EXECUTIVE SUMMARY

NORTH CLUSTER

MANAUS INTERNATIONAL AIRPORT
PORTO VELHO INTERNATIONAL AIRPORT
RIO BRANCO AIRPORT
BOA VISTA INTERNATIONAL AIRPORT
CRUZEIRO DO SUL AIRPORT
TABATINGA AIRPORT
TEFÉ AIRPORT

November/2020

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INTRODUCTION

The Infrastructure Ministry published, in the Union Official Journal, in the Edition Number 52, on March 18th, 2019, the Public Call Notice 2/2019, with the main goal to select projects, surveys, investigation and technical studies to subsidize the modelling of the concessions for the expansion, exploitation, and maintenance of the following airports:

South Cluster

Curitiba/PR – Afonso Pena;
Foz do Iguaçu/PR – Cataratas;
Navegantes/SC – Ministro Victor Konder;
Londrina/PR – Governador José Richa;
Joinville/SC – Lauro Carneiro de Loyola;
Bacacheri/PR;
Pelotas/RS;
Uruguaiana/RS – Rubem Berta;
Bagé/RS Comandante Gustavo Kraemer.

North Cluster

Manaus/AM – Eduardo Gomes;
Porto Velho/RO – Governador Jorge Teixeira de Oliveira;
Rio Branco/AC – Plácido de Castro;
Cruzeiro do Sul/AC;
Tabatinga/AM;
Tefé/AM;
Boa Vista/RR – Atlas Brasil Cantanhede.

Central Cluster

Goiânia/GO – Santa Genoveva;
São Luís/MA – Marechal Cunha Machado;
Teresina/PI – Senador Petrônio Portella;
Palmas/TO – Brigadeiro Lysias Rodrigues;
Petrolina/PE – Senador Nilo Coelho;
Imperatriz/MA – Prefeito Renato Moreira.

According to the Public Call Notice 2/2019, the Grupo de Consultores em Aeroportos (GCA) presented the following reports for each airport: **Market Reports, Engineering Studies, Environmental Studies and Economic and Financial Evaluation**. Furthermore, it presented a complementary Economic Financial and Evaluation Report, for each Cluster, which aimed the economic financial feasibility assessment of the airports that form the Cluster.

The purpose of the Executive Summary is to present the main arguments, information and conclusions of the Economic and Financial Evaluation of the North Cluster. For a better understanding of the studies, it is recommended the reading of the reports.

1 ECONOMIC AND FINANCIAL EVALUATION – NORTH CLUSTER

This section presents the Executive Summary of the Economic and Financial Evaluation for the 30-year joint concession of the seven airports that make up North Cluster (hereafter "Cluster") modelled between 01/October/2021 and 30/September/2051. Currently, the Cluster's total revenue is R$280MM and its EBITDA margin is 24% (considering 2018 data)[1].

1.1 Revenues

The economic and financial evaluation of the Cluster is based on revenue projections for individual airports which include:

