



MAXIMUM LEVELS OF AVIATION TERMINAL SERVICES CHARGES

**Consultation on the Implementation of the Provisional
Annual Compliance Statement for
Regulatory Year 26th March 2004 to 25th March 2005
and Calculation of the Price Cap for
Regulatory Year 26th March 2005 to 25th March 2006**

Commission Paper CP1/2005

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1. PURPOSE OF THE PAPER

This Commission for Aviation Regulation ('Commission') paper serves three purposes. First, it establishes the Irish Aviation Authority's (IAA) provisional compliance with the Commission's price cap for the period 26 March 2004 to 25 March 2005. A definitive assessment of compliance for 2004/05 will be possible when final figures for aviation terminal services charges' revenues and aircraft tonnages become available. Definitive compliance with the price cap for the previous regulatory period (26 March 2003 to 25 March 2004) is established in this paper.

Second, in its two-year Review Determination, published as CP4/2004 on 29 July 2004, the Commission corrected the regulatory formula used to express the IAA's price caps. For the avoidance of doubt, as well as to make the computations fully transparent, this paper reports the company's compliance with the price cap in each regulatory period from March 2002 forward.

Third, using final information (where it is available) and provisional information (otherwise), the paper presents the price caps for the 2005/06 regulatory year.

2. BACKGROUND

The Commission's 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 cap is made by amending the previous year's cap for inflation; an X factor which represents the annual real change in prices; 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.

A brief synopsis of the Commission's previous determinations and the associated price-cap compliance statements is now provided. Section 35 of the Aviation Regulation Act 2001 required the Commission, not more than 12 months after its establishment, to make a Determination specifying the maximum levels of aviation terminal services charges that may be imposed by the Irish Aviation Authority. The Commission made its first Determination on 26 February 2002, published in Commission Paper CP3/2002 – Determination and Report on the Maximum Levels of Aviation Terminal Services Charges that may be imposed by the Irish Aviation Authority.

Thereafter the Commission has checked compliance with the price cap annually. CP1/2003 established that the Irish Aviation Authority had complied with the price cap in the first regulatory period (March 2002 – March 2003). CP1/2004 made the same assessment in respect of the second regulatory period (March 2003 – March 2004).

The Commission re-examined the formulae used to determine the price cap in the Review of Determination and Report, CP4/2004. Since the specification of the price cap formulae in CP1/2004 would have resulted in double

counting in later years any under (or over) collection of revenues in earlier years, the formula was modified for future use.

This Commission Paper is similar to that of previous assessments. The Authority's compliance with the price cap for the regulatory year March 2004 -March 2005 year is measured and a new price cap for the March 2005 - March 2006 regulatory year is calculated.

3. PRICE CAPS DATA 2002 - 2006

Table 1

		26/03/02 to 25/03/03	26/03/03 to 25/03/04	26/03/04 to 25/03/05	26/03/05 to 25/03/06
	2001/2002	Period 1	Period 2	Period 3	Period 4
Maximum Average Revenue (YU_{t-1})		1.34	1.4974	1.6301	1.78
CPI $t-1$		4.75	1.86	2.22	
X $_t$		7.00	7.00	7.00	
YU $_t$		1.4974	1.6301	1.7804	
Interest (I $_{t-1}$)		2.96	1.92	1.88	
Total Revenue		7,750,845	10,829,552	14,073,430*	
Total MTOW		7,264,444	7,680,531	7,801,952*	
Actual Average Revenue (Y_{t-1} *)		1.067	1.41	1.80	
CAR's Budget Adjustment (W_{t-1})		70,128	(66,402) **	(73,713) ***	
MTOW for W calculation		8,376,250	8,773,750	9,172,750	
W per MTOW		0.0084	-0.0076	-0.0080	
K $_{t-1}$		-0.2811 [□]	0.3841	0.2066	
Y $_t$	1.34	1.79	2.01	1.98	

◆ A technical change in the definition of the K-term (see CP4/2004, page 10) causes it to switch from a negative value in the first period to positive values thereafter but in all of the first three regulatory periods it represents the amount by which per MTOW revenues were below the cap.

*These are actual figures up to December 2004 and estimates for period 2005 provided by the IAA.

**This is based on audited financial statements up to 31 December 2003 and draft financial statements up to 25 March 2004.

***This is based on draft financial statements from 26 March 2004 to 31 December 2004 and budgeted costs up to 25 March 2005.

Using the information in Table 1, the maximum average revenue per tonne of aircraft, (Y_t), departing from Dublin, Shannon or Cork airports during a regulatory period, is calculated by taking the unadjusted average revenue per tonne of aircraft, (YU_t), plus the difference between the Commission's actual costs and expenses and budgeted costs and expenses, (W) plus the correction per tonne to be made during the regulatory period, (K).

