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The Passenger Potential of Twente Airport

Jan Veldhuis

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## 1 Introduction

The Province of Overijssel is about to take a decision on 16 June 2010 about the future development of Twente Airport. Based on its own assumptions, the Province foresees in 2020 a range of 190.000 to 5.200.000 passengers. This estimation has not yet taken into account a further growth until 2030. For the analysis in the Cost Benefit Analysis, carried out for the year 2030, the Province has assumed a passenger number of 1,2 millions, together with 30.000 tons of air cargo.

The Vereniging Omwonenden Luchthaven Twente (VOLT-Twente) has asked SEO Economic Research in Amsterdam to bring out a second opinion on the plausibility of these projections. Given the very short time available for this analysis, no new model computations have been made, nor have new data been collected and used. Nevertheless, this second opinion entails a short analysis of realistic order of magnitude of the passenger potential to be expected.

It is acknowledged that there are large number uncertainties for Twente Airport, even larger than for bigger airports, such as Schiphol. We will therefore not focus on the most likely development, but rather explore the upper ranges of the possibilities Twente Airport may have in the future. It is particularly relevant how the indications of the Province of Overijssel are related to the upper ranges estimated by us.

This short report summarizes our findings. The subsequent paragraphs address the main driving factors, as well as conclusions on the realistic passenger potentials for the airport. We will also, where relevant, in this second opinion compare our assumptions with similar assumptions made by the Province of Overijssel<sup>1</sup>.

See the note provided by "Gedeputeerde Staten (GS) of the Province of Overijssel" of 9 June 2010.

## 2 The catchment area of Twente Airport

We have analysed the passenger potential of the airport by looking to four categories of driving factors:

- The propensity-to-fly
- The size of the catchment area
- The market penetration ratio
- The market growth

The Province of Overijssel is also considering these four categories as the main drivers and hence there is no difference in this respect between our analysis and the one of the Province.

#### 2.1 The "propensity to-fly in 2003

Starting point of the analysis is the '*propensity-to-fly*' (PTF): how often does "the average Dutch" make a trip by air? More specifically: how often does "the average inhabitant of the region around Twente Airport" make a trip by air? For this question the following table<sup>2</sup> is illustrative.

Number of return trips by air from and to the Netherlands (mln., 2003)	Schiphol	Trips per person (PTF)		
Non-business (Dutch residents)	4,3	1,5	5,8	0,36
Non-business (foreign residents)	2,8	1,0	3,8	0,24
Business	4,4	1,5	5,9	0,37
TOTAL	11,5	4,0	15,5	0,97

The aviation market can be broken down into relevant market segments. An important distinction is the travel purpose: business or non-business. Non-business trips include holiday trips, but also visits to friends or relatives are included in this category. For the non-business segment is it moreover relevant whether it refers to Dutch or foreign residents. More precisely, "Dutch" residents are people living in the

<sup>&</sup>lt;sup>2</sup> SEO Economisch Onderzoek (2006): "Economische Effecten Schiphol", table 2.3 and 2.4. The table in the main text is a further elaboration of these tables.

tourism".

Netherlands, who make a trip by air to destinations in the rest of the world, also to be indicated as "outgoing tourism". "Foreigners" are residents from the rest of the world, making an air trip to the Netherlands, also to be indicated as "incoming

A significant part of the air trips to and from the Netherlands is handled via Schiphol Airport. In total this corresponds with 11,5 million return trips in 2003. One return trip corresponds with two passenger movements: the first one at the departure, the second one at the return. In total this corresponds therefore with 23 million passenger movements, which depart from and arrive at Schiphol. This figure does not include the connecting passengers at Schiphol, also a significant segment, over 40% of total traffic.

However, air trips to and from the Netherlands are not only handled via Schiphol. Although the Randstad area (around Amsterdam and Rotterdam) mainly uses Schiphol, residents and visitors to the rest of the Netherlands use also other airports in the Netherlands (such as Eindhoven, Rotterdam and Maastricht), but even airports in adjacent Germany and Belgium (such as Weeze, Düsseldorf, Brussels and Charleroi). In total this corresponds with another 4 million air trips. Adding this to the users of Schiphol, one may count 15,5 million return trips to and from the Netherlands, corresponding with 0,97 trips per person per year (total population equals about 16 million in 2003).

