Lingus recommended that CAR engage a financial advisor with the requisite expertise to assist CAR in undertaking a further financeability assessment and reaching a conclusion on financeability for the final determination. Stakeholders noted the following items should be addressed:

- Assess the daa credit rating outlook based on a review of financial and business risk profile (Aer Lingus);
- Review conditions in the relevant debt markets (Aer Lingus);
- Assess likely investor appetite (Aer Lingus);
- Further review the financial viability assessment before making any decision on whether an adjustment is required (Ryanair);
- Engage relevant external expertise, to consider the specific characteristics of Dublin Airport and the entirety of the funding requirement (Dublin Airport).

Subsequently we were engaged by the Commission to provide it with assistance in assessing Dublin Airport’s likely ability to raise debt, given its ownership structure does not lend itself to raising equity, to fund its proposed c.€2bn expansion plan based on CAR’s pricing proposal the 2020 - 2024 period.

Report

This report is intended to allow the Commission to consider our findings and recommendations. It focuses on addressing the key considerations for financeability, including those raised by Dublin Airport, Aer Lingus, Ryanair and other stakeholders. Based on the evidence we have analysed, this report provides our conclusions on the financeability assessment of the regulated entity, along with recommendations to potentially enhance Dublin Airport’s ability to access the required level of funding for the capital expenditure programme proposed over the price determination period.

Our Approach

In this report, we assess financeability through examining the following key question for any future debt funders:
Can Dublin Airport repay the debt borrowings (both coupon/interest payments and principal when they become due for payment) based on forecasts of its operating performance over the life of the debt?

This is generally the focus of credit rating agencies in determining the appropriate credit rating and is typically assessed by debt funders through, inter alia, focusing on a number of core financial ratios within the context of a wider qualitative assessment of the company’s overall business management, operating environment, regulatory framework and ownership/capital profile.

As part of this analysis we also considered the following:

- Is there a specific investment credit rating based on our market analysis that we would recommend CAR needs to enable Dublin Airport to maintain access to debt markets to raise the full debt finance required to support the capex expansion at a reasonable cost? Should this target be towards a strong rating (i.e. the rating sitting at least halfway between the downgrade and upgrade thresholds) or is targeting the rating at threshold levels only sufficient?
- Further to our conclusion on the above, are there specific credit metrics that CAR could treat as core and secondary to assist in achieving the appropriate credit rating to help promote financeability and do these metrics need to be met in all years?

- Relevant downside sensitivity/scenario analysis which funders are likely to test in order to establish that any proposed credit metrics are robust to reasonable downsides.

We have carried out our review in the following steps:

- We have obtained information regarding the price determination process including CAR’s pricing set model and outputs under various scenario
- Reviewed the regulated accounts for Dublin Airport and financial statements for the related entities within the group (together “daa plc”), alongside Dublin Airport’s forecasts and model financial projections under various scenarios
- Assessed the ratings methodologies and credit rating reports from S&P and other ratings agencies
- Tested CAR’s pricing model to assess the likely impact of various adverse outcomes on the forecast financials and key financial ratios
- Examined market data regarding new debt issuance and pricing levels for relevant traded bonds along with consideration of funding conditions in other debt products e.g. private placements

**Limitations and Assumptions**

In producing this report, Centrus have undertaken a review of the relevant documents, either publicly available or provided to us by CAR and Dublin Airport, describing past, recent and future developments in relation to our engagement. In producing this report, we are
assuming that all information received from CAR and Dublin Airport is reliable, accurate and complete.

The credit risk assessment and market analysis is based on the following: (i) our experience of fundraising in public sector and infrastructure debt markets, (ii) our financial analysis applied to the information made available to us from CAR and the Dublin Airport, (iii) conversations with stakeholders including the Commission, Dublin Airport, S&P ratings agency, Aer Lingus and New ERA, and (iv) our review of inputs from market data sources such as Bloomberg, Markit, Reuters, Dealogic, etc. available through subscription services and public information sources.

We have not, nor would it have been appropriate for us to have, undertaken any market soundings in relation to the future funding of either of daa plc or Dublin Airport or discussed current or potential future transactions with any debt investors. Our conclusions have been informed by conversations with Dublin Airport and their advisors in relation to their interaction with debt funders in the past.
3. Financeability – Key Considerations

Introduction

In general, financeability is regarded as an important check within regulatory determinations through which the regulator assesses whether an efficient company’s revenues, profits and cash flows, forecast using the outputs from the regulatory decision process, would enable that company to access the financial markets at reasonable cost.

To deliver on its multiple objectives, it is important the Commission is able to demonstrate that the final price determination, enables the financeability of Dublin Airport by way of cost-effective access to debt finance. In this regard the Commission could ensure that the final package of measures that it determines are required to provide incentives for efficiency also allows for efficient financing so that overall costs to consumers are no higher than necessary.

The hypothetical regulated entity

The Commission has agreed that its primary basis for assessing financeability will be a notional approach that focuses on the regulated entity i.e. by consideration of Dublin Airport as a standalone entity, separate from the remainder of the daa plc group. This was also the approach it took in the 2014 Determination, having considered financeability from the perspective of daa group in previous Determinations. The regulated entity relating to Dublin Airport is made up of DAA plc (the Company excluding the activities of Cork Airport, Dublin Airport Central and other non-regulated business activities) and four of its subsidiaries as follows:

- DAA Finance PLC
- ASC Airport Services Consolidated Limited
- DAA Airport Services Limited
- DAA Operations Limited

We agree with the assessment that this is hypothetical given the regulated entity (i) does not exist as a separate legal company in its own right, (ii) does not have a credit rating as a separate entity and (iii) does not raise debt solely for its use e.g. through a ring-fenced structure.

While our report will provide conclusions on the financeability of the hypothetical regulated entity Dublin Airport, we have supplemented our analysis by also giving consideration to some relevant factors that impact on the financeability of Dublin Airport as part of the daa plc group. The latter is the entity with a credit rating that future funders will be debt financing. We consider this will assist the Commission in understanding how funders would be likely to assess the regulated entity on a standalone basis, as well as some of the benefits and/or trade-offs from a debt provider’s perspective in providing funding to it within the wider group rather than as a separate, ringfenced entity.
Capital structure and ownership factors

In line with the Commission’s approach to financeability that allows for the government ownership structure of daa plc, we assume a simple notional financial structure with gearing driven by the fact that Dublin Airport will not have access to equity increases. As a result, it is reliant on increasing its debt financing alongside use of its own cashflow generation to fund the upcoming capital investment over the price determination period.

It should also be noted that in the assessment CAR conducted of the draft determination CAR assumed that a 30% dividend pay-out rate would be maintained throughout the period, irrespective of Dublin Airport’s funding requirement.

We also note that regulators, rating agencies and long-term funders will give consideration to shareholder decisions that inform a company policy in relation to treasury management, target credit ratings, debt strategy and covenant packages, securitisation structures for borrowing, dividend policy, etc. These can usually be regarded as levers available to the borrower that could determine and/or be used to enhance the credit profile. For example, S&P noted in its 2016 ratings review of Avinor that it expected Avinor’s forecast ratios to remain weak and leverage to remain elevated through 2016 and 2017 as it undertook a capital expenditure programme where EBITDA expansion did not keep up with increasing debt resulting from those investments. However, it noted that management ran a cost efficiency programme and that there was some flexibility and discretion over the magnitude and timing of uncommitted capex which would help mitigate downside risks on the ratios so that the rating could remain unchanged.

We assume that it is at the discretion of the shareholder or company to vary any of the building block factors e.g. operating cost reductions, in order to deliver efficiencies as forecast in the regulatory model and we will not address same within this financeability assessment. The decision on treatment of equity returns and reinvestment of equity in assessing financial ratios is not within the scope of our report.

Credit rating agency and debt funder perspectives

When assessing financeability, many regulators such as the CRU, the Utility Regulatory in Northern Ireland, Ofgem and Ofwat focus only on a defined set of financial ratios to ensure consistency with rating agencies’ criteria for threshold ratings at investment grade level over the price determination period under review. The rationale for using the credit rating agency approach and metrics to aid assessment of debt financeability is that this reflects to a large degree how debt investors assess potential investments and whether debt will be repaid in full versus the possibility of a default or non-payment.

We note that the terms of reference for our review, which aligns with the recommendations of a number of stakeholder responses such as Dublin Airport and Aer Lingus, required that our analysis consider the wider question of financeability from the perspective of debt funders to airport operators such as Dublin Airport, including infrastructure and public sector investors.
Therefore, we have generally followed the key steps within the methodology for credit ratings assessment\(^1\) followed by the credit rating agency S&P for airport operators and broadened out the analysis to a wider funder perspective where appropriate and as detailed below. We chose to mirror S&P’s approach as it is the current ratings provider to daa plc and therefore has published information relevant to the regulated company being assessed that we refer to throughout our analysis.

The following is an illustration of the approach applied by S&P when rating companies like Dublin Airport which we follow in undertaking our analysis of the credit risk associated with Dublin Airport below:

**Source: S&P Global Ratings**

**Financial Ratios Analysis**

In considering credit metrics, we have assessed trends in financial ratios over historic and forecast periods as well as the absolute level of ratios in each year. This is consistent with the approach of ratings agencies whereby ratios falling below the threshold levels in isolated periods do not necessarily cause a rating downgrade and the ability to meet threshold ratios on a sustained basis is typically what they look for. For example, S&P notes when rating Perth Airport Pty Ltd, that they “expect the airport’s FFO to debt to be temporarily below

\(^1\) Please note that this is based on the credit rating agencies’ published methodologies at the time of preparing this report, which are subject to change at their discretion
9% for one or two years, before recovering thereafter” and therefore maintained a ‘BBB’ rating on its debt despite the forecast decline in the relevant financial metric below the threshold level for that rating.

While S&P’s methodology typically focuses on a 5 year period (being the last 2 years’ historic, the current financial year and 2 years’ forward forecasts), debt funders will often assess expected performance over the full regulatory pricing period along with any reasonable forecasts beyond that period to when their debt will be repaid in full. This is required to allow them to take a view on the probability that their principal and interest will get repaid in full and in a timely manner.

