



## TENTH SESSION OF THE STATISTICS DIVISION

Montréal, 23 to 27 November 2009

### Agenda Item 4: Airport traffic data

#### ACI TRAFFIC FORECASTS - FACTORS BEHIND THE NUMBERS

(Presented by the Airports Council International)

##### SUMMARY

This paper examines some of the airport-related factors expected to impact the demand for air travel over the next 20 years. The data for this paper was provided by a recent ACI survey of some 250 airports. Familiarity with these issues is essential to understanding ACI's concern that there will be a large "capacity gap" in the near future. With demand outstripping airport infrastructure capacity, the resulting congestion would not only degrade the travel experience, but limit the aviation sector from fulfilling its vital role as an engine for global economic development.

### 1. INTRODUCTION

1.1 ACI presented IP/8 for the ICAO Statistics Panel (STAP/14) to describe the methodology and the objectives of the short, medium and long-term forecasts which are produced for ACI annually by the firm DKMA. This IP examines more closely the factors behind those forecasts which are expected to impact the demand for air travel over the next 20 years.

### 2. CAPACITY CONSTRAINTS

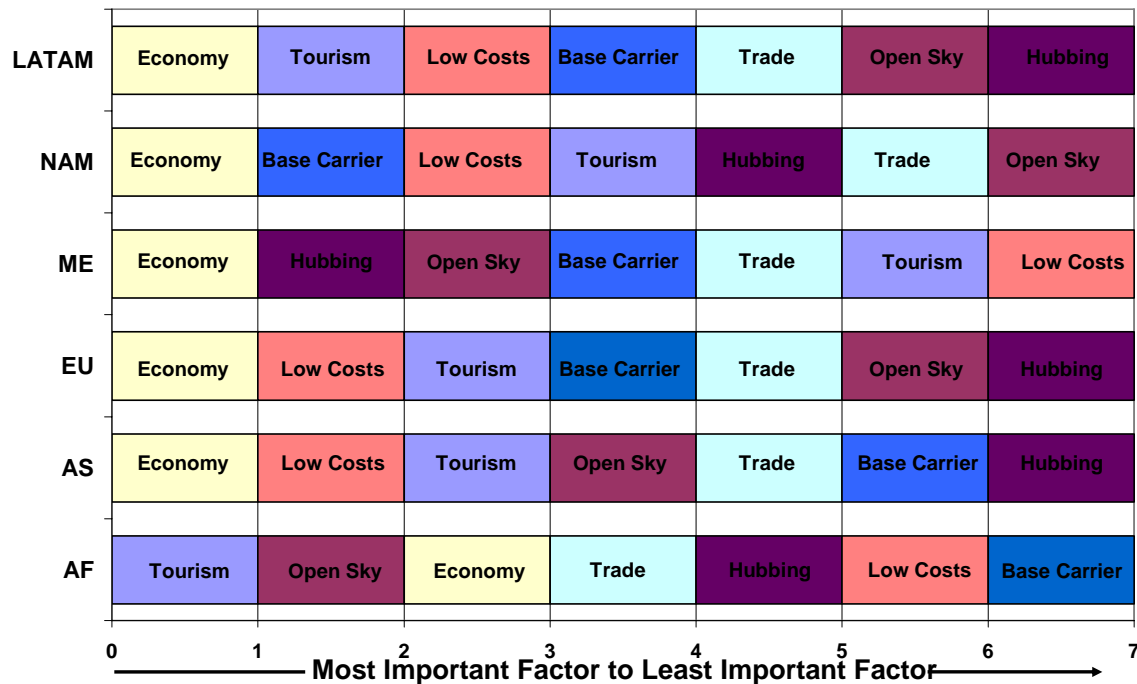
2.1 As part of the annual forecast questionnaire in 2007, some 250 airports representing over 50% of current global traffic were asked about the constraints they faced in building new capacity and what form these constraints took. Results were listed in IP/8: among the major constraints were lack of terminal and runway capacity, noise issues preventing airport expansion and air traffic control inefficiencies. We could also add to this list political and environmental obstacles to building new airfield infrastructure and greenfield airports in many States.

