Supplementary Response on behalf of Ryanair Limited to the Consultation on the Decisions of the 2008 Aviation Appeal Panel.

16th February 2009

1. This supplementary submission is presented in the light of the failure to date by the CAR to organise the meeting between experts recommended by the Appeal Panel in their decision:

   "The Panel is of the view that the Commission might well be best advised to carry out that analysis by reference to the competing contentions of DAA (.....) and Ryanair, by way of a joint meeting/hearing with Ryanair's consultants, the DAA's consultants and the Commission's own consultants, rather than by way of passive regulation, as appears to have occurred to date".[1]

2. Ryanair again calls on the CAR to organise this joint meeting as a matter of urgency. In making its clear recommendation, Ryanair believes that the Appeal Panel considered that the evidence on the capacity of the terminals at Dublin Airport should be tested through questioning and debate rather than leaving it to the CAR to make arbitrary judgements based on separate written submissions from the DAA and Ryanair. By failing to organise the recommended joint meeting, Ryanair considers that the CAR is being negligent in that it will have insufficient verification of the evidence to enable it to make a robust determination. The CAR is therefore guilty of continuing to pursue the *"passive approach"* to regulation as highlighted by the Panel.

3. Ryanair's view in this regard is strengthened by the fact that at the An Bord Pleanála hearing, evidence submitted by DAA on the relationship between the annual passenger throughput of a terminal and busy hour demand could not be verified, a point which DAA was forced to concede following cross-examination. Ryanair is concerned that potential flaws in information which DAA has submitted to the CAR will not be exposed without a robust process of challenge as envisaged by the Appeal Panel in recommending strongly that a joint meeting was held.

4. This submission will deal with:

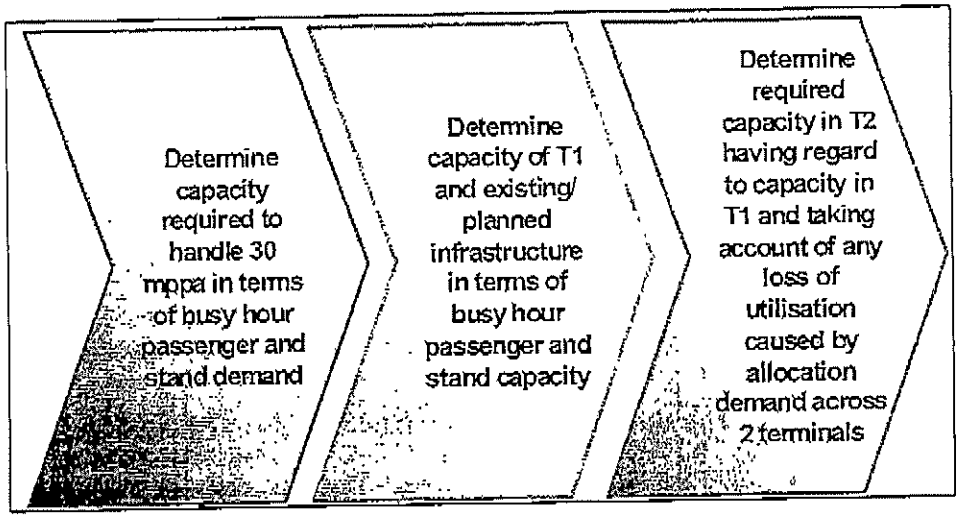
   - the logical sequence in which the appropriate size of T2 should be determined;
   - the context in which it should be considered;
   - the requirement of efficient and economic development;
   - the relationship between hourly capacity and annual throughput;

[1] Ryanair Appeal Decision, paragraph 8.12.

- the available capacity in T1 at Dublin Airport;
- the consequential effect on the capacity required in T2, having regard to the Local Plan ceiling on throughput of the Eastern Campus of 30 mppa;
- the size of T2 and the costs to be allowed.

The logical sequence in which the appropriate size of T2 should be determined

5. Ryanair considers that in consequence of the decision by the Appeal Panel, the capacity of T2 falls to be determined through a logical sequence as set out in the diagram below.



