Airports and the Environmental Burden of a National Status Symbol

Just about everywhere in Europe the way is being cleared, often with a great deal of political effort, for decisions to expand what is still somewhat endearingly described as 'the national airport'. London Heathrow is full and looking for space to expand; in Paris, even the combination of Roissy Charles de Gaulle, Orly and Le Bourget no longer offers enough capacity and eyes are turning hopefully to a new airport situated (well) to the north of the capital. Zurich is looking for more space; Amsterdam Airport Schiphol is hoping finally to get its fifth runway - and, if it has its way, a sixth shortly thereafter - and Frankfurt also has ambitions for further expansion, though it is also counting on cooperation with the airport in Hahn to accommodate the growth in air travel.

This latter development immediately illustrates a second trend, in which over-full 'national' airports lead to regional airports handling more and more flights: after Stansted, the airports in Luton, Cambridge and other localities are taking over London's excess traffic; Hahn, Hanover and Saarbrücken are doing the same for Frankfurt, as is Rotterdam for Schiphol, Charleroi and Bierset for Brussels, and so on. This dispersal of air traffic is intended partly to relieve pressure on the central airports, but also as a means of escaping from them. Low-cost tourist flights and night-time freight traffic, in particular, are eager to move out to the regions, partly to avoid high landing fees and delays, but partly also to circumvent the nuisance of environmental regulations and restrictions. At the same time, local authorities in the regions around Florence, Seville and other places are hoping that expansion of their regional airports will attract more travellers to their area. Consequently, the political battle about the expansion of the 'national' airports is now being duplicated around many of Europe's 'regional' airports. These political battles focus on noise nuisance versus air travel, on risks versus economic growth, and on the question of how these pros and cons can and should be weighed against each other.
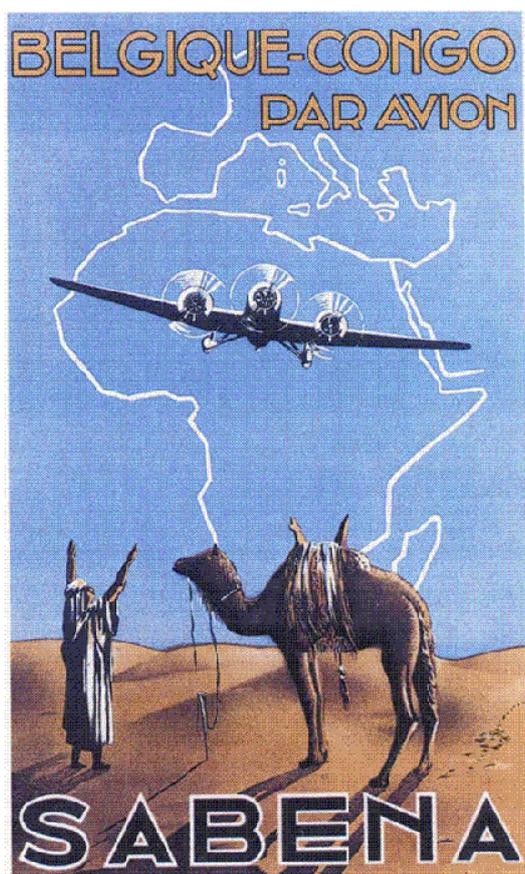
sabena poster from the 1930s to promote the connection Belgium-Congo: a time when people clearly did not mind planes flying over.

(Inter)continental hubs and regional spokes

There was a time when airports were a focus of national pride. The biggest airport in Belgium is still called 'Brussels-National', and no book on the history of the Netherlands fails to mention the building of Schiphol Airport on the reclaimed bed of the former Haarlemmermeer lake. Governments regarded a national airport as a public utility, comparable with the energy supply and road construction. In times of political upheaval in the (former) colonies, the airport also took on the role, both physically and symbolically, of national refuge. In addition, together with the often massive government support to both the national airline and the national aircraft industry, the airport also had to help ensure that every nation-state was able to play its part in this new economic and technological sector. The close geographic and economic ties between Schiphol Airport, Royal Dutch Airlines klm and the aircraft manufacturer Fokker symbolised the tripartite and interwoven national and colonial importance of airport, airline and aircraft industry.