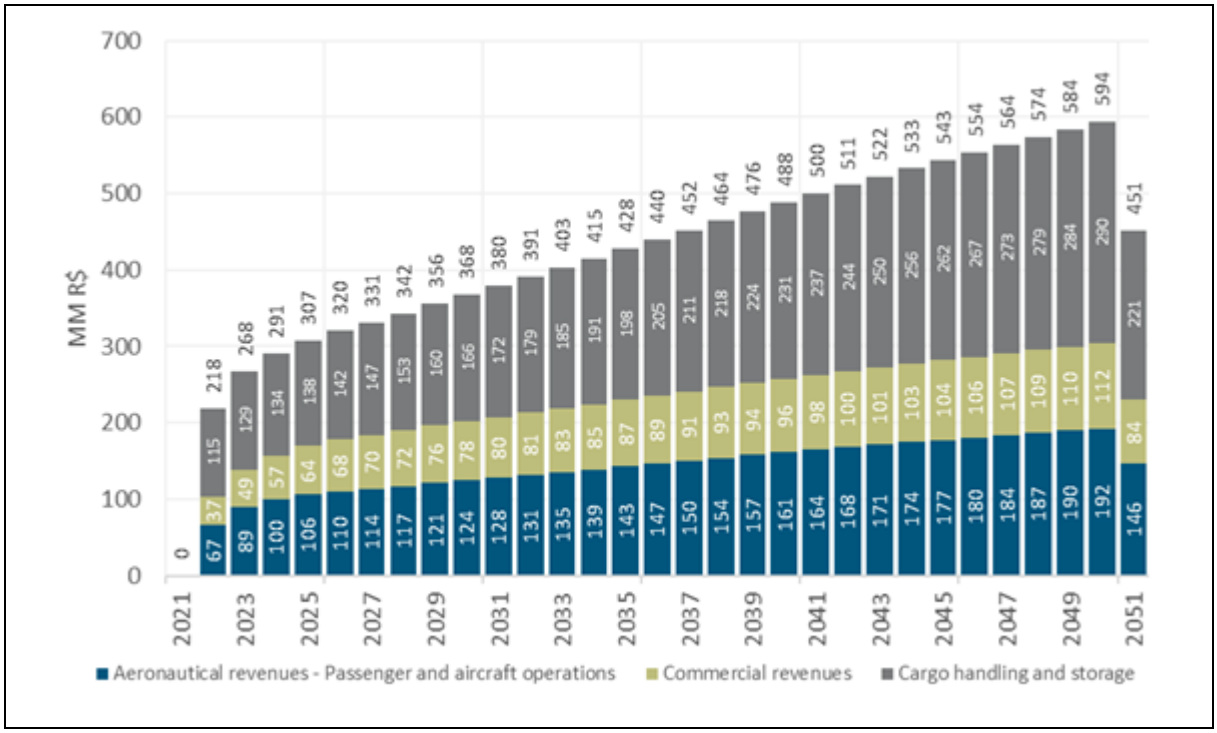
- Aeronautical revenues, resulting from regulated fees on the various operation types. These have been categorized as passenger and aircraft fees and cargo handling and storage fees;
    - Aeronautical revenues – passengers and aircraft operations: applicable to both passenger flows (domestic and international boarding or connection fees) and aircraft operation and parking, by operation type (domestic and international landing and parking fees, and landing and boarding and parking fees for general aviation);
    - Cargo handling and storage: due for cargo handling and storage services where rendered directly by the Airport operator at the air cargo terminal (TECA), and may divide into import, export and domestic cargo;
- Commercial revenues, related to services and goods provided to passengers, airlines and other business users, i.e. international air cargo terminal, retail, food & beverages, car parking, aircraft fuelling, car rental etc.

Forecasts for aeronautical revenues are based on expected Airports throughput, which include passenger flows, cargo, mix of aircraft types and aircraft operations, and their respective fees. Meanwhile, forecasts for commercial revenues consider not only expected demands and their respective impacts over each category of business, but also efficiency gains resulting from contract renegotiations between the concessionaire and the lessees of commercial areas, following market benchmarks.

Total revenues are expected to grow on an average of 2.9%p.a. between 2023 and 2050 (first and final full year of the concession). Aeronautical revenues share will increase during the concession period, from 18% in 2023 to 19% in 2050. Manaus International Airport accounts for more than 83% of the Cluster's total revenues in 2050.

[1] All monetary value presented in this report is given in constant Real (R$) values based on January/2019 real prices, following SAC/MI guidance.

Figure 1: Total revenues during concession



Source: GCA Consortium.

1.2 Costs and expenses

Airport operating costs and expenses are mainly related to personnel and outsourced services, in addition to utilities and public services and consumables.

After the concession, the concessionaire will take up new obligations, which include performance bond, socio-environmental expenses and property tax (IPTU). The concessionaire must also pay grants, applicable according to the feasibility of the concession and therefore not discussed under this item.

