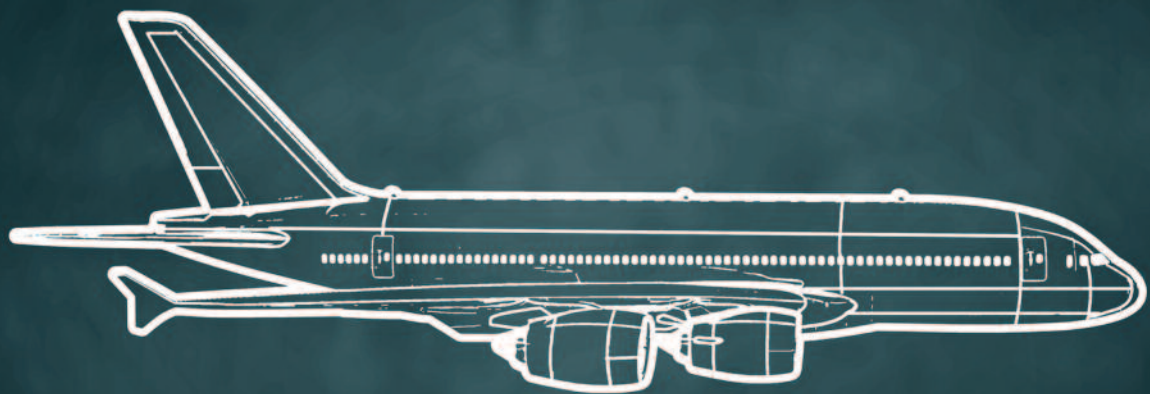


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PRIVATISATION IN AVIATION

Challenges and Opportunities



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Privatisation: trend or future for aviation?

Salvatore Sciacchitano
Executive Secretary of ECAC



2017 marks the 25th anniversary of the European single market – a revolution in air travel after the restrictive bilateral air services agreements regime which restrained air travel, tourism and business and, consequently, economic growth and job creation. Since 1992, the number of air routes within the European Union has increased by 170% and the liberalisation of air services has significantly furthered opportunities for consumers and for the many direct and indirect entities and individuals impacted by the process. Beyond growth, the nature of the industry has also changed, with the resulting competitive pressures reshaping airlines, airports and air navigation services. Liberalisation has defined, in an essential way, the face of European aviation as we know it today.

The air transport sector has progressed from strength to strength. Travel volume has more than doubled over the past 15 years. 2016 was the seventh straight year of above-trend growth and 2017 will most likely follow. And where there is growth, there is a need for investment. A solid future for aviation, a catalyst for economic growth and integrator of economies, lies in a successfully liberalised market. To keep up with the continuously upward air traffic forecasts in a context of limited public budget, some governments have turned towards privatisation as a source of funding for flag carriers, infrastructures and air services.

Indeed, as the air transport sector matures, the experience of privatisation demonstrates that it can be an important pillar to support competition and profitability. It has the potential to improve the ability to compete and raise efficiency in the global economy while alleviating the burden on public finances. The rise of private equity in aviation financing could be the answer for service improvement, profitability of flag carriers and expansion of infrastructures. What has been the experience in Europe so far, and what are the critical factors of success?

This issue of ECAC News looks into cases of privatisation in various aspects of European civil aviation in order to highlight the lessons learnt, the keys for prosperity as well as the risks of such structural evolution. What are the preconditions for airlines to be consolidated through private investment and management? What are the effects of the 49% ownership rule in Europe on airline privatisation? Two eminent researchers propose their analysis of Europe's aviation specificities in the context of airline privatisation. What are the challenges awaiting airports when they open their capitals to private shareholders? ECAC News takes a closer look at two first-hand examples in the field: the Spanish company Aena and German Fraport. Air navigation service providers are also exposed to a similar trend. NATS in the United Kingdom and ENAV in Italy, two robust and illustrative examples of air navigation service providers that have opened their capitals to the private sector, share with ECAC News their insights on the success and hindering factors of their journey.

Neither panacea nor a "one size fit all" solution, the privatisation experience of critical air transport entities in Europe, each a unique and complex structure, shows the vitality of the sector, its ability to reinvent itself and to move forward in the global race. There are grounds for optimism but ensuring the success and sustainability of this solution relies on close government and industry collaboration. It will be the only way to balance investors' need for profit with users' need for cost-efficient connectivity in a fully liberalised Europe.



From liberalisation to privatisation

Silvia Prati

Air Transport Officer, ECAC

In October 1996, the European Commission published a communication on the impact of the third package of air transport liberalisation measures. It was three years after the measures had been implemented and six months before the 'full cabotage' would be completed. The last barrier for the completion of the European single aviation market, the exercise of the cabotage rights, was about to be removed. As from 1 April 1997 European carriers would be able to operate between any two points, including domestic destinations, in the European Community.

Twenty years later, in 2017, the liberalisation of the European aviation market has proven to be a success. However, barriers to market access still exist beyond the European Union, including among ECAC Member States, and at the global level.

At ICAO level, experts are discussing the conclusion of multilateral agreements for the liberalisation of market access. This will be one of the major challenges in the future of civil aviation, together with the liberalisation of foreign investments in air carriers.

However, the liberalisation of air transport is progressing. Different examples of liberalisation at regional and multilateral level exist and are gradually replacing the system of bilateral air services agreements.

► The start: from administered economy to market economy

Historically, air transport evolved under the control of national authorities. Liberal agreements between governments were the exception. International air transport was based on inter-state bilateral agreements, with strict control of market access and ownership regimes of carriers. This meant national carriers and publicly owned/managed airports.

Following the United States deregulation in 1978, Europe

launched a gradual removal of bilateral restrictions. In 1987, ECAC developed two international agreements to promote a partial liberalisation of capacity and tariffs. In December 1987, the process towards full liberalisation began within the European Union, with the first package of measures.

The liberalisation led to more air services, new airline business models, more airports and enhanced competition. Civil aviation had to move from an administered economy to a market economy. Air travel changed drastically for passengers, operators and regulators. New forces were driving the development of civil aviation, creating new expectations from passengers, posing new challenges for operators and requiring new regulations from institutions.

Particularly in Europe, the flag carriers, completely or largely controlled by national authorities, disappeared. In the year of the first package (1987) the privatisation process in European aviation started with British Airways.

Today the former European flag carriers have been, wholly or largely, privatised. Only a few airlines still have important public partnerships. The new entries are mostly financed with private capital.

This is not the case in all ECAC countries and at the international level. In some regions, governments still have a significant presence in airlines' shareholdings. However, this European trend is also advancing in other regions, mainly triggered by the adoption of more liberal aviation policy (for instance in India).

In Europe, the privatisation wave is also evident in the airport sector. Europe was a pioneer (e.g. British Airports Authority was privatised almost 30 years ago). Today, as indicated by ACI EUROPE, over 40 per cent of European airports have at least some private shareholders. Most of them have a public-private partnership, whilst other countries, including the United States, have not embraced this policy yet.

European regulators made the decision to have the sector financed by private investments. As a consequence, Europe needs private investments to support the growth of air transport.

As emerged from the ECAC/EU Dialogue on financing aviation held in June this year, capital is available to be invested in the sector, and private investments or private-public partnerships represent the future. The legal framework

should facilitate and support these developments.

Bankruptcies and takeovers were rare in the air transport sector during the era of the so-called flag carriers. In recent years, such events are more common and are reshaping the market and the competition. Consolidation, as has already occurred in the United States, is gaining momentum in Europe.

Mergers and takeovers are the main response from airlines faced with the financial crisis affecting the sector in recent years. Airlines are participating in the capital of other carriers, in some cases creating international and cross-border groups of carriers.

The International Airlines Group is a prime example, as well as Lufthansa's acquisition of Swiss, Brussels Airlines, Austrian, Niki and Air Berlin. The share exchange completed between Air France/KLM, Delta Airlines and China Eastern is a different example of consolidation taking place among members of an alliance (i.e. SkyTeam).

This consolidation wave appears inevitable in Europe, but also at the international level. However, the limits imposed by ownership and control rules included in the air services agreements still prevent the possibility of majority ownership and control of foreign investments in air carriers.

As previously mentioned, this will be one of the main challenges to be tackled by regulators at the international level in the coming years.

Aviation is a capital-intensive industry and important investments are needed to ensure its future growth and benefits to the economy. The new challenges

emerging from new technologies, Big Data and digitalisation will transform the market and business and will require important financial investments. The increased participation of private investors or private-public partnerships could be expected in the future of civil aviation, not only for airlines and airports.

► Liberalisation and privatisation in air traffic management (ATM)

ATM is another essential component of aviation. Air navigation services are mainly provided by national providers under government and public control.

However, new technologies, the air traffic growth forecast and the need for improved efficiency are calling for a liberalisation of the sector and important investments. In recent years, this sector has also registered some trends towards privatisation or private participation in the ownership and management of services. The transformation is slow and governments are more cautious; nevertheless the process has started.

In Europe, the need for improved connectivity and a seamless travel experience is also promoting progress in multimodal transport models. This development will necessarily be accompanied by an increased liberalisation of other modes of transports – railway in particular – and new investments in infrastructures. Between 2001 and 2016, the European Commission developed a liberalisation pro-

cess similar to the one used for the single aviation market, aimed at creating a single European railway area. The implementation of these measures is progressing and the establishment of a single area should facilitate the development of new multimodal transport schemes.

The enhanced cooperation between different modes of transport as well as the development of new business models linked to new technologies will further transform civil aviation and the travel experience in Europe. These evolutions will require, and possibly attract, a wider participation of private investors in the sector.

According to forecasts, air traffic will continue to grow in the next 20 years, in Europe and worldwide. Liberalisation and sustainability are two key factors in the future of aviation. Pursuing these two goals will ensure a favourable legal framework to promote the growth of civil aviation and secure, through an easier access to capital and the promotion of public-private partnership, the necessary resources to meet the opportunities offered by the expected increase.

Liberalisation of air transport, which began almost 30 years ago, is still a very topical issue for civil aviation and it will keep stakeholders busy in the future. Liberalisation is mostly accompanied by a privatisation wave. However, privatisation could still be considered a new model in civil aviation. Important evolutions are expected in the future and we can expect that major innovations will take place quicker than in the last 30 years. ■

Silvia Prati graduated in law from Rome Sapienza University with a final thesis on the “Liberalisation of air transport in the European Community”. After practising as a lawyer in various law firms, she began working for Alitalia – Linee Aeree Italiane – in 1999 where she spent more than 17 years. Her career began in the newly established alliance development department, before she joined the aeropolitical department. There she commenced, and progressed, her experience in air service agreements and the economic regulation of air transport. In the following years, she was responsible for the bilateral and international relations department. Ms Prati maintained this position throughout the company's several changes of management and shareholding until the last experience during the partnership with Etihad. In September 2016, she was offered the opportunity to join ECAC where she continues to enjoy the exciting aviation world from a different perspective and location.



Airline privatisation requires track record of profitability and no government interference

Jonathan Wober

Chief Financial Analyst, CAPA - Centre for Aviation

As with other industries, airline privatisation tends to be motivated broadly by the desire to access private sector capital, private sector management or both. Working against this is the desire of governments to retain ownership of their national airline as an extension of economic policy, whether for reasons of maintaining connectivity or for less defined reasons of national pride.

The required balance between these aims (and foreign ownership limits) determines the approach to privatisation. A public listing of shares or a trade sale? Sale of all or only part of the State's shareholding?

In many parts of the world, state ownership (whether partial or whole) remains the default model for national airlines, although this varies by region and within regions.

In North America, private sector ownership is the dominant model (United States airlines have never been state-owned, although Air Canada once was).

The Middle East's three Gulf-based super connectors have grown rapidly without opening up their capital to the private sector, although they have opened themselves up to a wide pool of management talent.



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Perhaps the region that has successfully carried the highest number of airline privatisations is Europe. However, even here, there is still a divide between western and eastern Europe.

► Approaches to privatisation in Europe

Almost every major western European national airline has been privatised, although governments retain stakes in Finnair (55.8%), TAP Portugal (50%), SAS (42.8% split between Sweden, Denmark and Norway) and Air France-KLM (17.6%).

In eastern/central Europe, most national airlines remain state-controlled, although several are seeking private sector investors. These include airBaltic, Air Malta, Croatia Airlines and LOT Polish Airlines. In 2013, Air Serbia was partially privatised through the sale of a 49% stake to Etihad.

Western European privatisations tended to follow the route of IPO (initial public offering), floating shares on the stock market. This secures access to private sector funds, whether for investment in the airline itself or as cash to the government in exchange for selling its shareholding (or both).

Privatisation through the sale of shares (often a minority stake) to a strategic partner additionally brings access to private sector management skills. The strategic partner is typically another airline and often also brings a commercial partnership.

The 1987 IPO of British Airways was a pioneering example of an airline privatisation carried out by the United Kingdom government led at the time by Prime Minister Margaret Thatcher, whose government implemented a wave of privatisations across a wide range of industries.

British Airways' stock market flotation was 11 times oversubscribed, but the key to the success of this privatisation was the 1983 appointment of Colin Marshall as CEO. An airline industry outsider at the time, he helped to change the bureaucratic culture at British Airways ahead of its privatisation.

Other leading western European countries followed the United Kingdom's lead, with Lufthansa and Air France undergoing IPOs in the 1990s and Iberia in 2001. KLM had long been a listed company, but became 100% privatised in 1998.

The privatisation of Europe's biggest airlines then led to consolidation in the sector, facilitated by better access to capital and a less nationalistic mindset under private ownership. British Airways acquired local rival British Caledonian very soon after the IPO in 1987, although more significant cross-border transactions took longer to realise (helped by EU liberalisation).

The first big European airline merger was the 2004 combination

of Air France and KLM. Lufthansa bought Swiss in 2006, Austrian in 2009 and Brussels Airlines in 2017, effectively completing the privatisation of neighbouring European airlines.

British Airways and Iberia merged to form International Airlines Group (IAG) in 2011, before IAG then acquired Vueling in 2013 and Aer Lingus in 2015 (the Irish national airline had been part privatised through a stock market listing in 2006). IAG itself is now 20% owned by Qatar Airways, in a further illustration of how a stock market listing can widen the shareholder base and facilitate trends towards consolidation.

Lufthansa Group, IAG and Air France-KLM are now three of the five biggest European airline groups by passenger numbers (the other two are low-cost carriers Ryanair and easyJet, which have never been state-owned).

The only western European national airline not to be listed in its privatisation is TAP Portugal. A multi-year search for a strategic partner ended in 2015, when the Atlantic Gateway consortium took a 61% stake, subsequently reduced to 45% due to EU ownership requirements. The Portuguese State retains a 50% holding (employees own the balance of 5%).

In addition to raising fresh capital, through Atlantic Gateway TAP has gained closer commercial relationships with three airlines outside Europe: Brazil's Azul, China's Hainan Airlines and United States' JetBlue.

The IPO approach favoured in most of western Europe has also been adopted elsewhere in Europe, where governments have sought to combine wider access to capital for their airlines while retaining significant stakes.

Examples include Turkish Airlines and Aeroflot, respectively the number six and number seven European airline groups. Both are listed and subject to the reporting disciplines of the capital markets, but each is still partly owned by its national government (49% for Turkish Airlines and 51% for Aeroflot). Although they follow dif-

ferent strategies, both Turkish Airlines and Aeroflot are agents of their respective government's economic policy and expressions of national identity.