This also facilitates debt funders taking a longer-term view on financial performance over the investment cycle characteristic of the airport sector. Multi-year capital expenditure programmes result in periods of negative cashflow and thus are funded through debt raising, while higher passenger numbers / improved service feed through to increases in revenues with a lag and allow deleveraging in the post investment period. Whilst focusing on shorter assessment periods, it should be noted that rating agencies will also make allowances for the impact of the investment cycle on financial ratios over the short term as noted in the example of S&P’s ratings reports for Avinor and Perth Airport as discussed above. This was explicitly allowed for by Moody’s when it affirmed Australia Pacific Airports (Melbourne) Pty Ltd rating at A3. In the latter case it noted that while the debt leverage was forecast to temporarily weaken below the rating tolerance level over a period of two to three years, it also expected that it would subsequently recover to a level back within the rating parameters as the new assets start generating returns.

Finally, given airports are more levered to economic growth than other core infrastructure / utility companies, funders will require that airports retain sufficient financial flexibility to sustain operations and those investment programs in the face of shocks which they assess through downside testing described below.

Other Credit Risk Factors

We believe debt funders will supplement their assessment of financial ratios with a qualitative assessment of the Dublin Airport’s regulatory framework alongside the business and macro environment within which the airport operates. This is the same as the approach of rating agencies e.g. similar risks are captured within S&P’s business risk profile analysis and Moody’s ratings methodology attributes 60% of their rating scorecard for factors other than financial ratios.

Funders will also give consideration to the airport’s government ownership structure which brings both benefits and constraint. This is reflected in the rating agencies’ uplift / downlift for government support to an entity’s standalone credit rating when assessing Government Related Entities (“GREs”) in the case of S&P or government related issuers in the case of Moody’s. This adjustment factor for government support reflects the importance of assets such as Dublin Airport to the State, which may be considered a credit mitigant by funders.
from business risk and could enhance their assessment of an airport’s overall credit risk profile.

**Scenario Analysis**

Scenario analysis allows funders to assess the extent to which these other risk factors could impact on Dublin Airport’s future performance e.g. through lower passenger volumes, different outturn operating costs, construction programme overruns or delays, etc. We have also undertaken scenario analysis to reflect the impact these risks materialising could have on Dublin Airport’s future debt capacity and to understand the extent to which changes in the final price determination might help to mitigate same.

The scenarios we have assessed for the purpose of this paper are focused on (i) CAR’s pricing model with inputs based on its draft decisions on the relevant building blocks within the price determination process and (ii) those scenarios we consider that debt investors and rating agencies are likely to assess as most relevant for debt funding as they impact the EBITDA and cash generation of the entity as well as its debt profile over the regulatory period. Our analysis indicates that there are a range of credible scenarios that are financeable and there are also scenarios where financeability would be more difficult.

We note however, that there is significant potential for a larger range of scenarios to allow for variances that might emerge in the longer run, for instance the impact of Brexit, slower economic growth in Ireland, different outturns for operating costs or capex programme timing and costs to current stakeholder forecasts, financial market conditions changing, etc. We also note that stakeholders, rating agencies and debt funders may have their own views on the scenarios it is most appropriate to consider and on how financeability should be assessed that differ from our assessment. Finally, we note that we are not attempting or consider it appropriate to replicate all the factors and scenarios that a rating agency might consider when developing a rating assessment but have focused on the those credit metrics, including financial ratios, that are most likely to impact negatively on debt funder appetite and pricing.

**Peer Group Analysis**

daá plc as an airport operator is generally classified within the infrastructure and transport sector alongside a number of airports across the UK, Europe and globally whose principal line of business is the operation and maintenance of airports and in many cases are subject to regulatory tariffs or licences that limit the prices they can charge to airlines and/or passengers. For our peer group comparison, we have considered only companies that carry credit ratings and access debt funding markets.

Across this group, there is a large variation in size of the entities with the larger airports such as Heathrow, Schiphol and Aéport de Paris benefiting from reduced volume risk due to their positioning as major transport hubs, others such as Norway and Aena which operate a large network of airports and other smaller operators such as daá plc and Brussels which are...
largely reliant on single assets and exposed to a greater extent to the domestic economy and the performance of individual airlines.

This larger group of airports can be categorised into two further sub-groups according to ownership - state owned or private. Generally, the “private” airports adapt different shareholders policies and capital structures, including ring fencing of regulated / operational company assets for debt structuring e.g. Heathrow and Gatwick. Amongst the state owned airports we have considered within the peer group assessment, there are also significant differences across the sub-category according to government ownership levels (e.g. daa plc, Avinor and Schiphol are 100% government owned, Airport de Paris (“ADP”) and Aena are majority government / public sector owned, while Brussels Airport, Zurich Airport, Copenhagen Airport and Aerport di Roma have a minority government / public sector ownership beside private investors) but generally are operated for profit maximisation rather than for public benefit.

Given Dublin Airport’s Irish government ownership, it can also be considered within the public sector entity category alongside ESB and Gas Networks Ireland (“GSNI”) as Irish government owned companies that are subject to regulation and carry a credit rating / issue debt on bond markets. More broadly this could also put daa plc into the same category as other public sector European utilities such as Snam, Gasunie and Verbund.

Whilst we refer to the regulatory framework of other utility sectors such as the water and energy sectors in the UK within our report and highlight state owned utilities above, we note that generally companies within those sectors are not considered directly comparable to airports such as daa plc by rating agencies and funders as they have a different risk profile. This is because they typically do not face volume risk and in the case of UK utilities tend to have private ownership structures. Therefore, we do not include them for peer group analysis purposes.
Debt Funding Profile and Debt Markets

The profile of new debt has been set out in the CAR base case based on the funding requirement for the total allowed capital expenditure amount smoothed evenly across the 5 years of the pricing period. We note that both this capital expenditure profile and the funding of same is unlikely to follow the forecast set out as we expect that Dublin Airport, through daa plc, will access a range of debt funding markets at the appropriate timings to optimise its funding sources, maturities and debt price.

In particular we would expect its debt strategy to have regard to factors such as (i) advance funding of capital programmes, (ii) forward funding to lock in lower costs in the current funding rate environment and/or increased investor appetite for longer dated maturities and

### Debt Funding Profile and Debt Markets

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Credit Rating</th>
<th>Government / Public Sector Ownership</th>
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<tbody>
<tr>
<td>daa</td>
<td>Dublin</td>
<td>A-</td>
<td>Majority</td>
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<tr>
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<td>Spain</td>
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<td>Yes</td>
</tr>
<tr>
<td>Gas Networks Ireland (GNI)</td>
<td>Ireland</td>
<td>A</td>
<td>Yes</td>
</tr>
<tr>
<td>SNAM</td>
<td>Italy</td>
<td>BBB+</td>
<td>Yes</td>
</tr>
<tr>
<td>Gasunie</td>
<td>The Netherlands</td>
<td>A1</td>
<td>Yes</td>
</tr>
<tr>
<td>Verbund</td>
<td>Austria</td>
<td>A-</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Note: Based on S&P credit ratings where available, otherwise Moody’s ratings are provided
*Includes both Manchester Airport and Stansted
Euro issuance, (iii) public bond issuances in benchmark size as a minimum, (iv) utilisation of the Revolving Credit Facility ("RCF") and committed EIB facility to optimise the timing of new fund raises, etc.

When considering the total quantum of debt to be raised we exclude the €350m EIB facility that is already committed and yet to be drawn and make no assessment of the appropriate sizing of its RCF.

We note that the cost of debt will be a key input in the consideration of the ability to raise sufficient levels of debt in a cost-effective manner but have based our analysis on CAR’s draft determination for WACC provided within its pricing model and thus are not providing a separate assessment of same.

\[ \text{2 Usually considered to be } \€500m, \text{ although some bond benchmarks will include issues in smaller sizes from } \€300m \]
4. Debt Capacity Analysis

Rating Agency Perspective

S&P’s Financial Risk Profile

In order to obtain a picture of how the Financial Risk Profile for the regulated entity would be assessed over the regulatory price period, following the approach to financial ratios of S&P and the debt capacity indicators we believe will be focused on most closely by a range of debt funders, we have analysed the following:

- Free funds from operations (FFO) to net debt
- Net debt to EBITDA

These measures give an indication of the ability of a company to pay off its debt using its net operating income surplus while also illustrating how long this is expected to take based on the company’s current leverage.

**FFO to Net Debt:**

For infrastructure companies including airports which have significant levels of debt financed assets that generally have very long useful lives, this measure is not meant to gauge whether its annual FFO can cover its debt fully in any given year but rather the entity has the capacity to service debt (both principal and interest) within a prudent timeframe e.g. a ratio of 50% implies debt can be serviced within 2 years. This allows a ranking amongst companies for levels of gearing.

This is a core ratio for S&P for infrastructure related companies including airports, where there are large amounts of cash and debt held on balance sheet and is also one of the more important ratios given consideration by institutional / bond funders.

**Net debt to EBITDA:**

This ratio gives an indication as to how long a company would need to operate at its current level to pay off all its debt and higher ratio outcomes typically indicate that a company is unable to repay its existing debt obligations in the near term. This is commonly used by credit rating agencies including S&P, Fitch and Moody’s to determine the probability of a company defaulting on its debt for corporate issuers. Given their propensity for funding over shorter tenors than institutional investors, this ratio is also assessed more closely by bank lenders.
Generally, FFO/Net Debt is considered to provide a more accurate picture than Net Debt/EBITDA of the company’s ability to repay its debt over a period of time based on the free funds available from operations. Therefore, this ratio is often considered as a secondary measure of a company's leverage e.g. for S&P this is a secondary consideration whereas it is not included at all within the key ratios focused on by Moody's in its credit rating assessment for issuers in the airport sector. When funders look at this ratio as a measure of leverage, as Net Debt/EBITDA approaches certain threshold levels it may limit funder appetite to provide further debt and as a result the forecast Net Debt/EBITDA level is a consideration for assessing continued access to debt markets.

