



**PRINCIPLES FOR ESTABLISHING THE COST-BASE FOR
EN ROUTE CHARGES AND THE CALCULATION OF
THE UNIT RATES**

EUROPEAN ORGANISATION FOR THE SAFETY OF AIR NAVIGATION
E U R O C O N T R O L

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1. **GENERAL**

The Contracting States to the Multilateral Agreement relating to Route Charges have agreed to adopt a common policy in respect of the calculation of the charges and of their cost base.

The Contracting States have therefore adopted the following principles.

1.1 The Principles are based on those described in the "ICAO's Policies on Charges for Airports and Air Navigation Services" as contained in ICAO Document 9082 and in the "Manual on Air Navigation Services Economics" as contained in ICAO Document 9161, subject to any modification made in order to take account of other methods specific to the EUROCONTROL route charges system.

1.2 Contracting States shall establish en route charging zones in the airspace falling under their responsibility where en route services are provided to airspace users.

The en route charging zones shall be defined in a manner consistent with air traffic control operations and services, after consultation of airspace users' representatives.

An en route charging zone shall extend from the ground up to, and including, upper airspace without prejudice to the possibility for a Contracting State to establish a specific zone for a complex terminal area after consultation with airspace users' representatives.

If en route charging zones extend across the airspace of more than one Contracting State, the Contracting States concerned shall make the appropriate arrangements to ensure consistency and uniformity in the application of the Principles to the airspace concerned. They shall notify EUROCONTROL thereof.

1.3 En route charges shall reflect the costs incurred either directly or indirectly in the provision of en route services, including the EUROCONTROL costs. The costs of en route services shall be financed by means of en route charges imposed on the users of en route services, without prejudice to the financing of exemptions of certain users of en route services through other sources of financing, in accordance with Paragraph 4.2.

Account shall be taken of the whole of the en route air navigation facilities and services for which each Contracting State is responsible by virtue of the ICAO Regional Air Navigation Agreements and the associated Regional Air Navigation Plan on the basis of which national plans are established. This means that only facilities and services provided for civil and military traffic operating in accordance with ICAO rules and regulations (General Air Traffic: GAT) can be included. The Contracting States shall apply the Principles to all their providers of air navigation facilities and services whose costs are included in their cost-bases.

These providers shall establish the costs incurred in the provision of en route services in relation to the facilities and services provided for and implemented under the relevant ICAO Regional Air Navigation Plan in the en route charging zones under their responsibility. Costs shall include administrative overheads, training, studies, tests and trials as well as research and development allocated to these services.

Contracting States may establish the following costs when they are incurred in relation with the provision of en route services:

- (a) the costs incurred by the relevant national authorities,
- (b) the costs incurred by the recognised organisations, i.e. those acting on behalf of these national authorities,
- (c) the costs stemming from international agreements.

Without prejudice to other sources of funding, and with a view to a high level of safety, cost efficiency and service provision, the en route charges may be used to provide funding for projects designed to assist specific categories of airspace users and/or air navigation service providers in order to improve collective air navigation infrastructures, the provision of en route services and the use of airspace in accordance with applicable law.

- 1.4 Contracting States shall establish their cost-base in order to account for the costs of the en route air navigation systems under their jurisdiction. For the purpose of calculating the unit rate for year "n + 1" appropriate forecast operating accounts shall be established whereby the costs for year "n + 1" shall be determined on the basis of actual costs in the last complete financial year (year "n - 1") updated according to available information, particularly budget forecasts relating to years "n" and "n + 1". Adequate steps must be taken to ensure that there is no double counting.

However, Contracting States may opt for the process of setting unit rates in advance for a period of three to five years. In such cases, they shall establish appropriate forecast cost and service units for each of the relevant years.

In case of unexpected major changes of traffic or costs, unit rates may be amended during the course of the year.

- 1.5 In order to be taken into account, facilities and services shall either be in operation, or be expected to be put into service, by the end of year "n + 1". Facilities introduced during the year shall only be taken into account on a pro-rata basis.

Any temporary shut-down of a facility (i.e. failure or maintenance) shall not be taken into account.

- 1.6 The accounting period shall be 1 January to 31 December.

- 1.7 The cost-base shall be established by Contracting States in their national currency or in euros. Preliminary data, together with ancillary data, shall be reported to EUROCONTROL's Central Route Charges Office (CRCO) not later than 1 June of year "n". Final data, together with ancillary data, shall be reported not later than 1 November of year "n", in accordance with the specimen tables in Appendix II.