Notable exceptions aside, the preferred approach to privatisation in central/eastern Europe has been to seek a strategic investor to take a partial stake in the national airline. In the majority of cases, the airline is smaller and less profitable than the listed airlines found in western Europe and has first had to undergo a period of restructuring. In 2016, after a restructuring and a four-year search for external shareholders, AirBaltic found a private investor to take a 20% stake (German investor Ralf-Dieter Montag-Girmes). In fact, the Latvian airline has found two investors, since the 20% stake was transferred to Danish investor Larss Thuesen in April 2017. AirBaltic is continuing to search for a strategic airline investor.

Air Malta has been in an on-off search for a strategic investor for some time. A proposed sale of a stake to Alitalia fell through before the Italian airline entered administration in spring 2017 and Air Malta is now focusing on restructuring and returning to profit before more actively resuming plans for partial privatisation (the Maltese government is likely to want to retain a majority stake).

For Croatia Airlines, in profit since 2013, a long-running search

for a strategic partner may be returning to the top of its agenda. The Croatian government, owner of a 97% stake, has been considering privatisation since the airline recovered in 2013 from a previous four-year period of losses.

LOT Polish Airlines has also been through a period of restructuring, returning it to profit, and hopes that this will help in its own search for a strategic partner. However, its improved outlook reduces the urgency for a capital increase.

The Czech Republic has agreed to sell a majority stake in CSA Czech Airlines to Prague-based privately owned Travel Service, a leisure group that owns and operates the SmartWings scheduled airline brand, in addition to aircraft, complete crew, maintenance, and insurance (ACMI) and charter operations.

Air Serbia's 2013 part privatisation through the sale of a 49% stake to Etihad has been a relatively rare example of a central/eastern European airline finding a strategic investor. Since the sale, the Belgrade-based airline has almost doubled its passenger numbers (from 1.37 million in 2013 to 2.62 million in 2016) and reported three successive years of profit in 2014-2016 (after a loss in 2013). It also returned to long-haul flying, with the launch of Belgrade-New York in June 2016, improved its commercial proposition and broadened its commercial partnerships.



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► Outside Europe, airline privatisation has met with mixed results

One of the more successful examples is Australia's 1995 sale of national airline Qantas. Since then, its fleet has more than doubled and its passenger count has more than tripled. In the private sector, it has also developed the fleet-footedness necessary to cope with competition (from Virgin Australia), to launch its low-cost carrier subsidiary Jetstar, to grow its loyalty scheme and to embrace new technology to improve the customer experience.

The flotation of a 75% stake in Qantas followed the 1992 announcement of British Airways as a trade investor in a 25% stake. In this way, Australia combined the two privatisation approaches of selling a stake to a strategic investor and an IPO (British Airways sold its stake in 2004).

Across much of Northeast Asia, although there are plenty of listed airlines, there tends to be a strong alignment of national airline strategy with government interests, irrespective of the precise details of the ownership structure.

China's big three airlines Air China, China Eastern and China Southern are listed on the stock market, but they continue to be controlled by the Chinese State. Hong Kong's Cathay Pacific has a 20% stake in Air China and Delta has a 3.6% holding in China Eastern, in both cases to give access to wider strategic insights from global airlines.

Japan Airlines was originally privatised in 1987, but its more recent history revealed the ongoing watchful eye of the State, which

bailed out the airline following its 2010 bankruptcy. In the subsequent 2011 listing, the government recouped the bailout cost.

Korean Air was privatised as long ago as 1969, when the Hanjin Transport Group took control of the airline.

Malaysia Airlines' experience of privatisation has been mixed. In 1985, the Malaysian government sold a 40% stake to the public, making the airline the first partial privatisation in the country. In 1994, the Malaysian Central Bank sold its 32% stake to Malaysia Helicopter Systems, removing the government as the largest shareholder, although the State retained a golden share giving it a veto over certain decisions, and other State entities retained a minority stake.

Following a period of losses, the Malaysian government took control again in 2000, although a small free float remained listed on the stock market. In 2014, the government took back full control after the loss of two aircraft in highly exceptional circumstances.

In Vietnam, the government's sale of a 3.47% stake in Vietnam Airlines through a small cap listing in 2014 and the sale of 8.8% to ANA Holdings in 2016 reflects the country's piecemeal approach to selling holdings in state-owned companies. However, state ownership in the airline is set to fall to 51% in 2019.

In Latin America, the 1990 privatisation of Aerolineas Argentinas took the form of a sale to a consortium led by Iberia, then still owned by Spanish State holding company SEPI. In the subsequent years, SEPI, American Airlines' parent AMR Corp and two United States banks were also shareholders at various times. Aerolineas Argentinas filed for bankruptcy protection in 2001, in which year a controlling stake

was acquired by Spanish company Grupo Marsans.

Although the airline came out of administration in 2003, the Argentine government eventually took back full control in 2008 and has kept tight control over matters such as route approvals to the benefit of Aerolineas. The airline has struggled with profitability and industrial relations and seems likely to remain government-controlled for the foreseeable future.

A more successful example of Latin American airline privatisation is Aeromexico, although it has switched between private and state ownership more than once since its founding in the 1930s. Its most recent privatisation was in 2007, when the Mexican government sold the airline to Banamex, a bank owned by Citigroup. This paved the way for an IPO in 2011 (following the bankruptcy of rival Mexicana, itself privatised in 2005) and the subsequent investment in Aeromexico by Delta Air Lines and a joint venture between the two.

► No 'one size fits all' solution

As these examples show, there is no 'one size fits all' solution when it comes to airline privatisation. IPOs have worked well for larger airlines, while those needing more active support from a partner have fared better through a trade sale. In general, however, two requirements for a successful privatisation are a track record of profitability and no government interference in the running of the airline. ■

Jonathan Wober joined CAPA in 2013 to lead its analytical coverage of European airlines and is now also responsible for developing financial analysis products. Previously, he spent 13 years as an equity research analyst covering airlines and airports for Société Générale, HSBC and Deutsche Bank and BAE Systems. He holds a bachelor's degree in mathematics and physics from the University of Bristol and a master's in business administration from London Business School.

Airline privatisation and ownership limits in Europe: target vs instrument

Stefano Paleari

Professor, Università di Bergamo



As an academic, Mr Paleari has had the opportunity to study the evolution of the air transport industry and to evaluate the effect of its continuous development from a privileged standpoint. Now, as an extraordinary commissioner of Alitalia, he has gained new insights into this sector.

► Privatisation and liberalisation in the European aviation market

Privatisation has been a long-debated issue for the last 30 years. British Airways was the first big state-owned flag carrier to be privatised, in 1987. Lufthansa also began its privatisation process in 1987 by selling around 25% of its shares to private investors. In 1994 the government shares dropped to 35% and finally, in 1997 it became fully private. Air France began its privatisation process in 1999. Then the government shares dropped to 44% after Air France-KLM merged in 2004. The French government still owns about 14% of the company. Iberia was privatised in 2001 and Alitalia was privatised in 2008 after filing for bankruptcy.

Privatisation came together with the progressive liberalisation of the aviation market and the creation of the European Common Aviation Area. The first privatisation wave and the liberalisation process started in the same period. The latter began with the approval of the first (out of three) deregulation packages (1987-1993) that, together with the cabotage rights in 1997, shaped the current features of the European Common Aviation Market. Airlines were the first among the actors in the aviation industry's supply chain to undertake the

liberalisation/privatisation process. Airlines are the *Business to Consumer* part of the supply chain. There has always been greater attention to the market condition and to the competitive environment among airlines because the impact of an airline's monopoly power is perceived to affect more directly the consumer welfare. Of course, this is only partially true, since the monopoly power throughout the supply chain (aircraft manufacturer, airports or ICT/GDS providers) also has an impact on the final fares paid by the consumer. However, historically the upstream market has tended to be less to the fore of public debate, hence it liberalised later. The inclusion of private capital, the extent of market liberalisation, the value chain and the role of national interests were (and remain) closely tied. We cannot therefore treat and judge them separately but we need to recompose the overall picture.

► The reason for privatisation

Privatisation is partially a consequence of the liberalisation process, for several reasons:

- State-owned airlines tended to be less efficient and they were less able to compete in a free market. Consequently, after liberalisation several companies were privatised in a search for better efficiency.
- Within a more competitive environment, airlines reacted by trying

to gain advantages from scale economies and network economies through a capital-intensive consolidation process. This process was much easier among privately owned companies than between two state-owned companies. In the case of the Air France-KLM merger, the French State retained only minority shares after the merge, and the history of SAS (Scandinavian Airlines) – historically owned by three different States – is probably an indirect confirmation that it is not easy to develop a consolidation strategy when more States are involved in the ownership.

- All privatisation processes share common targets: efficiency improvement, offer increase and drop in the price paid by the final consumer. Nevertheless, the key factors that primarily drove liberalisation in the aviation industry are somewhat different. In the case of airports, privatisation appears much more related to the need to include private capital to finance the cost of infrastructure rather than to foster airport competition, even if we can also observe a positive impact on the latter. In the case of the airline industry, limiting distortions generated by state aid appears to be one of the key elements. For example, the European Commission adopted a progressively tighter approach to state aid, including limits to the recapitalisation of loss-making national carriers, and incentives granted to airports, etc.

The liberalisation and the privatisation processes were characterised by significant growth, thus turning air transport into a mass market (especially the intra-European market), and leading to a progressive globalisation of the world economy with new carriers from China, Asia and the Gulf area.

Interestingly, non-distortion and reciprocity can appear as pretty similar factors, with the latter also being the core element in the non-competitive era where, through bilateral agreements, foreign airlines try to ensure a non-discriminatory treatment compared to the local/national (state-owned) airlines. On the one hand, without reciprocity and with a single level playing field, the market cannot be perfectly competitive. On the other hand, ensuring reciprocity can generate forms of protectionism. The 49% limit of foreign shareholding is such a case.

► The “49% ownership” rule

As part of the common aviation framework, the European Union introduced the concept of “European licence” as a licence granted to an airline by one of the Member States. With this licence, airlines are allowed to serve any intra-European route and, since 1997, also domestic routes. Since then, the only limit to entering any European route for those airlines is slot availability, for which the

so-called *grandfather* rule typically applies (to slots already used). In order to obtain such a licence, the airlines should be 51%-owned by European citizens. Limitation is thus – at least in principle – coherent with United States’ (US) thresholds for the US market.

In order to receive a European licence, the Official Journal of the European Union Regulation (EC) No 1008/2008 L 293/6 Art 4 stipulates that the “Member States and/or nationals of Member States own more than 50% of the undertaking and effectively control it, whether directly or indirectly through one or more intermediate undertakings, except as provided for in an agreement with a third country to which the Community is a party”.

This rule was aimed at limiting access to the European market to Europeans. We consider this measure as a reciprocity rule, in light of the fact that in non-European countries similar forms of market access restriction typically exist. Several discussions have recently taken place in Europe to evaluate whether such rules need to be changed. The European Commission has clarified the interpretation of the ownership rule. Basically, the Commission confirmed that such rule should be framed as an issue related to the control of the company, which can be even more binding than the 49% general rule.

The first consideration is related to what extent this restriction can appear outdated when applied

to the current context. The link between private capital and citizenship is very weak and, in some cases, also difficult to retrieve.

The financial market is one of the more dynamic and globalised markets in the world. Investment funds are a crucial example. Is the nationality of the fund determined by the location of its headquarters? If, even from the ultimate analysis of the nationality of investors in the fund, no clear nationality predominance stands out, how should we proceed? Do we need to calculate the indirect ownership? How can we combine the general rules related to 49% ownership with the rules about the control *de jure* or *de facto* of the company? In public companies, the control can be exercised even with a relatively small portion of shares. Can a company, whose 80% share is owned by non-Europeans, but whose control is in the hands of Europeans, be acceptable? In such a complicated context, the rule risks being ineffective. If we take a brief look at the shareholding of some European companies, particularly in the case of listed companies, it is clear that – even at present – in some cases the control of the company could, at least in theory, be jointly managed by non-Europeans.

The first shareholder of IAG is Qatar with a 20% share, by far the biggest shareholder in IAG. Black Rock is among the biggest worldwide investment funds in the US, the first shareholder in Lufthansa and the third in easyJet, with two different branches which are cate-

Air France-KLM		easyJet		IAG		Lufthansa		Ryanair	
Main three shareholders									
Government of France	14.1%	Haji-Ioannou family	33.7%	Qatar Airways	20.74%	BlackRock Asset Manag. Deutschland	3.3%	HSBC Global Asset Manag. (UK)	8.4%
China Eastern	10.0%	INVESCO Asset Manag	10.0%	Capital World Investors	10.37%	Lansdowne Partners (UK)	3.1%	Fidelity International	5.9%
Delta Air Lines	10.0%	BlackRock Investment Management (UK)	6.2%	BlackRock Institutional Trust Company	3.22%	Templeton Investment Counsel, L.L.C.	2.9%	O’Leary (Michael Kevin)	3.9%
Nationality of shareholders (only disclosed shareholders)									
Europe	31.4%	Europe	73.9%	Middle East	20.74%	Europe	26.0%	Europe	38.5%
North America	21.3%	North America	15.4%	Europe	20.15%	North America	12.0%	North America	1.1%
Asia/Pacific	10.0%	Asia/Pacific	1.3%	North America	18.31%	Asia/Pacific	0.1%	Asia/Pacific	0.0%

Source: Thomson Reuters Eikon. Shareholding structure as of 31.10.2017

gorised in different nationalities according to the Thomson analytics scheme.

The second consideration is related to the effect on the consolidation process in Europe and the future of competition in the European market. From the regulatory point of view, the recent bankruptcy of Air Berlin and Alitalia, both 49%-owned by Etihad, deserves an in-depth exploration of the 49% rule, especially in a market with a progressive reduction of independent actors.

However, the 49% rule should allow European airlines to compete symmetrically with other third-country airlines, thus avoiding the risk of a foreign company being able to acquire its European competitor, while the latter could not acquire the former. This is in defence of European companies and European interest, or at least of those airlines that emerge from the consolidation process.

Interestingly, the three dominating US airlines are the same size in terms of revenues. Furthermore, some airlines are holding companies of groups that offer critical services (e.g. maintenance, handling, on-board services, IT/GDS system) for the airline operations to itself and to several other airlines, thus making the competition framework even more complex.

More generally, such considerations open the discussion among several other industries about the desirability of competition – also within local (domestic) markets – as well as the desirability of ‘European champions’ companies that can better compete worldwide with global players.

► The equilibrium between free market and its failures

The third consideration related to privatisation is the share retained by the State in airlines. Even if the major airlines are fully privatised, in several cases governments are still present: SAS (40%), Air France-KLM (16%), Czech Airlines (20%) and some of the smaller flag carriers are still state-owned: to give but two examples we can cite LOT (95%) and Air Baltic (80%). Finally, it is worth recalling that TAP Portugal was privatised in 2015 and then renationalised in 2016.

One of the possible explanations is that the government still considers airlines as a strategic asset to grant adequate accessibility levels and to favour the competitiveness of its territory. The market is fairly imperfect in several aspects and the creation of the internal aviation market is crucial to the realisation of a truly unified area for many reasons:

- Bilateral agreements with some third countries are still managed at a country level because European multilateral agreements did not completely replace the old bilateral agreements, and company designation is still included in the majority of the active bilateral agreements.
- Slot restrictions at congested airports and no tradability are a barrier to access. This increases the challenge for core-periphery routes to remain served by competitive services.
- Following the liberalisation process, the European Union intro-

duced the public service obligation (PSO) to allow governments to grant accessibility to remote areas. Nevertheless, its application is jeopardised within Europe, and non-homogeneously applied.