**Ratios Used in Practice Elsewhere**

The Civil Aviation Authority (“CAA”) in the United Kingdom consider Net Debt/EBITDA as a secondary metric to FFO/Net Debt amongst other interest coverage and leverage measures, while we also note that other regulators such as the Commission for Regulation of Utilities, the Utilities Regulator Northern Ireland, Ofgem and Ofwat base their financeability assessments on the FFO/Net Debt ratio without an analysis of Net Debt/EBITDA.

**S&P's Financial Risk Profile Ratio Scale**

When looking at how S&P categorise a financial risk profile of a company using ratios like these, the following thresholds are considered within the determination of how an entity is rated:

<table>
<thead>
<tr>
<th>Core Ratios</th>
<th>FFO/Net Debt (%)</th>
<th>Net Debt/EBITDA (x)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Minimal</td>
<td>35</td>
<td>2</td>
</tr>
<tr>
<td>2 Modest</td>
<td>23-35</td>
<td>2-3</td>
</tr>
<tr>
<td>3 Intermediate</td>
<td>13-23</td>
<td>3-4</td>
</tr>
<tr>
<td>4 Significant</td>
<td>9--13</td>
<td>4--5</td>
</tr>
<tr>
<td>5 Aggressive</td>
<td>6--9</td>
<td>5--6</td>
</tr>
<tr>
<td>6 Highly Leveraged</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

---

https://publicapps.caa.co.uk/docs/33/CAP1658EconomicregulationofcapacityexpansionatHeathrow.pdf
S&P currently rate daa plc’s financial risk profile as being ‘Modest’. As it provides ratings only for the group, there is no rating specific to the regulated business as a separate entity.

Financial Risk Profile Ratios based on CAR’s Base Case Pricing Model

The following is the base case as set out under the CAR price model used to carry out the preliminary price determination:

<table>
<thead>
<tr>
<th>Profitability Analysis</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger Numbers (m’s)</td>
<td>33.59</td>
<td>34.64</td>
<td>35.66</td>
<td>36.71</td>
<td>37.78</td>
</tr>
<tr>
<td>Price Cap Per Passenger</td>
<td>€7.50</td>
<td>€7.50</td>
<td>€7.50</td>
<td>€7.50</td>
<td>€7.50</td>
</tr>
<tr>
<td>M2 Runway Trigger</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>9.68</td>
<td>9.97</td>
</tr>
<tr>
<td>Aeronautical Revenue (€m’s)</td>
<td>251.91</td>
<td>259.83</td>
<td>267.45</td>
<td>275.30</td>
<td>283.38</td>
</tr>
<tr>
<td>Commercial Revenues (€m’s)</td>
<td>257.14</td>
<td>267.20</td>
<td>275.87</td>
<td>285.31</td>
<td>295.77</td>
</tr>
<tr>
<td>Total Revenue(€m’s)</td>
<td>509.05</td>
<td>527.03</td>
<td>543.32</td>
<td>570.29</td>
<td>589.11</td>
</tr>
<tr>
<td>Operating Costs</td>
<td>(273.08)</td>
<td>(273.08)</td>
<td>(283.91)</td>
<td>(289.71)</td>
<td>(291.09)</td>
</tr>
<tr>
<td>EBITDA</td>
<td>235.97</td>
<td>253.95</td>
<td>259.41</td>
<td>280.58</td>
<td>298.02</td>
</tr>
</tbody>
</table>

Source: CAR

<table>
<thead>
<tr>
<th>Net Debt Analysis</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening Net Debt</td>
<td>(602.00)</td>
<td>(909.84)</td>
<td>(1,193.09)</td>
<td>(1,397.15)</td>
<td>(1,586.72)</td>
</tr>
<tr>
<td>Funds From Operations (FFO)</td>
<td>208.58</td>
<td>227.38</td>
<td>231.23</td>
<td>249.07</td>
<td>263.76</td>
</tr>
<tr>
<td>Existing Capex</td>
<td>(75.00)</td>
<td>(75.00)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Additional Capex</td>
<td>(410.93)</td>
<td>(410.93)</td>
<td>(410.93)</td>
<td>(410.93)</td>
<td>(410.93)</td>
</tr>
<tr>
<td>Dividend</td>
<td>(30.49)</td>
<td>(24.70)</td>
<td>(24.36)</td>
<td>(27.71)</td>
<td>(29.92)</td>
</tr>
<tr>
<td>Closing Net Debt</td>
<td>(909.84)</td>
<td>(1,193.09)</td>
<td>(1,397.15)</td>
<td>(1,586.72)</td>
<td>(1,763.81)</td>
</tr>
</tbody>
</table>

Source: CAR
### Regulated Entity Base Case Financial Risk Profile Assessment:

<table>
<thead>
<tr>
<th>Financial Risk Profile Ratios</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFO/Net Debt</td>
<td>22.9%</td>
<td>19.1%</td>
<td>16.5%</td>
<td>15.7%</td>
<td>15.0%</td>
</tr>
<tr>
<td>Net Debt/EBITDA⁴</td>
<td>3.86</td>
<td>4.70</td>
<td>5.39</td>
<td>5.66</td>
<td>5.92</td>
</tr>
</tbody>
</table>

*Source:* CAR

The above forecasts illustrate what would be considered as being in the middle range of an “Intermediate” financial risk profile under the S&P ratings methodology on an FFO/Net Debt basis, although we note that they remain in the lower half of its threshold range over the final 3 year period. These ratios are in line with the historic levels of peer airports and other regulated entities as illustrated further below in our peer comparison.

However, when reviewing the secondary ratio of Net Debt/EBITDA, forecasts illustrate this will come under pressure during the price period, reflecting the sharp increase in the level of debt as the new passenger capacity is developed through the capital expenditure programme and the “lag effect” of the associated increase in revenues occurring. If looking at the regulatory period in isolation this could result in a “Significant” categorisation with a possible move towards “Aggressive” financial risk profile being evidenced over the latter price period.

Depending on which metrics a regulator or a category of debt funder places more emphasis on, the financial risk profile within the regulatory period can be viewed differently.

This ratio analysis alone would present the possibility that financeability could become more challenging in the later years of the 5-year pricing period, although does not necessarily indicate that the ratios as outlined in the base case above are unfinanceable for the following reasons:

- individual metrics in excess of threshold levels on a temporary basis do not necessarily lead to credit rating downgrades. This is because rating agencies, including S&P, looking at a range of wider factors from qualitative business risk profile to government support mechanisms, the sustainability of ratios over the long term, peer group and market trends as well as range of wider factors
- these scenarios do not allow for any measures which could be available to Dublin Airport to bolster financeability e.g. greater cost control, changing the parameters of the capex programme or other measures

---

⁴ These ratios are lower than those presented in the draft determination due to an updated estimate of the opening net debt position for 1 January 2020.
• the relationship between the level of credit rating required and/or market appetite for particular rating levels across the various debt market participants which can vary significantly over time.

However, we also recognise that a large or sustained failure to achieve threshold ratings consistently across the primary and secondary leverage ratios may not be consistent with maintaining the credit rating in question and we intend to take this risk into consideration when assessing financeability.

In order to assess how these ratios impact on the financeability assessment, the analysis must be extended beyond a solely ratio based one and therefore we consider both quantitative and qualitative factors in tandem.

S&P’s Business Risk Profile

S&P currently rate daa plc as having a “Strong” business risk profile. Through this measure, S&P combine a number of qualitative factors, which give a single categorisation that underpins its tolerance levels when assessing the financial ratios described above.

In order to accurately reflect the business risk profile over the price period of the regulated entity, separate to that of daa plc to which S&P’s current rating assessment is applied, we have followed the S&P ratings methodology to provide an indication of how we believe the following categories are likely to be used in order to arrive at a business risk profile rating for Dublin Airport:

• Country Risk
• Industry Risk
• Competitive Position
• Profitability and Peer Group Comparisons.

Country and Industry Risk Factors:

The country and industry risk factors between daa plc and the regulated entity are not assumed to differ and therefore both are considered low for the purposes of our business risk profile analysis.

Competitive Position and Profitability:

S&P currently rate daa plc’s competitive position and profitability is at the lower end of Strong.

Within the analysis of competitive advantage, the rating agency and funders will consider the strength of the regulatory framework and, in the case of Dublin Airport it is likely they could view it as strong and stable which is supportive of the rating. Whilst S&P could acknowledge that the final outcome of any regulatory process may be challenging over a given period when the regulatory approach is consistently applied, one may not expect its assessment of the regulatory framework to change as a result of same. We note that a
predictable regulatory support, consistently applied, is an important requirement of debt funders also.

However, we note that funders and rating agencies would consider the resulting financial metrics rather than the pricing itself and how those metrics would impact the business and financial risk.

We consider a key driver of S&P's business risk profile assessment to be the profitability assessment. In order to replicate the assessment of the competitive position and profitability of daa plc and, for the purposes of this analysis the regulated entity, a peer analysis was undertaken using an EBITDA Margin\(^5\) assessment.

This ratio can be used to assess a company's operational profitability and efficiency i.e. how well is a company using its operating cash compared to the revenue it generates. It differs from other profitability measures because it does not account for capital intensity/the amount of leverage employed by the firm and allows for comparison of companies across an industry, irrespective of their capital structure.

It is also used to track the progress of a company through time and the stability of a company's business model over cycles. This is not considered as a core ratio by rating agencies for the airport sector but allows for the categorisation of daa plc's peer group amongst airports across Europe and globally. It is factored into S&P's assessment of an operator's business risk profile as a final adjustment factor based on the level of profitability and volatility of same over time.