6. This is clearly not the process adopted by DAA, which sized T2 according to the capacity which it asserted was required to accommodate peak hour demand from the 'anchor tenant', Aer Lingus, and other planned occupying carriers. It was this latter process which RR&V examined for the CAR in the lead up to the 2007 Determination. RR&V were apparently not asked to examine (nor did they do so) the capacity being provided by T1 and what, therefore, constituted an efficient next increment of terminal capacity at Dublin Airport.

7. Ryanair considers the assessment of the capacity of T2 by the CAR and its consultants erred in 2007 by failing to fully consider the capacity of T1 and by the CAR adopting the wrong parameters from those considered by RR&V for determining how much of the cost of DAA's T2 development should be allowed into Box 1.

The context in which it falls to be considered

8. The consideration of the scale of incremental terminal capacity required at Dublin Airport falls to be considered in the context of the CAR's statutory duty to *"facilitate the efficient and economic development and operation of Dublin Airport which meet the requirements of current and prospective users of Dublin Airport"*. It is simply inefficient and uneconomic to allow DAA to build more capacity than is required to meet the totality of the needs of users of Dublin Airport. DAA appears to have justified this on the basis that single terminal operations are more efficient for Aer Lingus but this is not a sufficient justification for allowing the expenditure, given the CAR's statutory duties, if it results in less efficient use of capacity over the airport as a whole and uneconomic development of the airport. In any event, DAA's T2 proposal requires Aer Lingus operations to be split between Pier E and Pier B on T1 if it is right about the sheer quantity of Aer Lingus traffic to be handled in the peak hour, negating any efficiency argument at all.

9. Ryanair considers that, to the extent that efficiency for Aer Lingus was a consideration in the sizing of T2, Aer Lingus should meet the costs of achieving that efficiency. In other words, if T2 is larger than it needs to be to meet the overall requirement for additional terminal capacity at Dublin Airport, the cost should fall on the user of T2 with the specific requirement not to split operations between two terminals and to operate with an excessive peak profile of traffic.

10. Ryanair is aware that DAA sought to suggest in its 'Statement of Case' to the CAR in March 2007 that the CAR had no need to consider the scale of T2 being provided as it had already been subject to verification by the Government's Independent Verifier. By implication, DAA was suggesting that the only role for the CAR was to include the costs in the RAB and to calculate the necessary price cap.

11. The CAR is reminded that the Aviation Action Plan required a triple safeguard in respect of T2 of:

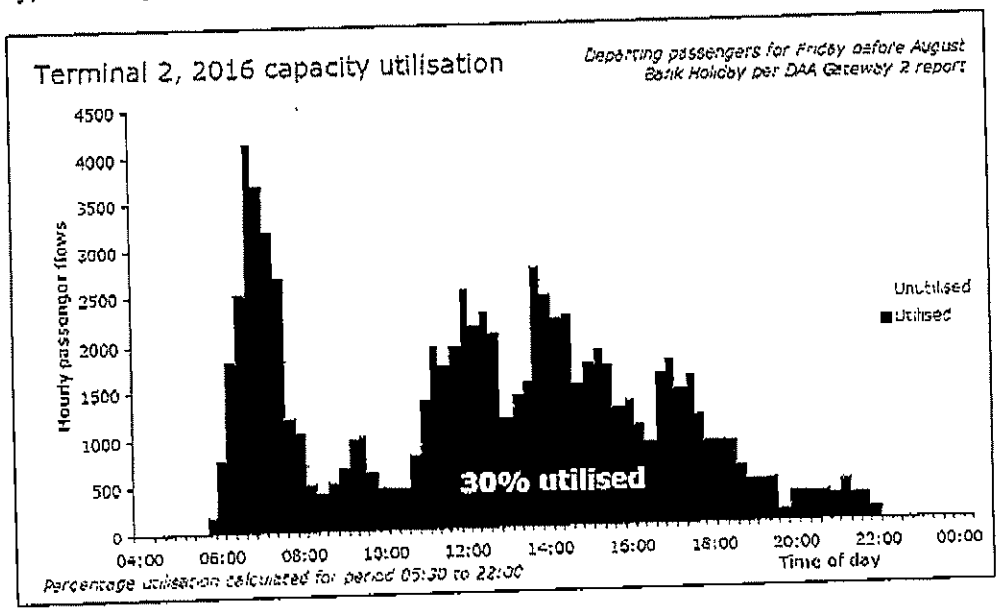
    - Consultation
    - Verification
    - Regulation