- Direct connectivity, particularly towards intercontinental destinations, is an added value for local economies and territories. However, like many other externalities, the competitive market can fail to produce the right amount of direct connectivity. A hub pass-through is more convenient, especially in terms of cost advantages, and it offsets the greater willingness to pay for direct connection.
- Economic rules are not homogeneous within Europe: tax policies and labour contracts are different. Such diversity can negatively affect fair competition.

► Competition and opportunities at a fair level

The analysis of the 49% rule is a crucial issue. It sheds light on the difficulties of targeting a regional European competitive market in a globalised world. It thus represents a critical choice, but also a chance to explore broader targets and instruments of the EU aviation policy. ■

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The challenges of airport privatisation

Chris Smith

Chris Smith Aviation Consultancy Limited

It is now some 30 years since the first privatisation of a major commercial airport, or rather airports, as BAA plc at the time comprised seven airports. One hundred per cent of the shares (save for a golden share retained by government) in the former British Airports Authority were offered on the London Stock Exchange. The motivation for the transaction was generally ideological and formed part of a much wider programme of privatisation of the Conservative government led by Margaret Thatcher. There was no stampede to follow this lead and the world sat back to observe the consequences.

The next privatisation of an airport in 1990 was also in the United Kingdom, but this time was of a stand-alone regional airport, Liverpool, and the transaction was very different. Five local councils negotiated the sale of 76% of their shareholdings to a private company that approached them, aware of the poor financial position of the airport company. Motivation was certainly not ideological – the political atmosphere in the area was at the opposite end of the spectrum from Thatcherism – but was financial need, a need made transparent by the obligation on councils to move their airport operations into a limited company (rather than being a department of the council). This requirement was contained in the same national legislation (the Airports Act 1986) which paved the way for the privatisation of BAA plc.

And so airport privatisation began, and some of the issues apparent in these early transactions have continued to run through many subsequent processes. The objective of this article is not to give a history of airport privatisation but to examine its structure and discuss the areas that have generated the most concern.

► Institutional change

As may be appreciated from the two examples given above, airport privatisation generally needs to be preceded by institutional change, so that the airport being privatised may have an independent legal existence outside the protective cloak of government, be it national, provincial or local. The process of moving an airport into a public company with shares, be it a plc (public limited company) or joint stock company or whatever is the norm for a commercial operation in the respective jurisdiction, is properly termed ‘corporatisation’, although it has sometimes been termed ‘privatisation’, which more precisely

might be used to describe the involvement of private sector equity.

It can be interesting to explore where a country’s airport infrastructure sits on the ‘ownership clock’, a representation of the extent to which airport institutional status has moved from the typical starting position (12 o’clock) at the end of World War 2 when airports, airlines and air traffic management were part of government. The clock also indicates the extent of private sector ownership involvement. Could the clock go full-circle? The answer may depend on one’s views of the vertical integration of air transport in the Gulf States!



► Privatisation methods

What the clock does not purport to show is how the private sector is involved in an airport, and here there are two basic models, namely asset ownership or a concession to manage and develop for a specified number of years. Another arrangement sometimes used for smaller airports to widen management expertise is a management contract although the private sector supplier generally takes no financial risks, and the airport remains fully owned by the public sector.

While larger airports can often support a public flotation of shares on a stock market, most airports are sold via an organised tender to an institutional investor or private equity fund. In general, the sale will cover all areas and assets of the airport, rather than just individual terminals or runways: experiments with separate ownership of terminals have tended to be short-lived, except in the United States where such arrangements are the norm at larger airports. Equity sales inevitably generate income for the public sector vendor.

Concessions are frequently associated with a requirement on the concessionaire to make an initial expansion (or renewal) of infrastructure, often with on-going obligations to add further capacity when certain trigger points are reached. While concessions are often prompted by an absence of sufficient funds to replace an ageing terminal and/or to expand facilities to handle traffic growth, they are generally accompanied by payments from the incoming concessionaire to the public sector owner, either up-front and/or on an on-going basis. Choice of the concession model though is often a sign of nervousness within the public sector of relinquishing control of a critical asset essential for economic development.

In reality, however, this nervousness is probably misplaced in most circumstances. The public sector normally has an objective of maximising the economic contribution of the airport to its hinter-

land, while the private sector always wishes to maximise financial profit. Both of these objectives are largely achieved by ensuring maximum growth in traffic. True, the private sector may have a greater focus on operating costs and levels of employment than the public sector: quantitatively these should be minor issues, although if politics makes them more important, jobs can be protected by provisions in the sale agreement.

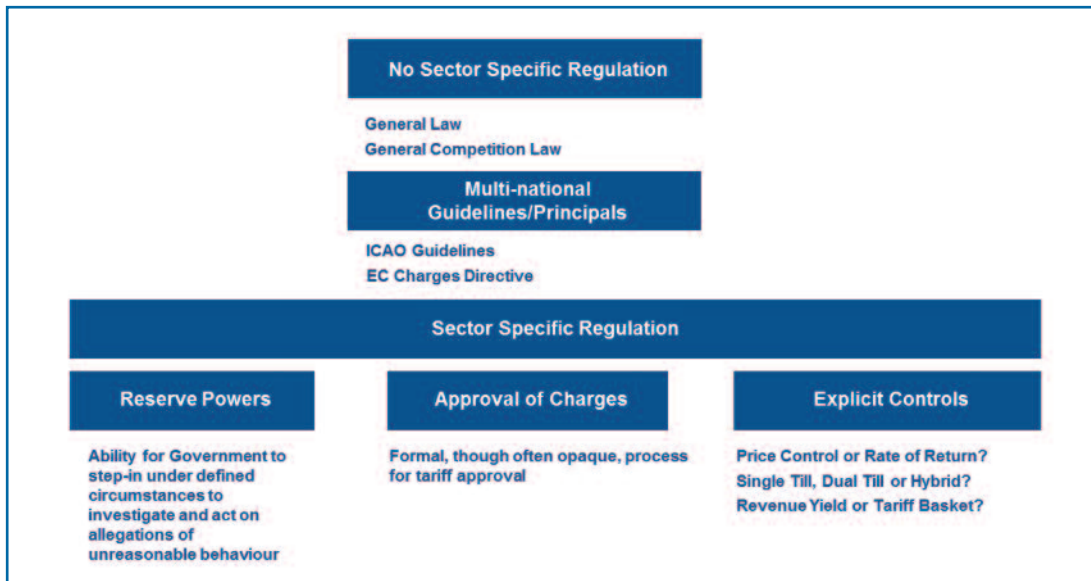
Another potential fear is that a new owner will soon close an airport and exploit its real estate potential. This position ignores the likelihood that land values near an airport are higher largely because of this proximity and airport closure could well see land values fall. There are, though, possible exceptions to this generalisation (e.g. London City Airport), but in any event there are considerable protective measures (e.g. clauses in the sale agreement, restrictions on future land use, withholding of planning permission for alternative uses) available to the public sector to prevent such an eventuality even if the new private sector owners were so minded. It is also common for the land on which the airport stands to be merely rented/leased to the airport operator and indeed in many jurisdictions there are restrictions on who may own land anyway. However, for some public authorities the 'belt and braces' approach is to offer the whole airport to the private sector on a concession basis.



► Issues and challenges

THE VALUATION CONUNDRUM

Deciding how much to pay for an airport requires assessment of its future traffic volumes, the revenues that will be generated, how operating costs might vary and the level of capital expenditure required to maintain and expand the airport. Potential purchasers will form their own opinions on how the airport's market potential and location can be best exploited. A key element in the equation is the level of revenue that will be generated from airport charges, and here we hit a potential conundrum or conflict of interest: the higher the maximum charges allowed by the public sector regulator, the greater will be the price that may be offered to the public sector owner of the airport. While a degree of institutional separation may be created between the economic regulator and the recipient of proceeds from the privatisation, an independent regulator still needs to be given guidance on the performance of its tasks, and in practice often independent regulation follows rather than precedes privatisation. The growth of low-cost carriers (LCCs) has perhaps made matters easier by exerting another pressure on airport operators to hold down charges, and it is unquestionably the case that competition between airports has increased over the last 30 years.



CONTROL OF AIRPORT CHARGES

A central feature of most airport privatisations is how airport charges are to be controlled. At the start of the privatisation era, it was generally assumed that airports were natural monopolies and able to extract high aeronautical revenues from their airline customers. Thinking and analysis has evolved significantly, especially over recent years, and the existence of at least a degree of competition between airports is well established:

- major airports compete (through their hub airlines) for connecting passengers;
- most airports compete to attract airlines to provide seat capacity and air service to their airports; and
- growing consumer awareness of travel options, which has increased catchment area competition.

However, the level of competition is not uniform and is far from perfect, so that in many jurisdictions States have considered that some airports have sufficient market power to necessitate at least the potential for regulatory intervention. A hierarchy of possible arrangements offering a spectrum of alternatives has evolved. These alternatives range from the very formal (and expensive) to light-handed approaches. Additionally, those privatisations based on a concession provide an additional control mechanism in the form of

the concession agreement itself. While attention is often focused on the ‘hard’ financial aspects of regulation, it is also important to consider the role of parameters measuring service quality and capacity provision (discussed further below) in regulatory regimes.

When developing an economic regulatory regime it is essential that local factors such as regulatory tradition, regulatory competence and regulatory capacity are taken into account as these can greatly influence the effectiveness of the regulation and the chances of regulatory capture. The controls need to reflect the specific circumstances of the airport concerned, so it is little wonder that there are so many different regulatory models in existence.

CONCESSION END-PERIOD ISSUES

Airport concession contracts typically have a duration of 25 to 40 years, and typically there is also a requirement to build a new major piece of infrastructure, such as a passenger terminal. While the period of the concession may be sufficient to accommodate the full depreciation of this new infrastructure, this is less likely to be the position with any other facilities developed later in the concession period. The initial concession agreement therefore needs to set out the basis for the valuation mechanism for incompletely de-

preciated assets at the end of the concession, several decades later. While in principle straightforward, the details of the mechanism can impact the planning and provision of facilities even just ten years into the concession if opportunities are identified in the details of the mechanism for ‘gaming’ the system. In the worst case with no compensation for incompletely depreciated assets, concessionaires will rightly try to minimise capital expenditure. Such considerations certainly killed a major expansion at one significant European airport to the detriment of the supply of new airport capacity to the system and the loss of economic benefits to the local area and consumers over a wider region.

As a concession approaches the end of its life, the owner of the assets (i.e. the public authority) must appoint a new concessionaire. Frequently, a short extension (say, ten years) may be given to the incumbent operator, but this merely delays the launch of a new tender competition. In this competition, of course, the incumbent operator has a unique position as the primary source of all data and having a unique inside knowledge of the business, the market and the asset. Although superior knowledge is not necessarily an ingredient of a winning bid, the tender competition will not take place on a level playing field.

In practice, given that the airport privatisation era is only 30 years old, very few concessions have come to the end of their life and have encountered these problems. Where they have, the tendency has been to re-appoint the incumbent, although outside Europe there have been examples of new concessionaires being appointed (e.g. Santiago International Airport in Chile).

CAPACITY PROVISION

One of the more interesting issues that is currently attracting much attention is that of airport capacity expansion, and here the concerns are evolving with three different stakeholders involved: the authorities responsible for governing the region around the airport (and often the original owner or grantor of the operating concession), the airport operator itself, and the airline community. These different stakeholders have different objectives:

- **Government:** provision of sufficient capacity to ensure economic development is not held back⁽¹⁾;
- **Airport operator:** a desire to sweat the existing assets as much as possible through peak spreading while not overly restricting traffic growth;
- **Airline community:** a desire to protect their own financial position knowing that ultimately they will pay for the investment.

The position of the airline community is an interesting one and within it there may be different objectives. Early concerns were (a) the prevention of 'gold plating' of infrastructure by the airport operator to increase its regulated asset base thereby justifying higher airport charges, and (b) a desire that new facilities were appropriate to the needs of the carriers. More recently,

there has been growing awareness amongst base airlines that they are the likely bearers of any cost overruns of major investment: carriers that might have served the airport in the future have the option of changing their minds if airport charges become too high. Base airlines also have to grapple with the balance of new infrastructure facilitating the expansion of their network on the one hand, and the likelihood that new entrants could increase competition at their home airport on the other. Consultation processes have become more complex.

Government control in an asset sale is often limited, perhaps with the only tool that a government has to force expansion being a threat to withdraw the airport operator's licence – the nuclear option!

Governments may have more control in concession arrangements over future capacity expansion, having normally included expansion triggers in the agreements to cover market growth after the initial and specified infrastructure investment has been completed. However, over the course of several decades market composition and traffic distribution over the hours of the day and the months of the year can change, so that it is important that capacity triggers have some flexibility and ideally distinguish between natural and forced peak spreading if inefficient investment on the one hand and excessive sweating of the asset on the other are to be avoided.

Airport operators need to balance a desire to use existing assets to the maximum extent without depressing traffic growth, and yet still satisfy the requirements of their control regimes and the de-

sires of their airline clients. New infrastructure needs also to anticipate any structural shifts in the nature of demand and consequences for detailed design. Investment risks are of course highest for airport operators as theirs is a sunk investment: while an airline may terminate an underperforming route or dispose of aircraft if it has ordered too many or the wrong type, an airport operator lives with its investment decision forever.

Conclusions

Over the last 30 years airport privatisation has become much more accepted and widespread, although there is still a reasonable distance to travel. Moreover, with ever-increasing pressures on public sector finances and an unsatisfied private sector investor appetite for airport assets, it is likely to continue into the future. Each airport privatisation is unique so it is sometimes necessary to 'invent the wheel' and be innovative, but awareness of some of the more important issues can mean it is a success for all stakeholders. It is not, though, a universal panacea for all problems – an airport without a market in the public sector may well remain an airport without a market in the private sector – and it should be remembered that privatisation is not a prerequisite for a modern and successful airport, as evidenced by Amsterdam Schiphol and Singapore Changi, to name but two public sector airports. ■

(1) Environmental impact will also usually be a concern, but government will have other powers to *prevent* a development, but may not have powers to *ensure* a development takes place.

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The entry of private capital into Aena: the regulator's view

Raúl Medina Caballero
Director General of Civil Aviation, Spain

The entry of 49% of private capital into Aena, the airports operator in the Spanish airport network, the largest in the world by number of passengers, occurred in February 2015. The development of an airport model combining on the one hand the necessary guarantees to maintain the airport infrastructures as well as the efficient performance of the operator and, on the other hand, the predictability and stability needed to boost its development, was a very important challenge for Spain.

This new regulatory framework took shape through Law 18/2014 of 15 October 2014, on the adoption of urgent measures for growth, competitiveness and efficiency, which established a new five-year prospective regulatory instrument: the Airport Regulation Document (DORA).

This paper presents the Directorate General of Civil Aviation's vision as the Spanish administration body that actively participated in the implementation of the new regulatory framework through the development of the first Airport Regulation Document (DORA 2017-2021) approved in January 2017.

► The Spanish airport system, past and present

As in all neighbouring countries, airports in Spain are vital to ensure connectivity for citizens and visitors. These infrastructures are essential for the development of one of the country's economic driving forces: tourism, which accounts for more than 14% of our national GDP. In 2016, 230.2 million passengers were handled at Spanish air-

ports. Some 60 million of them were tourists, and so far this year the number of tourists is growing at a rate close to 10% compared to the same period in 2016.

The importance of air transport in Spain led us in the past to make a strong bet for setting up an airport system as a network of general interest that, while ensuring the connectivity of our territories, allows us to introduce economies of scale and thus to gain efficiencies in the management of our airport infrastructures. Aena runs this

THE SPANISH AIRPORT NETWORK



network of 46 airports and 2 heliports and is currently configured as an efficient operator, with operating costs per passenger that are below the European average⁽¹⁾.