The following analysis of historic EBITDA Margins across the industry illustrates where daa plc has historically sat, on a profitability basis among its peer airports which are rated by S&P:

<table>
<thead>
<tr>
<th>EBITDA Margin</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>daa</td>
<td>34.8%</td>
<td>35.1%</td>
<td>34.5%</td>
</tr>
<tr>
<td>Sydney Airport</td>
<td>79.9%</td>
<td>81.1%</td>
<td>81.2%</td>
</tr>
<tr>
<td>Heathrow</td>
<td>58.8%</td>
<td>59.5%</td>
<td>60.8%</td>
</tr>
<tr>
<td>Aeroporti di Roma</td>
<td>57.9%</td>
<td>59.0%</td>
<td>60.8%</td>
</tr>
<tr>
<td>Brussels Airport</td>
<td>61.8%</td>
<td>58.1%</td>
<td>57.0%</td>
</tr>
<tr>
<td>Zurich Airport</td>
<td>56.1%</td>
<td>56.0%</td>
<td>56.5%</td>
</tr>
<tr>
<td>Gatwick</td>
<td>48.3%</td>
<td>49.0%</td>
<td>53.8%</td>
</tr>
<tr>
<td>Aeroport de Paris</td>
<td>41.5%</td>
<td>41.5%</td>
<td>42.2%</td>
</tr>
</tbody>
</table>

\(^5\) EBITDA margin is a measure of a company’s operating profit based on its Earnings Before Interest, Tax, Depreciation and Amortisation as a percentage of its revenue.
Based on the EBITDA Margins outlined above, it illustrates that daa plc ranks at the lower end of its peer group in terms of its profitability, while still demonstrating metrics that are considered “Strong”, albeit likely to be at the lower end of same, in the context of a business risk profile rating.

If the EBITDA Margin analysis is used for the purposes of determining what may be viewed as a business risk profile of the regulated entity, differences in the ratio between Dublin Airport and daa plc due to included/excluded activities would need to be considered.

The EBITDA Margin for the regulated business for 2018 based on an EBITDA of €273m was 45.8% compared to 45.1% in 2017 on an EBITDA of €254.7m. On a forecast basis, the following table illustrates the projected EBITDA Margin increases over the life of the regulatory pricing period:

<table>
<thead>
<tr>
<th>Business Risk Profile</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBITDA Margin</td>
<td>41.6%</td>
<td>43.2%</td>
<td>42.8%</td>
<td>44.2%</td>
<td>45.4%</td>
</tr>
</tbody>
</table>

When the base case projected EBITDA Margin levels are compared to the peer group historic levels, it is likely that Dublin Airport, i.e. the regulated entity, could be viewed as more efficient from a profitability perspective than at the daa plc group level and would rank in the middle of its peer group over the life of the price period (assuming the peer group EBITDA Margin levels remain constant). The above ratio also places the profitability margin of the regulated entity in the middle of the Average category (30-55%) which S&P has highlighted for the absolute measure of profitability in its Profitability Assessment.

As the profitability measure of the regulated entity against peers is still in the “Average” category (i.e. between 30-55%) for the profitability assessment of the business risk profile assessment after allowing for the lower price of €7.50, we therefore consider it reasonable, based on the data outlined above, that the business risk profile for the regulated entity would remain comparable over the regulatory price period and all other things being equal could remain in the “Strong” category in the context of an S&P rating.

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*These calculations are based on the last audited regulated accounts*
We therefore consider it appropriate to continue using a business risk profile of “Strong” as the relevant business risk profile over the full price determination period when determining the anchor rating of Dublin Airport at the next stage.

**Stand Alone Credit Profile of the Regulated Entity**

Overall Rating Assessment:

The following is an illustration of how the anchor credit rating of A- rating for daa is arrived at under S&P’s methodology when combining the business and financial risk profiles:

---

<table>
<thead>
<tr>
<th>Business risk profile</th>
<th>1 (minimal)</th>
<th>2 (modest)</th>
<th>3 (intermediate)</th>
<th>4 (significant)</th>
<th>5 (aggressive)</th>
<th>6 (highly leveraged)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(excellent)</td>
<td>aa/aa+</td>
<td>aa</td>
<td>a+/a</td>
<td>a-</td>
<td>bbb</td>
<td>bbb+/bb+</td>
</tr>
<tr>
<td>(strong)</td>
<td>aa/aa-</td>
<td>a+/a</td>
<td>a-/bbb+</td>
<td>bbb</td>
<td>bb</td>
<td>bb+</td>
</tr>
<tr>
<td>(satisfactory)</td>
<td>a/a-</td>
<td>bbb+</td>
<td>bbb/BB-</td>
<td>bbb/-bb+</td>
<td>bb</td>
<td>b+</td>
</tr>
<tr>
<td>(fair)</td>
<td>bbb/bbb-</td>
<td>bbb-</td>
<td>bb+</td>
<td>bb</td>
<td>bb-</td>
<td>b</td>
</tr>
<tr>
<td>(weak)</td>
<td>bb+</td>
<td>bb+</td>
<td>bb</td>
<td>bb-</td>
<td>b+</td>
<td>b/b-</td>
</tr>
<tr>
<td>(vulnerable)</td>
<td>bb-</td>
<td>bb-</td>
<td>bb/-bb+</td>
<td>b+</td>
<td>b</td>
<td>b-</td>
</tr>
</tbody>
</table>

**Source: S&P Global Ratings**

Based on the combination of a “Strong” business risk profile and a “Modest” financial risk profile, S&P use the above matrix to assess an A rating as the anchor rating for daa plc group.

However, before final determination of the Stand-Alone Credit Profile (“SACP”) of the entity, S&P considers whether there is a need for any modifiers or adjustments required to this anchor credit rating based on wider factors as follows:

---

Due to the comparable ratings analysis S&P have applied a modifier of a -1 notch adjustment based on its comparable ratings analysis which takes into account where daa plc’s business risk profile and financial risk profile ranks among its peer group (limited to those rated by S&P as below). This is primarily down to the current FFO/Net Debt ratio and the EBITDA...
margin ratios being out of alignment with the peer group analysis. This in turn reflects the long period of outperformance of DAA allowing it to deleverage aggressively which is expected to reverse to more “normal” levels of leverage in coming periods.

This is illustrated in the following FFO/Net Debt Comparison:

<table>
<thead>
<tr>
<th>FFO/Net Debt</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAA</td>
<td>40%</td>
<td>48%</td>
<td>63%</td>
</tr>
<tr>
<td>Zurich Airport</td>
<td>114%</td>
<td>113%</td>
<td>101%</td>
</tr>
<tr>
<td>Aeroporti di Roma</td>
<td>38%</td>
<td>30%</td>
<td>39%</td>
</tr>
<tr>
<td>Aeroport de Paris</td>
<td>32%</td>
<td>30%</td>
<td>33%</td>
</tr>
<tr>
<td>Royal Schipol Group</td>
<td>26%</td>
<td>25%</td>
<td>23%</td>
</tr>
<tr>
<td>Avis</td>
<td>14%</td>
<td>12%</td>
<td>16%</td>
</tr>
<tr>
<td>Manchester</td>
<td>19%</td>
<td>18%</td>
<td>16%</td>
</tr>
<tr>
<td>Brussels Airport</td>
<td>12%</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>Heathrow</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Gatwick</td>
<td>14%</td>
<td>15%</td>
<td>11%</td>
</tr>
<tr>
<td>Sydney Airport</td>
<td>6%</td>
<td>8%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Source: S&P Capital IQ

Applying this modifier in order to align to what is considered a more sustainable financial risk profile to the anchor rating results in a final SACP for daa plc of ‘A-‘.

For the purposes of assessing the regulated entity Dublin Airport rather than the group, if the same (albeit simplified) analysis is applied to the regulatory price period on a business and financial risk profile, using FFO/Net Debt as the basis for determining financial risk and the EBITDA Margin percentage as an indicator of business risk, the following table outlines a stable profile for each of these ratios in the base case presented by CAR.

<table>
<thead>
<tr>
<th>Financial Risk Profile Ratio</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFO/Net Debt</td>
<td>22.9%</td>
<td>19.1%</td>
<td>16.5%</td>
<td>15.7%</td>
<td>15.0%</td>
</tr>
<tr>
<td>FRP Rating</td>
<td>Intermediate</td>
<td>Intermediate</td>
<td>Intermediate</td>
<td>Intermediate</td>
<td>Intermediate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business Risk Profile</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBITDA Margin</td>
<td>41.6%</td>
<td>43.2%</td>
<td>42.8%</td>
<td>44.2%</td>
<td>45.4%</td>
</tr>
<tr>
<td>BRP Rating</td>
<td>Strong</td>
<td>Strong</td>
<td>Strong</td>
<td>Strong</td>
<td>Strong</td>
</tr>
</tbody>
</table>

Source: CAR

Based on a business risk profile of strong and a financial risk profile of intermediate this would place the regulated entity in the anchor rating category of A-/BBB+. Based on the 2-year forecast ratio of FFO/Net debt being in the upper end of the intermediate range, it is reasonable that the anchor rating would be at upper end of the A-/BBB+ range.
Subsequently, consideration must be given as to whether the same modifiers applied by S&P at the daa plc level would be applicable to the regulated entity.

In assessing whether a modifier is applied to Dublin Airport's anchor rating, the context of the comparable ratings notch modifier applied at a daa plc level is an important consideration. As the current FFO/Net debt ratios for the group are significantly higher, largely due to cash within the group outside the regulated entity and in the “Minimal” to “Modest” categories of financial risk profile and, as noted previously EBITDA margins are more aligned, we consider it is possible that a rating agency could view the ratios in the base case of the regulated entity being already more comparable to those of the peer group. Therefore, it is reasonable to assess that S&P would not be likely to apply the same modifier to the regulated entity and therefore the current SACP of Dublin Airport could be considered A-/BBB+.

GRE / Government support

As per S&P’s Methodology, daa plc is considered a government related entity for the purpose of their credit assessment. A matrix is applied, which differs depending on S&P’s assessment of the likelihood of support. This is considered Moderately High for daa plc as it believes there is a moderately high likelihood Ireland would provide timely and sufficient extraordinary support to daa plc in the event of financial crisis. This is given its 100% ownership by the government and that the airport is a strategic asset for Ireland. We would not expect this adjustment for government support would differ when considering the rating of the regulated entity versus that of the group.