A part of this segment refers to outgoing tourism, 5,8 million trips in total, 0,36 per head of population per year. This means that the "average Dutch resident" makes 0,36 times per year a holiday trip by air (about once in every three years). The incoming tourism corresponds with 2,8 million trips, 0,24 incoming trips per head of population. Finally the business traffic: 5,9 million trips, 0,37 business trips per head of population. Generally, these variables indicate the '*propensity-to-fly*' (PTF), in total 0,97<sup>3</sup> trips per head of population in the Netherlands.

There are several studies made on this '*propensity-to-fly*', which have been considered by the Province. LEK assumes the same order of magnitude for the PTF, although it estimates the PTF for Germany somewhat higher (1,20) than the PTF for the

This figure does not correspond with figures indicated by Prof. Jaap de Wit and Prof. Carl Koopmans in the Volkskrant of 9 December 2009. They indicate a '*propensity-ta-fly*' of 0,25. They take a smaller – however also correct – definition. The PTF-variable is also used to indicate how many Dutch residents make non-business trips by air. They take the 4,3 million trips (see table above) as the starting point. Dividing this by a population of 16 million, the result is 0,27, in the article rounded to 0,25. In this analysis however, we cannot confine ourselves to this segment alone and we have to include also the other travel purposes as well as the parts travelling via foreign airports. Therefore, we take for the PTFvariable the broader definition, summing the PTF up to 0,97.

Netherlands (a bit lower than 1,00). ADECS and DHV come to similar indications. Based on these studies, The Province assumes for the PTF in 2003 values between 0,99 to 1,09. These are somewhat higher than our estimation of 0,97, but regarding the uncertainties this difference is not fundamental.

Can these PTF-indications be applied for the region around Twente? This is not the case, as the described market segments are not equally distributed over the Netherlands. Taking the outgoing tourism (the Dutch residents) one must acknowledge that the average resident of the Randstad takes an air trip more often than the average resident from the rest of the Netherlands. This can be concluded from enquiries among passengers using Schiphol, who have been asked for the region of their origin. From this it is estimated that the number of outgoing non-business trips of the residents from the Twente region is about 60 to 80% of the average in the Netherlands<sup>4</sup>. The non-business PTF of the residents of Twente is therefore not 0,36, but it is in the range of 0,22 to 0,28 per head of population. In other words: they take a holiday by air once in about four years.

The distribution of incoming tourism over the Netherlands is even more un-equal. The incoming tourism is mainly orientated towards the Randstad and within the Randstad particularly towards Amsterdam. Although Twente is an excellent tourist region and it is visited frequently to make walks and cycling tours, the number of tourists by air is estimated to be negligible.

Finally, also the business traffic is mainly orientated towards the Randstad area. The average number of business trips from and to Twente is estimated to be around 50 to 70% of the average in the Netherlands, corresponding with 0,18 to 0,26 per head of population,

In summary, one concludes that the '*propensity-to-fly*' (PTF) in Twente is not 0,97, but in the range of 0,40 to 0,54 trips per head, as is summarized in the table below.

Number of return trips by air per head in Twente, 2003		
	Netherlands	Twente
Non-business (Dutch residents)	0,36	0,22 - 0,28
Non business (foreign residents)	0,24	
Business	0,37	0,18 - 0,26
TOTAL	0,97	0,40- 0,54

<sup>&</sup>lt;sup>4</sup> This figure includes the use of residents from Twente of other airports than Schiphol (such as Münster /Osnabrück).

Also other studies conclude a lower PTF for Twente in comparison with the average of the Netherlands. ADECS (in coordination with the RPB) estimates a PTF for Twente of 0,75. However, these differences have not been taken into account by the Province.

#### 2.2 The size of the catchment area

The Province of Overijssel distinguishes two "slices" in its catchment area. Firstly, it identifies the area, which is to be reached within about one hour travel time from the airport. It is moreover acknowledged that this area becomes larger if the quality of access to the airport, measured in speed and travel time, improves. The second "slice" refers to the area that can be reached between one and two hours from the airport. One may represent the two slices by drawing circles of 75 and 150 kilometers respectively, as is done in the map below. This map gives an impression of the catchment area of the airport.



Within 75 kilometer one can further identify the following areas, with indications on their size, measured in numbers of inhabitants.