This positive situation results from the efficiency measures applied by the company since 2012, among which: a rigorous policy of austerity and expenditure control and the appropriate and efficient investments able to cater for the expected growth in demand; a commitment to international development; and competitive charges allowing the operator to recover costs.

► The entry of private capital into Aena

February 2015 marked the entry of private capital into Aena. It was the largest initial public offering (IPO) operation to be carried out by a company in Europe since 2011. Aena, previously owned by the State in its entirety, went on to have 49% of its capital on the stock exchange. In this way, it entered the group of European airport operators with a mixed ownership scheme, a model that has been consolidating in recent years as an effective alternative to introduce discipline into the management actions without undermining the general interest.

Such an entry of capital has allowed the path of efficiency initiated during the previous years to be maintained through market orientation, a downward pressure on costs, greater autonomy and flexibility in the management functions. Furthermore, the entry of private capital has allowed Aena to position itself as a great international company running airport infrastructures, consolidating itself as a first-level lead actor.

By way of example, it should be noted that since 2016, operating costs per passenger have been reduced by approximately 7.5% and the company profit level has increased up to 40% above the 2015 levels.

(1) Airport Performance Indicators 2017, Leigh Fisher.

► The new airport regulatory framework in Spain

The Spanish government promoted a new regulatory framework through Law 18/2014 so that the entry of capital could be conducted with full guarantees, ensuring on the one hand the continuation of the network of airports while maintaining the best quality, capacity and efficiency conditions and, on the other hand, providing the system with the necessary predictability and stability.

This legal framework established, as a basic principle, the continuation of the network of airports as well as the mechanisms to ensure the adequate requirements for the provision of airport services subject to regulation, encouraging efficiency. This is accomplished through a five-year duration document: the DORA, prepared by the Directorate General of Civil Aviation (DGCA) and approved by the Council of Ministers. The DORA establishes the conditions that must be satisfied by Aena concerning the management of the network of airports.

In addition, the new framework established mechanisms to monitor compliance with the DORA and reinforced the principles of transparency and consultation of Directive 2009/12/EC through a specific consultation procedure with the associations of airlines during the development of the DORA and,

annually, through transparent procedures and consultations on airport charges.

The new framework sets a new prospective regulatory model that promotes the operator efficiency and is based on the recovery of the expected costs during the complete regulatory period, including operating costs and an appropriate remuneration of assets, through the cost of capital. These costs are subject to analysis by the regulator who should ensure the efficiency of such costs.

The total volume of costs together with the estimated demand for the period allow the establishment of a price cap for each year of the regulated period, similar to the model applied in other neighbouring European airports. This limit on the average income can be modulated according to the performance in certain proportions predetermined within the DORA, mainly in relation to the quality and fulfillment of strategic investments. This modulated price cap is the one that Aena must finally meet when establishing each year's charges.

Within the new regulatory framework, and in general, the risks associated with deviations in cost and demand that actually occur are taken by the airport operator.

Finally, with regard to costs, the model takes into account the dual till established in Spain through Royal Decree-Law 20/2012 of 13 July. The costs of the regulated services are thus exclusively covered by those revenues generated from the provision of such services.





► Airport Regulation Document 2017-2021

In January 2017, the first DORA was approved in Spain. It will be effective for five years, from 2017 to 2021. Its preparation by the Ministry of Public Works, through the DGCA, has brought significant challenges for the Spanish administration as this is the first time the complete regulation of a networked system for a five-year period has been addressed in Europe.

During the years prior to its development and as from the entry into force of Law 18/2014, the DGCA had to develop some analysis methodologies to deal with the scrutiny of all operational and financial variables of Aena. These methodologies were based on international benchmarking and methodologies similar to those used by other European regulators although adapted, taking into account the size of the network of airports.

The process has been long and complex but it has finally resulted in broad consensus between the airport operator and all users, who have perceived continuous im-

provements in the consultation and transparency processes provided for in Directive 2009/12/EC.

As a result, the DORA 2017-2021 has established the values of the operating variables that will affect the management of the airports in the Aena network in the coming years. Any analysis conducted by the DGCA and the results of any consultations with operators in the sector have been taken into account in adopting the decisions on the parameters established in the DORA.

This DORA has therefore set a path for tariff reductions by -2.22% for the next five years. A total volume of investment of EUR 2.185 million has also been approved, which was deemed sufficient to meet the foreseen demand in terms of quality. In this sense, the DORA 2017-2021 has established quality standards through a set of 17 indicators that will ensure quality services for the users.

► Regulator's view and main conclusions

As indicated by the figures, the entry of private capital into the Spanish airport operator has helped strengthen Aena's leadership position in the international arena and maintain the downward pressure

of costs in favour of efficiency, lower costs for airlines and, ultimately, provide benefits for users.

Before the entry of private capital into Aena, the establishment of a new regulatory framework, through Law 18/2014, was a key issue. Indeed, it ensured that in addition to the efficiencies introduced by the operator in the operational management, high quality levels would be maintained and there would be investments ensuring the capacity needed to adequately meet the future air traffic demand.

This framework, modern and similar to that existing in other neighbouring countries, has favoured a process of constructive dialogue between the main actors involved in the process of setting the tariffs, both during the preparation and processing of the DORA and in the subsequent consultations carried out to establish such tariffs.

In the regulator's opinion, and as highlighted in the subsequent procedures, the improvement of this process has been gradual and largely driven by the adoption of the regulatory framework. We anticipate that the implementation of the framework and the performance of the network of airports will continue to improve in the future with the constructive cooperation of all parties involved. ■



Raúl Medina Caballero was appointed Director General for Civil Aviation of Spain in 2015, after serving as Deputy Director General since 2010. He is also a member of the ECAC Coordinating Committee and ECAC Focal Point for Remotely Piloted Aircraft Systems. Mr Medina Caballero began his career in the Siemens Group where he worked as a systems engineer. He then joined the Ministry of Transport where he held several positions, all of them in the regulatory and supervisory fields of the air transport sector. He holds master's degrees in aeronautical engineering (MS) from the Polytechnic University of Madrid and in public administration (MPA) from the Columbia University of New York, where he studied as a Fulbright Scholar. Mr Medina Caballero is a civil servant of the Corps of Aeronautical Engineers.

Privatisation and the game changers in the airport business

José Manuel Vargas
Former President and CEO, Aena



The Spanish company Aena is the world's leading airport operator by number of passengers and in terms of stock market capitalisation. For Spain alone, the last three years have seen over 633 million passengers passing through its airports. Aena manages 46 airports in Spain and participates directly and indirectly in the management of 16 airports in Europe and America, moving more than 290 million passengers in 2016. Its two main hubs, Adolfo Suárez Madrid-Barajas and Barcelona-El Prat airports are in the top ten airport rank in the European Union.

Today, Aena is an effective, flexible and highly profitable organisation with excellent financial strength and solvency, a stable regulatory framework, important commercial and off-terminal business improvements and great potential for development.

► The journey since 2011

The journey to our current position as a leading airport operator has not been easy, starting from a very difficult financial situation at the end of 2011, with a net financial debt of over €12 bn and negative cash flow amount of €500 m, mainly due to a large investment from 2000 to 2011 of almost €17 bn, creating state-of-the-art airports nationwide with ample available capacity (up to 335 million passengers).

Since 2011, Aena has undertaken a determined transformation plan with four strategic lines, including the necessary adjustment of airport charges to market value, an important increase of non-aeronautical (commercial) revenue, a big improvement of efficiency in management and spending cuts and the adjustment of investment (capital expenditure, CAPEX).

This process, which included important structural changes,

achieved outstanding figures at the end of 2016, with a very strong cash flow generation (€1.8 bn), big EBITDA (earnings before interest, tax, depreciation and amortisation) margins (61%), and a significant reduction of the net financial debt of the company (from €12 bn in 2011 to €8 bn in 2016). Nowadays Aena is the largest listed airport company by market capitalisation (€20 bn).

Of course, the company and its professionals were required to undergo an important and tough cultural change. A great effort was made and we are still working to improve and finalise that complex cultural change.

► The 2015 initial public offering (IPO)

This transformation reached a peak in 2015 when 49% of Aena's shares went to the private sector while the rest remained in the Spanish State hands following the largest IPO in Europe since 2011 and in Spain since 2007. It preserved and guaranteed the Spanish airport network, one of Aena's strengths, in order to compete in a global market and become a worldwide leader in airport infrastructure, achieving the highest efficiency levels among its peers, compatible with an improvement in its quality standards.

This opening to the private capital is even more important today. In the current environment, with indebted governments, the market and the private sector – i.e. the big companies – will play a more relevant role as they are large enough to face the challenges of the new infrastructure that needs to be developed across the world. A recent study by ACI (Airports Council International) shows that airports with private sector involvement manage 41% of total traffic and invest 44% of global CAPEX.

Since its IPO, the performance of the stock has been very positive, with a revaluation of more than 109% at the end of 2015 and 124% at the end of 2016. It is also worth mentioning, as one of the most important milestones, the rating granted by Moody's [global provider of credit ratings, research, tools and analysis] to Aena: "Baa1 with a stable outlook", which implies obtaining a rating one step above that currently granted to Spain. On the part of Fitch [global leader in financial information services], the rating granted to Aena is "A with stable outlook", above the rating granted to Spain of "BBB+". These ratings certainly confirm the solvency and credit quality of the company.

Aena became part of the IBEX 35 (i.e. the largest 35 companies in the Spanish stock exchange market)



Speech of José Manuel Vargas on the first day of Aena's listing on the stock exchange of Madrid, 11 February 2015

on 22 June 2015, less than four months after its listing, and thanks to its revaluation and high volume of trading. Clearly, the Aena IPO proved that the market is extremely open to this kind of business. In the current environment, the market is looking for stable companies that offer a lot of potential because of the different business they combine. Indeed, we are amongst the most complex infrastructure operators.

In summary, the Aena IPO, the largest airport privatisation in history, was absolutely essential and has in fact been one of the most successful in the history of Spain. It placed the company in the privileged position of being a reference in the global air transport sector, and implied important changes in the way the company operates, always taking into account the

interest of all agents in the value chain. Within this strategy Aena took control of, and began managing, London Luton Airport in 2014, the fifth largest airport by traffic in the United Kingdom, and is always open to expansion to new markets in the airport infrastructure business.

At this moment, we have two types of shareholders: on the one hand, the government, on the other, the private shareholders. We must provide return (on investment) and fulfil our obligations to both these shareholders. Combining both visions is therefore essential.

This is reflected in the way we operate. Before the transformation of the company, one vision prevailed. Now we have to combine both. That is why it is so important to have a good and stable regulation that provides an efficient

framework for a company to operate. Regulation provides us with obligations to fulfil, but while fulfilling these duties we also have a commitment to the stakeholder to create value. Aena accomplishes these two goals by offering not only capacity, high levels of quality and competitive cost to our users and main customers, airlines, but also a return on investment to our shareholders. The regulation in the airport business is pretty good, especially if you compare it to other regulated sectors. There are few sectors where the customer plays such an important role.

▶ A new model for changing airports

As Aena operates the largest network of airports in Europe, this model gives great strength and competitive advantages. There is a need to have long discussions with airlines on the issue of charges, but it is functioning quite well. Overall, charges in Aena are very competitive in 2017 in comparison to other big airport organisations in Europe and other tourist areas in the Mediterranean region.

At the beginning there were many different and sometimes opposite interests between airlines and Aena, whereas we have now reached quite a common vision. A valuable element of the current regulation is that it is clearly steering



Shops at Barcelona-El Prat Airport's new terminal T1

the different market players towards agreement. Only when they disagree is arbitration by the authorities required. At the end of the day, the different players have reached the conclusion that it is better to agree, and that more elements unite us than separate us.

Furthermore, the way airports are managed across the world is changing. In this scenario, Aena is evolving from a 'pure service' vision to a 'combination of services with a business approach'. Looking forward, one of the major challenges for companies, and probably for the sector, will be to complete those transformation processes.

Within this new vision, Aena has focused on commercial sales to increase its value and become one of its strengths for growth. We have undergone a large restructuring of the retail areas at our airports in order to be more attractive to our customers, who are more and more demanding, requiring new and fashionable products and services. There is still a long way to go, especially in real estate business, logistic and digital innovation.

Indeed, we must bear in mind innovation – that is something we think about a lot in the organisation. Digitalisation is disrupting many businesses. It might appear that the airport business could not be disrupted because it relates to infrastructure but that is not true. In all regulated businesses, the commercial side is threatened by digitalisation. Because of digitalisation, the physical infrastructure is no longer a place where there are no competitors. In fact, it is a big challenge that offers new opportunities as well as new threats, especially in the areas of retail and parking, and we are working to make the best of it.

Digital devices make us more competitive. In retail, this is very



First day of Aena's listing on the stock exchange of Madrid, 11 February 2015

clear. Now, when people go to the airport, they look at a bottle of whisky, they take a photo, look in their phone and think "no, this price is not good" and they don't buy.

Airports are becoming a very competitive market place. In that way, there is an enormous threat to the physical tradition of business. It is probably not obvious in the short term, but clearly those trends crystallise in the midterm.

At the same time, however, digitalisation provides a good opportunity to airports. The regulated business and the physical infrastructure of commerce – the two sides of traditional airport business – are going to merge as if the business were the virtual infrastructure.

After all, what is the main asset, from a commercial perspective, of passengers and airports? It is not the fact that it is rounded. It is the fact that we have the passenger momentum and we can take advantage of that momentum and orient it towards spending. Digitalisation provides airports with the opportunity to sell not only goods that are limited to the physical infrastructure but also other types passengers would like to buy.

Right now, distribution is not a problem and it will be less and less so in the future. So, envisage airports evolving from shopping centres to showrooms where every type of goods can be sold – because it is easy to take the decision not to carry. The traditional "cash and carry", which some airports have claimed to be in the past, will become "ask and be served" wherever and whenever you want. Why not buy a computer? You go to a showroom, make your choice and the computer is delivered. Probably not the "hard goods decisions" but a number of goods which are not for sale in airports today could be distributed via this virtual infrastructure.

Also, the mobility landscape is rapidly evolving with new agents and solutions that a few years ago were "science fiction", such as car sharing, ride sharing, B2C ride hailing and, in the very near future, even 'robocabs'.

All in all, the airport business is changing and we must anticipate the threats and convert them into challenges and opportunities to keep our organisation at the cutting edge. ■

José Manuel Vargas was President and CEO of Aena from January 2012 to October 2017. During this period, Mr. Vargas has led the restructuring of Aena, its partial privatisation and the company's initial public offering in 2015. Prior to Aena, he was managing director and CEO of Vocento, a leading press group in Spain. Recently, he has joined Rhône Capital Fund as partner in charge of Spain, Latin America and Infrastructures. José Manuel Vargas is a graduate in economics and business administration from the Universidad Complutense de Madrid, with a law degree from UNED, and he is a certified public accountant.



The successful privatisation of the 14 Greek regional airports

Christoph Nanke

Senior Vice-President Global Investments & Management,
Fraport AG

On 11 April 2017, after nearly four years, the long and complex privatisation journey for the 14 Greek regional airports finally reached a successful conclusion: “Mission accomplished”! This date marked the official concession commencement date (CCD) for this mammoth project, as well as a milestone for privatisations in Greece and the global airport industry. But for the Fraport Greece team and other stakeholders, it was a Tuesday characterised by excitement and tense nerves.