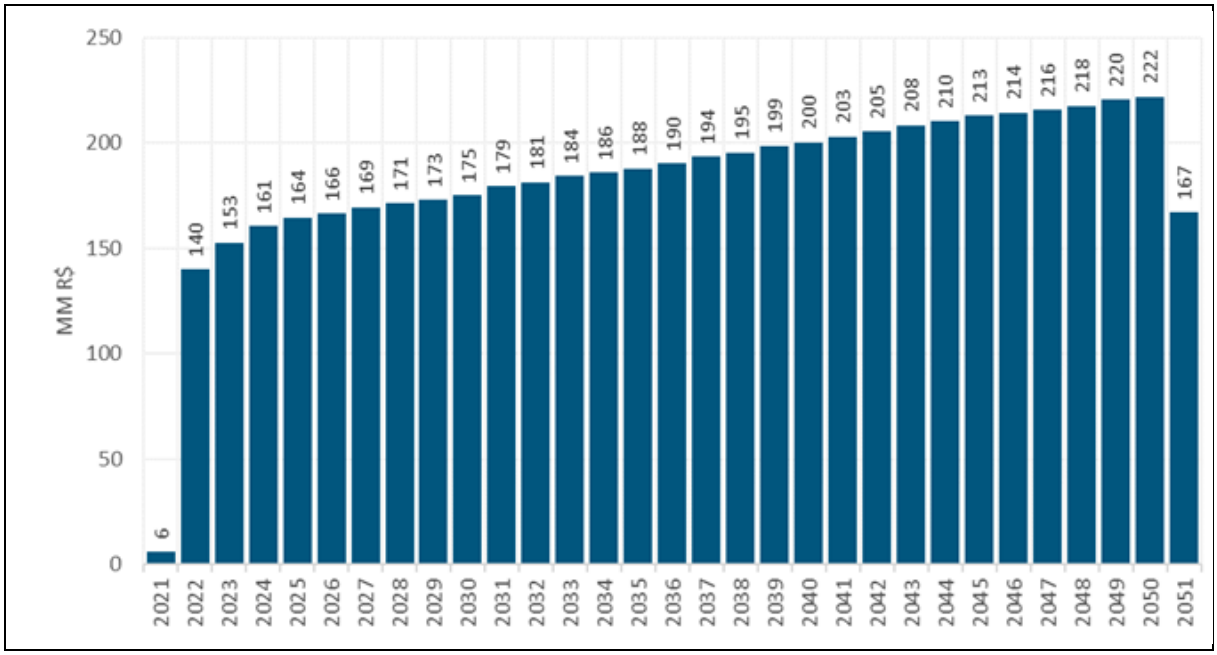
Costs and expenses forecast take into account the most appropriate forecast drivers for each item, that is, the variables that best explain the evolution of the observed costs. Additionally, costs and expenses forecasts were based on current values and considered initial efficiency gains derived from private management as well as economies of scale, determined from benchmark analyses.

It is worth pointing out that, compared with the scenario for each airport in the cluster operating in isolation, additional efficiency gains have been assumed to derive from their joint operation by a single operator, due to reduced personnel costs and expenses. Granting airport concessions in clusters offers opportunities to optimize the effective workforce by centralizing certain activities (in particular administrative ones and maintenance cost centers) and a potential to remodel hierarchies.

Other cost categories are typically associated with each airport's current expenses and the provision of services or goods at the local level. As a result, efficiency gains from the Cluster's joint operation are subject to increased uncertainty and were therefore not taken into consideration for economic and financial evaluation purposes.

Total costs and expenses are expected to increase from R$153MM to R$222MM between 2023 and 2050. Outsourced services and Personnel are the most significant, representing 41% and 37% of total Cluster costs in 2050, respectively.

Figure 2: Costs and expenses during concession (prior to grant values)



Source: GCA Consortium.

It is important to emphasize that, before entering into the concession agreement, the concession holder will be required to settle funds for Infraero's staff readjustment program, reimbursement to authors of the feasibility studies, and compensation to São Paulo stock exchange (B3) for holding the auction (Table 1).