- Twente: approx. 650 thousand inhabitants
- Rest of the Province of Overijssel: approx. 500 thousand inhabitants
- South Drenthe: approx. 375 thousand inhabitants
- North East Gelderland: approx. 1 million inhabitants
- Adjacent Germany (Rheine /Münster): inhabitants: PM

The Dutch part of this area corresponds therefore with approximately 2,5 million inhabitants. This number excludes the German part of this area.

Between 75 and 150 kilometers one may count much larger population potentials. Only the Dutch part corresponds with approximately 8 million inhabitants. In the German part one may include the "Ruhrgebiet", with even 20 to 25 million inhabitants. In this second slice one can further identify the following areas:

- Northern part of the Netherlands: approx. 1,4 million inhabitants
- Provinces North Holland and Flevoland: approx. 3 million inhabitants
- Province Utrecht: approx. 1,2 million inhabitants
- Rest of Gelderland /Eastern Brabant /Northern Limburg: approx. 2,3 million inhabitants
- Adjacent Germany (Ruhrgebiet): over 20 million inhabitants

The Province assumes a large range of population, particularly within one hour travel distance between 2,4 to 4,9 million inhabitants. Regarding the small uncertainties, this is remarkable. Possibly this large range may be attributed to differences in assumptions on the quality of land side infrastructure and access to the airport. Our approach is admittedly less accurate<sup>5</sup>, as we have drawn rough circles. However, despite of the lower accuracy, there are no fundamental differences in the assumptions of the population potentials between us and the Province.

#### 2.3 The market penetration ratio

Not only the size of the catchment area is relevant here, but even more the probability that Twente Airport is chosen from these regions for trips by air. This probability is larger for regions relatively close to the airport. It is the largest for the

<sup>&</sup>lt;sup>5</sup> SEO has indeed not quantified the population potential in the Münsterland, estimated by the Province at 1,7 million. Regarding the size of this area and the expected market penetration ration, the expected passenger potential for Twente Airport from this region is limited, 50 to 60 thousand passengers in 2030 at most.

region of Twente itself (around Hengelo, Enschede and Oldenzaal, generally about 10 kilometers from the airport). The probability becomes smaller for the more distant regions within 75 kilometer, and the smallest for the regions at more than 75 kilometers from the airport. In general, the airport choice probability depends on the following factors:

- Distance to Twente Airport compared to the distance to competing surrounding airports
- Network quality (number of destinations and frequencies) of Twente Airport compared to the network quality of competing surrounding airports
- Airfares from Twente Airport compared to the airfares of competing surrounding airports

Therefore, the probability that a choice is made for Twente Airport is the biggest in the Twente region itself. The airport has there the clear advantage of the close distance, relative to other airports. This advantage decreases however for the other regions, even within 75 kilometers. It is – for instance – much smaller in the regions Drenthe and Gelderland, as Twente has only a small advantage in distance, compared to the much larger Schiphol. Furthermore, in the German Münsterland there is strong competition from the airport of Münster /Osnabrück.

The probability of a choice for Twente Airport in the "slice" between 75 and 150 kilometers is small, if not negligible. There is in the Northern part of the Netherlands hardly an advantage of Twente Airport with regard to distance, compared to Schiphol. The advantage is even negative in regions such as North-Holland, Flevoland and Utrecht. In Gelderland, Brabant and Limburg there is moreover the competition with airports like Eindhoven, Weeze and even Brussels. The choice for Twente Airport in the Ruhrgebiet is not realistic, given the location of airports like Düsseldorf, Cologne, Münster /Osnabrück and even Frankfurt, with has an excellent access from the Ruhrgebiet by ICE-trains.

The table below gives an impression of the market penetration, estimated by us in distinct points in the hinterland. These estimations are made, using theoretical airport choice models, based on the variables listed above.

	AMS	ENS	EIN	FMO	NRN	DUS	DTM	CGN	FRA
Within 1 hour									
Hengelo	35%	4,9%	3%	3%	2%	42%	2%	5%	4%
Zwolle	50%	1,0%	3%	1%	2%	37%	1%	3%	2%
Emmen	39%	1,7%	2%	4%	2%	41%	2%	5%	3%
Arnhem	42%	0,6%	5%	1%	4%	39%	1%	5%	3%
Munster	11%	1,2%	1%	8%	2%	55%	5%	8%	8%
Between 1 and 2 hours									
Groningen	66%	0,9%	3%	2%	2%	21%	1%	3%	2%
Amsterdam	89%	0,2%	2%	0%	1%	7%	0%	1%	1%
Utrecht	74%	0,3%	4%	0%	2%	15%	0%	2%	1%
Den Bosch	54%	0,3%	10%	0%	3%	26%	0%	3%	2%
Duisburg	7%	0,2%	2%	1%	3%	72%	2%	8%	6%