12. Leaving aside Ryanair's concerns regarding DAA's inadequate consultation regarding the T2 proposals and the inadequacies of the Verification Report, the third bullet expressly required the CAR to establish the costs appropriate to building an efficient terminal. The CAR must therefore assure itself that the development proposed represents efficient and economic development, over and above any 'verification' of cost carried out by Boydcreedsweett.

Efficient and economic development

13. Efficient and economic development means balancing the cost of providing facilities with achieving acceptable levels of service. In airport terms, this means that it is unlikely to be economically efficient to provide for isolated peaks of demand. In airport capacity planning, there is a general acceptance that achieving a balanced development means that at extreme peaks of traffic, some passengers may experience service standards below the target. This is normally done by establishing a typical busy, but not peak, hour as the basis for designing and managing airport capacity, whether new or existing.

14. Efficient development is not about designing facilities to meet peak demand levels on a given peak day. Yet this is precisely what DAA did[2]. It established its estimate of peak hour departures in T2 in isolation from an assumption of a high proportion of the Aer Lingus fleet departing in a single hour, at high load factors, and then created a peak day 'schedule' from this to match the expected daily and annual traffic share expected to use T2. Even its choice of the Friday before a bank holiday indicates this was a peak day not a 'typical busy day' as would normally be used for airport capacity planning. DAA did not check whether the level of peakiness implied by this schedule was reasonable as a basis for designing a terminal. Clearly it was not, as the chart below, taken from the IMR Solutions analysis for the CAR, illustrates without a doubt, and the DAA has been using this grossly inflated figure to justify a facility that is excessively large for the realistic level of busy hour traffic that would use it on a typical busy day.



[2] Section 2.2 of Volume 2 of the T2 ES.

15. Even on this basis of a peak day schedule consistent with 11.4 mppa in T2, the need for which Ryanair disputes, designing to meet a peak hour demand of 4,200 departing passengers per hour would not be economic or efficient. Designing a terminal to meet demand on this basis is effectively equivalent to IATA Level of Service A, equating to a completely free flow situation. At best, an experienced airport planner would have formed a judgement that a suitable design parameter would have been less than 3,000 departing passengers per hour. The peaks of demand implied by DAA's design hour for T2 at Dublin are by any measure grossly inefficient and there is no evidence that DAA made appropriate trade offs between the costs of meeting this extreme peak and the proportion of passengers who would benefit from the oversizing of the facility.

16. We agree with RR&V that *"the bottom up schedule based analysis does not appear to have been complemented by a high level top down ratio analysis"*[3]. York Aviation advises that, in its considerable experience, any busy day design 'schedule' should always be cross checked ensure that the busy design hour passenger volume is consistent with what would reasonably be expected at any given level of annual demand using an airport or individual terminal. Efficient development balances the cost of providing new facilities against the level of demand to be handled at comfortable levels of service and the passengers over a year as a whole who will experience less than desirable levels of service. We agree with RR&V that a commonly used measure is the 95% busy hour, accepting that 5% of passengers over a year will be handled in conditions of greater congestion.