In just a few days, the Easter holidays would be starting and the airports would be receiving an influx of international tourists who had already booked flights to Greece. Moreover, Fraport Greece was taking over the operations of not 1 but 14 diverse airports, spread across Greece at mostly island destinations. The 14 regional gateways include major Greek airports – with the exception of Athens and Heraklion – like Thessaloniki in the north, Chania (Crete) in the south, and the major tourist destinations of Rhodes, Santorini, Mykonos, Corfu and Kos.

Back in April 2013, Greece’s state-owned Hellenic Republic Asset Development Fund (HRADF) invited companies to submit an expression of interest (EOI) for concessions to operate Greece’s regional airports. HRADF decided to offer a total of 14 airports, grouped into two balanced “clusters”. Cluster A includes seven airports on the mainland, the Ionian Islands, and Chania on Crete. Cluster B also comprises seven gateways, which serve popular tourist islands in the Aegean Sea.

► The privatisation concession

For this reason, HRADF tendered two separate concessions – each requiring the “provision of services

in relation to the financing, upgrade, maintenance, management and operation” of the corresponding seven airports. Running for a 40-year period, both concessions have an initial four-year “Imminent Works Period” for implementing major construction works at the airports, followed by an “Operation Period” covering the rest of the concession term. The key goals of HRADF’s airport privatisation were to maximise the upfront and ongoing (annual) financial proceeds received from the concession winner, while improving the quality of infrastructure and services at the regional airports – and thus the overall travel experience for passengers. It is important to note that the privatisation process took place in the middle of a deepening financial crisis in Greece. Obviously, all potential investors had to evaluate these risks. However, Fraport has steadfastly believed in the long-term potential of Greece’s tourism industry – with its diversified traffic origination (77 per cent international traffic) – as well as the key role played by the regional airports in meeting the needs of travellers. Indeed, Fraport sees Greece developing into one of the world’s great travel destinations, especially once the regional airports are enhanced with modern infrastructure and efficient operations managed by Fraport Greece. Other convincing aspects of the privatisation included the long-term concession

model – typical in the global airport sector today – and solid tender process led by HRADF. Thus, Fraport decided to participate in the Greek regional airports project.

► Fraport in the competition

Fraport, which manages Frankfurt Airport and a portfolio of airports worldwide, had been following Greece’s planned regional airports privatisation for a long time. Even before HRADF launched the tender, Fraport, as the majority shareholder, formed a consortium with Copelouzos Group (a leading Greek industrial conglomerate). In competition against two strong international consortia, Fraport/



“Follow-me car” with Fraport Greece staff

Copelouzos submitted its binding offer in 2014 and emerged as the winning “preferred bidder” later on 25 November of the same year. Fraport/Copelouzos offered an upfront concession payment of €1.234 billion, plus an annual fixed concession fee of €22.9 million as well as an annual variable concession fee. But before the cluster concession agreements could be finalised, the process was delayed by a series of Greek elections that began in December 2014 and ran into early 2015. The resulting emergence of a new government was followed by a slowdown period for all pending privatisations. Fraport remained patiently dedicated to the project. During this period, HRADF played an important and constructive role in moving the process forward. Finally, a breakthrough came with the signing of the cluster concession agreements in mid-December 2015, just in time for Christmas. Another important step forward occurred in May 2016 when the concession agreements were ratified by majority vote in the Greek parliament.

► The operational takeover

Now intensive preparations for planning the operational takeover could move forward – a task made more complex because none of the 14 airports were incorporated entities. Up to this point, the state-owned Hellenic Civil Aviation Authority (HCAA) in Athens had operated all of Greece’s airports, except Athens International Airport – which had been privatised years earlier. This meant that the concession process needed to be structured in the form of an asset deal. After anxiously waiting in standby mode for months, Fraport’s transition team sprang into action.

Split into several work streams, the daunting task was building a brand new airport company, a start-up with over 500 employees. The operations team planned the operational takeover of the regional airports and was also responsible for licensing issues. The commercial team worked on hundreds of con-



Enhancing the travel experience: Thessaloniki State Symphony Orchestra performs for passengers at Thessaloniki Airport, September 2017

tracts with tenants, airlines, ground handlers and other stakeholders. Because administrative functions needed to be created from scratch, teams were set up for the key areas of human resources and training, information technology (IT), as well as accounting and controlling.

The IT team implemented systems for the new Fraport Greece headquarters in Athens, which included the Airport Operations Data Base (AODB), and SAP-based accounting systems – which had to be ready for activating on the day of CCD. The accounting team had to set up the organisation’s accounts, profit and cost centres, and establish accounting and controlling processes. The human resources team was responsible for staffing, organisational structure and the recruiting process, as well as developing and carrying out the training plan.

The Fraport Greece corporate website was launched in the summer of 2016, specifically to assist with recruiting and to provide general information about Fraport Greece. Without an accompanying promotional campaign, the website attracted more than 1000 applications in the first three days. The opportunity to work on behalf of one of the most significant concession projects in the industry – with salaries offered at significantly higher levels than the Greek collective bargaining agreement – resulted in a surge of 60 000 applications from job seekers who were vying for about 600 job positions now filled at the new Fraport Greece airport company.

► Creating synergies among 14 airports

A key point to emphasise about this privatisation was the number of airports transferred at one time. The operational takeover of 14 airports was a logistical challenge for everyone involved in the project and something never done before by anyone in the industry. Instead of installing the headquarters at one of the airports, the management team decided to locate the headquarters in Athens. This made it possible for the organisation to develop completely new and tailor-made processes and to realise significant synergies between the 14 airports. Today, these achievements are influencing other airports in the Fraport Group.

Financing the transaction was actually a lengthy and complex project in its own right. A total of €688 million to finance the acquisition facility was provided by a consortium of leading financial institutions including three development banks – the European Bank for Reconstruction and Development (EBRD), International Finance Corporation (IFC), and Black Sea Trade and Development Bank (BSTDB) – along with Greece’s Alpha Bank. The European Investment Bank (EIB) provided loans of €280 million for the infrastructure investment programme, while shareholder funds (Fraport/Copelouzos) of €650 million made up the remainder of the total financing package. After intensive negotiations with all parties (including

The successful privatisation of the 14 Greek regional airports



Fraport Greece CEO Alexander Zinell speaks at Fraport Greece stakeholder meeting, Santorini Airport, October 2017

advisors and lawyers), the financing documents were finally signed on 24 March 2017. The financial close was achieved on 31 March, while the first drawdown under the acquisition facility took place on 10 April – one day before the handover of the 14 airports. The upfront concession fee of €1.2345 billion was made to the Greek State on 11 April, right after all 14 airports were operationally transferred to Fraport Greece.

In addition to the upfront concession payment, the contracts also cover so-called €400 million “Imminent Works” at the 14 airports, which focus on improving existing terminals and other infrastructure, renewal of most of the runways, expanding capacity (necessary at most of the airports) and building brand new facilities. For this purpose, Fraport developed an extensive construction programme, initiated the design process and developed EPC (Engineering, Planning and Construction) contracts for all 14 airports – finally signed with a Greek construction group in March 2017, just a few weeks before the CCD. To avoid traffic dis-

ruptions during the busy vacation months it was agreed that Fraport Greece should launch the “Imminent Works” during the off-peak period. One of the first projects is the runway reconstruction at Mykonos, which requires closing the airport for a couple of weeks. Similarly, construction projects have now started at all of the other airports – however, without disrupting operations. Fraport Greece will build a total of five new passenger terminals – at the airports in Thessaloniki, Kefalonia, Kerkira (Corfu), Kos, and Mytilene (Lesvos) – and modify/expand terminals at other airports. Thus, terminal capacity at all 14 airports will expand threefold to a combined 300 000 m².

▶ Looking ahead

Fraport is very confident about the positive results of the transaction for the 14 Greek regional airports. These airports have achieved overall traffic growth of 10.5 per cent in the first nine months (January-September) of 2017, reaching

almost 23.9 million passengers. During September 2017, the busiest of the 14 Greek airports included Mykonos (JMK) with passenger growth of 20 per cent; Kos (KGS) with an increase of 19.8 per cent; and Mytilene (MJT) on the island of Lesbos, up 18.6 per cent. In 2016, total traffic for the 14 airports reached 25.3 million passengers (Cluster A: 12.9 million; Cluster B: 10.3 million). When the tender for the two concessions was first published in 2013, the 14 airports registered 19 million passengers (Cluster A: 10.4 million; Cluster B: 8.7 million).

In conclusion, the 14 Greek regional airports underscore Fraport’s capabilities to manage and implement projects of this size and complexity, even in a challenging socio-economic environment. Moreover, it underscores the close interaction and cooperation achieved by Fraport with key stakeholders during the privatisation process and beyond. Finally, this project serves as an important industry case study on the successful privatisation of a diverse system of airports through harnessing synergies for the benefit of users and stakeholders. Fraport AG is convinced that Fraport Greece will be able to develop the 14 Greek regional airports as a win-win concession for the Greek State and its strategically important Greek tourism sector, the 14 airport regions and, of course, the passengers and airlines served. ■

Christoph Nanke has more than 15 years of international experience in the aviation industry. He is deputy head of Fraport’s Global Investment & Management Department, which manages Fraport’s international airport portfolio and is responsible for all investment activities in western Europe and the Americas. Mr Nanke is president of the Investors Committee of Ljubljana Airport, Slovenia, vice president and member of the board of Fraport Greece and member of the board of Hanover Airport (Germany). For many years, he was also a member of the board of Delhi International Airport (India), Pulkovo Airport (St. Petersburg, Russia) and vice chairman of Xi’an International Airport (China). During recent years, Mr Nanke has successfully headed a number of important transactions for Fraport. Before taking over his current position, he was CEO of Fraport Ground Services Austria in Vienna. Prior to joining the aviation business, he worked for several years in the banking industry. Mr Nanke has a university degree in business administration from Otto-Friedrich-University, Bamberg, Germany.

Air traffic management reform: better late than never

Eamonn Brennan

Director General Designate EUROCONTROL



Structural reform, in the direction of enhanced levels of commercialisation, can finally deliver air traffic management (ATM) reform, explains Eamonn Brennan (DG Designate, EUROCONTROL). And while this might lag behind reform in other parts of the aviation value chain, it will be crucial if aviation is to grow in line with its potential in the years to come.

When the European Commission (EC) recently celebrated its 25 years of market liberalisation and reform in the aviation sector, there was very little mention of ATM. Behind the undoubted success of the European Commission's aviation strategy and the single aviation market, reform at ATM level over the past 25 years has been slow.

The issues are familiar to anyone involved in aviation: *fragmented airspace*, with national interests often to the fore; *resistance to change*; *variable levels of service quality*; and, in many areas *high prices and poor cost efficiency*.

Therefore, while the aviation sector can rightly be held up as the 'poster boy' for EC market liberalisation (passengers have more choice and more routes at significantly lower prices than 25 years ago), the picture for the ATM link in the aviation value chain is not quite as good.

The Functional Airspace Block (FAB) initiative has helped in enhancing cooperation and the advent of Europe-wide economic regulation (RPs) has placed a bigger emphasis on safety, cost and environment, but the basic air navigation service provider (ANSP) structure has often seen little change.

Therefore, we need to ask ourselves the question:

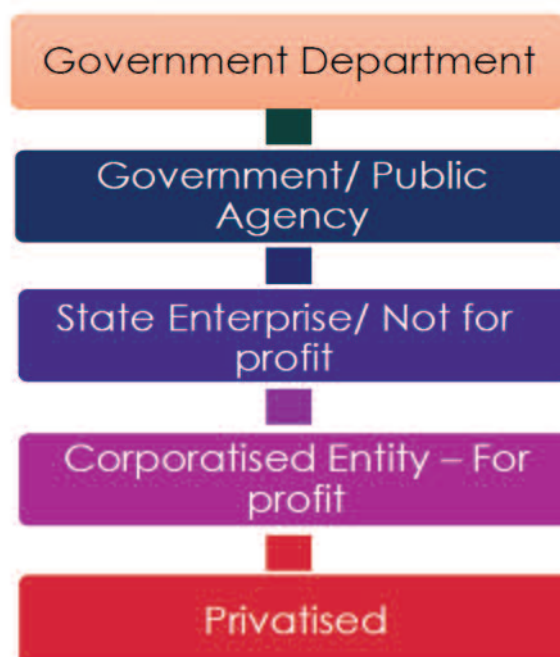
Is ATM now the limiting factor for the further development of the aviation sector in Europe?

And if so, is structural reform the answer?

Concerns around the pace and effectiveness of reform in the ATM sector are not new, of course. The same issues were prevalent 25 years ago – *weak incentives* for monopoly ANSPs; *confused objectives* (national interest, customer interest or organisation interest); *staff/union and management resistance to change*. The Single European Sky has had some success, but even its most stringent supporters would agree that there is significant scope for more reform. In particular, the Single European Sky has had little impact in delivering major structural or ownership reforms.

Broadly speaking, ANSPs fall into five ownership models shown in the graphic below, along a spectrum from full government control to fully privatised. However, when we consider the number of ANSPs in each category, the numbers are heavily weighted towards the top end of the graphic. Therefore, with many ANSPs focusing on national priorities rather than customer/airline needs, we can identify the high level of government control and influence as a key reason behind the slow pace of ATM reform.

ANSP structural models



► Reform – what is the incentive?

So is a move towards greater levels of commercialisation the answer to ATM's problems? Private investment in itself is not a guarantee of better performance but it does offer management the flexibility to switch their focus and strategy from 'satisfying government' to 'satisfying customers'.



Of course, government-run ANSPs can be very efficient too; however, ANSPs which fall into the top three boxes on the previous page probably have less commercial incentive to reform, adapt and chase efficiency. Even if we accept that no one model is necessarily superior to the others, or there is no "off-the-shelf" solution to ATM reform, we can identify a number of advantages inherent in the corporate model, which are difficult to achieve when there is a high level of government control.

These advantages are set out in the table below.

The ability to develop and pursue an investment strategy focused on commercial considerations is a key strength of the commercialised model. ANSPs with an enhanced commercial outlook can seek strategic collaborations, driving lower costs, greater efficiencies and a form of liberalisation, which, if encouraged, can be a key driver of ATM reform.

Collaborations such as COOPANS, Co-Flight and iTEC are leading to a harmonisation of ATM systems and a first real step in reducing fragmentation. These collaborations did not come about because of legal or regulatory requirements (though effective regulation is important and can facilitate reform), but rather through an identification of commercial benefit, which can be shared amongst the participating ANSPs, with associated benefits for customers and staff.

The key word behind all of this is: **incentives**. Organisations, be they government entities or commercial entities (and indeed individuals) work best when there is a clear incentive encouraging change. Or put another way – "carrot rather than stick". ANSPs will often not collaborate for the sake of collaboration, particularly where there may be strong cultural or legal differences.

But where they have an incentive to reform, where the balance between risk and opportunity is right and a pathway to overcome obstacles is defined, then commercial and strategic collaboration offers an important stepping stone towards improved performance in the ATM sector. Industrial partnerships are an important first step in commercialisation. Good examples include iTEC, Entry Point North, Co-Flight, COOPANS, FerroNATS, Air Navigation Solutions Ltd, amongst others.

However, delivering ownership reform is not an easy objective to achieve. It requires successful social dialogue and a clear transformation strategy. The regulatory framework is an important consideration as regulatory certainty and stability is important for investment. But perhaps most importantly, governments must be fully behind reform. While national governments may lose some control by setting up corporate structures for ANSPs, the advantages in terms of flexibility and customer focus more than outweigh any potential concerns.