The unadjusted average revenue per tonne of aircraft departing from Dublin, Shannon or Cork airports in the previous regulatory period, (YU_{t-1}) is the basis for the current regulatory period's unadjusted average revenue per tonne of aircraft departing from Dublin airport, (YU_t), to which modifications for inflation and the X value are then applied.

$$YU_t = YU_{t-1} \left(1 + \frac{\Delta CPI_{t-1} + X}{100} \right)$$

Where,

ΔCPI_{t-1} means the percentage change (whether of a positive or negative value) in the Consumer Price Index between that published in January of year_t and January of year_{t-1}.

$$X = 7.$$

W is defined as the difference between the Commission's actual costs and expenses and budgeted costs and expenses, both expressed on a per tonne basis, recoverable through aviation terminal services levied on aircraft departing from Dublin airports during the regulatory period.

K , the correction per tonne to be made in the regulatory period is derived from the following formula: $(Y_{t-1} - Y_{t-1}^*) \left[1 + \frac{I_{t-1}}{100} \right]$

in which Y_{t-1}^* is the actual average revenue per tonne of aircraft departing from Dublin, Shannon or Cork Airport in the regulatory period and

I_{t-1} means the average of the rate (expressed as an annual percentage interest rate) on three-month commercial paper issued by the National Treasury Management Agency.

4. COMPLIANCE DURING THE FIRST AND SECOND REGULATORY PERIODS

The data in Table 1 in respect of the first two regulatory periods are based on:

- The price caps set out in the Commission's Determination and Report of the Maximum Levels of Aviation Terminal Services Charges, (CP3/2002);
- Finalised data reported by the IAA to the Commission in respect of actual maximum take-off weight (MTOW) in tonnes and the revenues from aviation terminal services charges (for the IAA's operations at Cork, Dublin and Shannon airports) in the regulatory periods 2002/03 and 2003/04;
- Finalised data regarding the difference between the Commission's actual and budgeted costs (the W term);
- Published, or publicly available, information on changes in consumer prices and the levels of interest rates.

The average revenues per MTOW yielded by way of aviation terminal services charges levied per aircraft departing from Dublin, Shannon and Cork airports have been below the price caps in the first two regulatory periods.

In the first period, the price cap was €1.34. Average revenue per MTOW yielded by way of aviation terminal services charges was €1.067¹.

In the second period, the price cap was set at €1.79². This took account of inflation³, the formula's prescribed positive X value of 7%, the Commission's

¹ In CP1/2003, the average revenue per MTOW tonne yielded by way of aviation terminal services charges levied at Dublin, Shannon and Cork Airports was provisionally reported as equal to €1.068. This figure has been amended to €1.067, following a final audit of accounts.

budget having been €70,128 greater than forecast⁴, and the IAA's under-collection of revenues in the first period (of €0.2811 per MTOW tonne). The average revenue per MTOW yielded by way of aviation terminal services charges was €1.41, thus below the price cap of €1.79.

² In CP1/2003, the Commission calculated the price cap as equal to €1.78. However, following the final audit of accounts and the recalculation of the actual average revenue per tonne as equal to €1.067, the price cap is amended to €1.79.

³ The Commission uses the Consumer Price Index to measure inflation. In the compliance report for the second regulatory year (CP1/2004) the Harmonised Index of Consumer Prices (HICP) was used in error to compute the price cap for the third regulatory period. In this report the correct (CPI) index has been substituted and, as a result, the inflation rate used is fractionally more rapid (1.86% compared to 1.8%) making the IAA's under collection of revenues (that will be available for collection in later regulatory periods), now correctly measured, fractionally larger.

⁴ This sum relates to the Commission's costs in respect of the regulation of aviation terminal services over the full period February 2001 to March 2003. The sum differs from that reported in previous compliance statements due to the posting of audit adjustments.

5. COMPLIANCE DURING THIRD REGULATORY PERIOD

In July 2004, the Commission completed a Review of the levels of the price cap in the first two regulatory years, published as CP4/2004 on 29th July 2004. This corrected an error in the regulatory formula.

For the third regulatory period (26 March 2004 to 25 March 2005), the price cap was set at €2.01. This took account of inflation, the formula's prescribed positive X value of 7%, the Commission's budget having been €66,402 below forecast⁵, and the IAA's under-collection of revenues over the first two regulatory periods (of €0.384 per MTOW tonne).

Following the Commission's request for information from the Authority, the Authority supplied the following information to allow the Commission to proceed with the monitoring of compliance:

- i. The total revenue yielded by way of aviation terminal services charges levied at Dublin, Cork and Shannon Airports during the third regulatory year of the Commission's determination;
- ii. The total number of MTOW tonnes in the calculation of the aviation terminal services charges during the third regulatory year of the Commission's determination.