<u>The relationship between hourly capacity and annual throughput</u>

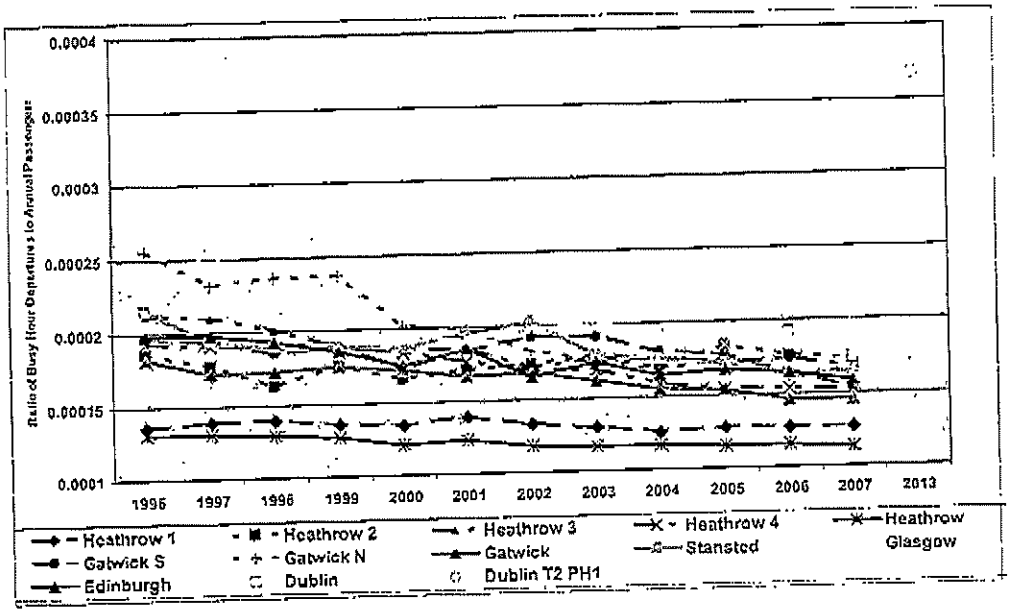
17. There are clear patterns in the relationship between annual passenger numbers handled at an airport or in a terminal and the scale of peak hour demand which relates to that annual throughput. Although, the actual relationship will be influenced by the particular characteristics of the traffic at any airport, there are general principles to which these relationships comply. First and foremost, as an airport becomes busier, the ratio of busy hour demand to peak hour demand generally declines. In other words, at a busier airport, airlines will tend to operate higher frequency services to popular destinations filling in the troughs throughout the day rather than concentrating departures only to the most popular times in the morning and evening.

[3] RR&V Report No. 4, paragraph 4.3.2.

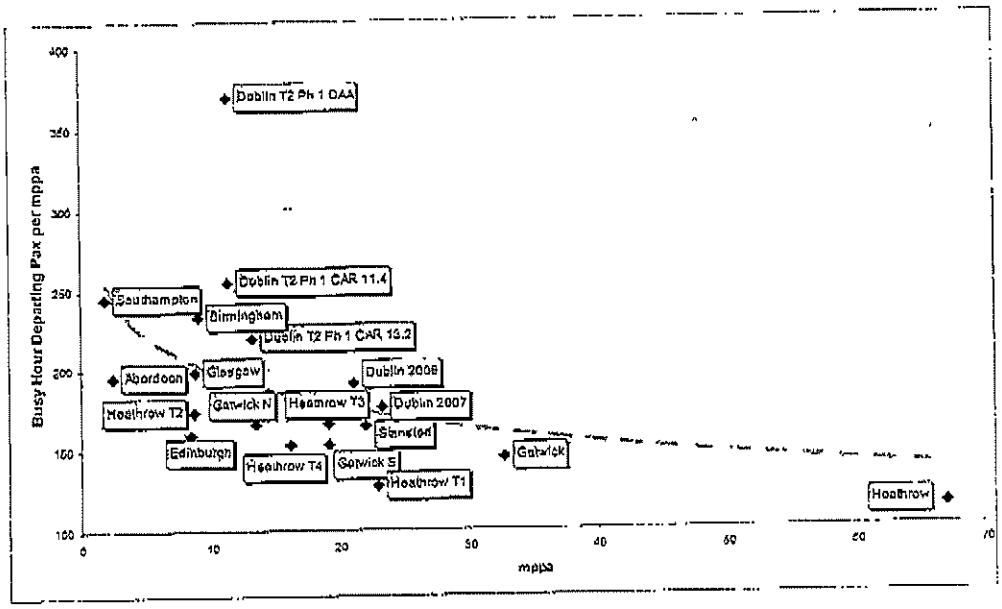
18. It is valid to note, as DAA does in its 'Statement of Case' in 2007, that the level of 'peakiness' will be less at an airport operating close to capacity compared to one operating with spare capacity. In other words, when a new facility is opened, airlines may bunch flights into the peak hour in the early years of operation, taking advantage of available capacity, but over time the profile will smooth itself out again. DAA itself conceded that this would be the pattern of use of T2 in paragraph 4.35 of its May 2007 Statement of Case to the CAR, stating that *"As the airport becomes busier over time, the schedule for T2 would be expected to gradually become flatter and more similar to the profile today."* In other words, in assessing the capacity of T2 other than in the very short term, it is not unreasonable to base this assessment on the current profile of use of Dublin Airport.