ADVANTAGES OF CORPORATISATION IN THE ATM SECTOR

1. Pace of change	Commercial organisations are continually seeking an advantage. They actively seek and explore change in order to improve.
2. Innovation	A culture of innovation tends to be more easily fostered in a commercial environment.
3. Clear strategies	All organisations need clarity of strategy. Commercial entities have a reduced risk of conflict between national policy and customer interest. In addition, there is less risk of regular strategy changes (strategy not at risk of changing every time the government changes or "popular" issues arise)
4. Investments	Commercial entities have less restriction on investment, tend to have easier access to capital markets and can define their own investment strategies.



Data delivers intelligence – allowing for business, safety and strategic insight

► Digitisation – forcing ATM to reform

Digitisation has already caught hold in the ATM sector, offering both challenge and opportunity. Indeed, it may be the catalyst that finally delivers effective and widespread ATM reform. Virtual/remote towers, System-Wide Information Management (SWIM) and Big Data are just some of the areas where the transformation is already underway. In particular, digitisation enhances cooperation, which will reduce fragmentation and reduce the ability for national interests to override the overall performance of the wider ATM network.

It remains to be seen which of our ownership models is best placed to take advantage of ATM digitisation; however, as commercialised entities tend to be more adaptable, dynamic and are not constrained by non-commercial priorities, these ANSPs already have a strong head start in the digital race.



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► ATM performance – the overall objective

Ultimately, the objective for ATM reform must be improved safety and performance. Air traffic is set to double in the next 25 years – the one certainty is that the existing structures will not be able to cope with such sharp increase. Commercial collaboration, regulation and digitisation will all play key roles in ensuring that ANSPs can meet future challenges.

However, structural reform must also be prioritised to ensure that ANSPs can identify commercial incentives and/or partnerships and take steps themselves to drive reform. While there is no one-size-fits-all model for ATM reform, an enhanced focus on customer needs

and shared benefits can best be delivered through corporate structure as it simply gives flexibility.

Delivering this will be challenging with many unforeseen pitfalls and obstacles – just like when the EC set out to liberalise the aviation market 25 years ago. There is no correct model, just behaviours. Safety, performance and delivering continuity, as well achieving passenger needs, is what the next 25 years will be about. Pan European organisations like EUROCONTROL can offer a real opportunity and platform for cooperation and system-wide benefits and hopefully we can maximise this in the years ahead. ■

Eamonn Brennan was appointed by the 41 Member States of EUROCONTROL to become its next Director General from 1 January 2018. Prior to joining EUROCONTROL, Mr Brennan was the chief executive of the Irish Aviation Authority (IAA) where he was responsible for the provision of air traffic management (ATM) services in Irish-controlled airspace, aeronautical communications on the North Atlantic, and air traffic control at the major Irish airports, as well as the safety and security regulation of the Irish civil aviation industry. He has worked as a management and training consultant in London, Kuala Lumpur and South East Asia working on projects for the private sector, World Tourism Organization and the European Commission amongst others. Mr Brennan has held many leading roles in the air traffic management industry during his career, including member of the Executive Board of CANSO from 2005 to 2011 and global deputy chairman and chairman, chairman of EUROCONTROL Air Navigation Services Board (ANSB) and project director for The Airline Group's successful bid for NATS shareholding. Mr Brennan has over 35 years' experience working across three continents, in over 25 countries, in both the public and private sector.



NATS: the UK's pathfinder for privatising air traffic control

Martin Rolfe
CEO, NATS - United Kingdom

Privatising NATS, the United Kingdom's (UK) primary air navigation service provider (ANSP) was a brave move for a socialist government. Not only had this never been done before – anywhere in the world except Fiji – but this was national infrastructure. Left-wing governments generally prefer to keep national infrastructure in national hands – like the railways and the roads. Indeed, when they were in opposition, the UK Labour party's transport spokesman had famously proclaimed "Our air is not for sale". Sixteen years on, the political nerve that saw the Public Private Partnership (PPP) through to completion in 2001 has certainly been vindicated.

Today the UK system is performing extremely efficiently with among the best punctuality in the world. NATS is a profitable company and, as a result, able to plan and invest with certainty, including the £1 billion technology modernisation programme which we are now midway through.

But it was by no means a smooth flight. There was widespread opposition to privatisation – from the trade unions representing air traffic controllers and pilots, and from the general public, who saw that NATS had a good safety record and their view was 'if it ain't broke, don't fix it'. The lobby activity was strong and vocal.

And there was great political opposition to the proposal when it was tabled in parliament in 1998. The parliamentary Select Committee conducted no fewer than three inquiries into the PPP, worried that commercial drivers would sideline the primary objective of safety.

Its indomitable chair, Gwyneth Dunwoody MP, warned that the government was "made up of ordinary people who make mistakes and the privatisation of NATS is a mistake".

The government maintained that Britain's safety standards were among the highest in the world, and that separating NATS from the Civil Aviation Authority (CAA), whose

Safety Regulation Group ensures compliance, actually strengthened the arrangements.

So the government pushed on. The only way to handle forecast traffic growth was to increase capacity; the only way to increase capacity was to invest heavily in new technologies. And the government was not going to spend £1 billion from the public purse. It originally considered funding all the major projects under the Private Finance Initiative but in the end concluded that this was impractical. The only alternative was borrowing – and NATS could not be sure of getting this money while competing with the rest of the public sector for finance. The government decided that privatisation was the best option.

The new company came into being in the summer of 2001 and the government collected over £750 million in proceeds. Then, just a few weeks later, came the tragic events of 9/11. The subsequent downturn in traffic not only impacted businesses across the globe but also significantly weakened NATS' financial position. This led to a refinancing of the business, which brought in BAA, the airports group, as a 4% shareholder with the government matching BAA's £65 m investment in loan notes.

Since that financial restructuring NATS has been profitable and repaid the loan notes with interest. The government, as its biggest shareholder, has received more than £220 million in dividends, and



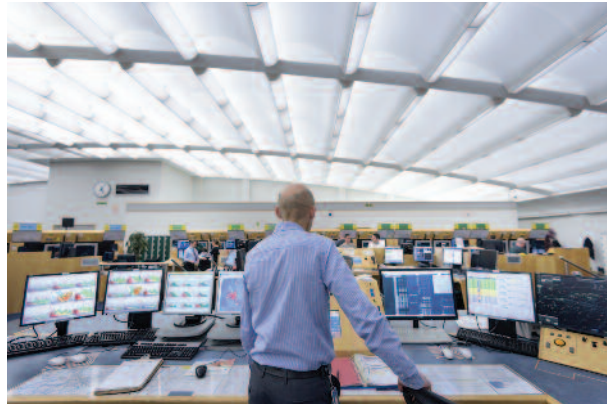
NATS UK Air Traffic Control, Prestwick Centre

not a penny of taxpayers' money has been spent on NATS or on the air traffic service it provides.

NATS is the oldest ANSP in the world. Originally set up in 1962 as a joint and integrated undertaking between the Board of Trade and the Ministry of Defence, the civil side was then absorbed into the CAA when it was established in 1972. It continued as a joint civil/military organisation but by 1992 it was recognised that as a service provider, the civil side of NATS should be separated from its regulator.

At that time privatisation was considered a step too far and, instead, the civil side of NATS was re-organised into a limited company, becoming a wholly owned subsidiary of the CAA in 1996. Close cooperation with the military has continued ever since, but on a formal contractual basis.

Since its financial restructuring was completed in 2003, the shape of NATS' ownership has been largely stable – hardly surprising since the main part of the company is a regulated monopoly and therefore a generally predictable and stable investment. The government continues to own 49% with a golden share to protect key rights such as national security. The government's strategic partner, The Airline Group, holds 42%; BAA (now Heathrow Airport) still holds 4%; and employees own 5% of their company through a share trust.



London Terminal Control at NATS Swanwick Centre

Despite a call for evidence in 2011 to explore options for its shareholding, and another hint two years ago that it was looking once more at its share, the government has so far decided not to sell any of its 49%.

The ebb and flow in priorities for the airline industry has meant several of them have reduced or divested their own shares, with the Universities Superannuation Scheme, one of the largest pension schemes in the UK, buying 49.9% of The Airline Group in 2014. But between them the airlines still hold a majority interest in The Airline Group. For them, privatisation was always about ensuring NATS maintained high standards of safety and service and that its charges represented value for money. They wanted assurance that NATS' investment plans tallied with their requirements and that the right level of investment could be found.

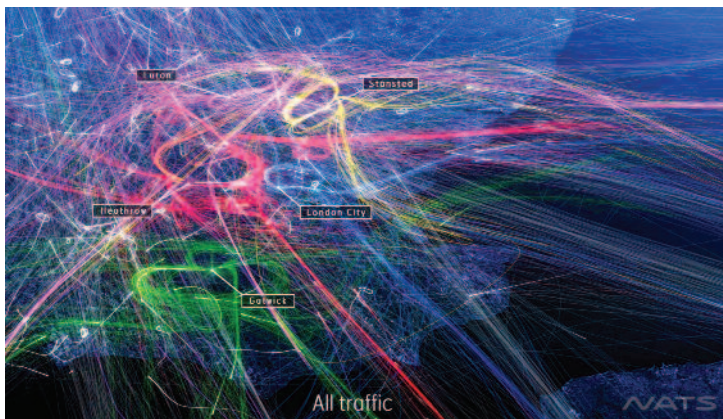
▶ NATS' performance since 2001

The table below illustrates how, on all measures, NATS' performance has improved since 2001 (note: the colours relate to control periods – the regulatory timetable for which targets are usually set every five years). Even Gwyneth Dunwoody, speaking to one senior airline official some years later, candidly admitted that “If I had a hat I'd be eating it” – a very British idiom used when we are surprised and impressed to be proved wrong.

Since the PPP, the company has significantly reduced its costs, reduced headcount by almost a quarter and turned a profit every year.

Contrary to the fears opponents had for privatisation, NATS has actually improved its already good safety performance and sustained that improvement.

	PPP year	CP2				CP3					
	01/02	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17
Traffic (flight millions)	2,001	2,480	2,372	2,172	2,116	2,167	2,126	2,162	2,216	2,278	2,45
Safety (Airprox)											
Risk bearing (Cat A/B)	8	2	0	0	0	0	0	1	1	0	0
Delay seconds NERL attributable (seconds)	109.4	26.8	19.3	4.3	4.3	7.3	1.4	5.5	2.4	4.3	10.9
CO ₂ emissions savings (tonnes)		16,488	35,552	82,880	40,848	134,131	83,028	86,617	481,802	157,156	55,904
Headcount (average)	5,652	5,158	5,084	4,920	4,652	4,533	4,562	4,519	4,342	4,196	4,216
Group profit/(loss) before tax (£m)	(79.9)	66.7	135.5	78.3	106.1	194.5	160.8	157.5	200.3	44.4	125.5



NATS handles over two million flights in UK airspace every year. Of those, over 1.2 million arrive at or depart from one of the five main London airports. That is over 3500 flights every day using six runways.

Punctuality is now running at 99% with delays reduced from an average 110 seconds delay in 2002 to less than 10 seconds in 2017 – which for the number of movements is the best performance in Europe and delivered against constantly increasing traffic, which is now at record levels.

From the outset, NATS and its trade unions set out to establish mutual understanding and a constructive approach to this new way of running the business. Under a “working together” partnership, management and trade union representatives continue to meet regularly.

One of the first major projects post privatisation was to consolidate four existing centres down to two, which was completed in 2010 when NATS' new centre at Prestwick in Ayrshire opened ahead of schedule and under budget. This was a major contributor to the reduction in overall costs and is now enabling mutual contingency and resilience to be developed between Prestwick and NATS' other centre at Swanwick in Hampshire.

NATS is now midway through its £1 billion technology transformation programme and is recognised as a driving force in bringing

the industry together to shape the Single European Sky. A founder member of the SESAR Joint Undertaking and of the A6 Alliance and Borealis Alliance, NATS has been at the heart of the industry's efforts to synchronise activities and research into a meaningful deployment programme. The SESAR Deployment Manager is now up and running and Brexit or no Brexit, NATS intends to continue being fully involved.

The other dimension that privatisation either knowingly or inadvertently freed was NATS' entrepreneurial spirit. Its commercial arm, which is not subject to economic regulation, has won many overseas contracts, and its expertise in managing complex airspace is particularly valued in emerging markets in Asia Pacific and the Middle East.

NATS has also pioneered new technologies such as the fast moving “digital towers”, technology in which the company has now invested and will be putting into service at the first major airport anywhere in the world when London City Airport moves to the new platform in 2020.

► Could all this have been achieved in State ownership?

We don't think so. Quite apart from the caps on borrowing, the nature of government decision-making is such that NATS would not have been sufficiently nimble to make the most of emerging opportunities, had it still been in the public sector.

Other countries around the world have watched NATS with interest. In the United States fearful anti-privatisation lobbies have done their best to misrepresent NATS' record with selective and distorted presentation of the facts – and in some cases, simple untruths. But the facts speak for themselves. NATS takes nothing for granted and works constantly to be best in class. Being in control of its own destiny – and with its employees sharing in its success – is the best thing that could have happened to it. ■



NATS digital remote tower control room

Martin Rolfe was appointed CEO of NATS in May 2015 and is responsible for the 24/7 air traffic operations. He joined NATS as managing director operations in March 2012, overseeing the delivery of NATS' en route business. Previously Mr Rolfe worked for Lockheed Martin where he was managing director of the United Kingdom civil business. Mr Rolfe has worked in the air traffic management field for 18 years, leading large multinational teams across Europe, the United States, the Commonwealth of Independent States and the Far East, with customers including air navigation service providers, central government departments and military organisations.

The privatisation of air traffic control in Italy

Interview with **Roberta Neri**
CEO of ENAV



The Italian air navigation service provider, ENAV, underwent a partial privatisation last year via a stock market listing. Today, the Italian treasury holds 53.3% of the company's shares. Appointed in June 2015, CEO Roberta Neri tells ECAC News about the critical components of this process and assesses its benefits for the state-owned company.

As someone from outside the industry, what have been your key impressions of the air traffic management (ATM) industry during your term?

I joined the ATM family exactly two years ago so I am still a newcomer. Nevertheless, I have a long experience in the regulated utilities sector, such as water and energy, and I must admit there are a number of similarities between this sector and the ATM industry (for example, being in a monopolistic position you are under economic regulation). There are, of course, also some very notable differences. The main ones that come to mind are the constant technological investments required to maintain the highest levels of safety, both through the maintenance and update of existing systems and equip-

ment, as well as through investment in innovation, which we are rolling out together with our European and international partners.

A second fundamental factor is the critical role of our people in guaranteeing the highest level of performance coupled with our paramount goal of safety – a significant amount of resources are dedicated every year to training our people. One thing that struck me when I joined this sector is the strong degree of cooperation and partnership amongst ATM providers internationally with a view to developing the future of ATM together – our partnership in Coflight and Aireon represents just two examples of how we see the future: new technologies, new business models, strong partnerships.

Can you provide us with some information on ENAV's history?

ENAV's activity started almost 40 years ago. It inherits the activity of handling civil air traffic control which, until 1979, was managed by the Italian Air Force and starting from 1982 by a new public company called AAAVTAG (Azienda Autonoma di Assistenza al Volo per il Traffico Aereo Generale).

ENAV, as it is today, is the result of the transformation of that public company into a public body, "Ente Nazionale di Assistenza al Volo", in 1996, and finally in 2001 into a public limited company in the context of the wider process of privatisation of the air transport market.

On 16 May 2014, a decree of the Italian prime minister mandated the sale of up to 49% of ENAV shares to private investors through a private competitive bid and/or an initial public offering (IPO).