Internationalisation, increased prosperity and privatisation have since led to radical changes in the aviation sector. The term 'internationalisation' refers in the first place to the growth in international collaboration and ties between companies and markets. This has led to a rapid growth in international travel, not least by air. Not only has it become very common to fly to

the United States, Asia or South America 'on business', but employees also fly daily from Brussels-National and Schiphol to London, Frankfurt, Paris, Milan or Copenhagen, returning home each evening. While it is true that within France and between Brussels and Paris there has been some substitution of air travel by train travel using the high-speed tgv, apart from these specific connections, high-speed trains have not (yet?) had much impact on the amount of air traffic.

In non-business air travel, the trend towards internationalisation has been reinforced by the growth in prosperity and the resultant 'democratisation' of air travel. Holidays by air, until the 1970s the privilege of the happy few, have become available to almost everyone. The popularity of a week spent in the Balearics or the Canaries in spring has pushed Palma de Mallorca into the top 15, and Gran Canaria and Tenerife into the top 30 European airport destinations with more than 15 million and around 10 million passengers per year, respectively. By way of comparison, the top European airports, in London and Frankfurt, each handle 50-60 million passengers a year, while the three airports serving Paris handle around 70 million. Schiphol handles more than 30 million passengers, Brussels around 15 million. More and more of these passengers, too, as well as those using the airports at Rome, Vienna, Milan and Prague - the latter gaining rapidly in popularity recently - are embarking on 'long weekend city trips' as tourists. This area of air travel did fall after 11 September 2001, as non-business passengers in particular were understandably deeply affected by those momentous events. Until that time air travel had been the fastest growing transport sector virtually everywhere in Europe, and unless more unforeseen events occur the upward trend is predicted to resume rapidly. It also has to be borne in mind that freight travel by air was barely affected at all by the terrorist assaults in the us.

Internationalisation and the democratisation of air travel have in any event resulted in the large 'national' European airports, in particular, increasingly developing into continental and especially intercontinental centres. In fact, Europe's top airports - London Heathrow, Frankfurt, Paris Charles de Gaulle, Amsterdam Schiphol, followed closely by Paris Orly and London Gatwick, which in turn are followed at some distance by Rome, Madrid en Zurich - are in competition with each other to serve as nodes in an intercontinental network. This by no means implies that these airports are not of crucial importance for the national economies of France, Germany, the uk, the Netherlands, and so on; what it does mean is that their importance, both as a starting point for passengers and above all as a magnet for yet other economic activities, increasingly depends on competition with other airports which are very close even though located in another country. For example, tourists can now easily begin their journey by travelling first to Paris, Schiphol or Frankfurt if they can arrange their intercontinental travel from there more cheaply, more quickly or more easily; the 'national' airport is no longer always the obvious choice. Moreover, companies that operate internationally sometimes relocate parts of their operation from one airport to another at short notice. This is especially easy because, as the crow - or in this case the aeroplane - flies, the top five airports in Europe are each situated less than 500 kilometres from one or two competing airports. Despite the rapid internationalisation and despite European integration, battle be-

tween 'national' interests continues unabated when it comes to air travel. And that battle by no means produces only winners.

The internationalisation process means that the adjective 'national' when applied to airports is at the very least paradoxical. And as regards the political control over those airports, it is a label that is becoming less and less applicable. In parallel with the gradual corporatisation and privatisation of the formerly state-owned national aircraft industries and national airlines, the operation of airports has also increasingly been placed in the hands of the private sector. In fact that privatisation, and the need it has created for increases of scale, has created far more problems for the aviation sector than the disastrous events of 11 September 2001. The aircraft industry has had to stand on its own feet since the 1970s and 1980s, and this has led to increases of scale, international cooperation and, as a corollary, painful business closures all over Europe. The demise of the Dutch aircraft-builder Fokker, to take just one example, made clear how important the aircraft industry was as a symbol of national pride. As a result of that symbolism, economic calculations relating to survival chances, employment and profitability were often overruled by political considerations. Those considerations were and are also decisive factors in ensuring continued government support for airlines. Through all the years of government support for Swissair and Sabena, right up to their failure in 2001, this mix of economic calculation and symbolic considerations was clearly visible.