Irrespective of the period for which unit rates are set, costs and ancillary data shall cover the period up to "n + 5".

- 1.8 In order to establish a common currency basis, the CRCO shall convert the reported amounts of the cost-bases into euros. The exchange rate used for this purpose shall be the monthly average of the "Closing Cross Rate" calculated by Reuters, based on daily BID rate, for the various national currencies in relation to the euro for the month of April of year "n" in respect of the preliminary data and the month of September of year "n" in respect of the final data.

Contracting States experiencing high inflation may convert their costs established for year "n + 1" at constant prices (i.e. not adjusted for inflation) directly into euros, using the actual exchange rate at the time of calculation. This is the preferred method and should be used by all Contracting States experiencing high inflation rates, i.e. in excess of 15% per annum.

Alternatively, a Contracting State could convert its costs established for year "n + 1" at current prices, into euros, at the average forecast exchange rate for year "n + 1". In this instance the forecast exchange rate should broadly reflect the forecast differential inflation rate for that Contracting State and the countries of the Economic and Monetary Union (EMU), for year "n + 1".

In either case, the resulting unit rate should remain constant throughout the year "n + 1".

1.9 Adjustment mechanism

As charges are calculated for the year "n + 1" based on the estimated costs and traffic for the period concerned, an adjustment mechanism will be applied to ensure that only the actual costs of the service are eventually recovered.

Where unit rates are set in advance for a period of three to five years, the adjustment mechanism shall be applied to ensure that only the actual costs of the service are eventually recovered.

The adjustment mechanism is described in detail in Appendices II and III and in Paragraph 4 below.

1.10 Consultation with airspace users

- 1.10.1. Contracting States shall ensure that airspace users' representatives are consulted on the charging policy on a regular basis. To this end, they shall provide them with the necessary information on their charging mechanism as set out in Appendix II, and shall organise an effective and transparent consultation hearing to present this information as well as the information referred to in Paragraph 1.10.2. below, in the presence of the air navigation service providers involved.

The relevant documentation, excluding any information of a confidential nature, shall be put at the disposal of airspace users' representatives, and EUROCONTROL three weeks before the consultation hearing.

- 1.10.2. Contracting States and/or air navigation service providers shall organise an exchange of information on cost bases, planned investments and expected traffic with airspace users' representatives if the latter so request. Subsequently, they shall make their respective costs established in accordance with Paragraph 1.3 available in a transparent manner to airspace users' representatives and EUROCONTROL.

The information of a non confidential nature referred to above shall be based on the reporting tables and detailed rules set out in Appendix II (Reporting Table 1 and additional information).

- 1.10.3. Airspace users' representatives shall be consulted by the enlarged Committee for Route Charges, particularly on preliminary and final estimated cost-base figures for year "n + 1", and on any changes to the EUROCONTROL Principles for establishing the cost-base.

Consultations regarding preliminary and final data shall be scheduled approximately 3 weeks after the dates given in Paragraph 1.7.

Such data shall be made available to airspace users 3 weeks prior to the dates set for such consultations.

- 1.10.4 The provisions of paragraph 1.10.1 and 1.10.2 shall also apply to any revision, in accordance with paragraph 1.4, third sub-paragraph, of the unit rate during the course of the year.

In so far as practicable, the Contracting States concerned shall ensure that airspace users' representatives are consulted in the enlarged Committee for route charges on the revised estimated cost-base and unit rate figures.

1.11 Incentive schemes, including independent economic regulation

- 1.11.1 Contracting States may establish or approve incentive schemes consisting of financial advantages or disadvantages applied on a non-discriminatory and transparent basis to support improvements in the provision of en route services resulting in a different calculation of charges as set out below. These incentives may apply to air navigation service providers and/or airspace users.

When a Contracting State decides to apply an incentive scheme on air navigation service providers, it shall, following the consultation referred to in Paragraph 1.10.1, set in advance the conditions for determining the maximum level of the unit rate or of the revenue for each year over a period not exceeding five years. These conditions shall be set with reference to the projected level of costs (including the cost of capital) over the period and may also stipulate financial modulations (either above or below the expected costs) based on particular aspects of the air navigation service providers' performance which may include efficiency, quality of service, the performance of particular projects, milestones or competencies or a level of cooperation with other air navigation service providers in view of taking into account network effects.

When a Contracting State decides to apply an incentive scheme, including night time modulations, in respect of airspace users, it shall, following the consultation referred to in Paragraph 1.10.1, modulate charges incurred by them in order to reflect efforts made by these airspace users to optimize the use of en route services, to reduce the overall costs of these services and to increase their efficiency, in particular by decreasing charges according to airborne equipment that increases capacity or to offsetting the inconvenience of choosing less congested routings.