This matrix looks at the Government’s local currency rating combined with the SACP and determines whether there is any potential rating uplift as follows:

![Determining a GRE’s lower Credit Rating: Moderately High (BBB-) Likelihood Of Support](image)

Source: S&P Global Ratings
As Ireland’s current rating is A+ and daa plc’s SACP is A- / the Dublin Airport’s SACP could be considered A-, there is currently no impact on either anchor rating for the Irish government support.

However, should the SACP fall 1 notch to BBB+, the government support uplift would allow the credit rating to remain at A- and even in the case the SACP had a 2 notch downgrade to bbb flat (which S&P suggested would be possible if daa plc failed to maintained a FFO/Net Debt sustainably above 13% for example), then the government support would result in daa plc maintaining a credit rating of BBB+ at worst (assuming no shift in the Ireland rating). We note that both daa plc / Dublin Airport and the Irish government ratings would need to undergo a two-notch downgrade (i.e. Ireland’s credit rating is lowered to A-) before daa plc / Dublin Airport would end up with a credit rating of BBB.

As noted earlier, we would expect that the government ownership and support is an important factor for funders when assessing the credit profile of Dublin Airport, as the expectation that government would support a strategic asset such as Dublin airport can create a tolerance for higher business risk, lower financial ratios and lending with minimal covenants and/or security packages than would be the case for general corporates.

As a result of the government support and the ratings uplift, it allows Dublin Airport through daa plc to continue to access a wider pool of investors associated with higher ratings, e.g. some investors and traders in public bonds along with certain US private placement investors require a minimum credit rating of A- and institutional investors who have a strong appetite for lending to government related entities as evidenced with funder appetite seen in recent issuance books for other Irish public sector entities such as ESB. Conversely if the rating falls below this A- level it could narrow the pool of potential funders by excluding these investors.

We note that daa plc’s current documentation for EIB loans and its public bond prospectus provide a put option to funders in the event of a change of control from government (albeit there is an inbuilt “cure” provision as long as the issuing entity maintains an investment grade rating), effectively protecting funders against a loss of government support and may be considered consistent with the weight given to the government uplift in their funding decision also.

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**Rating Score Snapshot – daa plc**

<table>
<thead>
<tr>
<th>Country Risk</th>
<th>Low</th>
<th>Country Risk</th>
<th>Low</th>
<th>Strong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Risk</td>
<td>Low</td>
<td>Industry Risk</td>
<td>Low</td>
<td>Strong</td>
</tr>
<tr>
<td>Competitive Position</td>
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<td>Competitive Position</td>
<td>Strong</td>
<td>Strong</td>
</tr>
<tr>
<td>CashFlow/ Leverage</td>
<td>Modest</td>
<td>CashFlow/ Leverage</td>
<td>Modest</td>
<td>Modest</td>
</tr>
<tr>
<td>Financial Risk Profile</td>
<td>Strong</td>
<td>Financial Risk Profile</td>
<td>Strong</td>
<td>Modest</td>
</tr>
<tr>
<td>Anchor</td>
<td>a</td>
<td>Anchor</td>
<td>a-</td>
<td>a-</td>
</tr>
<tr>
<td>Business Risk Profile</td>
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<td>Business Risk Profile</td>
<td>Strong</td>
<td>Modest</td>
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<td>Modifiers</td>
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<td>Modifiers</td>
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</tr>
<tr>
<td>Diversificatory/ Portfolio effect</td>
<td>&lt;</td>
<td>Diversificatory/ Portfolio effect</td>
<td>&lt;</td>
<td>&lt;</td>
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<tr>
<td>Capital Structure</td>
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<td>Capital Structure</td>
<td>=</td>
<td>=</td>
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<tr>
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<td>Liquidity</td>
<td>=</td>
<td>=</td>
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<td>Financial Policy</td>
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<td>=</td>
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<tr>
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<td>=</td>
<td>Management and Governance</td>
<td>=</td>
<td>=</td>
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<td>Comparable rating analysis</td>
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<td>Comparable rating analysis</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Stand Alone Credit Profile</td>
<td>a-</td>
<td>Stand Alone Credit Profile</td>
<td>a-</td>
<td>a-</td>
</tr>
<tr>
<td>GRE</td>
<td>A+</td>
<td>GRE</td>
<td>A+</td>
<td>A-</td>
</tr>
<tr>
<td>Sovereign Rating</td>
<td>A+</td>
<td>Sovereign Rating</td>
<td>A+</td>
<td>A-</td>
</tr>
<tr>
<td>Likelihood of Support</td>
<td>Moderately High</td>
<td>Likelihood of Support</td>
<td>Moderately High</td>
<td>Moderately High</td>
</tr>
</tbody>
</table>

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Debt Funder Perspective

In addition to the above, we consider it likely that any potential funder would also take into account wider factors in their analysis of financeability such as business risk and scenario analysis.

In considering the base case it is considered likely that in order to understand financeability over the regulatory period, a funder would perform scenario analysis in order to stress test the base case to ensure it would still meet the level of rating and metrics over both the regulatory and funding period required in order to size the debt appropriately.

In addition to the ratios outlined within the metrics assessments and scenario analysis below, a funder will consider the ability of a borrower to service the ongoing debt requirements. FFO/Cash Interest and EBITDA/Cash Interest are interest ratios typically used by funders as an illustration of an entity’s ability to meet the costs of the debt. These ratios for Dublin Airport in the base case are as follows:

<table>
<thead>
<tr>
<th>Debt Service Assessment</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFO/Cash Interest (x)</td>
<td>16.19</td>
<td>15.36</td>
<td>13.95</td>
<td>13.60</td>
<td>13.18</td>
</tr>
<tr>
<td>EBITDA/Cash Interest (x)</td>
<td>20.51</td>
<td>18.97</td>
<td>17.29</td>
<td>17.06</td>
<td>17.10</td>
</tr>
</tbody>
</table>

Source: CAR

It is clear from the above metrics that there is headroom in the interest cover ratios over the regulatory period such that it could be expected that the financeability assessment should not be materially impacted by a forecast change in interest cost levels. (For context, the average EBITDA/Interest cover ratio across the peer group airports rated by S&P was 7.1 when Zurich Airport with an outlier ratio of 47.1 is excluded).
As the scope of this report is not to determine the appropriate cost of debt and we note that the 7 allowed by CAR already includes an aiming up allowance, we have limited our assessment to this review of the leverage forecast ratios discussed earlier and excluded the impact of interest rate changes from our scenario analysis below.

### Assessment of Base Case Metrics for the Regulated Entity

<table>
<thead>
<tr>
<th>Financial Risk Profile Ratio</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFO/Net Debt</td>
<td>22.9%</td>
<td>19.1%</td>
<td>16.5%</td>
<td>15.7%</td>
<td>15.0%</td>
</tr>
<tr>
<td>FRP Rating</td>
<td>Intermediate</td>
<td>Intermediate</td>
<td>Intermediate</td>
<td>Intermediate</td>
<td>Intermediate</td>
</tr>
</tbody>
</table>

*Source: CAR*

Based on the above ratios a funder is likely to identify that the FFO/Net Debt for the regulated entity is trending towards the 13% threshold outlined by S&P as a potential factor to consider in whether a ratings downgrade could occur. In particular, for daa plc it mentions that if ratios remain below 13% on a sustained basis it could lead to a downgrade of the SACP to BBB which it could be reasonable to consider might also be a risk for Dublin Airport.

In order to understand this further a funder may choose to look at secondary metrics such as Net Debt/EBITDA for Dublin Airport as follows:

<table>
<thead>
<tr>
<th>Financial Risk Profile Ratio</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Debt/EBITDA</td>
<td>3.87</td>
<td>4.76</td>
<td>5.47</td>
<td>5.72</td>
<td>5.91</td>
</tr>
<tr>
<td>FRP Rating</td>
<td>Intermediate</td>
<td>Significant</td>
<td>Aggressive</td>
<td>Aggressive</td>
<td>Aggressive</td>
</tr>
</tbody>
</table>

*Source: CAR*

The ratios outlined in the 2022-2024 period indicate a potential worsening financial risk profile where there are 3 periods in the assessment indicating an “Aggressive” financial risk profile. By combining this with the FFO/Net Debt ratios in their analysis a funder may identify that the overall categorisation of the financial risk profile of “Intermediate” may come under pressure and ultimately could result in a rating of BBB+.

Should any potential downgrade occur to BBB with an overall credit rating of BBB+ once the government uplift is applied, a Net Debt / EBITDA ratio of close to 6.0x could give cause to concern for some funders on the ability to withstand downside scenarios and therefore limit the investor pool and overall financeability for the quantum of new debt when it is required.
As outlined previously, a funder is likely to consider more than just the regulatory cycle in their view and could also consider a wider period in their assessment in order to determine if the metrics that indicate possible ratings pressure in the period would be sustained over the investment/funding cycle.

In order to support this analysis, we have reviewed forecasts for the potential regulatory period beyond the current base case regulatory period where the cycle of capital expenditure is reduced, and the “lag” impact of the expected higher passenger growth continues. Note, based on information received from CAR, these projections are based on a variable price cap determination which is built up by predicting a core level of required capex and keeping the WAAC constant across the two regulatory periods, with no financeability adjustment included.

<table>
<thead>
<tr>
<th>Financial Risk Profile Ratio</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFO/Net Debt</td>
<td>13.77%</td>
<td>14.79%</td>
<td>15.77%</td>
<td>17.07%</td>
</tr>
<tr>
<td>FRP Rating</td>
<td>Intermediate</td>
<td>Intermediate</td>
<td>Intermediate</td>
<td>Intermediate</td>
</tr>
<tr>
<td>Net Debt/EBITDA</td>
<td>6.29</td>
<td>5.86</td>
<td>5.48</td>
<td>5.07</td>
</tr>
<tr>
<td>FRP Rating</td>
<td>Aggressive</td>
<td>Aggressive</td>
<td>Aggressive</td>
<td>Aggressive</td>
</tr>
</tbody>
</table>

*Source: CAR*

By looking at the period beyond the capex cycle a trend can be identified where the ratios deteriorate further through the first year of the next regulatory period before trending back towards stronger levels, due to the ability of the regulated entity to deliver a sufficient level of EBITDA and funds from operations in order to be able to service its then projected levels of debt.