2.2 These constraints, when analyzed in terms of their collective impact, can contribute to a “capacity-gap” where airport capacity may fall short of future demand, creating, at minimum, congestion, and at maximum, diverting traffic to other airports or to other transport modes. This capacity shortfall was calculated at approximately one billion passengers in a 2006 ACI study, which compared planned airport capacity to passenger forecasts for the year 2025. This shortfall would not necessarily indicate that one billion passengers would not fly at all: there would still be underutilized airports in the global system which might absorb some of the additional demand. But ACI publicly stressed that the capacity gap, particularly in North America, Europe, and certain parts of the Asia/Pacific region, was a serious concern and that it would take considerable political will to remove capacity constraints at many already-congested facilities. ACI-Europe, for example, estimated that virtually every major airport in the European region would face serious congestion by 2020.

3. POSITIVE FACTORS INFLUENCING DEMAND

3.1 In an effort to analyze other factors which affect future demand for air travel, ACI and DKMA surveyed the same 250 airports with a list of seven potentially positive factors on demand and nine negative factors. The results across the six regions are expressed in the chart below.

**Ranking of Positive Influencing Factors**



3.2 In terms of positive factors, participating airports were asked to rank 7 factors by importance; 1 being the most important and 7 the least important. As can be seen in the illustration the various regions have different rankings except when it comes to the economy which is seen as the most important factor in all regions except Africa who instead ranks tourism as its number one driver (not at all illogical, seeing how important tourism is to many African economies). In most other regions, except the Middle East, tourism is seen as an important factor. Hence these two traditional variables which have historically fuelled growth in the industry are still anticipated to rank high in the future by airport operators. (And indeed, all the econometric modeling that underpins air traffic forecasts is based on the tight link between traffic and GDP. Over the past 50 years, air traffic has consistently grown about twice as fast as global GDP.)

3.3 It is interesting to note that in four regions, the low cost carrier (LCC) expansion ranks high (either 2<sup>nd</sup> or 3<sup>rd</sup>) except in the Middle East and in Africa. Given that LCCs have so far not really taken hold in those two regions, those results were to be expected. In the U.S. and particularly in Europe, the rise of LCCs, connecting many ‘secondary’ airports has brought has contributed in recent years to growth rates not commonly seen in these “mature” regional markets. The LCC boom has had a positive effect on many previously underutilized airports and has also brought increasing numbers of leisure travelers to many regions in Europe, spurring economic growth and enabling large numbers of citizens to maintain a second residence for holiday visits.

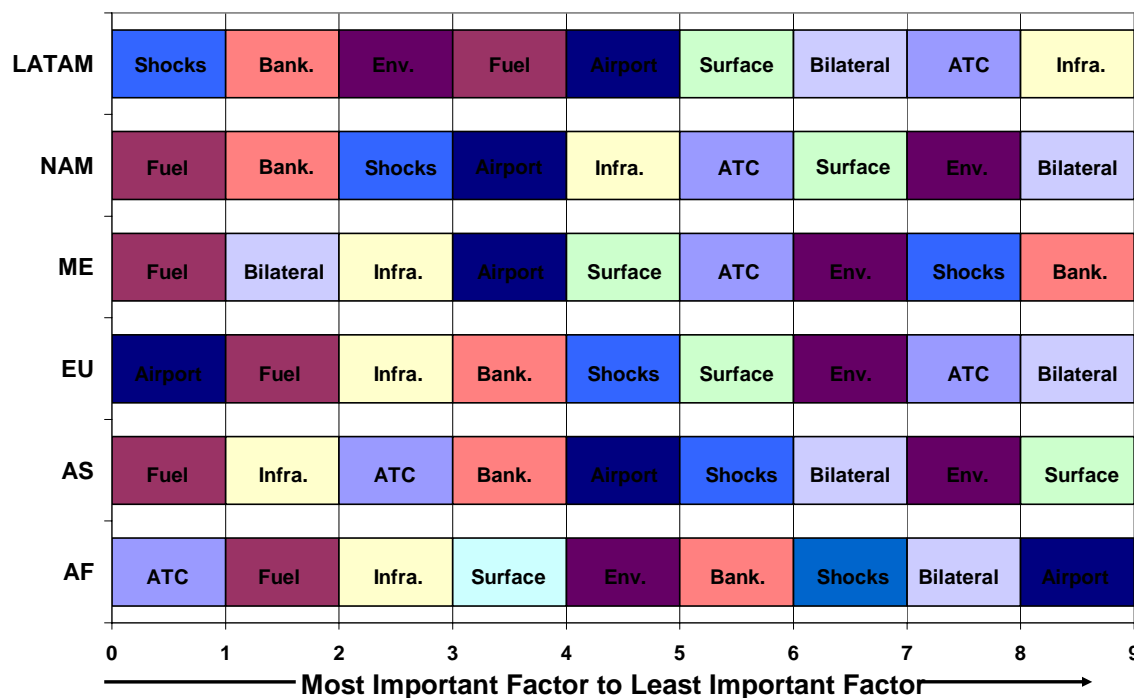
3.4 Factors which are important for the Middle East, aside from the economy, are hubbing activity, open skies agreements and expansion of base carrier. Since the region tends to focus its development around long-haul activity serving, among other things, 6<sup>th</sup> freedom passengers it would seem consistent to have these elements rank high since they are the cornerstones of regional aero-political policy. Some markets, such as the United Arab Emirates, have signed some open skies agreements and lifted foreign ownership restrictions. ACI has consistently argued that airport operators should have a voice in open skies negotiations. While liberalization may stimulate demand, open skies agreements would have only limited value if key airports in the signatory States had no excess capacity to meet the increased demand.

