



Maximum Levels of Aviation Terminal Services Charges

**The Provisional Annual Compliance Statement for
Regulatory Year 26th March 2007 to 31st December
2007**

**and Calculation of the Provisional Price Cap for
Regulatory Year 1st January 2008 to 31st December
2008**

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1. SUMMARY

This Commission Paper reviews compliance by the Irish Aviation Authority (“IAA”) with the price caps set by the Commission for Aviation Regulation (“the Commission”) for the regulatory years 2005/06, 2006/07 and 2007 in respect of Aviation Terminal Services Charges (“ATSC”) at Dublin, Shannon and Cork Airports, and provides guidance on what the price cap will be in 2008.

Regulated charges are set in advance of the regulator knowing the actual volume and composition of business. It is therefore possible that some under- or over-shooting of the price cap will occur. The price cap formula, which anticipates annual adjustments to the price cap, is structured to take account of this possibility.

The provisional price cap for 2008 as set out in this report is €2.28 per tonne. This assumes that the maximum take off weight (“MTOW”) of aircraft that actually depart from Dublin, Shannon and Cork airports for 2008 will be 9,922,000 tonnes, and that the provisional 2007 data on revenues and MTOW for 2007 are correct.

In addition to calculating the provisional cap for 2008, this paper reports on the IAA’s compliance with its price caps. It provides a final assessment of the IAA’s compliance with the 2005/06 and 2006/07 price caps and finds that the IAA complied with the Commission’s first Determination which ended on 25 March 2007. In addition this paper provisionally tests the IAA’s compliance with the price cap for 2007.

2. BACKGROUND

In its Determination CP4/2007 the Commission set the caps for the five year regulatory period 2007-2011. In doing so the Commission has moved from March-March regulatory years to calendar years. The first year of the new regulatory period is therefore a shorter regulatory year of March-December 2007.

The Commission's price cap Determinations are specified in such a way that, at the end of each regulatory year, compliance with the price cap for that year is measured and a new price cap is derived for the next regulatory year. The calculation of the price caps in the first regulatory period was made by amending the previous year's cap for the following:

- inflation;
- An 'X factor' which represents the annual real change in prices and includes, *inter alia*, annual improvements in efficiency;
- the difference between the Commission's actual and budgeted costs and expenses per passenger, as recovered through the aviation terminal services charges; and,
- The degree of over- or under recovery of charges in the previous year.

In CP4/2007 the Commission set out a new formula for calculating price caps for the second (or current) regulatory period which differed from the formula used during the first regulatory period by. It included terms which allow for the sharing of volume risk between the IAA and its users and make certain revenue allowances conditional on the IAA achieving specified milestones in the commissioning of new control towers at Cork and Dublin.

This Commission Paper is similar to that of previous assessments. The IAA's provisional compliance with the price cap for the regulatory year March-December 2007 is measured and a new price cap for the 2008 regulatory year is calculated. In doing so the Commission had to make adjustments to the 2007 cap based on compliance by the IAA with the 2005/06 and 2006/07 caps.

3. COMPLIANCE WITH THE 2005/06 AND 2006/07 PRICE CAPS

Price caps during the first regulatory period were set according to the formula:

$$Y_t^{IAA} = YU_t^{IAA} + W_{t-1}^{IAA} + K_t^{IAA}$$

Where:

- Y represents the adjusted price cap for year t;
- YU represents the 'unadjusted' price cap for year t and is calculated by adjusting the previous year's unadjusted price cap for inflation and the 'X-Factor';
- W is adjustment term and represents the per tonne adjustment to the unadjusted cap due a differential in the actual and budgeted costs of the Commission in year t-1; and,
- K is another adjustment term which represents the per tonne adjustment to the unadjusted cap due to an over or under recovery of charges by the IAA.

3.1 The 2005/2006 Regulatory Year

For the regulatory year 2005/2006 the price cap was €1.98 per tonne. This took account of inflation, the 'X-Factor' of +7%, the Commission's budget having been €72,734 below forecast, and the IAA's under-collection of revenues over the 2004/2005 regulatory year of €0.2055 per tonne (allowing for interest).