There are large differences with respect to the market penetration ratios between the Province and our approach. While the SEO-approach concludes market penetration ratios from Twente Airport (ENS) of 1 to 5% within one hours travel distance to the airport, the Province assumes ratios ranging between 15 and 35%. Even in the own Twente region, the airport can in our view not expect a share of more than 5%<sup>6</sup>. Background is that the airport does not offer flights for the majority of the market (such as intercontinental and many European trips). Furthermore, even if the airport would offer specific connection, still the attractiveness of larger airports may be larger<sup>7</sup>.

There are also large differences in the catchment area at a distance more than 1 hour from the airport. While the Province assumes a variation in market penetration ratios between 0 and 3%, our analysis does not show ratios of over 1%. Although the differences in ratios are small, the effect on passenger numbers is large. Particularly in the German Ruhrgebiet, with approximately 20 million inhabitants, little differences in market penetration ratios lead already to large differences in passenger numbers.

The Province assumes significantly larger ratios, as shown above, which are further motivated in table 5 of its note<sup>8</sup>. This table compares passenger numbers of selected airports with population potentials of their respective catchment areas. This analysis derives market penetration ratios, which range - for the catchment area within 1

<sup>&</sup>lt;sup>6</sup> It has been taken into account that residents from the Twente region may have a specific preference for "their own" airport, as they may adapt their travel behavior to the product the airport has to offer. If such a preference would not exist, the market share of the airport in the own region would even fall back to 3%.

It has not taken into account that Dutch passengers may have (negative) preferences for foreign airports. That may decrease the market share of Düsseldorf and hence increase the share of Twente Airport. On the other side, such an effect would also decrease the preference of Twente Airport of German passengers. As we analyse possible market penetration ratios for 2030, with possibly further European (and Euregio-) integration we have not further taken into account such "boarder" effects

<sup>8</sup> Note of 9 June 2010.

hours distance - from 2.7% for Maastricht Airport to even 16% for the airport of Münster /Osnabrück. The airports of Eindhoven and Weeze show market penetration ratios of 15 and 10% respectively. The latter two airports are bases of Ryanair. These - and other low cost airlines – charge in many cases extreme low fares, and hence such airtports have been able to grow fast to levels of over 1 million passengers. This does not only lead to high penetration ratios in the own region (resp. Eindhoven and Nijmegen and surroundings), but particularly to high ratios in more distant regions. This is confirmed by the fact that many passengers from the Randstad have found their way to Eindhoven and Weeze, despite of the vicinity of Schiphol. The analysis of the Province is clear and transparent, but one can not apply such penetration ratios to Twente, as we assume that Twente is no basis for such a low cost carrier, as is motivated in paragraph 4 below.

Groningen Airport has in the analysis of the Province a market penetration ratio of 5.8%. It is not a basis of a low cost carrier. It has 190 thousand passengers, but this number includes transit passengers, who make just a transit stop at the airport<sup>9</sup> and who cannot be counted to the catchment area of Groningen. The actual ratio for Groningen is therefore lower than the 5.8% mentioned, possibly in the same order of magnitude of the ratio for Maastricht (2.7%). Such values are considered by us as realistic for Twente Airport that may be able to achieve market penetration ratios ranging from 1 to 5%, as is shown in the table above.

Nevertheless, our estimations are – as mentioned earlier – based on theoretical models. In reality Twente Airport may achieve higher market penetration ratios than theoretically indicated. There may be several factors, not included in our models, leading to such higher market shares. In our final assessment, made in paragraph 3, we will take such considerations into account.

# 2.4 The development of the "propensity-to-fly" until 2030

The above indications refer to the year 2003. It is seven years ago now, but in this *second opinion* we preferred to use the same data as used by the Province of Overijssel as a starting point. The next question is then how much the *propensity-to-fly* will be in the year 2030.

<sup>&</sup>lt;sup>9</sup> This is often the practice of Transavia, who serves for a flight to (for instance) the Canary Islands several airports in the Netherlands. Therefore it happens that (again for instance) passengers on their return flight to final destination Eindhoven, firstly have to stop at Groningen to off-load passengers with destination Groningen.