19. The fact that airlines will take up spare capacity first in the peak period before filling the troughs does not mean that a terminal should always be designed for the absolute peak of the peak. As set out above, efficient terminal development balances cost of development with achieving a reasonable capacity equivalent to the typical busy hour. Determining this typical busy hour is normally undertaken by examining trends in the relationship between the busy hour and annual demand at the airport in question, benchmarked against busier airports operating at the level of traffic forecast for the future.

20. The trends in the relationship of the busy hour for departing passengers to annual passenger throughput are clearly illustrated in the two charts below and overleaf[4]. The ratio of the busy hour to annual throughput is a measure of the peakiness of traffic at an airport or using a particular terminal.



[4] Data for BAA airports are taken from BAA's Patterns of Traffic Reports and that for Birmingham was obtained directly from the Airport.



21. It is evident from the first of these charts that Dublin Airport already exhibits a peakier profile for departures than most other airports, which can be explained by the substantial numbers of based aircraft by Ryanair and Aer Lingus. This is also evident from the second chart, where it is clear that Dublin exhibits a peakier profile than Stansted, another airport with a dominant pattern of early morning departures by two based low fare airlines. Examination of this chart also illustrates the fact that in 2006, Dublin was operating with a peaking profile consistent with a less congested airport but by 2007 was trending towards those airports operating with a level of runway congestion. This is material to considering the capacity of T1, as we go on to do below. The lack of additional runway capacity until at least 2012 is likely to continue to exert downward pressure on the busy hour to annual passenger ratio at Dublin (current economic circumstances excluded).

22. It is also apparent from the second chart that individual terminals at airports tend to operate with peakier patterns of traffic than the airport as a whole. For example, the combined busy hour demand in the two terminals at Gatwick has been in the range 9 to 12% greater than the overall busy hour for the airport as a whole. This is material to assessing the capacity required at Dublin when demand is split across two terminals. Notwithstanding this trend, it is clear that the level of peakiness in the design parameters adopted by DAA for T2 is simply without precedent. Even with the corrections made to the size of Box 1 by the CAR, dependent on what annual throughput the CAR actually assumed, are materially greater than the peakiness which would be considered acceptable for a terminal providing capacity for either 11.4 or 13.2 mppa. Of course, as we will demonstrate below, once the capacity of T1 is taken properly into account, even this level of throughput would not be required.