Provisional compliance was reported in CP1/2006 using actual tonnage and revenue data for the period 26 March to 31 December 2005 and estimates for the period 1 January to 25 March 2006. The Commission has since received actual data for the latter period, and can now calculate a finalised per tonne yield of €2.00, as shown below.

$$Total _ Revenue \div Total _ MTOW = €17,692,287.45 \div 8,846,139.23 = €2.00$$

As with the provisional compliance report in CP1/2006 the finalised data shows that the average revenue per tonne yielded by way of ATSC exceeded the cap of €1.98. The price cap for the 2006/2007 regulatory year will be reduced to compensate users for the IAA's over-recovery of charges in the 2005/2006 regulatory year.

3.2 The 2006/2007 Regulatory Year

For the 2006/2007 regulatory year the price cap was €1.94 per tonne. This took account of inflation, the 'X-Factor' of +7%, the Commission's budget having been €9125.45 above forecast, and the IAA's over-collection of revenues over the 2005/2006 regulatory year of €0.0225 per tonne (allowing for interest).

Following a request for information made in November 2007 the IAA supplied the Commission with the following information:

- Total revenue yielded by way of aviation terminal services charges levied at Dublin, Shannon and Cork during the regulatory year 26 March 2006 to 25 March 2007 of €18,440,300.36; and,
- Total number of MTOW tonnes for which aviation terminal services charges were levied during the regulatory year 26 March 2006 to 25 March 2007 of 9,500,994.10 tonnes.

This gave an average revenue per tonne of €1.9409 as shown below

$$\text{Total Revenue} \div \text{Total MTOW} = €18,440,300.36 \div 9,500,994.10 = €1.9409$$

The IAA therefore marginally exceeded the cap of €1.94 by less than one cent. Accordingly there will be a marginal adjustment to the 2007 cap to reflect this differential.

The Commission is satisfied that the IAA has effectively complied with the Determination that ended 26 March 2007.

4 THE 2007 PRICE CAP AND PROVISIONAL COMPLIANCE

On 23 March 2007 the Commission published its second determination on the maximum levels of ATSC that may be imposed by the IAA from 26 March 2007 to 31 December 2011. The first regulatory year within the second regulatory period is the nine month regulatory year 26 March 2007 to 31 December 2007 and calendar years thereafter.

The Determination introduced a new formula for calculating price caps

$$R \leq t \times N \quad (\text{Formula 1})$$

Where R represents the IAA's annual revenues from ATSC, t represents the maximum permitted revenue per tonne from ATSC (i.e. the price cap), and N is the actual number of MTOW tonnes of departing aircraft at Dublin Shannon and Cork airports.

During the regulatory period;

$$t = v + f + k + w \quad (\text{Formula 2})$$

By substituting into formula 1 above we get

$$R \leq vN + fN + kN + wN \quad (\text{Formula 3})$$

The definitions and sub-formulae for calculating the v, f, k and w terms are set out in CP4/2007. From the formulae in CP4/2007 one can see that f, k and w are generated from a formula with N as the denominator. Therefore formula 3 above can be rewritten as

$$R \leq vN + F + K + W \quad (\text{Formula 4})$$

Which in turn can be written as

$$R \leq vN + Z \quad (\text{Formula 5})$$

Formula 4 can be interpreted as requiring that annual revenues derived from ATSC be less than or equal to a variable revenue component that varies with

traffic volumes, vN , and a fixed revenue component, Z that does not vary with traffic volumes.

In order to effect the CAR's policy of providing for the sharing of traffic risk between the IAA and users, the level of allowed revenues for a regulatory period can only be determined definitively once outturn traffic volumes are known. Consequently a per tonne cap for a given year cannot be finalised until the following year when outturn volumes, in MTOW tonnes, are known.

4.1 The 2007 Price Cap

A provisional price cap for 2007 was published in CP4/2007. While the cap cannot be finalised until early 2008 when actual MOTW volumes for 2007 are available, the cap can be updated with actual volume data for 26 March 2007 to 31 October and an estimate for November and December 2007. To update the provisional cap the Commission relied on the following information:

- The total number of MTOW tonnes for which aviation terminal services charges were levied during the regulatory year 26 March 2007 to 31 December 2007 of 7,837,631 tonnes;¹
- An updated estimate of the k_{2007} term of -€0.004;
- An updated w_{2007} term of €0.021;
- An updated f_{2007} term of €1.032; and,
- The v_{2007} term of €1.06 as published in CP4/2007.