But back to the airports. Virtually everywhere, their operation has now been placed in the hands of the private sector, albeit sometimes with some government support. The wave of privatisation which washed over once publicly-owned utilities such as energy and communications has thus also reached the airports. The arguments for and effects of that privatisation are also comparable. In listening to the arguments, we hear time and time again that the provision of such utilities no longer forms part of the 'core business' of the government, and that the private sector can moreover do it 'better' and 'more cheaply'. Furthermore, the argument goes, outsourcing puts an end to the odd duality of the government's position in weighing up economic and environmental interests. The effects of privatisation also reflect what has happened in other sectors: airports now operate as businesses just as in other sectors, compete (even) more fiercely, enter into mergers or far-reaching strategic alliances, look to float their shares on the stock market, in turn contract out some tasks themselves, etc. And that inevitably influences the (power) relations with government. When a single company, such as the British baa for example, owns no fewer than seven airports throughout the uk, that company not only enjoys a whole range of advantages of scale, it also has a remarkably strong position in the national and regional political debate on aviation, on its distribution between the various airports, etc. And this once again throws the spotlight on the importance of regional airports: if the 'national airport' is the 'hub', then regional airports are the 'spokes' of a network, from where passengers can be carried to and from the 'hub' by smaller subsidiaries and smaller aircraft.. In the larger European countries in particular, the 'national' airport is increasingly playing the role of an international hub, with the regional airports as satellites.

Schiphol airport as departure point for Friesian cattle to Canada (1949).

Environmental burden

The growth in air travel has also led to a sharp increase in the nuisance it causes. Moreover, increasing environmental awareness has raised the level of sensitivity to this nuisance. The result of all this is that more or less heated political debates are taking place all over Europe regarding the future of this or that specific airport and, sadly to a much lesser extent, regarding the future of air travel itself. The regionalisation of air travel to all manner of what until now have been relatively small airports means that the environmental debate is now no longer restricted to the large airports, but has been literally and figuratively regionalised.

In substance, the debate naturally focuses in the first place on noise nuisance and, to a lesser extent, on the risks posed by air travel. Accidents such as that involving the El Al Boeing in Amsterdam, Concorde in Paris and the accident in Zurich in 2002 play an important role in this latter debate. If aviation no longer occupies a proud and exclusive national position, but is simply a business sector like any other, then it should be treated and assessed on its risks in the same way as the chemical industry, the nuclear industry, etc. It is in fact remarkable - and symptomatic of that exclusive position - how late this now virtually self-evident idea penetrated aviation and came to play a part, albeit extremely gradually, in the decision-making process. The terrorist assaults of 11 September 2001 will undoubtedly contribute to the carving out of a bigger role for safety and risk prevention around airports, though mainly from the perspective of combating terrorism.

The key element in all discussions about airports, however, is the issue of noise nuisance, followed at some distance by environmental issues such as odour nuisance, land use and the greenhouse effect. As regards noise nuisance, very similar discussion patterns are found around virtually all airports. In the first place, it often takes years before there is a consensus on the precise magnitude of the problem. This is partly because noise nuisance around airports is traditionally - at least around the major airports - not measured, but calculated. Put simply, noise contours are defined on the basis of

the number of aircraft movements, and within these contours a certain percentage of the population is regarded as suffering nuisance from noise. But the noise nuisance estimated in this way in no way corresponds with the noise nuisance experienced by those concerned. That is dependent on a host of objective and subjective factors, ranging from the actual noise levels produced by aircraft, the time of day and the wind direction, to all manner of collective and personal characteristics and sensitivities. The result is that the first phase of the environmental battle around airports almost always focuses on setting up a measurement campaign which seeks first and foremost to establish the actual level of noise nuisance and that perceived by local residents. In the Tijdelijk Overlegplatform Schiphol (Temporary Schiphol Consultative Platform) set up by the Dutch government in an attempt to break through the years of stalemate regarding the expansion of the airport, it was precisely the way in which noise nuisance ought to the measured that ultimately proved to be the breaking point.

Another traditional point for debate concerns the expectations regarding the future reduction of noise nuisance by technical means. One of these is changing flight paths so that aircraft spend less time flying over built-up areas and do so at higher altitudes. Another involves the phasing out of noisy types of aircraft. In fact, measures even came into force at European level recently concerning a number of Russian-made aircraft. Optimists believe that these measures will lead to a reduction in noise nuisance in the near future. Sceptics, by contrast, believe that the increase in the number of aircraft movements will more than cancel out any reduction in the noise nuisance produced by each individual aircraft. As is so often the case in environmental issues, the environmental impact per unit may well be reduced, but the overall growth leads to a net increase in that impact.