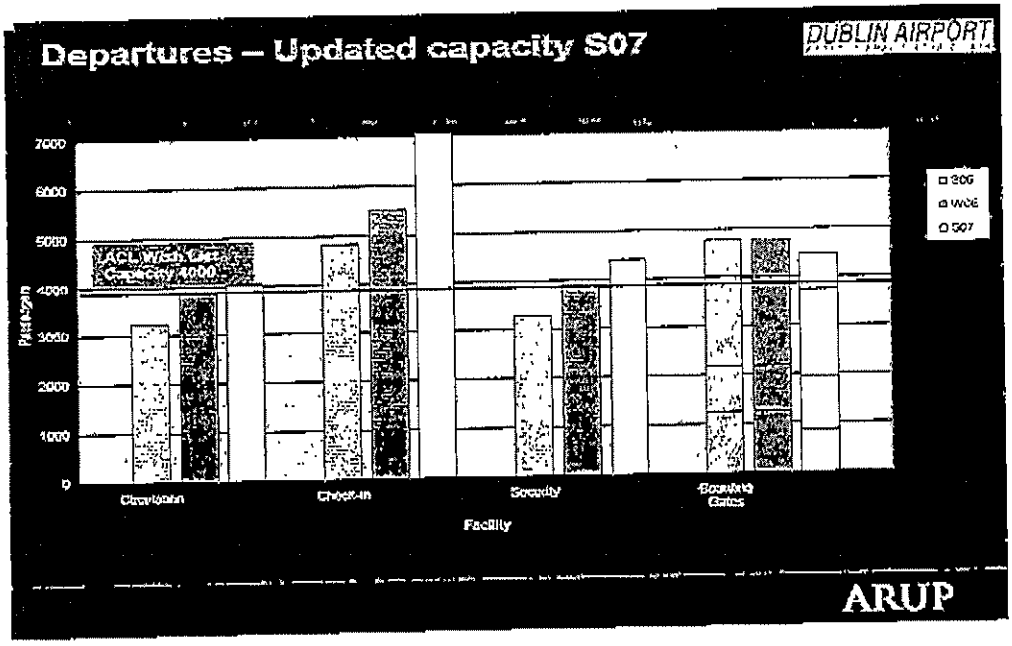
23. In submissions to the CAR[5], as well as to An Bord Pleanála, DAA used a graph, reproduced by IMR Solutions, to seek to show that its peak hour design parameter was similar to that used by other airports. At the planning hearing, DAA was challenged to provide the source of this data and could not. DAA's advisor conceded that information being presented by York Aviation was correct. York Aviation believes that DAA may have wrongly compared total busy or peak hour passengers and their ratio to annual passenger throughput with the ratio of the design hour for departing passengers only to annual passenger throughput for which it was planning in T2. It is also worth noting that, using this data, DAA also sought to mislead the CAR as to the extent to which hourly demand in T1 was being squeezed by capacity constraints currently. Had the expected meeting with DAA's consultants been arranged by the CAR, this is an area which Ryanair would have sought to explore fully and still hopes to be able to do so before the CAR reaches its new determination.

The available capacity in T1 at Dublin Airport

24. The busy hour to annual passenger ratios outlined above are material to considering the capacity of T1 at Dublin Airport. The start point for this assessment is DAA's assessment of the hourly capacity of T1. Typically, the declared capacity for scheduling purposes would be set at a level consistent with the hourly capacity for a terminal. In some hours, when airlines operate at higher than average load factors, demand will be higher, consistent with the 95% busy hour concept. For summer 2007 and summer 2008, DAA declared the departing passenger capacity of T1 to be 4050 departing passengers per hour, based on analysis carried out for it by ARUP.

25. As can be seen in the chart overleaf, the limiting factor is shown as landside circulation space. It is clear that in other capacity elements there was spare capacity at this level of hourly demand. It is relevant that as at 2007, the trend for increased use of web check-in and kiosks was known to DAA. It should also be noted that capacity for arriving passengers is a less limiting factor and less relevant to the assessment of the required scale of T2.

[5] Graph at Figure 4.29 of DAA's Statement of Case.



26. Since this analysis was undertaken, Pier D has opened, increasing boarding gate capacity, and improvements have been made to security processing.

27. It is clear that capacity will be increased further when T1X opens later this year. DAA itself made this clear in its 'Statement of Case' submission to the CAR in 2007 at paragraph 4.55b), where one of the benefits cited for T1X was that it *"increases the declared hourly capacity"*. In DAA's minutes of a CIP Workshop No. 4, held on 2nd March 2007, the Managing Director of Dublin Airport advised the meeting that the capacity of T1 would rise from 4,050 departing passengers per hour with Area 14 Check-in (as illustrated above) to 4,800 passengers per hour with T1X. Hence, it is reasonable to take 4,800 departing passengers per hour as the available capacity of T1 at the point when T2 is due to become operational and as the basis for assessing the scale of T2 development required.