This was also evidenced post the completion of the Terminal 2 (“T2”) development where the FFO/Net Debt ratio of daa plc evidenced the same lower levels identified in the base case, falling below the 13% level in 2010 before rebounding in the 2011-2014 period and beyond into the most recent regulatory period. Leverage measured by Net Debt/EBITDA also moved toward 5.0x around the time daa plc raised debt, before falling over the regulatory period:

<table>
<thead>
<tr>
<th>Post T2 Completion</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFO/Net Debt</td>
<td>13.56%</td>
<td>12.02%</td>
<td>13.99%</td>
<td>18.39%</td>
<td>20.76%</td>
</tr>
</tbody>
</table>

*This data is based on daa plc’s financial metrics rather than Dublin Airport*
<table>
<thead>
<tr>
<th>Net Debt/EBITDA</th>
<th>4.9</th>
<th>4.6</th>
<th>4.0</th>
<th>3.6</th>
<th>3.3</th>
</tr>
</thead>
</table>

*Source:* S&P Capital IQ

By understanding the nature of the capital expenditure cycle and how that relates to the funding period, it is expected that a funder assessing the base case, could arrive at the conclusion that the repayment risk is acceptable in the regulatory period and one or two financial years beyond same and therefore may take the view that the base case is financeable in that instance.

However, other factors such as a forecast of sustained higher leverage over the 5-year period from 2022 to 2026 (relative to the post T2 period where the FFO/Net Debt dipped below 13% and Net Debt/EBITDA moved to a Significant level before deleveraging materialised at a faster pace) could impact the assessment of a funder materially in the case of financeability. Furthermore, funders will also usually assess the risk to debt repayment and these ratios in the case of downside scenarios before concluding on whether the base case is financeable at the metrics outlined above.

**Scenario Analysis**

In order to determine what a funder would assess for financeability purposes, we consider a number of key business risks can that can cause EBITDA underperformance for airport operators such as Dublin Airport.

The review has been broken down into a review of General Business Risks and Capital Investment Programme Risks.

In each of the scenarios, as in the base case, the pressure on the ratings is evidenced in the latter years of the price period 2022-2024 where the financial risk profile trends towards “Aggressive” from a ratings context and the Net Debt / EBITA ratio is at relatively high levels above 6.0x.

It is likely that if a funder were to carry out detailed stress testing as part of their financeability assessment they would seek to ensure that downside scenarios are assumed to occur and that in those scenarios the metrics presented would not drop below an appropriate level.

Therefore, for the purposes of our analysis we have tested the base case in a range of downside scenarios in order to determine the EBITDA adjustment or financeability adjustment required in order to provide appropriate metrics. This has largely been driven by the Net Debt / EBITDA ratio given it is the metric that is already at a level that would likely give cause for concern to funders. However, we have also sought to ensure that the FFO / Debt metrics remain above threshold levels as the most relevant ratios for rating agencies and the wider pool of investors that Dublin Airport would require for the quantum of funding to be raised.
Whilst various levers are available in a downside scenario, when a funder is assessing financeability they are likely to only take into account those levers that are guaranteed to occur in the case of a downside scenario. Our analysis of downside risks has not taken into account any such possible levers.

**General Business Risks**

- **Passenger Numbers**
  
  Passenger numbers are subject to changes and are particularly sensitive to economic events where a shock to the level of passengers forecast in the regulatory period to not achieve the levels set out. As CAR have proposed, with the general support of stakeholders including Dublin Airport, that passenger number variability, both upside and downside, are assigned to the operator, then a funder will ensure that this is stress tested in order to determine how sensitive the metrics are to passenger number changes.

- **Operating Expenditure**
  
  Within the various response documents to the price determination, operating expenditure (“OpEx”) levels outlined in the base case have received a reasonable level of challenge and have in fact been replaced in S&P’s base case modelling with those of Dublin Airport’s management. Therefore, it is reasonable to assume that if a funder were testing a downside scenario, overspend on OpEx levels outlined in the base case metrics set out as part of final price determination would be a critical consideration.

  Any extra allowance prior to the final price determination for the OpEx forecast will be reflected as an equal and opposite offset in associated income allowed in the final price determination and therefore the metrics outlined in the base case will remain constant in this instance. However, the level of downside testing on OpEx relative to the base case that funders would consider likely to be required may be less onerous.

  For the purposes of our report, sensitivities are based on the current forecast OpEx numbers allowed for in the draft price determination and are based on any potential overspends occurring on these numbers post the final price determination.

**Scenario Outcomes**

We have run a range of scenarios on these inputs including an assessment of variations in opex and passenger numbers compared to forecasts... Based on our analysis of these scenarios, aiming for improved base case ratios of FFO/Net Debt above 15% and Net Debt/EBITDA below 5.0x would improve confidence of maintaining financeability should certain higher probability downside scenarios occur.

  Target ratios in this range may be needed to provide confidence that the metrics a funder would assess over the regulatory period in a downside scenario in the case of both passenger volatility and operational expenditure overspends are protected against, all other variables being held unchanged.

**Capital Investment Programme Risks**
• **Capital Expenditure Delays**

As a result of carrying out such a significant level of capital investment over the entire regulatory period, the risk of delays to the completion dates is one that a funder would factor into their downside scenario analysis.

Should the capital expenditure suffer a delay in initiation or slower than expected delivery timelines, it is expected that the critical impact could be experienced in reduced passenger numbers as the increased capacity resulting from the capital investment is realised later, outside of the regulatory period. This was analysed as one of the possible funder downside scenarios which results in lower ratios and could cause possible ratings and metrics pressures thereafter. However, these ratios would need to be assessed for any changes in debt drawdown profile resulting from the delay to appropriately calibrate the overall impact on forecast ratios.

• **Capital Expenditure Overspend**

Should a project result in an overspend, there will be an associated increase in the net debt over the regulatory period reflecting the amounts not currently forecast and allowed for within the regulators building block model. Therefore it may not be guaranteed that the regulated entity would obtain the price benefit associated with the increased investment in the RAB and even if it was determined as an appropriately sought and allowed increase in capital expenditure, the benefits of this would not be received until the next regulatory period price determination as an opening adjustment to the regulatory asset value. In the interim period the overall quantum of debt funding required would be higher.

All else being equal, an increase in capital expenditure evenly allocated across the regulatory period would most likely reduce the FFO/Net Debt to threshold levels in later years while Net Debt/EBITDA ratios could trend towards the aggressive end of the S&P financial risk profile given the forecast ratios in the base case. This would result in the increased possibility that a rating of BBB+ would come under pressure for a possible rating downgrade due to the primary metrics not been deemed sufficient in the initial instance and the secondary metrics indicating a higher level of financial risk. To mitigate the impact on metrics of this downside, would require a similar increase in the level of cashflow / EBITDA required to service debt as calibrated under the revenue and OpEx scenarios outlined above.

We note this analysis is done in the absence of considering the impact of the proposed Stage-Gate process on the capital expenditure programme which could help mitigate the probability of significant cost overspends not being remunerated.

**Funder assessment of Dublin Airport credit risk and financeability**

Some of the downside assessments analysed above will relate to components of the building blocks within allowed revenues that are within management’s control or its accepted risk profile. Furthermore as our analysis was based on the model for the preliminary price determination we note that the base case figures are likely to change for the final price
determination and where CAR build allowances into the individual building blocks, it is likely to mitigate the severity of downside analysis that funders apply to those inputs.

However, we note that generally a funder will size the quantum of debt it is willing to lend based on its assessment of headroom within the forecast financial ratios in those downside outcomes, rather than the base case out-turn. Therefore, the financial ratios in the future will need to be targeted with head room to the levels that may seem acceptable to funders if presented to them as current levels today, to help ensure the full debt requirement could be funded over the life of the price determination period under the base case scenario.

As a result, where it is considered a given rating category is the required level to ensure access to funding across a range of debt investors and market conditions, it is recommended that target ratios in the base case are set at levels that fall comfortably within that rating category rather than at the threshold level, for example targeting FFO/Net Debt of 15% or greater rather than 13% or above. This would help ensure that there may be funder appetite for the required debt raise in later years of the price determination period, even when ratios are forecast to be tighter and there is a possibility that lending conditions / market appetite will be more restrictive than seen today.

Based on the assessment of the financeability from a funder perspective, factoring in both the base case metrics and the associated downside scenarios, it appears that if a funder were presented with the CAR base case, the results of their downside scenarios are likely to indicate an increased risk of potential pressure on a forecast SACP of BBB+. This could be viewed as consistent with the view of S&P who in their latest update on the ratings of daa plc note there a number of downside risks to the rating, including scenarios that could lead to the downgrade of the SACP to BBB.

Whilst we do not consider that this rating pressure alone would lead to a conclusion of the regulated entity being unfinanceable, when it is combined with the potential for financial metrics to reach levels in 2024 and 2025 that some funders may consider as too sensitive to adverse outcomes for an airport company like Dublin Airport and therefore too highly levered, then it could potentially signal a problem.

A funder’s assessment of appropriate financial ratios is likely to depend to a large extent on prevalent funding market conditions at the time it is making its investment decision and the relative credit metrics being presented to debt providers as alternate opportunities by peer group companies. In the following section we provide a review of current market conditions and recent debt market transactions relevant to Dublin Airport to assess the market appetite today for leverage levels.  