The incentive scheme shall be limited in time, scope and amount. The estimated savings generated by the operational efficiency improvements shall at least offset the cost of the incentives within a reasonable timeframe. The scheme shall be subject to regular review involving airspace users' representatives.

Contracting States which have established or approved incentive schemes shall monitor the proper implementation by air navigation service providers of these incentive schemes.

- 1.11.2 In accordance with Paragraph 1.11.1 above and notwithstanding the other above provisions of the Principles, where:
- the en route services for which a Contracting State is responsible are provided by a body ("the service provider") which is subject to independent economic regulation, and
 - that regulation is designed, inter alia, to provide incentives through the

charging mechanism to encourage an efficient and effective service at the lowest possible cost,

that Contracting State may disapply both Paragraph 1.4 above and the adjustment mechanism referred to in Paragraph 1.9 above and described in Chapter 4 and Appendix III, whereupon the following provisions shall apply:

- (i) the regulator¹ shall conduct periodic reviews of future charges and shall set in advance, for a period not exceeding 5 years, conditions from which the maximum level of the unit rate shall be determined in each year of the review period;
- (ii) the proposed unit rate shall be calculated annually in accordance with the conditions referred to in (i) above, and presented to the enlarged Commission in accordance with (iii) of Paragraph 1.11.3;
- (iii) in the event of exceptional circumstances the regulator may institute an interim adjustment to the regulatory conditions imposed on the service provider.

1.11.3 Any Contracting State wishing to adopt independent economic regulation in compliance with the provisions of Paragraph 1.11.2 shall do so in accordance with the Principles and taking full account of the guidelines in Appendix VII. The following conditions shall apply:

- (i) Contracting States shall, before setting up a new system, consult with airspace users, the service provider concerned, and EUROCONTROL on the objectives, procedures and timetable of the proposed system and take account of the views expressed;
- (ii) Prior to the beginning of each review period, or where the regulator is considering an interim adjustment in accordance with Paragraph 1.11.2 (iii), the Contracting State shall:
 - (a) ensure that adequate information, as set out in Appendix VII, is made available to airspace users to enable them to participate in informed consultation;
 - (b) ensure that there is appropriate and meaningful consultation between the regulator, the service provider and airspace users so as to determine sound and justifiable projections and principles to be applied in setting regulatory conditions on the maximum level of the unit rate;
 - (c) inform the enlarged Committee of these projections and:
 - the forecast costs for the review period as applied by the regulator, using the specimen tables at Appendix II;
 - conditions set by the regulator and the maximum level of the unit rate which derives from them.
- (iii) Within each review period the contracting state shall on a yearly basis:
 - notify its forecast and actual costs using specimen tables at Appendix II in accordance with common procedures as described in Paragraph 1.7; and
 - seek the approval of the enlarged Commission of its proposed unit rate.
- (iv) Contracting States shall make provision for a suitable appeal mechanism where this would be consistent with their national legal systems.

¹ "The regulator" is defined as the individual or body mandated by the contracting state to administer the system of economic regulation established in accordance with the Principles.

- 1.11.4 In order to encourage an efficient and effective service at the lowest possible costs, the provisions of Paragraphs 1.11.2 (i), (ii) and (iii) and 1.11.3 (i), (ii), (iii) and (iv) shall apply by analogy, it being understood that all necessary changes have been made, to those Contracting States opting for the setting of unit rates in advance for a period of three to five years and whose service provider is not subject to independent economic regulation.

2. ACCOUNTING PRINCIPLES - GENERAL

- 2.1 The Contracting States shall ensure that air navigation service providers, whatever their system of ownership or legal form, draw up, submit to audit and publish their financial accounts. These accounts shall comply with the International Accounting Standards. Where, owing to the legal status of the service provider, full compliance with the International Accounting Standards is not possible, the Contracting State shall ensure that the provider achieves such compliance to the maximum possible extent.

In all cases, the Contracting States shall ensure that air navigation service providers publish an annual report and regularly undergo an independent audit.

The Contracting States shall ensure that, when providing a bundle of services, air navigation service providers identify in their internal accounting, the relevant costs and income for en route services, broken down in accordance with the Principles and, where appropriate, shall keep consolidated accounts for other, non-air-navigation services, as they would be required to do if the services in question were provided by separate undertakings.

The Contracting States shall designate the competent authorities that shall have a right of access to the accounts of service providers that provide en route services in the airspace under their responsibility.

