Chapter 1

The NAICM project in perspective

On 3 September 2014, Mexico’s President announced the construction of the New International Airport of Mexico City (Nuevo Aeropuerto Internacional de la Ciudad de México, NAICM). This project is one of the three largest airport infrastructure projects worldwide. It responds to a constant need of over 20 years to expand the capacity of Mexico City’s current airport, which is reaching its operational capacity limit. The construction of the NAICM will be funded with a mix of public and private funds, with around 60% coming from the federal budget. This chapter will introduce the nature and main features of the project, setting the stage for a deep analysis of its governance, procurement structure, integrity approach, and communications strategy.
The New International Airport of Mexico City (Nuevo Aeropuerto Internacional de la Ciudad de México, NAICM) is currently one of the three largest airport infrastructure projects worldwide (see Table 1.1). Its construction costs are estimated at USD 13 billion and should be built within a four-year timeframe, followed by a series of tests and certifications. The Government anticipates this infrastructure being operational in 2020.

Table 1.1. The NAICM in perspective

<table>
<thead>
<tr>
<th>Airport</th>
<th>Passengers per year (million)</th>
<th>Type of project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Istanbul New Airport (Turkey)</td>
<td>150</td>
<td>New construction</td>
</tr>
<tr>
<td>NAICM (Mexico)</td>
<td>120</td>
<td>New construction</td>
</tr>
<tr>
<td>New International Airport of Beijing (China)</td>
<td>75</td>
<td>New construction</td>
</tr>
<tr>
<td>Hamid International Airport (Qatar)</td>
<td>50</td>
<td>New construction</td>
</tr>
<tr>
<td>Berlin Brandenburg International Airport (Germany)</td>
<td>45</td>
<td>New construction</td>
</tr>
<tr>
<td>Dubai International Airport</td>
<td>28</td>
<td>Expansion</td>
</tr>
<tr>
<td>Heathrow-Terminal 5 (United Kingdom)</td>
<td>27</td>
<td>Expansion</td>
</tr>
</tbody>
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The decision to launch the NAICM project was announced on 3 September 2014 by President Enrique Peña Nieto. The first stage is to be operational in 2020 and the project is estimated to be self-financed, with revenues coming from Mexico City’s International Airport (AICM) plus NAICM when it starts operation through the resources obtained by the payment of the Fee Use of the Airport (TUA).

The NAICM will be built in the Texcoco Valley, located on the eastern border of Mexico City. The location decision was reached after assessing several alternatives. The first alternative was to expand the capacity of nearby airports to create a metropolitan system. This choice would have required a new runway at the Toluca Airport (to reach two runways); works in other airports surrounding Mexico City to be able to use three runways; and two runways currently in use at the AICM. This choice implied several setbacks, such as long distances between the different airports to Mexico City and complicated simultaneous operations. A second choice was the construction of a new airport in Tizayuca, Hidalgo with two runways and the potential of expansion for two more, plus the two currently operating at AICM. However, the new airport would have been located approximately 80 kilometres from Mexico City and also implied complications with regard to simultaneous operations. The third choice, the one preferred in the end, implies access to an area six times the size of AICM, allowing for six runways and the closure of AICM. NAICM will be located approximately 25 kilometres from the city centre, which compares favourably with the location of other airports in the world (see Figure 1.1 as well as Box 1.1 for more information about the characteristics of the area where NAICM will be located).
Figure 1.1. Distance from the airport to the city centre (km)


Box 1.1. Characteristics of the area where NAICM will be located

The area where NAICM will be located belongs to the municipalities of Texcoco and Atenco, in the State of Mexico. It limits with the solar evaporation deposit “El Caracol” to the north, the Peñon-Texcoco highway to the south, rural land for agriculture to the east, and urban areas of the municipality of Ecatepec to the west. The soil is lacustrine, alluvial, and sedimentary, and so is used for agriculture and pasture. More than 75% of the area is partially or totally covered by salty pasture.

The flora of the area consists of 24 species, with five dominant ones. Their preservation and relocation is envisioned in the “Programme for flora preservation of the NAICM”. The fauna consists of five species of mammals, four species of reptiles, and five species of amphibious animals, which are covered by a “Programme for fauna preservation and relocation of the NAICM”. Likewise, the area hosts 14 species of birds, which will be considered in the “Action and follow up plan for the preservation of birds”.