Table 1: Obligations to be met prior to signing the contract

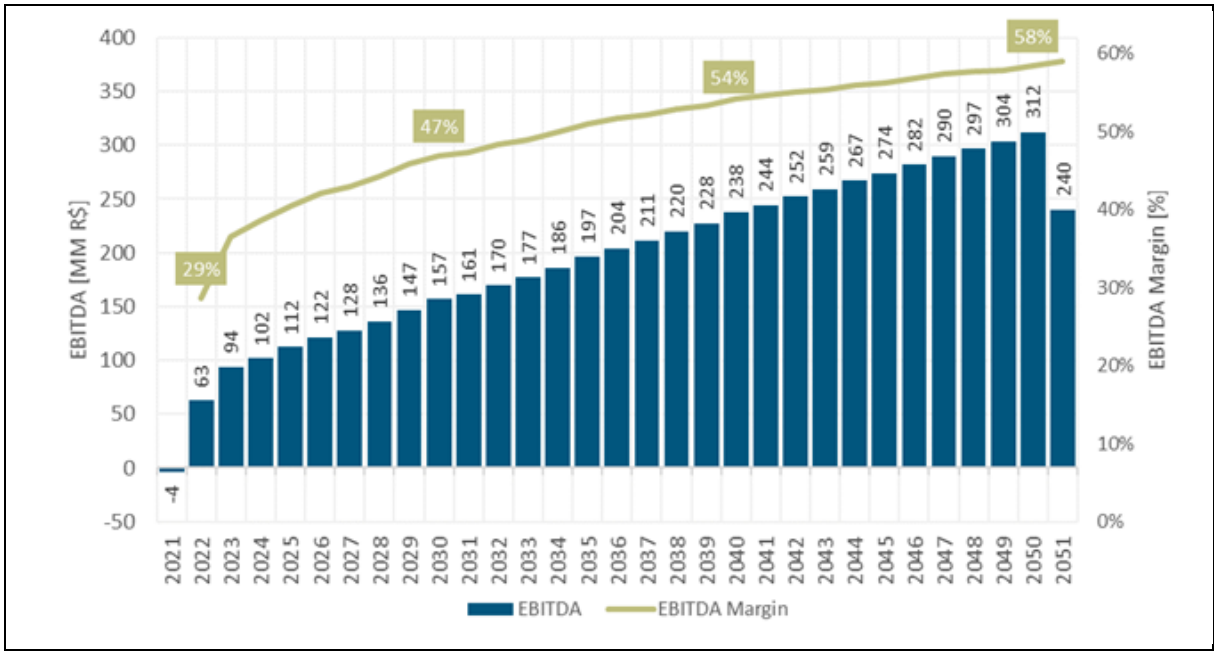
Values in MM R$	TOTAL
OBLIGATIONS TO BE MET PRIOR TO SIGNING THE CONTRACT	**(191,7)**
Funds for Infraero's staff readjustment program	(166,9)
Reimbursement to authors of the feasibility studies	(24,2)
Payment to B3 for holding the auction	(0,6)

Source: GCA Consortium.

1.3 EBITDA and margin

Net of grant payments, the concession EBITDA is forecasted to be R$94MM in 2023 and to reach R$312MM in 2050 (Figure 3), with an average growth of 4.6%p.a. EBITDA margins increase is forecast throughout the concession due to expected economies of scale.

Figure 3: EBITDA and EBITDA margins during concession



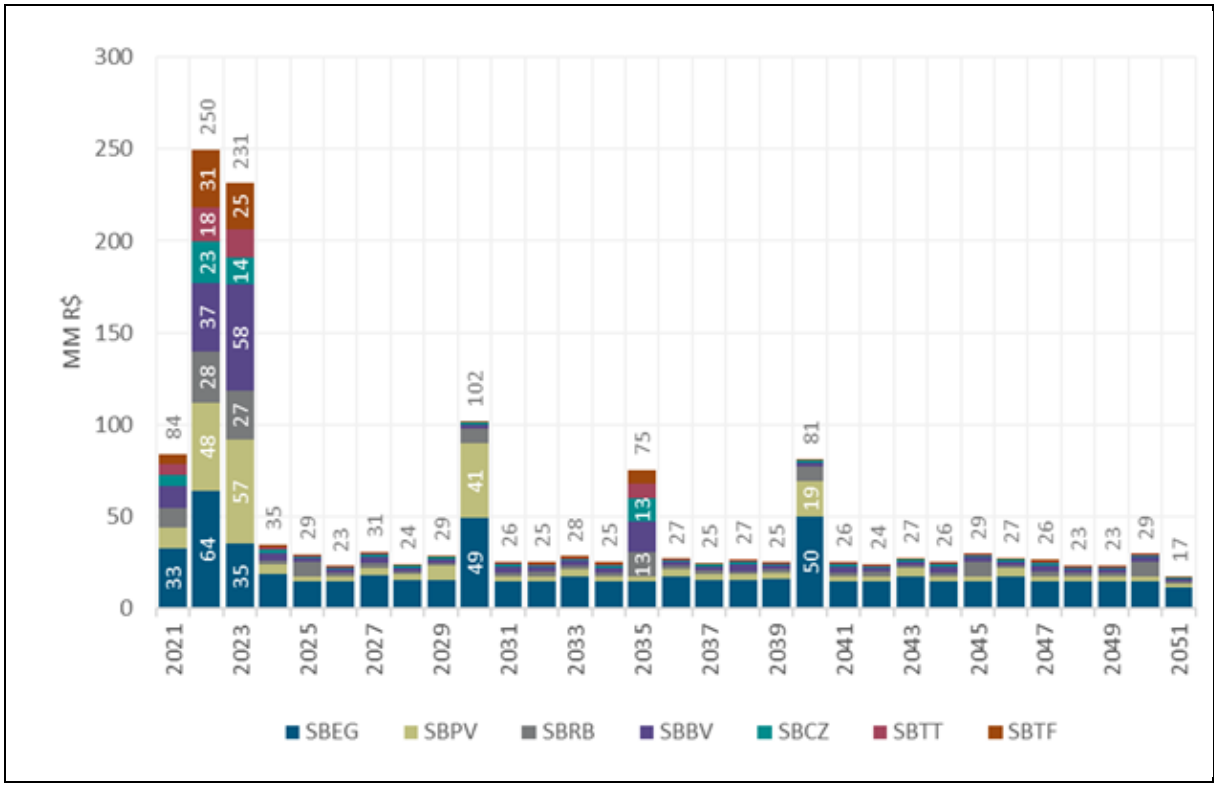
Source: GCA Consortium.