28. Taking the ratio of departing passengers per hour to annual passengers in 2006, this would put the capacity of T1 at around 25 mppa, assuming no further decline in the peak profile of traffic as the overall demand level grows as might reasonable be expected. Taking the ratio of departing passengers per hour to annual passengers in 2007, this would put the capacity of T1 at around 27.6 mppa. To be conservative, Ryanair considers that a reasonable assessment of the annual capacity of T1 as extended is around 26 mppa.

The consequential effect on the capacity required in T2

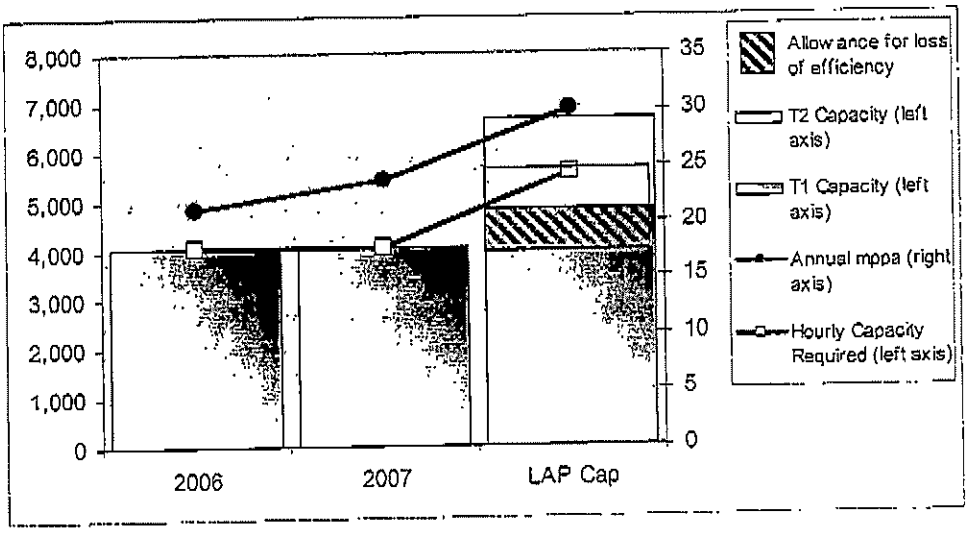
29. Within the cap of 30 mppa for the Eastern Campus imposed by the Local Area Plan, in pure incremental terms, the annual capacity required in T2 is no more than 4 mppa. However, Ryanair recognises that the effect of splitting traffic between two terminals has the inevitable effect of meaning that the sum of the capacities of two terminals has to be greater than would be the case with single terminal operations having regard to the inevitable mismatch in time of peak demand in each terminal. For example, taking an airport with an estimated busy hour flow of 1,000 passengers and with traffic split between two terminals, this might result in one having a peak passenger demand of 600 passengers per hour at 6.00 in the morning, with the other operating with 400 passengers in that hour but with 300 passengers per hour and 600 passengers per hour respectively in the 7.00 hour. The two terminals would, hence, need a combined busy hour capacity of 1,200 passengers per hour.

30. It is appropriate to take as the start point for assessing the capacity required in T2 the busy hour demand expected when Dublin Airport is operating at 30 mppa using the busy departing passenger to annual demand ratios discussed above. Using the ratio from 2006, the best estimate of the busy hour for departures would be 5,575 (less if the ratio for 2007 was used to reflect a less peaky profile). This would give a ratio of busy hour departure demand to annual mppa of 180, well above that observed at other 30 mppa airports shown in the second chart at paragraph 20 above. To give the CAR further comfort, BAA is projecting a departing passenger busy hour of only 4,890 for Stansted Airport when the airport is handling 33 mppa, prior to the opening of a second runway. Even allowing for some constraints on busy hour demand at Stansted in those circumstances, it is clear that adopting an estimate of 5,575 busy hour departing passengers for 30 mppa at Dublin is likely to grossly overstate the demand which will be required to be handled in the busy hours than to understate it.