The area of the Lake of Texcoco is considered a stressed ecosystem, as it has gone through alterations during long periods, impacting the physical and biological characteristics, which have not allowed it to recover its original structure. Such alterations impeded the passive or natural regeneration of the ecosystem, leaving behind a highly salty soil. The project anticipates improving the conditions of the soil, which should lead to the assisted restoration of the ecosystem in the long run.

The NAICM responds to a constant need of over 20 years to expand the AICM’s capacity according to the country’s rate of growth. In fact, recent works at AICM include the remodelling and opening of a new international terminal building (1994), the construction and remodelling to expand capacity for check-in, passenger services, migration, and baggage, among others (2001-04), and the opening of Terminal 2 (2007). Indeed, AICM operations are reaching the technical limit, which is set at 394 000 operations per year (see Figure 1.2). This is because airport activity has grown faster than the economy. While the annual growth in real gross domestic product (GDP) was 3.5% between 2009 and 2013, the annual growth in passengers in Mexico was 5.4% during the same period. Likewise, while the annual growth of the industrial activity indicator was 2.5% between 2009 and 2013, the annual growth of cargo was 5.2% during the same period.

Figure 1.2. Number of AICM operations (thousands)


The fact that AICM is reaching its operational capacity causes trade and passengers to connect via alternative airports, losing the potential of Mexico City to become a regional hub. Panama, for example, handles more than double the transit passengers Mexico does (see Figure 1.3).
AICM is the number one means of air transportation in Mexico. It is the strategic point that connects the country internally and with the rest of the world. Not only does it serve 34% of the passengers in Mexico, but it is also the main port of entry for tourists and business travellers. In addition, it concentrates 56% of the merchandise that is air-transported abroad. The NAICM will have in its maximum development phase six runways and will transport around 120 million passengers annually, which is four times the current capacity of AICM (Table 1.2).

Table 1.2. NAICM capacity

<table>
<thead>
<tr>
<th>First phase</th>
<th>Maximum development</th>
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<tbody>
<tr>
<td>50 million passengers per year</td>
<td>120 million passengers per year</td>
</tr>
<tr>
<td>550 000 operations per year</td>
<td>1 000 000 operations per year</td>
</tr>
<tr>
<td>3 parallel runways operating simultaneously</td>
<td>6 runways with triple simultaneous operation</td>
</tr>
<tr>
<td>94 contact and 42 remote stands(^1)</td>
<td>4 430 ha of land</td>
</tr>
</tbody>
</table>

1. Estimated to be sufficient for the next ten years.

The five-year National Development Plan 2013-18 published in the Official Journal on 20 May 2013 indicates that Mexico shall be equipped with modern airport infrastructure to augment connectivity between regions and increase the competitiveness of the country. Infrastructure is found to be one important factor that enhances the overallcompetitiveness of countries.

Mexico is currently ranked 61 out of 144 countries in terms of global competitiveness and 65 in terms of infrastructure (WEF, 2014).
The new airport is designed to be one of the world’s most sustainable airports and a showcase for Mexican innovation built by national contractors and engineers. The Federal Government has set the objective for the airport to be a world reference in design, construction, and sustainable operation. It will use clean energy from renewable sources; it will operate with green technologies promoting efficient water use; and will have ventilation and air conditioning that optimise energy use. It is expected to take advantage of the biogas generated in the dump of the Bordo Poniente to provide energy to the new airport.

A previously existing entity, the Grupo Aeroportuario de la Ciudad de México S.A. de C.V. (GACM) has received the mandate to design, build, and open the NAICM by the Mexican Government. In January 2015, the Ministry for Communication and Transport (Secretaria de Comunicaciones y Transportes, SCT) published the concession in favour of GACM, to build, manage, operate, and develop the new infrastructure. Between the different types of infrastructure delivery modes, public procurement has been identified as the means to implement the construction works. This choice, along with the surrounding environment of the project, entails choices on the structure of procurement operations and trade-offs between various objectives.