The aviation market is fastly growing. Generally one assumes a growth of 4 to 5% yearly, significantly more than the economic GDP-growth. Nevertheless it is also expected that these growth rates tend to be lower at the longer term. Although the market is stagnating today (2009-2010), it is also the expectation that this growth is recovering within a couple of years. Regarding the large uncertainties one cannot give predictions. Generally one uses scenarios, where large ranges of uncertainties are assumed. Looking to the earlier mentioned SEO-study<sup>10</sup>, it is not un-realistic that the air traffic to and from the Netherlands, and therefore also to and from Twente, will be of an order of magnitude three times as much as it was in 2003, corresponding with a growth rate of 4.1% yearly. Similar growth rates are assumed by the Province. This does not mean that this growth rate <u>will</u> be realised, but is means that it <u>could</u> be realised. Other (and significantly deviating) developments may be equally plausible.

If one would assume with regard to the '*propensity-to-fly*' the upper ranges indicated and one would together assume a tripling of the market size, one would conclude for Twente in 2030 the following indications:

Number of return trips by air per head in Twente, 2003-2030		
	2003	2030
Non-business (Dutch residents)	0,28	0,84
Non business (foreign residents)		0,10
Business	0,26	0,78
TOTAL	0,54	1,72

For several reasons these indications are high estimations. Firstly a high growth scenario (4.1% yearly) is assumed. Secondly, for 2003, the upper side of the range of the '*propensity-to-fly*' for Twente is used. Finally, as is clear from the table, it is assumed that also foreign tourists by air may visit Twente. In summary, one could expect on these assumptions some 1,72 return trips per head of population in 2030.

<sup>10</sup> The SEO-study mentioned has – regarding the purpose of the study - assumed only one scenario, the so-called "Transatlantic Market (TM-)scenario". In earlier SEO-studies where a market extrapolation for Schiphol was made, four scenarios were assumed. One of the scenarios was the TM-scenario, with relatively fast growth rates. Other scenarios assumed lower growth rates.

### 3 The market potential of Twente Airport

The conclusion of the above considerations must be, that Twente Airport has a realistic chance to be chosen in the Twente region itself, but that these chances become quickly smaller in the more distant regions. The Twente region has about 650 million inhabitants (also in 2030) and assuming 1,72 return trips, this corresponds with 1,1 million trips by air to and from the <u>region</u> Twente. This does not mean that these trips also use the <u>airport</u> of Twente.

This has the reason that many of these trips goes to destinations that Twente Airport will not be offering, also not in 2030. A particular part refers to intercontinental destinations, which Twente Airport is not expected to offer. For these trips, also the residents and visitors to Twente have to use Schiphol or other airports offering these destinations. Even Twente Airport will not be able to offer all European destinations, for which a demand exists in the Twente region. If Twente Airport would in 2030 be accommodating some 10.000 aircraft movements, this corresponds with 30 movements and 15 departures per day. In case one assumes a daily connection to all destinations, the airport would be able to offer only 15 destinations in 2030<sup>11</sup>.

That number is still small compared to Schiphol, that offers even today (2010) already 250 destinations. It is therefore to be expected that the far majority of these 1.1 million trips will not choose Twente Airport, as it does not serve the desired destination. This is – as expected – the case for 80 to 90% of these trips. That means that the actual potential for Twente Airport is at most 20% of 1,1 million or 220 thousand trips. But even these trips will not all use Twente Airport. Despite of the vicinity of the airport and despite of the fact it serves the desired destination, the expected frequency level of competing airports like Schiphol is significantly larger. Therefore a significant part of this potential may still choose Schiphol, which has moreover excellent train connections from Twente. It is expected that at most 50% of that specific potential uses Twente Airport<sup>12</sup>. This implies that Twente Airport

If one would assume that all destinations would be offered only once per week, the number of destinations could be larger.