1.4 CAPEX

The development plan, expansion of airport assets to meet growing demands and ensure appropriate level of service, requires a total investment of R$1.5 Bi, of which Manaus Airport (SBEG) and Porto Velho Airport (SBPV) are responsible for 43% and 18%, respectively.

Development investments (topical and intended to expand airport assets, including expropriations) will be divided into different phases and amount to a total R$567MM. Maintenance investments (periodical and intended to maintain and replace assets, including re-paving cycles) add up to R$911MM throughout the concession period (Figure 4).

Figure 4: CAPEX during concession



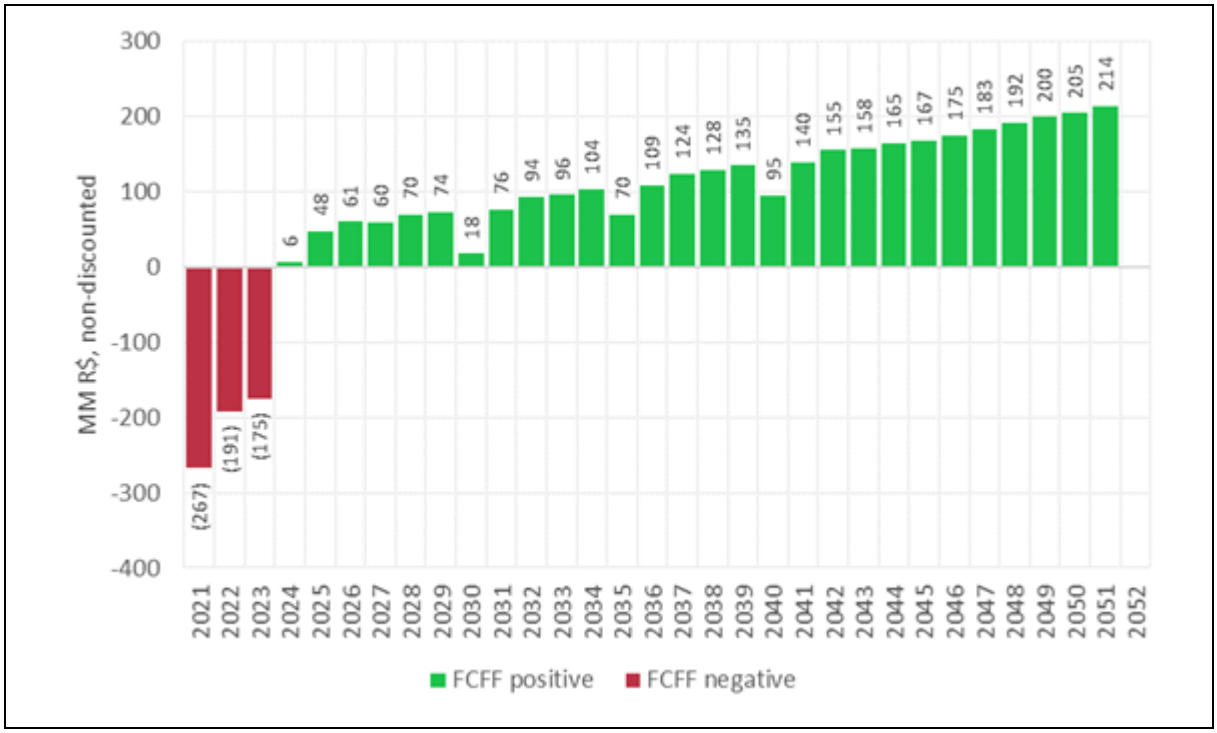
Source: GCA Consortium.