3.5 It is interesting to note that in North America, the influence of the base carrier ranks second among priorities. This result undoubtedly flows from the fact that many U.S. and Canadian airports are considered “fortress hubs”, often having a majority of flights operated by a single carrier. The merger of Delta and Northwest immediately created the world’s largest airline, and for many U.S. airports, including Atlanta, Minneapolis-St. Paul, Detroit, Memphis, Salt Lake City and Cincinnati meant that a ‘mega-carrier’ had the vast majority of operations. Also analyzing the rankings for North America, it is not unusual that open skies ranked last among the factors, since the U.S. has scores of open skies agreements in place and Canada an increasing number as well. For the U.S. in particular, there are not that many important foreign markets left to liberalize.

#### 4. **NEGATIVE FACTORS**

4.1 The reverse of the analysis above is to evaluate factors which will dampen demand for air travel. Airports were asked to rank 9 elements by order of importance where 1 is the most important factor and 9 the least important. In this case, there is no clear consensus: different regions clearly have different concerns when it comes to what could dampen their prospects.

### Ranking of Negative Influencing Factors



4.2 For three regions, fuel ranks as their number one concern. Those three regions are North America, Asia and the Middle East. For the last two regions, given that a significant portion of their operations centers around long haul (where fuel tends to be a bigger cost center) this is a logical result. In North America, aside from fuel, airport operators are also concerned about bankruptcies and external shocks. With a number of large carriers operating under bankruptcy protection (at the time of the survey), one would expect this result.

4.3 In Europe, airport operators were more concerned about airport competition than fuel, and insufficient airport infrastructure ranked third. Low cost expansion has without doubt benefited passengers but from an airport point of view, since in some cases low cost have established their operating bases in secondary airports, this has meant overlapping catchment areas (e.g. “Brussels South” – Charleroi) and increased competition between airports. Similarly, many Europe’s largest airports are in close physical proximity to one another and compete fiercely for transit passengers and cargo. Conversely, in Africa, where airports tend to be widely scattered geographically, competition among airports was the least important factor. As for infrastructure, most large European airports are either facing now, or in the near future, infrastructure limitations.

4.4 One factor which will take on much more significance in the near future is the environment. In Europe in particular, there is increasing public concern over greenhouse gas (GHG) emissions from the aviation sector. While estimated to comprise only 2 to 3% of all GHG emissions, there is a wide public perception that aviation is the fastest growing contributor to the problem of global warming. There are two negative influences at work behind this perception, both having the potential to cut demand for air travel. The first is a backlash about perceived “frivolous” air travel: the same green forces which are encouraging consumers to buy locally-grown produce is advocating “local holidays” taken by rail or automobile instead of air trips to destinations farther afield. The second source of concern is that air travel will be the target of new taxes which will flow directly to governments, and not

necessarily be invested back in the industry. This will raise the price of air tickets, which are already subject to a proliferation of taxes in many States.

4.5 ACI and IATA and other aviation stakeholders are hard at work within the ICAO framework to address environmental concerns. ACI's most recent World Assembly also adopted a resolution with a target of having member airports achieve carbon neutrality within the next several years.

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