The first four pieces of information above will all be finalised when final data for 2007 are available.

Based on this information and using formula 2 above, the updated provisional cap for 2007 is €2.11 per tonne.

¹ This estimate includes actual data for the period 26 March 2007 to 31 October 2007

4.2 2007 compliance

For the 2007 regulatory year the updated price cap as set out above is €2.11 per tonne.

Following a request for information made in November 2007 the IAA supplied the Commission with the following information:

- Estimated total revenue yielded by way of aviation terminal services charges levied at Dublin, Shannon and Cork during the regulatory year 26 March 2007 to 31 December 2007 of €16,588,881;² and,
- The total number of MTOW tonnes for which aviation terminal services charges were levied during the regulatory year 26 March 2007 to 31 December 2007 of 7,837,631 tonnes.

This gives an estimate of the average revenue per tonne of €2.12 as shown below

$$\text{Total _ Revenue} \div \text{Total _ MTOW} = €16,588,881 \div 7,837,631 = €2.1166$$

The IAA is therefore currently forecast to exceed the provisional cap of €2.11 by approximately one cent. Accordingly there will be a provisional marginal adjustment to the 2008 cap to reflect this differential. Upon finalisation of the 2007 revenue and MTOW volumes in early 2008 a finalised adjustment, if necessary, will be made to the 2008 cap.

² Ibidem

5 THE 2008 PROVISIONAL CAP

5.1 The 2008 Cap

As described in Section 4 above the price cap formula published in CP4/2007 can be interpreted as requiring that annual revenues derived from ATSC be less than or equal to the sum of a variable revenue component that varies with traffic volumes, vN , and a fixed revenue component, Z , that does not vary with traffic volumes.

The Commission can make a finalised calculation of 'v'. The 'N' term which represents actual 2007 MTOW volumes will not be known until 2009. The fixed term 'Z' will not be finalised until early 2008 when finalised 2007 data for both the IAA's revenues and volumes and the costs that the Commission levied on the IAA are available.

However based on the information the Commission currently has, the maximum permitted revenues ('R') that the IAA may collect from departing aircraft at Dublin, Shannon and Cork airports for the regulatory year 2008 can be represented by the following formula

$$R \leq 1.06 * N + 22,610,449$$

This would correspond to a per tonne price cap of €2.28 if MTOW equals 9,922,000 tonnes as currently forecast.

The calculations for the 2008 provisional price cap are based on the following information

- The (provisional) price cap for 2007 of €2.1091;
- An estimate of the IAA's revenues for 2007 of €16,588,881
- An estimate of the sum of weight of aircraft that departed from Dublin, Shannon and Cork airports during 2007 as measured by the aggregate MTOW of 7,837,631 tonnes;

- The percentage change in the All Items Consumer Price Index (Base Dec 2001 = 100) between January 2007 and October 2007 of 4.16%;
- The relevant 'X-factor' of 3.75%;
- The Commission's estimate of its actual cost that is recoverable through airport charges during 2007 of €244,120.50;
- The Commission's budgeted cost that is recoverable through airport charges during 2007 of €240,863.25
- The average interest rate multiplied by 0.75 on the three-month commercial paper issued between January 2007 and October 2007 by the National Treasury Management Agency;
- The sum of weight of aircraft that will depart from Dublin, Shannon and Cork airports during 2008 as measured by the aggregate MTOW of 9,922,000 tonnes;
- The v-term for 2007 of €1.06;
- The FR-term for 2007 of €10,114,000;
- The relevant G-factor, a fixed factor reflecting the annual rate of change in annual MTOW, of 4%;
- CPI_D , the CPI index basis used to express in real terms monetary values, of 115.7; and,
- As the IAA has yet to meet the milestones described in CP4/2007 in respect of the Cork or Dublin Towers there are no fixed milestone adjustments to be made and therefore $FM_{2008} = 0$.

The 2008 provisional cap will be updated when finalised data from 2007 becomes available. It will be finalised in 2009 when actual MTOW volumes for 2008 are known.