1.5 Evaluation of concession's financial feasibility

The project's forecasted free cash flow (FCFF) is presented in Figure 5, which shows the FCFF is positive during most of the concession, except during investment cycles: the project's first phase will require funding, while following phases will lead to momentary FCFF reduction. The project's IRR, prior to grant values, is 10.5%p.a. (real) and its MIRR is 9.7%p.a. (real).

It is worth mentioning that the main benefits of granting airport concessions jointly as opposed to individually include: enabling granting concessions for airports that would lack viability in isolation; synergistic gains associated – for example – with the recognition of PIS/COFINS tax credits and the reduction of the taxable basis for income tax as a result of the booking of losses from airports operating in the red to reduce the taxable income generated by other profitable airports; in addition to the cost savings mentioned earlier.

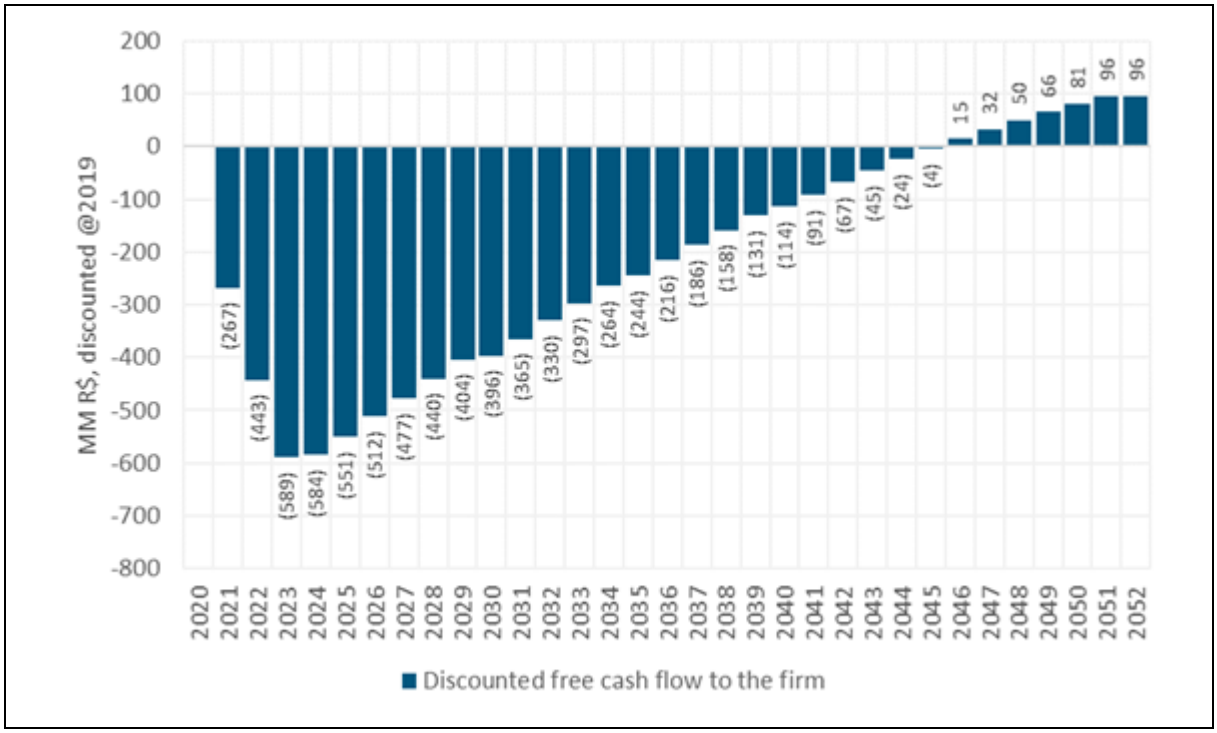
Figure 5: Free cash flow for the firm (non-discounted – prior to grant values)



Source: GCA Consortium.

The cumulative discounted FCFF (given the referential weighted average cost of capital – WACC set at 9.36%p.a., real), from which the NPV net of grant payments is determined, is shown in Figure 6. The NPV of the project is **R$95.7MM** (net of grant payments). Since the internal rate of return is higher than the cost of capital and the NPV is positive, the concession is financially feasible.

Figure 6: Cumulative discounted free cash flow to firm (net of grant payments)



Source: GCA Consortium.