In the year to 25 March 2005, the Authority's average revenue per tonne yielded by way of aviation terminal services charges levied per aircraft departing from Dublin, Shannon or Cork airports was €1.80. This was calculated using the actual revenue and tonnage figures for the period 26

⁵ The sum differs from that reported in previous compliance statements due to the posting of audit adjustments.

March 2004 to 31 December 2004 and estimated values for the period 1 January 2005 to 25 March 2005, as follows:

$$\frac{\text{Total Revenue}}{\text{Total MTOW}} = \frac{\text{€14,073,430}}{7,801,952} = \text{€1.80}$$

It is seen that the provisional average revenue per MTOW tonne in regulatory year 3 was €1.80, and so did not exceed the cap of €2.01.

Finalisation of the regulatory year 3 compliance statement and of the maximum charges for the fourth regulatory year is pending, following the future receipt, on the agreed schedule, by the Commission of finalised revenue and tonnage data for 2004/05 from the IAA.

6. PROVISIONAL PRICE CAP FOR FOURTH REGULATORY PERIOD

This section of the paper updates the price cap from 2004/05 to 2005/06 in accordance with the amended formula set out in the Review, CP4/2004. In order to establish the price cap, the following information is required:

- i. The 2004/05 price cap;
- ii. Any difference between the Commission's actual and budgeted costs that is recoverable through aviation terminal services charges;
- iii. The percentage change in the Consumer Price Index between January 2004 and January 2005;
- iv. The X factor;
- v. Any correction arising from over- or under-recovery in previous years by the IAA of regulated aviation terminal services charge;
- vi. The average interest rate on three-month commercial paper issued between March 2004 and February 2005 by the National Treasury Management Agency.

The information necessary for the Determination is as follows:

- i. The 2004/05 price cap of €2.01.
- ii. The differences between the Commission's budgeted and most up to date actual financial information on cost that is recoverable through aviation terminal services charges. For the period March 2004 to March 2005, actual drafts costs were below the forecast costs by €73,313.
- iii. Between January 2004 and January 2005, the Consumer Price Index increased from 125.9 to 126.7, corresponding to an inflation rate of 2.22% over that 12-month period;
- iv. The X-factor for the fourth regulatory year of +7%;
- v. The average daily interest rate on three month commercial paper issued between March 2004 and February 2005 by the National Treasury Management Agency was 1.88%;

By substituting this information into the formula, the per-tonne price cap for aviation terminal services charges in the fourth regulatory year is found to be €1.98. The full calculation is presented in Annex 1.

Using the above information, the Authority's regulatory requirements for the regulatory year 26 March 2005 to 25 March 2006 may be stated as follows:

The average revenue per MTOW tonne yielded by way of aviation terminal services charges levied per aircraft departing from Dublin, Shannon and Cork airports should not exceed €1.98.

7. ANNEX 1: COMPUTATION OF PROVISIONAL PRICE CAP FOR 2005-2006

The Determination as reported in the Review, CP4/2004, states that:

For the regulatory year 2005/06, the average revenue per tonne yielded by the Authority by way of aviation terminal services charges levied per aircraft departing from Dublin, Shannon and Cork airports shall not exceed the amount calculated in accordance with the following formula:

$$Y_{05/06}^{Iaa} = \left(Y_{04/05}^{Iaa} - W_{Car,03/04}^{Iaa} - K_{04/05}^{Iaa} \right) \left(1 + \frac{\Delta CPI_{04/05} + X^{Iaa}}{100} \right) + W_{Car,04/05}^{Iaa} + K_{05/06}^{Iaa}$$

We know the following:

$$Y_{04/05}^{Iaa} = \text{€ } 2.01$$

$$W_{03/04}^{Iaa} = -\text{€ } 0.0076$$

$$K_{04/05}^{Iaa} = \text{€ } 0.3841$$

$$\Delta CPI_{04/05} = 2.22$$

$$X^{Iaa} = 7$$

$$W_{Car,04/05}^{Iaa} = \frac{-\text{€ } 73,713}{9,172,750} = -\text{€ } 0.0080$$

$$K_{05/06}^{Iaa} = \left(Y_{04/05}^{*Iaa} - Y_{04/05}^{Iaa} \right) \left(1 + \frac{I_{04/05}}{100} \right) = (\text{€ } 2.01 - \text{€ } 1.804) \left(1 + \frac{1.88}{100} \right) = \text{€ } 0.2066$$

Therefore,

$$Y_{05/06}^{Iaa} = (\text{€ } 2.01 - (\text{€ } 0.0076 - \text{€ } 0.3841)) \left(1 + \frac{2.22 + 7}{100} \right) - \text{€ } 0.0080 + \text{€ } 0.2066 = \text{€ } 1.979$$