<sup>&</sup>lt;sup>12</sup> In the theoretical choice models used, the market share is in principle equal to the frequency share. If Twente Airport would offer a destination once per day and Schiphol four time par day, about 20% of the market would choose Twente Airport. In reality the share is somewhat lower, regarding the S-curve shape of the relation between market share and frequency share. These probabilities are realistic if all other travel attributes, such as airfares and travel distance to the airport, are equal. As Twente Airport has a clear advantage with regard to distance to the airport in its own region, the share of Twente Airport may be considerably higher than 15% in its own region.

cannot expect more than 110 thousand trips from its own region. This corresponds with a market penetration ratio of 10% of Twente Airport in its own region Twente. This is considered as an high estimation, as theoretical models, indicated in paragraph 2 come to significantly lower estimations on the market penetration ratio in the own region (around 5%). Nevertheless higher estimations cannot be excluded and for different assumptions optimistic, however not impossible upper ranges have been taken. This number of 110 thousand trips corresponds with 220 thousand passenger movements. These numbers are summarized in the table below.

	Trips (*000)	Market Share	Trips (*000) at Twe	Pax Mov. (*000) nte Airport
TOTAL number of Trips	1.100		110	220
Trips to destinations Twente Airport has service to Trips to destinations Twente Airport has no service to	220 880	50% 0%	110 0	220 0

How large is then the potential from other regions within 75 kilometers? These regions correspond with approximately 1,85 million inhabitants, the Twente region not included. It is a significant larger population potential, but in these regions the advantage of the airport with regard to its vicinity is much smaller. While it was assumed that in the Twente region 50% of the market potential that has direct service from Twente Airport would indeed choose Twente Airport, this probability in the surrounding regions would be in the order of one third at most (about 15 to 20 %)<sup>13</sup>. This implies that in these regions the population size may be three times as high as in the Twente region, but the relative use of Twente Airport is three times as small. So also from these regions approximately 220 thousand passenger movements can be expected at most.

The Dutch part of the regions between 75 and 150 kilometers includes approximately 8 million inhabitants. However, Twente Airport has even a disadvantage with regard to distance. It can therefore not be understood, why Twente Airport would have a realistic chance of use from these regions, unless extremely low airfares would be charged<sup>14</sup>. These considerations are even more the case for the German Ruhrgebiet, with its large airports like Düsseldorf, Cologne and Frankfurt. However, regarding the very large population potentials from these regions, it may be assumed that Twente Airport could be used in incidental cases, but its passenger numbers may not exceed 100 thousand passenger movements.

<sup>&</sup>lt;sup>13</sup> See footnote earlier: in case there is no advantage with regard to distance, the order of magnitude of markets hare equals 15%.

<sup>&</sup>lt;sup>14</sup> This may be the case if a low cost carrier will have its base at Twente Airport. This issue is addressed in paragraph 4 below.

In summary, one must conclude that Twente Airport cannot expect more than 0,5 million passenger movements: 0,2 million from Twente, 0,2 million from its surrounding regions within 75 kilometers and 0,1 million from regions at more than 75 kilometers. This estimation of 0,5 million is made by taking the most optimistic assumptions for its driving factors, as explained above. Also it is well above estimations that theoretically may be expected. This means that we have to take a range for the passenger potential for the airport, between a realistic 0,3 million to an optimistic 0,5 million passengers in 2030. These estimations are far below the assumption of the Province of Overijssel in its Cost-Benefit Analysis of 1,2 million passengers in 2030.

## 4 A Low Cost Carrier at Twente Airport?

The recent ten years in the European aviation market have been characterised by the strong emerge of *low cost carriers* in Europe. These airlines operate mostly from secondary airport at extreme low fares in some cases. A well-known example is Ryanair, who serves the Dutch catchment area from airports like Charleroi, Eindhoven and Weeze. These (and other secondary) airports have seen even explosive developments in the recent years. In all three specific cases these airport handle more than 1,5 million passenger movements, already today.

The question is then whether Twente Airport could be a basis of such a *low cost carrier*. This would significantly improve the passenger potentials for the airport, also in the regions at larger distances with large population potentials. Despite the disadvantage of the distance that Twente Airport has in these regions, there is the advantage of the low airfares, by which significant passenger numbers, even from the Randstad or the densely populated German hinterland, could use Twente Airport.

Yet the probability of a base of such a *low-cost carrier* (LCC) is not realistic for a number of reasons. One must say that in 2010 the penetration of LCC's is nearing completion and the existing LCC's their operating bases have been chosen with the three airports as the most striking examples. Moreover, these airports are, despite their secondary character, located closer to major population centers, which is less the case for Twente, as argued above. This means that, even if some LCC's want to move their base, Twente therefore will not be the first choice.

The conclusion is that an LCC-base is not realistic to consider and therefore our guidance range from 0.3 to 0,5 million as the maximum achievable in 2030 should continue.