On 26 July 2016, ENAV was listed on the Milan stock exchange while continuing its business in compliance with all the relevant national and European regulations. Post IPO, the Italian government holds 53.3% of the company's shares.





In the IPO, you received requests for eight times the available shares. Why is an air navigation service provider (ANSP) an attractive asset for investors?

There are many factors that make an ANSP an attractive investment opportunity. ENAV, like other ANSPs, provides its services under a “natural monopoly” regime and is today one of the best performing providers worldwide in terms of safety, quality and punctuality, all of which represent key facts for the aviation community and for our primary customers: the airlines.

ENAV operates in a regulated business with clear rules defined at European level, based on reference periods of five years at a time, characterised by a risk-sharing mechanism between airspace users and us. This framework provides ENAV with a highly resilient and predictable business model, with a robust cash generation capacity. In addition, ENAV has a strong potential to expand its non-regulated business, especially internationally, capitalising on its excellent performance, its know-how and technological leadership. This type of asset was particularly attractive in the days post-Brexit, when we decided to proceed with the listing.

The combination of stable and resilient cash flows represented, at that time, the most secure place to invest and this, together with an attractive dividend policy, was the main reason why the IPO was eight

times oversubscribed. In conclusion, ENAV has an additional factor of attractiveness: we have seen amongst the ANSPs some forms of shareholding or public-private partnerships – ENAV is the first and only ANSP to be listed on a public stock exchange.

What internal changes have you put in place in ENAV to prepare for privatisation?

The main changes we have put in place in preparation for the IPO are twofold:

- Firstly, we have worked hard in the past years to make the company a top performer. We have prepared a very focused business plan, defined our strategies and prioritised resources (for example, I have streamlined the management line and cut some positions) – this makes ENAV a lean and robust company, ready for the market.
- Secondly, we have worked on all issues related to corporate governance, where we have adopted all the rules, codes and best practices for listed companies in preparation for this important change. We have adopted a number of new policies and procedures, for example on internal dealing, related party transactions and release of sensitive information, all of which are aimed at ensuring that ENAV will comply with all relevant financial market rules. We have also created some new positions in the manage-

ment team with new resources recruited from the market. The listing has also imposed an additional level of guarantee that goes alongside with those already in place: prior to the IPO we introduced a “Risk Control and Related Parties Committee” and a “Remuneration and Appointments Committee” to support the board of directors on specific topics, and we also introduced an internal control and risk management system, for which I am responsible.

Lastly, I think it is important to add that there are a number of safeguards in place to ensure that the Italian State maintains control of a critical and strategic public service like ours: the so-called ‘golden powers’ held by the government ensure that any shareholding above 3% is immediately reported to the competent bodies, which can request more information on the shareholders’ intentions and, if unsatisfied, can block or impose limits on the share purchase. Also, no single non-state shareholder can have a holding of more than 5% of the share capital, and the rights associated to the shares which exceed these limits are blocked.



What are the results more than one year after the privatisation?

ENAV benefits from the increased flexibility brought about by having its shares widely traded in the market, which enables the company to evaluate and pursue development opportunities and investments in its core business as well as in the non-regulated business. A listed ENAV has also materially strengthened its brand and reputation worldwide, opening up further growth opportunities.

Most importantly, the IPO process has equipped ENAV with 'best in class' corporate governance policies and procedures that ensure the business is future proof. Communication is important and we have reinforced our communication at all levels, towards our shareholders, our customers and the media in general. In the past weeks the share price of ENAV rose to above €4.40 with a significant increase over the €3.30 price of the

IPO. We also paid our first dividend as a listed company to our shareholders at the end of May providing an interesting and compelling return to our investors.

How can the airlines benefit from this process?

At ENAV we have always put our customers, the airspace users and, from the wider perspective, the passengers, at the heart of our work. We have been providing our services according to the highest standards in terms of safety and quality of service. As a listed company we need to satisfy even more the needs of our customers in order to safeguard the long-term sustainability of our business.

The vast majority of our members are state-owned or even part of the State structure. What is the role of your State today?

The Italian State, mainly through ENAV's shareholder, the Ministry of Economy and Finance, has always

played a non-invasive but fundamental role enabling ENAV to provide its business in the most effective way, focusing on quality and investments.

The Italian State has never played an active role in the day-to-day management of the company but has supported ENAV in playing its role, especially in the international environment. This has not changed after the IPO, as the Ministry maintains a 53% stake, and I expect the government will continue to play the same discreet role while also benefiting from the new energies coming from the market.

As an example, at the first shareholders' meeting held after the IPO on 28 April 2017, a new board of directors was elected together with a new chairman: of the nine board members, six were presented by the Italian Ministry of Economy and Finance while the other three were nominated from the list presented by our institutional funds shareholders. ■

Roberta Neri was appointed CEO of ENAV in June 2015. She began her career in 1989 in Italsiel and continued her professional experience at ACEA S.p.A., where she was involved with financing, budget planning, management control and strategic planning as chief financial officer. While at ACEA S.p.A. she held the position of member of the board of directors of a number of subsidiaries, such as Tirreno Power, Acea Ato 2 S.p.A., Pubblacqua S.p.A., Aceaelectrabel S.p.A., Aceaelectrabel Produzione S.p.A. and Aceaelectrabel Trading. Ms Neri has been involved with Manesa S.r.l. since 2009, a company providing technical/financial consultancy for structured operations on behalf of financial and industrial investors, initially as chairwoman and CEO and since 2014 as a member of the board. From 2015 to 2017, she was a member of the board of directors of Acea S.p.A. Since 2015, she has been a member of the board of directors of Sorgenia S.p.A. and chairwoman of the board of directors of Techno Sky. In 2017, she was appointed as member of the board of directors of Cementir Holding S.p.A. Ms Neri graduated from Rome Sapienza University with an honours degree in business economics.



The privatisation of security functions

Emanuela Gellini

Manager, Technical Cooperation, Sub-directorate of Security and Defense, French Directorate General of Civil Aviation

Air transport, which contributes to the economic and tourism development of many States, has in recent years become a prime target for acts of terrorism, as confirmed by the various terrorist attacks it has suffered in the past years. In this article, Emanuela Gellini presents the key factors of a successful privatisation of security functions.

A complete legal framework to protect air transport against unlawful acts has been created, starting with the one introduced by the International Civil Aviation Organization (ICAO) through the Standards and Recommended Practices of Annex 17 to the Chicago Convention that apply to all Contracting States of the organisation.

In Europe, the adoption of Regulation No 300/2008 introduced common rules for the Member States.

According to Standard 3.1.2 of Annex 17, each Contracting State must designate an Appropriate Authority to be responsible for security which, in most cases, is the minister in charge of civil aviation. Responsibility for the implementation of security measures is then shared by various entities. The police, customs and, in some countries, the armed forces are tasked, in their respective areas of responsibility, with implementing passenger and cabin baggage screening measures as well as hold baggage and cargo screening measures, with ensuring the protection of aircraft, and with controlling all staff and vehicles accessing security restricted areas.

The vast number of players working under different ministries makes this implementation difficult and demands extensive coordination.

This organisation prevailed in France until 1994 when responsibility for security measures began to be transferred to the airport managers. The latter then outsourced this implementation to private security firms by applying a competitive bidding system.

This privatisation made it necessary to redefine the roles of the various participants and placed an obligation on the Appropriate Authority to ensure that each stakeholder complies with the applicable regulations. For the other government services, the privatisation resulted in refocusing their resources on primary missions such as border control, public safety, and supervising the staff of the private companies via targeted inspections.

Several States, including certain African countries, have already adopted this type of organisation

(Ivory Coast for example) or are currently considering doing so (Egypt for instance).

► The keys to success

There are a number of prerequisites to successful privatisation. Transferring an originally governmental mission to a private entity requires amending national regulations to authorise such a transfer and thus provide a sound legal framework for the process. All roles and responsibilities must then be correctly defined, especially between the Appropriate Authority within the meaning of Annex 17, the police forces, the airport manager and the private security service providers. In this regard, the process for selecting private service providers must involve competitive bidding and be transparent and non-discriminatory.



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View of Ouagadougou airport

The cost of security measures is high and is rising. The question of financing these measures thus arises, particularly when they have been assigned to private organisations. It is important to create a security tax or charge system (depending on the regulations applicable in the country) both to guarantee the durability of the system and its transparency and equity with respect to the contributors (i.e. the airlines). Calculated on the basis of passenger traffic, it should only finance costs induced by security measures, particularly the purchase of security equipment as well as the staff implementing the measures and their training.

The authority designated as Appropriate Authority as per Annex 17 must be reinforced. Being tasked with coordinating and overseeing implementation of security measures, it must have an adequate department and sufficient, well-trained staff to organise or take part in local audits and inspections. In addition, the Appropriate Authority should assist the

police forces hitherto in charge of the security measures with redefining their supervisory role. A quality assurance system will define the general conditions of conducting this supervision.

Finally, the introduction of a system for certifying private security agents is vital to guarantee their level of training.

► The advantages of this approach

One of the main advantages of privatising security measure implementation is that it reduces the number of participants at a given airport and thus facilitates coordination. Countries that have adopted this scheme have therefore had resources in sufficient numbers, entirely dedicated to these tasks and receiving regular training, the government personnel being partly deployed on other public safety missions.

Assigning implementation to private companies also provides

greater flexibility and a better adjustment in the resources posted to checkpoints according to variations in air traffic.

Lastly, for some countries, where a high turnover of government staff represents a real disadvantage, the use of private agents provides a solution to this problem. ■

The French Directorate General of Civil Aviation and the Civil Aviation Authority of Burkina Faso have initiated a technical cooperation on this matter as part of the process of privatisation of security measures underway in the ASECNA (Agency for Aerial Navigation Safety in Africa and Madagascar) States. One of the components of this cooperation is to run a feasibility study. The report of this study should be presented shortly to the authorities of Burkina Faso.

Emanuela Gellini has over 30 years' experience at the French Directorate General of Civil Aviation (DGAC), including 18 years dealing with international affairs and 13 focusing on legal matters. She was appointed officer in charge of technical cooperation in security in February 2017 – after spending 13 years working on the French DGAC's cooperation with the Asia Pacific region. Ms Gellini also participated in various consultancy missions supporting the restructuring of civil aviation authorities (Albania, Thailand), the development of civil aviation codes (Cambodia, Congo, Madagascar, Morocco, African and Malagasy civil aviation authorities) and the drafting of the statutes of a company for the management of Senegalese airports.



ECAC Security Forum

Interview with **Urs Haldimann**
Swiss Federal Office of Civil Aviation (FOCA)

Urs Haldimann has been chairing the ECAC Security Forum since its creation in 2005. As his mandate is coming to a close (a new chair will be appointed in December), Mr Haldimann shares his reflections on the progress achieved in the 12 years of existence of this ECAC group.

What have been the Security Forum’s main achievements since its creation?

Through the close and active involvement of experts from a large number of Member States, observers from other regions and States (in particular from Africa through AFCAC and WAEMU, Israel, Singapore and the United States), and – very importantly – also from the industry, we have succeeded in not only exchanging views but also launching debates on most pertinent subjects, such as behaviour detection, land-side security, effective and efficient communication and insider threat.

These debates are reflected in the conclusions of the Security Forum and initiate more detailed deliberations in the specialist task forces. Through this process, the common understanding of AVSEC priorities has risen throughout ECAC and this is quite an important achievement.

Additionally – although this is not an achievement of the Security Forum itself – I have noted a considerable increase in the participation of female experts in the meetings, which I consider a real added value. Around 9/11, security was clearly dominated by men and the percentage of women contributing to ECAC’s work in security was very low. Today we have reached a share of nearly 50/50 in some meetings. Of course, this also reflects societal developments, but in an area like security this is a remarkable development that cannot be taken for granted.

You have been the chair of the Security Forum since day one. How have you seen this group evolve over the years?

The Security Forum was created by ECAC’s Directors General in 2005 at the same time as the various ECAC security task forces.

I still remember when I was asked to present this new body in ECAC News in 2005/2006. At first I struggled to describe why such a body was really needed. It was meant to bridge the gap between the various ECAC task forces and experts from Member States who were not represented on them. I therefore stressed the Forum’s role as a kind of plenary body which would discuss the work of specialist task forces and identify areas where further guidance and pragmatic solutions were required. I wasn’t sure whether this concept would work, since the Forum was clearly lacking any decisional powers.

What is the main added value of the Forum (notably compared with other security groups)?

The lack of decisional powers – which at first sight appeared as a potential weakness – obliged the ECAC Secretariat and myself to reflect more deeply on the concept. It finally led to a “general store” concept, combining on the one hand the sharing of information from the various task forces and study groups (particularly with representatives who are not participating in those groups), and on the other hand, the possibility to discuss issues of common interest with colleagues without being immediately bound by certain statements. The idea was to build a real forum, in the true sense of the word, where ideas could be elaborated and tested in a laboratory-like atmosphere.

If we look at the active contribution of security experts from the entire ECAC region, from observers and industry representatives, as well as the impact of the Forum’s conclusions on the direction of ECAC’s work, I believe we have succeeded. Since the Romans brought the “forum” as a concept to perfection, I was particularly glad to have the chance to chair my last meeting in Rome.



24th Security Forum in Rome, October 2017

What are the main challenges for ECAC Member States that you see emerging/being discussed during Security Forum meetings?

When talking about new challenges in security, cyber security is normally mentioned quite soon. Fortunately, ECAC considered this threat at such an early stage that it was necessary to explain what it was all about and why it should be tackled. Thanks to the work carried out in this area, the aviation sector is today quite ahead of other sectors regarding measures to be taken against the cyber threat.

Although the ongoing work on this subject will have to continue, I consider another threat will be our main challenge in the near future: the insider threat. Such threat cannot be mitigated by a series of individual measures or technical solutions whose effectiveness can be verified easily. In fact, it requires a concept which includes elements of unpredictability, behaviour detection, background checks, vetting and appropriate communication, embedded in a robust security culture allowing the implementation of a sustainable security awareness programme.

How do you see the evolution of the Security Forum in the years to come?

The Forum will appoint a new chair in December and I am very confident that he or she will guide the work steadily through all kinds of future turbulence. I am glad to hand over the pilot stick at a phase where the Security Forum is considered as a well-established instrument in the AVSEC world and has its place on the agenda of most security experts.

As I said earlier, one of the strengths of the Security Forum is its flexibility with regard to the subjects it deals with, and the highly developed culture of debate. As it has grown over the last 12 years, the Forum will continue to evolve in the future, but ideally without attempting to pursue a fixed long-term concept for future developments. It would be a mistake to try to clearly determine today the direction it should take... In life, and particularly in aviation security, you never know what monster is hiding around the next corner. So we should remain flexible in order to tackle whatever monster may appear; or even better: surprise it from behind! ■



23rd Security Forum in Paris, 2017



21st Security Forum in Paris, 2016

Urs Haldimann began his career in 1984 in the Swiss Federal Department of Foreign Affairs, dealing with different aspects of public international law, mainly in the transport sector. In 1993, he shifted the focus of his professional activities to civil aviation exclusively, starting to work with the Federal Office of Civil Aviation (FOCA). In his present position as head of the legal and international affairs section in FOCA, Mr Haldimann is responsible, inter alia, for setting the legal civil aviation framework in Switzerland and he is in charge of relations between Switzerland and international bodies such as ICAO, the EU and of course ECAC. Furthermore, he oversees facilitation and security policy issues. In this capacity, he was elected vice chairman of the Facilitation Panel of ICAO which was held in spring 2016 and he will hand over the chairmanship of the ECAC Security Forum in December 2017, after chairing the group since its creation in 2005. Mr Haldimann is also currently the chair of the ECAC Medium-Term Objectives Task Force.