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8 This is also the recommended minimum credit rating level generally proposed by NewERA, the financial advisor to Irish Government Ministers in relation to commercial State bodies, as appropriate for continuing market access for commercial State bodies which maintain a credit rating.
5. Market considerations

Funding markets context

Interest rates are at an almost all-time low and now is considered by many as a favourable time to access the debt market for corporate issuers. This is evidenced by the all-time record for weekly global bond issuance set in the first week of September 2019, with individual issuer sizes in Europe ranging from Danaher’s €6.25bn to Wirecard’s €500m bond.

Generally, global debt levels (across bonds, loans and revolving credit facilities) have been rising over recent years with investment grade issuance the predominant category and within this BBB rated issuance the largest share of rated corporate debt reflecting a growing concentration of issuers within this lowest level of the investment grade category. This evidences that access to markets for BBB rated issuers has been strong over recent years, although S&P who compiled this data\(^9\) note that most BBB issuers are above the BBB-category that is a one notch level above “junk”.

It is also noteworthy that 23% of the global non-financial debt is in the form of revolving credit facilities, while the vast majority ($3,211bn or 75%) of the bond/notes outstanding are in the form of senior, unsecured issuance and approx. one-third were issued with an original maturity of 13 years or more. For single A and BBB categorised bonds, the majority of debt is within the 7 to 13 years maturity range on issue but close to 30% of the issuance within both these rating categories have maturities of 20 years+.
This suggests that a number of potential target markets for the majority of Dublin Airports possible new debt issuance has demonstrated strong and continued appetite over recent years for senior, unsecured debt from non-financial issuers in the general BBB rating category, including at long tenors, and this market trend has continued into 2019 based on recent issuance levels. Anecdotal evidence and our recent experience of working with debt issuers suggests that given this favourable environment many entities are seeking to prefund debt to cover their funding needs a number of years into the future.

Dublin Airport’s funding markets options

Public bonds
To date Dublin Airport, through daa plc, has funded its long-term debt through a combination of EIB loans and the public bond market, albeit its most recent issuance of €400m in that market in 2016 could be considered a sub-benchmark size (which is usually seen as €500m although some bond benchmarks will include issues in smaller sizes from €300m). We note that issuing at lower than the benchmark size of €500m could limit investor appetite for funders in that market as some investors have a minimum threshold size for issuances and traditionally, as with all debt markets, the higher the credit rating of the issuer the wider the pool of investor who can purchase that debt.

<table>
<thead>
<tr>
<th>Issuer</th>
<th>Issuer Ratings (current)</th>
<th>Currency</th>
<th>Amount (€m)</th>
<th>Issue Date</th>
<th>Term (yrs)</th>
<th>FFO/Debt*</th>
<th>Debt / Ebitda*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daa</td>
<td>A-</td>
<td>€</td>
<td>400</td>
<td>2016</td>
<td>12</td>
<td>36.9%</td>
<td>2.23</td>
</tr>
<tr>
<td>Aerports de Paris</td>
<td>A+</td>
<td>€</td>
<td>500</td>
<td>2018</td>
<td>10</td>
<td>32.5%</td>
<td>2.4</td>
</tr>
<tr>
<td>Aerports de Paris</td>
<td>A+</td>
<td>€</td>
<td>500</td>
<td>2017</td>
<td>10</td>
<td>30.0%</td>
<td>2.4</td>
</tr>
<tr>
<td>Aerporti de Roma</td>
<td>BBB+</td>
<td>€</td>
<td>500</td>
<td>2017</td>
<td>10</td>
<td>29.8%</td>
<td>2.3</td>
</tr>
<tr>
<td>Avinor</td>
<td>A1/AA-</td>
<td>€</td>
<td>500</td>
<td>2017</td>
<td>10</td>
<td>12.2%</td>
<td>6.4</td>
</tr>
<tr>
<td>Avinor</td>
<td>A1/AA-</td>
<td>€</td>
<td>300</td>
<td>2015</td>
<td>10</td>
<td>15.5%</td>
<td>4.8</td>
</tr>
<tr>
<td>Brussels Airport</td>
<td>Baa1</td>
<td>€</td>
<td>300</td>
<td>2017</td>
<td>7</td>
<td>14.1%</td>
<td>4.1</td>
</tr>
<tr>
<td>Zurich Airport</td>
<td>AA-</td>
<td>CHF</td>
<td>350</td>
<td>2017</td>
<td>12</td>
<td>74.9%</td>
<td>0.8</td>
</tr>
<tr>
<td>Heathrow</td>
<td>A-</td>
<td>€</td>
<td>650</td>
<td>2019</td>
<td>15</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Heathrow</td>
<td>A-</td>
<td>CAD$</td>
<td>400</td>
<td>2018</td>
<td>14</td>
<td>11.4%</td>
<td>8.3</td>
</tr>
<tr>
<td>Heathrow</td>
<td>A-</td>
<td>A$</td>
<td>175</td>
<td>2018</td>
<td>10</td>
<td>11.4%</td>
<td>8.3</td>
</tr>
<tr>
<td>Heathrow</td>
<td>A-</td>
<td>€</td>
<td>500</td>
<td>2017</td>
<td>15</td>
<td>11.2%</td>
<td>8.7</td>
</tr>
<tr>
<td>Gatwick Airport</td>
<td>Baa1</td>
<td>£</td>
<td>300</td>
<td>2018</td>
<td>30</td>
<td>10.7%</td>
<td>6.1</td>
</tr>
<tr>
<td>Manchester Airport Group</td>
<td>Baa1</td>
<td>£</td>
<td>350</td>
<td>2019</td>
<td>25</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>APAC (Melbourne) Airports</td>
<td>BBB+</td>
<td>NOK</td>
<td>1500</td>
<td>2016</td>
<td>14</td>
<td>9.0%</td>
<td>6.0</td>
</tr>
<tr>
<td>APAC (Melbourne) Airports</td>
<td>BBB+</td>
<td>AUD$</td>
<td>197</td>
<td>2016</td>
<td>10</td>
<td>9.0%</td>
<td>6.0%</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------</td>
<td>------</td>
<td>-----</td>
<td>------</td>
<td>----</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Sydney Airport</td>
<td>Baa1/BBB+</td>
<td>€</td>
<td>500</td>
<td>2018</td>
<td>10</td>
<td>7.2%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Sydney Airport</td>
<td>Baa1/BBB+</td>
<td>$</td>
<td>900</td>
<td>2016</td>
<td>10</td>
<td>8.9%</td>
<td>7.1%</td>
</tr>
</tbody>
</table>

Source: S&P Global Market Intelligence’s CreditPro, Bloomberg, Global Capital Markets

Note: Financial Ratios are based on financial statements as at the year of issue based on calculations for same by S&P or Bloomberg

We note that there have been a range of airport operators who have successfully issued in the public bond markets over recent years and through 2019, which demonstrates that access to these markets is good for investment grade rated borrowers issuing senior, unsecured corporate debt in the sector. There are a number of airports within the category of privately owned airports that have issued longer dated bonds (10 to 30 years) when their financial ratios are at levels lower than 13% on a FFO/Net Debt and higher than 6 times Debt / EBITDA, whereas the government owned issuers have typically issued in tenors of 7 to 10 years and generally have FFO/Net Debt levels exceeding 13% and Debt / EBITDA ratios of less than 5 in the year of issuance. This suggests that the market also differentiates between these two sub-categories with a risk appetite for higher gearing in private issuers relative to their government owned peers. We note that all these issuers have credit ratings of BBB+/Baa1 or above (which is the rating after the GRE application) and issuance sizes smaller than the typical €500m benchmark size is not unusual for the sector.

It is noteworthy that issuance by Avinor has been achieved with lower FFO/Net Debt and higher Net Debt/EBITDA levels relative to the peer group for Dublin Airport.

Source: S&P Capital IQ, Bloomberg

We note that Avinor’s ratios have subsequently returned to levels that are in line with the rest of the its peers. This was forecast by S&P when it maintained an SACP of BBB+ around the period of this issuance as it looked through the period of increasing leverage to fund
increased capital expenditure and expected leverage to decline once revenues post the expansion fed through to the ratios.

Given its sovereign ownership, Dublin Airport is also likely to be attractive to debt funders who are looking for opportunities to invest in the Irish market and therefore we also assessed issuance amongst its public sector peers to assess market demand for those types of credits.

<table>
<thead>
<tr>
<th>Issuer</th>
<th>Sector</th>
<th>Issue Ratings (current)</th>
<th>Currency</th>
<th>Amount (£m)</th>
<th>Issue Date</th>
<th>Term (yrs)</th>
<th>FFO:Debt</th>
<th>Debt / Ebitda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daa</td>
<td>Infra/Transport</td>
<td>A-</td>
<td>€</td>
<td>400</td>
<td>2016</td>
<td>12</td>
<td>36.9%</td>
<td>2.23</td>
</tr>
<tr>
<td>ESB</td>
<td>Utility</td>
<td>A-</td>
<td>€</td>
<td>100</td>
<td>2019</td>
<td>25</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>ESB</td>
<td>Utility</td>
<td>A-</td>
<td>€</td>
<td>500</td>
<td>2019</td>
<td>21</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Northern Ireland Electricity</td>
<td>Utility</td>
<td>BBB+</td>
<td>£</td>
<td>350</td>
<td>2018</td>
<td>7</td>
<td>15.8%</td>
<td>4.6</td>
</tr>
<tr>
<td>GNI</td>
<td>Utility</td>
<td>A</td>
<td>€</td>
<td>500</td>
<td>2016</td>
<td>10</td>
<td>25.0%</td>
<td>3.3</td>
</tr>
<tr>
<td>GNI</td>
<td>Utility</td>
<td>A</td>
<td>€</td>
<td>125</td>
<td>2016</td>
<td>20</td>
<td>25.0%</td>
<td>3.3</td>
</tr>
</tbody>
</table>

*Source: S&P Capital IQ, Global Capital, Bloomberg*

ESB, including its subsidiary North Ireland Electricity and GNI as well as the Irish government itself\(^{10}\) have issued in public bond markets in recent years. Generally, issuance by the most active participants in the market have been well received.