31. Simplistically, T2 would be required to handle no more than 775 departing passengers per hour if the peaks and troughs of demand could be matched evenly across the two terminals but this is highly unlikely to be the case. Conservatively, we suggest a maximum buffer for loss of efficiency from split operations should be 20%, meaning that a reasonable assumption for the combined hourly capacity of two terminals would be 6,690 passengers per hour. This gives a maximum hourly capacity of T2 required as 1,890 passengers per hour, or 45% of the level proposed by DAA or 61% of the CAR's Box 1 allowance. A mid range estimate would be a combined hourly capacity of 6,135 departing passengers per hour across two terminals, or 1,335 in T2, some 32% of the scale of the level proposed by DAA or 44% of the CAR's Box 1 allowance.

32. This former estimate is generous as it would, in practice, allow T2 to handle of the order of 9 mppa in the longer term once the initial peaks and troughs are smoothed out, giving a total theoretical capacity of 35 mppa across the two terminals operated at full capacity. The latter estimate would give a terminal capacity of around 6.7 mppa, or 32.7 mppa across the Eastern Campus.

33. Taking the higher estimate for the capacity required in T2, the demand capacity balance can be illustrated in the chart below.



The size of T2 and the costs to be allowed

34. Based on the analysis above, Ryanair considers that the absolute ceiling on the hourly capacity of T2 which could be justified as efficient and cost effective development at Dublin Airport, having regard to the capacity provided in T1 as extended and having regard to the ceiling on annual throughput imposed by the Local Area Plan, is 1,890 departing passengers per hour.

35. If the busy hour departing passenger demand is only 1,890 passengers per hour, then there is an inevitable knock on consequence for the capacity required in other T2 related facilities. Put simply any gating charts supplied to the CAR[6], which the CAR cites as *"persuasive evidence"* on page 38 of CP6/2007, will have been subject to the same errors of assessment as the derivation of the overall passenger number. Although the relationship will not be one for one, if there are fewer passengers departing in the busy hour than asserted by DAA, there will be a need for fewer pier served, or contact, stands. On the basis of a typical Aer Lingus short haul flight operating at a load factor of around 80% or 140 passengers, the DAA proposal provided for 30 departures within a single hour. At a busy hour of 1,890 passengers, this would equate to 14 departures in a busy hour, in other words 16 fewer pier served stands would be required. This inevitably means that a smaller Pier E would be adequate to meet the requirement, given that the intention was to make use of Pier B in part in any event to serve T2. We estimate that the scale of Pier E could be reduced by at least 50%.

36. Similarly, a reduction in busy hour passenger volume will mean that smaller roads and drop off-kerbs will be required. The size of car parks can be reduced pro-rata to those necessary to meet the Local Plan cap of 30 mppa. The cost of all other facilities should also be reduced pro rata as, if the terminal is oversized, facilities such as the Energy Centre are also oversized, with no economic justification for providing for further expansion given the limit on the Eastern Campus.

37. In summary, Ryanair considers that the maximum costs which could justifiably be allowed into the RAB upon the operation of T2 are:

- T2 facility costs of $171 million
- Pier E and other works costs of €97 million

This gives a ceiling on the total cost eligible to be included in the RAB of €268 million compared to the €481 million allowed by the CAR in the 2007 Determination.

38. In the light of the important requirement to resolve these matters in the interests of all users of Dublin Airport, Ryanair calls upon the CAR to organise the recommended joint meeting as a matter or urgency in order that the CAR can explore fully the important matters raised in this submission. Failing this, Ryanair and the DAA should at least have the opportunity to comment on each other's submissions.

[6] As referred to in DAA's Response to CP5/2007 at paragraph 5.4.1.