1.6 Definition of grant payments

Once the concession's financial feasibility is confirmed, it is possible to determine the grant payments that allow for a fair return to the concessionaire, given the project's risk pattern (i.e. identical to the costs of capital).

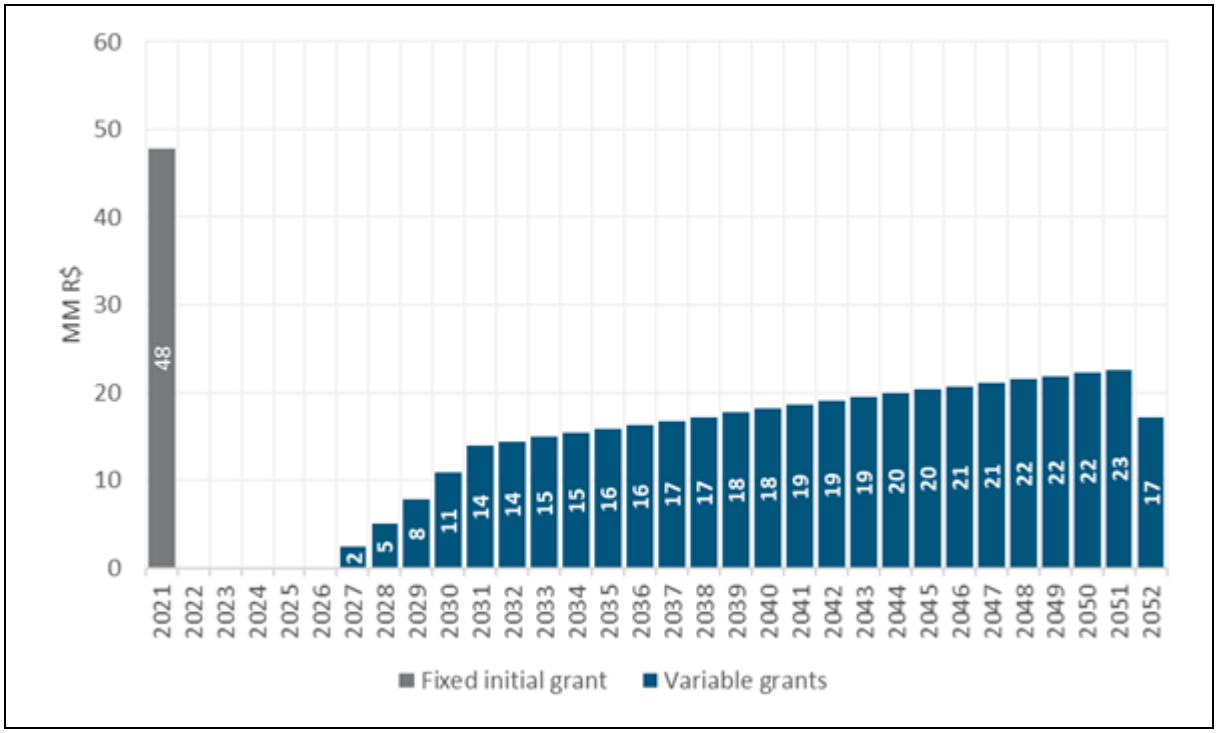
SAC/MI defined grant payments divided in an initial fixed payment, equivalent to 50% of pre-grants NPV (to be paid by the concessionaire as lump sum upon entry into the agreement), and variable annual payments (equal to a percentage of the concession holder's gross revenues in each period)[2] and set so that project NPV = 0 at the regulatory cost of capital.

Resulting grants are:

- Fixed initial payment: R$47.9MM (based on January/2019 real prices);
- Variable payments: final percentage of 3.9% of gross revenues.

[2] The following methodology is prescribed: on the fifth full calendar year of the concession, the concession holder will begin to determine the variable grant, to be proportional with the previous fiscal year's gross revenues. From the 6th to the 8th calendar year, the concession holder will recognize increasing shares – at 40%, 60% and 80% - of the final variable-grant percentage. From the 9th calendar year, the final variable grant rate would apply (that is, the rate set to make the concession' NPV equal to zero). According to the applicable provisions, payment may be made until May of the year immediately subsequent to that of the determination – therefore, the first payment has been assumed to be made in 2027, and the final one in 2052.

Figure 7: Grant payments flow during concession



Source: GCA Consortium.