Generally, daa plc credit spreads imply a credit risk premium to the regulated gas and electricity semi-state utility issuers. More recently it could also be observed that where Brexit and economic growth concerns have led to spread widening in Ireland sovereign debt, it has led to a bigger impact on the daa plc’s spreads than the other utilities which we have taken into account in our analysis. We would note that trading volumes in daa bonds are low and therefore this spread widening likely represents a market view on pricing and not necessarily levels that were transacted.

\(^{10}\) We have limited our review to 10-year benchmark issuance in recent years as the most relevant indicator of market appetite
Other debt funding

As noted by Dublin Airport in their response submission, there are many other markets where daa plc can issue debt, for example through European private placements (“PPs”), US private placements, bank financing market, and sovereign funds and development banks e.g. the EIB where it agreed a €350m loan facility which is yet to be drawn.

Historically, the European private placement markets may have seemed unattractive due to a requirement for a greater number of bespoke covenants relative to public bond issuance. However, institutional investors are increasingly competitive in debt markets, especially when underpinned by long dated, cashflow generative assets and have lent significant amounts of debt to infrastructure and government related borrowers in recent years. The Euro market is also currently a lot more attractive for US based funders due to favourable cross currency basis spreads and there has been a growing amount of US private placements also. Typically, transactions in this market start at c.€50m and could be as large as approximately €300m for any lending to a single borrower.

Funder assessment of market risk and financeability of Dublin Airport

We do not see any material factors today affecting general debt market appetite to the point where it could not absorb quantum of new debt to be raised by Dublin Airport through daa plc over the 5-year period, assuming recent market trends continue. This is based on the levels of public bond issuance in global debt markets, and investment grade issuance in particular, over recent years along with the emergence of a range of new funders in the form of US and European PP lenders alongside the more traditional bank funders including the EIB, we consider that all other things being equal and considering where its current credit
rating may be inferred at. Given the trend for general BBB categorised issuance over recent years and more specifically based on transactions amongst Dublin Airport’s peer group of public government owned airports, we conclude that in current market conditions a minimum BBB+ credit rating and financial ratios with FFO/Net Debt in the mid-teens and Net Debt/EBITDA of less than 6.0x is likely to be sufficient to access debt markets.

Whilst funders may consider these levels financeable in in today’s market, to consider funding into the future a level of headroom would be prudent to allow for possible downside scenarios covering business risks but also external factors such as government ratings and adverse debt market movement trends. Therefore, targeting forecast FFO/Net Debt above 15% and Net Debt/EBITDA below 5.0x for the end of the price determination period could be viewed as allowing for said headroom.

In respect of adverse market movements, we note the sensitivity of daa plc’s credit spreads to the trading level of Irish government spreads and the risk that investors may become more cautious on Irish government related debt in the period ahead (e.g. due to Brexit risks, lower economic growth forecasts, etc.). Therefore, in the context of a sizable debt requirement over a 5-year period, it would be prudent to conclude that it is likely daa plc may require a “comfortable” BBB+ credit rating to ensure it can continue to access debt markets efficiently and this rating is achievable with the above ratios.

When enabling Dublin Airport to achieve these metrics through price adjustments such as the accelerated depreciation, CAR could consider sculpting the adjustment to target a higher price in the later years where ratios come under most pressure.

Furthermore, CAR could give consideration to re-evaluating financeability midway through the period to examine if the financial viability adjustment allowed at the start is still required towards the end of the period. If it is not required it could be then removed from the price for the final 2 to 3 years. This would provide confidence to debt funders at the outset of the price determination period that the forecast capital expenditure programme will remain financeable if Dublin Airport performs in line with the base case scenario but could also help ensure that passengers do not overpay if the out-turn performance due to factors beyond Dublin Airport’s control do not warrant the allowances made. It is important that funders have certainty and hence the removal (to work from a funder perspective) would need to be structured in such a way as to only be removed if ratios were being met and forecast to be met over the period. For example, this could be implemented as a form of reverse trigger which is used following an assessment for delays in capital expenditure which changes the overall debt requirement over the remaining period.
6. Conclusions

Based on our analysis of credit factors, both quantitative and qualitative including scenario analysis, combined with our market analysis we conclude the following in relation to the financeability of the price determination:

- A minimum BBB+ credit rating and financial ratios with FFO/Net Debt in the high to mid-teens and Net Debt/EBITDA of 5.0 or less would be required to provide a reasonable level of comfort for the hypothetical regulated entity to access the debt markets across the price determination period.

- Standard and Poor’s do not provide a credit rating for the regulated entity but, by considering the components of its ratings methodology for business risk profile, it is reasonable that its business risk profile may also be assessed as “strong” and when combined with the financial risk profile, funders may assess the standalone credit profile (“SACP”) of the regulated entity within the ‘a-/bbb+’ rating category. Given its GRE status and the benefit that many funders are also likely to attribute to government ownership, it is likely that a BBB+ SACP credit rating could continue to provide access to the widest range of funders when taking into account the current resulting A- credit rating that could be implied.

- Whilst our review of forecasts based on the Commission’s price determination would not lead us to immediately conclude that a BBB+ rating is likely to be breached, we note that funders will also give consideration to the level of financial ratios in downside scenarios and both FFO/Net Debt and Debt/EBITDA measures in the base case could be considered to be at tight levels in the later years of the price determination.

- When doing so, they may have a concern that financial ratios with respect to gearing have insufficient headroom for downside scenarios which could impact their appetite for funding over the pricing period. In addition, CAR is setting a price cap for a 5-year period and we note that market conditions remain subject to change. Therefore, there is a risk that funder appetite at these levels may not persist over the full pricing period during which Dublin Airport will need to raise new debt.

- To increase confidence that Dublin Airport should be able to raise the full requirement for c.€1bn of new debt to fund a significant programme of capital expenditure forecast over the pricing period, to take account of both company specific adverse scenarios and in a potentially deteriorated debt market, CAR could consider enabling a path to Dublin Airport achieving an FFO/Net Debt above 15%, and a Net Debt/EBITDA of less than 5.0x in the later years of the forecast period.

The rationale for the above-mentioned headroom and associated thresholds is to increase confidence that funders will lend of the required level of new debt over multiple fundraisings required in order to fund a significant programme of capital expenditure forecast. This headroom would be designed to address funder downside scenarios and mitigate against adverse market conditions and other developments beyond Dublin Airport’s control. These
metrics would also place Dublin Airport more in line with the peer group of other airport issuers seen in the bond markets in recent years.

However, we note these conclusions are based on the various building block inputs for the draft determination which we understand remain subject to change before the final determination. Furthermore, they do not allow for other levers within Dublin Airport’s control that could be used over the period to enhance credit ratings and financeability to reduce the quantum of new debt required as discussed previously.

Other considerations:

We note that the final price profile could be allowed to vary over the price determination period, as a flat profile will provide additional benefit to Dublin Airport in the earlier years over and above what might be deemed necessary under the regulatory model building block approach. Whilst this could be considered appropriate given Dublin Airport has noted that it is likely to fund the debt requirement in advance of when capital expenditure is likely to be incurred, it could make recovery of any benefit allowed difficult in the future.

Whilst we recommend that the final price determination enables the achievement of FFO/Net Debt above 15% and Net Debt/EBITDA below 5.0x in the base case to provide confidence to debt providers to fund the allowed capital programme, we note that the Commission could consider introducing an interim review. This review would assess the outturn performance and projected capital expenditure in the context of market conditions at that time for the purpose of determining whether the Financeability adjustment is still warranted in the latter years and disallowed from that time forward if not. For example, this could be implemented as a form of reverse trigger which is used following an assessment for delays in capital expenditure which changes the overall debt requirement over the remaining period. In this way, funders would be provided comfort that there is sufficient headroom in the future financial ratios when lending new debt in the early years. Whilst beyond the scope of this report, it is important to have the correct lever applied when doing this review to ensure the balance it maintained between funder certainty and also ensuring appropriate incentives to maintain an efficient operator.

Any final adjustment for financeability will need to be recalibrated based on the final building blocks and resulting price based on same before the final determination.
Appendix A

Scope of Work

Financeability Assessment for Dublin Airport 2020-2024 for the Commission for Aviation Regulation (CAR)

- Advice on appropriate thresholds for financial ratios and target credit rating for Dublin Airport to enable it to access the debt markets at an efficient cost.
- Reflect on S&P’s approach to assessing Dublin Airport (in particular the business risk assessment and the uplift for potential state intervention).
- Engagement with Dublin Airport, its debt advisors and other stakeholders identified by the Commission or Centrus.
- Provide a high-level review of financial and business risk from a funder perspective given the proposed pricing level.
- Advise on investor appetite for regulated infrastructure businesses (bank, bonds and EIB), and any relevant factors that may influence this outside of the core financial ratios and the credit rating.
- Consider
  - any specific conditions under which Dublin Airport must access the debt markets (e.g. any particular requirements of its shareholder for example in relation to debt security, credit rating, etc.)
  - The effect of the rest of the daa group on the financial and business risk (CAR regulates Dublin Airport only, but daa raises debt as a group.)
- If deemed necessary, advise the Commission on any adjustments it should make to the risk assignment in the regulatory settlement to improve investor appetite.
Appendix B

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Contact Us

Jason Murphy
m: +353 (0) 86 045 2724
d: + 353 (1) 234 2442
e: jason.murphy@centrusadvisors.com

Dara Kavanagh
m: +353 (0) 87 1899818
d: +353 (1) 653 9648
e: dara.kavanagh@centrusadvisors.com

Fiona O’Driscoll
m: +353 (0) 87 3988489
d: +353 (0) 653 9640
e: fiona.odriscoll@centrusadvisors.com

Sarah Jane Coe
m: + 44 (0) 7764 132508
d: +44 (0) 20 3846 5676
e: sarah-jane.coe@centrusadvisors.com

We Work Ivieagh Court, Block D, Harcourt Rd | D02 VH94
centrusfinancial.com

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