The vision for the project is that it will not only be a state-of-the-art emblematic infrastructure in terms of design, construction, and operation, but that it will also define how major infrastructure projects are carried out in Mexico. In this sense, NAICM is seen as much more than just infrastructure, but as a lever to improve the quality of life of the inhabitants of central Mexico, in particular, and of Mexicans in general. Consequently, the development of the airport is accompanied by a set of measures dealing with the environment, mobility, water management and urban development, among others.

The construction of the NAICM will be funded with a mix of public and private funds, with around 60% coming from the federal budget. The cost of the project is estimated to amount to USD 13 billion for the first phase of construction (2014-18), with about 50% concentrated in 2015 and 2016 (Figure 1.4).

In order to guarantee the long-term financial sustainability of the project, GACM, together with the Ministry of Finance, designed a comprehensive financial strategy taking into account the situation in international financial markets and the recent evolution of the commodities market. In 2015, MXN 5.4 billion were allocated by the Federal Government to initiate preliminary work. At the same time, a credit line of USD 1 billion (MXN 16.7 billion) has been negotiated with private banks (HSBC, BBVA, Citibank and Inbursa).

Government revenues in Mexico are significantly exposed to fluctuations of oil prices since almost 30% of public resources are drawn from oil revenues. Although stabilisation mechanisms (i.e. exchange rate depreciation when oil prices fall, oil stabilisation fund, financial hedge on prices) in place prevent public resources from dramatically fluctuating with the oil market, this factor could however induce a greater recourse to private financing if public funds are scarcer than anticipated.

Due to the recent downtrend in oil prices and to accommodate possible changes in the funding from public resources, GACM upgraded the initial financial strategy to resist similar circumstances. The revised strategy includes a revolving credit facility of USD 3 billion, which was closed on 7 October 2015 and the forthcoming bond issuance of long-term bonds with international investment grade up to the amount of USD 6 billion.
Both public and private investments should be reimbursed through cash flow generated by the current and future airport. Returns on investment will therefore largely depend on the completion date of the construction of the airport. Although GACM is not experiencing any difficulties in attracting private funding for the project, as evidenced by the interim results of a checklist sent to members of the G20/OECD Task Force on Institutional Investors and Long-Term Financing, the expected return and risk of investment projects is a core consideration in attracting private financing (OECD, 2015).

When investment decisions relate to infrastructure projects, securing private financing can be seriously affected by the absence, perceived or real, of two main components. The first is a lack of planning in infrastructure projects. In efforts to create a framework conducive to private sector investment in infrastructure projects, the Mexican Government designed a national infrastructure investment plan for the period 2014-18. The second component is the absence of demonstration of the capacity to prepare and execute projects successfully. While this element will be assessed in the light of past successes or failures in infrastructure projects, it could also be influenced, according to the phasing of construction activities (see Chapter 4), by the success or failure of previous construction phases.

International experience illustrates that governance is a key issue for the success of this type of megaproject, not only to keep them on time and on budget, but also to avoid corruption. Chapter 2 deals with the governance structure of GACM and the different entities and stakeholders involved in the project. Chapter 3 addresses procurement practices and strategies. Procurement is, without a doubt, a very sensitive activity due to the amount of resources involved and the close interactions between the public and private sectors. By way of example, the OECD analysed a set of 427 foreign bribery cases...
concluded between February 1999 and June 2014 and found that 57% are related to public procurement (Figure 1.5).

Figure 1.5. **Purpose of foreign bribery cases between 1999 and 2014**

- Public procurement: 57%
- Customs clearance: 12%
- Other preferential treatment: 7%
- Favourable tax treatment: 6%
- License/Authorisation: 6%
- Access to confidential information: 4%
- Travel visa: 1%
- Unknown: 7%


The dimension of these risks calls for the implementation of preventive measures to safeguard integrity. Corruption not only implies economic costs, but also hinders trust in government and may result in risks for citizens (i.e. due to poor quality infrastructure). Chapter 4 proposes tools and measures to mitigate the risks of corruption and waste.

Successful megaprojects are accompanied by a robust communications strategy, which serves not only to inform, but also to engage citizens and business. Chapter 5 will describe to what extent the NAICM communications strategy abides by good OECD practices. Finally, Chapter 6 represents a route map for the implementation of the recommendations contained throughout this report.
Notes

1. The operational limit translates into about 32 million passengers per year.
2. Information provided by GACM.

References