Table 2 shows the sum of the grant payments flow over the concession period in two forms: (i) non-discounted; and (ii) at present value net of cost of capital.

Table 2: Total grants to the government (discounted and non-discounted)

Values in MM R$	Total, non discounted	Total discounted @9.36% a.a.
TOTAL	**480**	**131**
Fixed initial grant	48	48
Variable grants	432	83

Source: GCA Consortium.

1.7 Attractiveness to shareholders

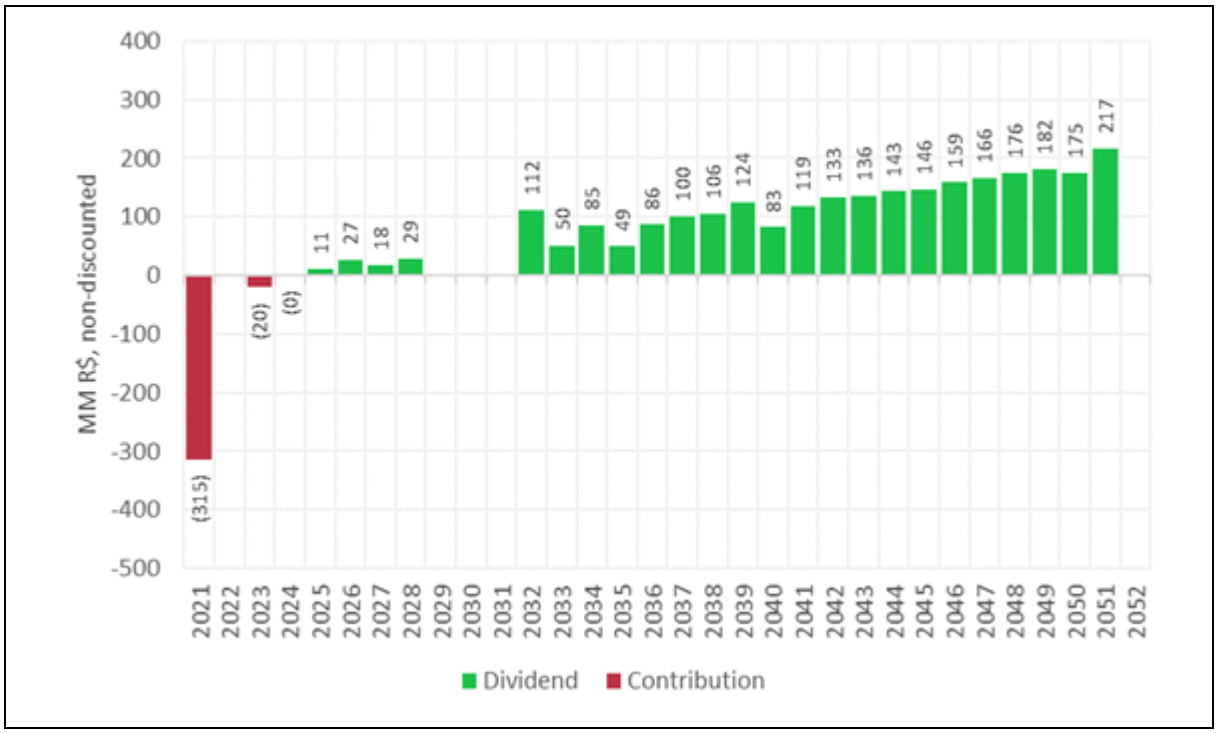
Analyses of the project's attractiveness to shareholders consider: (i) third-party funding (long term BNDES loan and issuing of debentures, given market conditions and minimum covenants); (ii) equity needs; and (iii) the possibility of dividend payments throughout the concession.

It is noted that the Cluster model also incorporate synergies in raising of loans to finance investments (in the event of any restriction or ineligibility to obtain funding that could affect airports in their isolated assessments).

Figure 8 presents the forecasted flows of capital injections and dividend distributions. The concessionaire needs to inject equity resources during the first development phase, collecting increasing dividends over the remainder of the concession period, with fluctuations related to the debt

service. Dividend distribution is interrupted only during funding and respective grace periods and is immediately followed by accumulated resource distribution. In 2050 distribution is limited when minimum capital stock requirement must be met. By the end of the concession the paid-in capital is returned to shareholders. The equity IRR, calculated based on contribution and dividend flows, is 11.2%p.a. (real).

Figure 8: Contribution and dividend flows, non-discounted (post-payment of grants)



Source: GCA Consortium.