Another continually recurring item in the debate is 'the length of the night'. The increasing volume of air traffic and the privatisation of airports has pumped up the pressure to turn airports as far as possible into enterprises which operate round the clock. However, the noise nuisance this creates is irreconcilable with people's right to a quiet night's sleep. As a result, political debates are taking place all over Europe on what length of time should be defined as 'night-time', and the courts issue rulings in which they determine the length of the night. In practice, the night-time period around several European airports is set at between 6 and 7.5 hours. Freight traffic and cheap charters are only too keen to make use of the hours 'on the margins' of the night. After local residents have sometimes had to spend years convincing politicians and courts to restrict night-time air traffic at 'national' airports, we are now seeing a clear trend towards simply transferring the noise nuisance to the regions. The economic growth which increased air traffic is expected to bring to the region means that regional authorities are often quite ready to accept more noise nuisance. Moreover, they are often (even) less troubled by active environmental groups. There are virtually no systematic noise measurement campaigns at regional airports. The noise nuisance thus relocates - as is so often the case with environmental misery - to areas less able to defend themselves.

A 'participative mediation approach'

And yet the larger airports in particular - almost all of which, following the wave of privatisations, have become private-sector companies - have evidently gradually become aware of the importance of the environmental debate to their own development opportunities. The websites of all the major European airports devote considerable attention to environmental issues, particularly noise nuisance. Protecting the environment is not only explicitly referred to as an aim, but almost all airports also provide extensive information on their environmental performance. biac, which operates Brussels airport, proudly announces that its environmental report was voted the best in 2001 by the Belgian Institute of Auditors (ibr).

However, there is sometimes a considerable gulf between theory and reality; that gulf is often called 'credibility', and on this point the airports and political authorities carry particularly awkward historical baggage. Precisely because of their exclusive position as the locus and focus of national pride, airports and air traffic have to date been subjected to less rigorous environmental constraints than other economic activities, from agriculture to chemicals. This is reflected among other things in the frequent lack of specific environmental targets and the fact that airports often do not have to acquire an environmental licence, or need only a partial licence. It is only very recently that they have been regarded as enterprises like any other when it comes to the environment; enterprises which, again like any other, must render public account for their environmental performance.

It is precisely on this latter point that a sea change appears to be taking place. Experiments involving a much more 'participative approach' have been carried out around a number of major European airports, including Frankfurt, Zurich and Schiphol. The central plank of this approach is not to heighten the potential conflicts between the airport and its surroundings, but rather to mediate, to arbitrate between the various interests. Simply allowing the conflict between the (mainly) local burden imposed by an airport and the (mainly) national benefits it brings to escalate only leads to complete political stalemates. Several airports therefore resort to 'mediation techniques', in which all those involved are in the first instance invited to sit around the table and look at whether particular opposing interests can be reconciled or even traded off against each other. As a means of conflict management, this approach is not new; similar approaches have been and are used, with more or less success, in other politically tricky issues such as the choice of location for storing nuclear waste, or in difficult discussions at regional level between the interests of agriculture and the natural environment.

The Temporary Schiphol Consultative Platform referred to earlier was an attempt to break the years of impasse regarding the expansion of Schiphol by facilitating dialogue between all concerned: the airport, public authorities, the business community, local residents and environmental groups. As also stated, the Platform failed to achieve its aim; after initially hesitating about whether or not they should take part at all, the environmental movement and local residents ultimately stormed out of the consultations. Noise nuisance, and especially the way in which it should be measured and monitored, proved the breaking point, though it was by no means the only area of

dispute. It remains to be seen whether the mediation approach in Frankfurt, Zurich and elsewhere proves more successful.

This is by no means self-evident. Historically, the aviation sector has been able to rely on political support because of its close ties with national economic and technology policies; and today, aviation still plays a key role in national economies and can therefore count on solid political support. It is therefore no surprise that the Dutch government to this day insists that in expanding Schiphol, economic goals can go hand in hand with environmental targets. At the same time, figures and scenarios irrefutably demonstrate the unfeasibility of this 'dual mission'; if the environmental targets are to be achieved, particularly with regard to noise, there is ultimately no choice but to restrict the volume of air traffic. It may be that the government will ultimately decide to drop its environmental targets. After the failure of the mediation approach, the recently submitted bill for a new Aviation Act in fact reinforces the exclusive position of airports rather than treating them as ordinary businesses, since safeguarding the ability of Schiphol to compete with other European airports is a key aim. And so we see that airports are still a source of national pride, for which a degree of environmental impact is evidently acceptable.

pieter leroy

Translated by Julian Ross.