▶ Directors General gather in Reykjavik for their 66th Special meeting Reykjavik, 31 August – 2 September



ECAC Directors General of Civil Aviation were generously welcomed by the Icelandic Transport Authority for their annual Special meeting hosted by a Member State. Icelandic Minister of Transport and Local Government Jon Gunnarsson opened the session with an address on the critical value of aviation to national economic and social growth, while Director General Thorolfur Arnason provided further information on the country's recent impressive aviation developments - such as a forecast of 8.5 million passengers travelling through Keflavik airport in 2017 for a national population of 340 000 inhabitants.

Under the leadership of ECAC Vice-President and Director General for France Patrick Gandil, the meeting

focused on key aviation challenges: improving safety, security and sustainability, as well as the global European representation at ICAO. It reviewed the progress achieved on ECAC's work programme in these areas and launched discussions on the status of the ECAC training policy. Alessio Quaranta, Director General for Italy and current Focal Point for Facilitation and Security, was elected second Vice-President by acclamation.

Also in attendance was ICAO Secretary General Fang Liu who delivered a keynote speech highlighting the valuable conclusions reached at the ECAC/EU Dialogue in Rome at the end of June and the increased role of regional organisations in tackling global aviation challenges.

Estonia's Director General Kristjan Telve presented the priorities of the current European Union Presidency held by his country until the end of 2017. Key players from the European aviation community, namely European Commission Director-General for Mobility and Transport Henrik Hololei, EUROCONTROL Director General Frank Brenner, and EASA Executive Director Patrick Ky, shared the most significant developments in air transport, ATM and safety matters since the last ECAC Directors General meeting in May, and actively participated in the discussions.

Portugal will host the Directors General summer meeting in 2018.

▶ ECAC joins ICAO AVSEC 2017 Montreal, 12-14 September

Opened by ICAO Secretary General Dr Fang Liu, the first ICAO Global Aviation Security Symposium brought together aviation security experts to discuss topics such as the evolution of aviation and innovation in aviation security. Deputy Executive Secretary Patricia Reverdy moderated a session on national-level quality control. Joined by Vladimir Chertok, Deputy Director, Federal Transport Oversight Authority, Ministry of Transport, Russian Federation, Adama Niang, Director Aviation Security and Facilitation, Agence Nationale de l'Aviation Civile et de la Météorologie, Senegal, Oscar Rubió, Director Aviation Security, Airport Security Police, Argentina, and John Velho, Chief, Screening Oversight and International Operations, Transport Canada, this session brought the views of regulators from different regions on this important topic.

▶ ECAC contributes to ICAO Global Aviation Cooperation Symposium Athens, 11 October

ECAC Executive Secretary Salvatore Sciacchitano moderated a panel debate on airport development at the second ICAO Global Aviation Cooperation Symposium in Athens on 11 October. Focusing on the theme of "Managing Change: Building a Safe, Secure and Sustainable Aviation Community", the symposium gathered regulators, service providers, operators, industry stakeholders and international organisations, providing them with an opportunity to discuss challenges and opportunities related to their fields and to exchange their experiences in implementing technical cooperation projects.

► **ECAC President speaks at High Level Conference on Cybersecurity in Aviation**
Krakow, 8-9 November

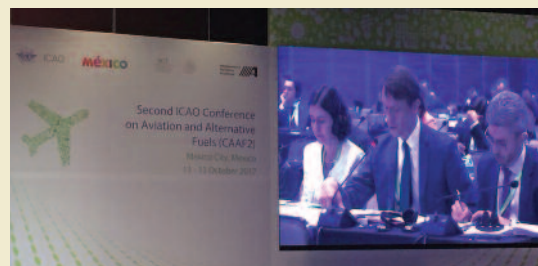
ECAC President Ingrid Cherfils joined a panel of high-level speakers at the Cybersecurity High-Level Conference organised by the Polish Ministry of Infrastructure and Construction, the Civil Aviation Authority of Poland and the European Aviation Safety Agency in Poland. Exploring how the international community addresses cyber security in civil aviation, Ms Cherfils underlined the importance of promoting innovation, seeking global solutions and strengthening cooperation between all stakeholders to address this challenge.

ECAC President Ingrid Cherfils with Director General for Poland Piotr Samson (left) and EASA Executive Director Patrick Ky (right)



► **European participation in second ICAO Conference on Aviation and Alternative Fuels**
Mexico City, 11-13 October

A European delegation of 27 experts participated in the second ICAO Conference on Aviation and Alternative Fuels. Philippe Bertoux, Representative of France on the ICAO Council, presented the working paper on European views and support for the development and use of sustainable aviation fuels on behalf of the European States. The conference successfully concluded with the adoption of the 2050 ICAO Vision for Sustainable Aviation Fuels. You can find out more about the conference at the following link: <https://www.icao.int/Meetings/CAAF2/Pages/default.aspx>



► **ECAC Executive Secretary speaks on safety-security risk management at ICAO Regional Safety Management Symposium**
Tallinn, 17 October

ECAC'S long experience of bringing safety and security closer together by fostering a more coordinated approach was presented by Executive Secretary Salvatore Sciacchitano in a session dedicated to integrated risk management at the ICAO Regional Safety Management Symposium for the European and North Atlantic Region, held in Estonia.

Hosted by the European Commission and the Estonian Presidency of the European Union, the event provided a unique information-sharing opportunity for regulators, service providers, operational personnel and other aviation professionals involved in safety management activities.



High-level speakers included ICAO Secretary General Fang Liu, ICAO EUR/NAT Regional Director Luis Fonseca de Almeida, DG MOVE Director General Henrik Hololei and EASA Executive Director Patrick Ky.

► Events to come

JANUARY

- tbc/ 21st meeting of the European ad hoc group on economic regulation (ADHOC-ECON/21), Brussels

- 8-12/ CASE Project Best Practices for National Auditors – Level 1 training (CASE-BPNA1-LB/1), Lebanon

- 16-17/ 28th meeting of the Study Group on Cyber Security in Civil Aviation (CYBER/28), Paris

- tbc/ 4th meeting between the Coordinating Committee and the Chinese civil aviation authorities, Paris

- 17-18/ CASE Project Regional Workshop on Security Culture (CASE-WSSCL-REG/1), Nairobi

- 22-23/ 43rd meeting of the Guidance Material Task Force (GMTF/43), Paris

- 28 Jan CASE Project Best Practices for National Auditors – Level 1 training (CASE-BPNA1-JO/1), Amman

- 30-31/ 23rd meeting of the Study Group on Explosive Detection Dogs (EDD/23), Paris

FEBRUARY

- 1-2/ 37th meeting of the Training Task Force (TrTF/37), Paris

- 8/ 33rd meeting of the Legal Task Force (LEG/33), Paris

- 9/ 36th meeting of the Common Evaluation Process (CEP) Management Group (CEP-MG/36), Paris

- 13-14/ 69th meeting of the Technical Task Force (TTF/69), Paris

- 15-16/ 19th meeting of the Behaviour Detection Study Group (BDSG/19), Paris

- 15/ 61st meeting of the Facilitation Sub-Group on Persons with Reduced Mobility (FAL-PRM Sub-Grp/61), Paris

- 16/ 53rd meeting of the ECAC Medium-Term Objectives Task Force (EMTO/53), Paris

- 19-23/ CASE Project Best Practices for National Auditors – Level 1 training (CASE-BPNA1-NA/1), Namibia

- 22/ 45th meeting of the Facilitation Sub-Group on Immigration (FAL-IMMIGRAT Sub-Grp/45), Paris

- 27-28/ CASE Project Regional Workshop on Security Culture (CASE-WSSCL-REG/2), Casablanca

MARCH

- 1/ 55th meeting of the Facilitation Working Group (FAL/55), Paris

- tbc/ 6th meeting of the Economic Working Group, Paris

- 15/ EaP/CA Workshop on Cargo and Mail Screening, Paris

- 20/ 181st meeting of the Coordinating Committee, Paris

CASE IN BRIEF

► Best Practises for National Auditors (BPNA) – Cargo in Nigeria

At the request of the Nigerian Civil Aviation Authority (NCAA), a Best Practices for National Auditors (BPNA) – Cargo training course was organised in Lagos, Nigeria, on 21-23 November 2017, for the benefit of eight auditors designated by the NCAA. The eight participants came from the NCAA, the airport operator (Federal Airports Authority of Nigeria), two separate handling companies and an airline.

The course was delivered by the CASE Project Aviation Security Technical Specialist and an expert released by the United Kingdom Civil Aviation Authority. In addition, a Standard Test Piece was delivered to the NCAA as part of the component of the Project dedicated to quality control.



This was the second BPNA – Cargo training carried out by the CASE Project, following an initial course conducted in Lomé, Togo, in July 2017.



► Cargo security in São Tomé and Príncipe: establishing a secure supply chain regime

In September 2017, the CASE Project supported the decision of São Tomé's Appropriate Authority, the National Civil Aviation Institute (INAC), to establish a secure supply chain regime for cargo and mail security. Over four days (18-21 September), the CASE Project's aviation security technical specialist worked hand-in-hand with a core team of security and legal experts from INAC to draft the new regulations.

The national authority's decision stemmed in part from its participation in the CASE Project workshop on cargo and mail security held in Maputo in April 2017, which was jointly organised by ECAC and the Portuguese Civil Aviation Authority under the auspices of the Community of Lusophone Civil Aviation Authorities. The mentoring activity, which is dedicated to cargo security regulations and implementing procedures, was the first national activity to be delivered in this new Partner State of the Project.



The chairman of INAC's board, Eneias Santos (*photo*), stated his full commitment to ensuring that the new provisions become part of the National Civil Aviation Security Programme and that they are implemented in the shortest timeframe possible, as well as to keeping the CASE Project team informed on the progress of this internal legal process.

► Focus on the use of explosive detection dogs in Qatar

The CASE Project conducted another activity dedicated to improving the use of available security equipment, from 12 to 14 November 2017 in Doha, Qatar. The particularity of this national mentoring activity was that it focused exclusively on explosive detection dogs, as one of the screening technologies deployed within the existing security system of the Partner State.



An assessment of the operational training of the K9 teams was carried out by three experts selected for their knowledge in this field and released by the Netherlands and Portugal, along with the CASE Project Aviation Security Technical Specialist. In addition, recommendations were made with respect to regulations.



► Cargo and mail security audit 11-15 September 2017, Georgia

The cargo and mail security audit organised under the auspices of the EU-funded EASA/ECAC-implemented Project for Eastern Partnership and Central Asia countries (EaP-CA) took place from 11 to 15 September 2017 in Tbilisi, Georgia. The main objective of this audit was to assess whether existing aviation security legislation and operational procedures were compliant with international rules and best practice in the field. The audit was based on ECAC Doc 30, Part II Recommendations.



► Cargo and mail security mentoring activity 9-11 October 2017, Moldova

The main objective of this mentoring activity was to review the legal framework in the field of cargo and mail security, and to provide proposals for amending and further developing the regulatory requirements in this field, taking into consideration ECAC Doc 30 Recommendations. In the course of the activity, ECAC also provided the ECAC Standard Test Piece to the Moldovan Civil Aviation Authority and explained the best practices in its use to verify the image quality of x-ray equipment used to screen cargo and mail.



► Workshop on cargo and mail screening 7-8 November 2017, Luxembourg

A workshop on cargo and mail screening was organised on 7 and 8 November 2017 in Luxembourg. The main objectives of this workshop were to explain in detail the various screening methods applicable to cargo and mail shipments, identify the main challenges in the area of cargo and mail screening and provide guidelines on how to mitigate them. The workshop also shared best practices on how best to inspect the quality of screening of cargo and mail shipments.

The workshop was organised by ECAC in cooperation with the Luxembourgish Directorate of Civil Aviation. Participants had the opportunity to observe the implementation of screening procedures at Luxair-CARGO and to observe Cargolux operations. Fourteen participants from seven Partner States took part in the workshop, together with representatives of ICAO, IATA, A4E and EEA who contributed to the activity by sharing their experience.



News from the JAA Training Organisation (JAA TO)



▶ Editorial

Paula V. de Almeida, JAA TO Director

Dear readers of ECAC NEWS,

We are living a very interesting moment in our industry. With the growth of aviation worldwide, new demands emerge and privatisation has been the result in many cases. Whether this is a path to follow, or how to get the best of this trend, is not clear yet. As such, this month JAA TO is providing a course which focuses on the privatisation of airports. Learn about this and other courses here.

▶ The airport industry: should we privatise?

A JAA TO-qualified instructor and aviation specialist lawyer delivers the course “The Airport Industry: International/EU Law, Policy & Practice”. Are you a government or airport authority wishing to attract more airlines or develop a more profitable business model in your airport? Do you need to develop your airport to address the international standards? Or are you a store stakeholder interested in doing business with a public airport about to be privatised? If so, this course is for you.

You can register for this course and gain valuable insight into the legal status of airports, contractual relationships between airport operators and stakeholders, airport regulations and more. The next session takes place on **14- 15 December 2017** at JAA TO’s headquarters in the Netherlands.



Isabelle L., qualified instructor

▶ Other courses for December: add to your agenda!

EASA Air Operations Management Team Seminar – Accountable Manager	11 – 12 Dec
EASA Air Operations Management Team Workshop - Flight Operations & Crew Training	13 – 15 Dec
EU Ramp Inspection Programme (SAFA) - Initial Theoretical & Practical	11 – 14 Dec
ICAO SMS and EASA Management System Requirements – Workshop	11 – 15 Dec
Cabin Safety Design, Certification of Interior Changes & Repairs	19 – 21 Dec
Implementing a Fatigue Risk Management System	20 – 21 Dec

▶ Special training courses

JAA TO's "Preferential Training Package and Training Needs Analysis Service" is a new project, offered exclusively to ECAC Member States' civil aviation authorities, which is running extremely well. Each training focal point from the CAAs who responds to our survey is allocated a JAA TO

training specialist. Together they identify their CAA's training needs and gaps. In this project, JAA TO will customise the CAAs' preferential packages for the year 2018. If your administration has not contacted JAA TO yet, please send an email to director@jaato.com and you will receive a prompt response.

▶ JAA TO corporate news

JAA TO's Foundation Board Chairman elected Vice-President of ECAC

In September, Alessio Quaranta, Director General of ENAC, Italy and Chairman of JAA TO's Foundation Board, was elected Vice-President of ECAC. On 21 September, JAA TO's team welcomed Mr Quaranta and congratulated him on the excellent news.

During his visit to JAA TO's headquarters, the Chairman also conveyed a special message to the team: "You have a great responsibility here, as every aspect of the aviation industry depends on training. Training is the basis of safety and advancement in this industry. Your job is very important and I am glad I can count on you to offer quality on a daily basis", Mr Quaranta stated.

We are proud to have you as our Board's chairman and we wish you every success in fulfilling this new role! You can count on us to keep delivering high-quality courses.



JAA TO officially receives renewed ICAO plaque

On 9 October, at the prestigious ICAO Regional Aviation Training & TRAINAIR Plus Symposium in Astana, Kazakhstan, JAA TO officially received a plaque from the International Civil Aviation Organization (ICAO) for its renewed status as ICAO Regional Training Centre of Excellence (RTCE). During the event, Eric Schoonderwoerd, JAA TO Business Developer and Strategist, moderated a session on "Tools and Technology" for training in aviation – a subject considered highly important at JAA TO as ICAO's leading RTCE in Europe.



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