- 2.2 The costs of eligible services, facilities and activities within the meaning of Paragraph 1.3. shall be established in such a manner as to be consistent with the accounts referred to in Paragraph 2.1 above for the period from 1 January to 31 December. However, the non-recurring effects resulting from the introduction of International Accounting Standards may be spread over a period not exceeding 15 years.

These costs shall be broken down into staff costs, other operating costs, depreciation costs, cost of capital and exceptional items including non recoverable taxes and custom duties paid, and all other related costs.

Staff costs shall include gross remuneration, payments for overtime, employers' contributions to social security schemes as well as pension costs and other benefits.

Other operating costs shall include costs incurred through the purchase of goods and services used to provide en route services, in particular outsourced services such as communication, external staff such as consultants, material, energy, utilities, rental of buildings, equipment and facilities, maintenance, insurance costs and travel expenses. Where an air traffic service provider purchases other en route services, the service provider shall include the actual expenditure for those services in its other operating costs.

Depreciation costs shall relate to the total fixed assets in operation for en route

services purposes. Fixed assets shall be depreciated, in accordance with their expected operating life, using the straight-line method applied to the historic costs of the assets being depreciated. When the assets belong to an air navigation service provider which is subject to an incentive scheme as referred to in Paragraph 1.11.1, current cost accounting may be applied instead of historic cost accounting for the calculation of depreciation. The method shall remain constant during the duration of the depreciation.

Cost of capital shall be equal to the product of:

- (i) the sum of the average net book value of fixed assets used by the air navigation service provider in operation or under construction and of the average value of the net current assets that are required for the provision of en route services; and
- (ii) the weighted average of the interest rate on debts and of the return on equity.

Exceptional items shall be non-recurring costs in relation to the provision of en route services that have occurred in the year.

For the purposes of subparagraph (ii), the weight factors shall be based on the proportion of the financing through either debt or equity. The interest rate on debts shall be equal to the average interest rate on debts of the air navigation service provider. The return on equity shall take into account the financial risk of the air navigation service provider taking the national bond rate as a guide. When the air navigation service provider is subject to an incentive scheme as referred to in Paragraph 1.11.1, an additional premium may be added to ensure adequate consideration of the specific financial risk assumed by this provider.

When the assets do not belong to the air navigation service provider, but are included in the calculation of the cost of capital, Contracting States shall ensure that the costs of these assets are not recovered twice.

- 2.3 The costs of eligible services, facilities and activities within the meaning of Paragraph 1.3 shall be allocated in a transparent way to the en route charging zones in respect of which they are actually incurred.

Where costs are incurred across different en route charging zones, they shall be allocated in a proportional way on the basis of a transparent methodology as required in Paragraph 1.10.2.

The cost of en route services shall relate to the costs referred to above to the exclusion of the costs relating to the terminal services, defined as follows:

- (a) aerodrome control services, aerodrome flight information services including air traffic advisory services, and alerting services;
- (b) air traffic services related to the approach and departure of aircraft within a certain distance of an airport on the basis of operational requirements;
- (c) an appropriate allocation of all other air navigation services components, reflecting a proportionate attribution between en route and terminal services.

If exemptions are granted to VFR flights in accordance with Paragraph 4.2, the air navigation service provider shall identify the costs of en route services provided to VFR flights separately from the costs provided to IFR flights. These costs may be established through a marginal-cost methodology taking into account the benefits to IFR flights stemming from the services granted to VFR flights.

Cost allocation between en route and terminal services should be done on a statistical basis. For facilities and services that serve both en route and terminal, the costs should be allocated based on one or more of the following criteria as appropriate:

- a. in proportion to the number of dedicated controller positions;
- b. in proportion to the number of dedicated sectors;
- c. in proportion to the number of flights;
- d. in proportion to the estimated time of use of the equipment;
- e. in proportion to the personnel;
- f. in proportion to the square footage of accommodation;
- g. in proportion to the number of radio channels;
- h. in proportion to the average distance flown or time spent;
- i. in accordance with the organisational structure of Air Traffic Service provision.

3. SUPPLEMENTARY INFORMATION ON THE COSTS INCLUDED IN THE COST-BASE

3.1 Investment costs

Investment costs to be included in the cost base comprise amortisation of fixed assets (tangible and intangible assets) and cost of capital.

3.1.1 Fixed assets shall comprise equipment and buildings, including related works services, land, basic software and, where appropriate, application software.

The investment expenditure shall include taxes and/or customs duty paid, where applicable.

3.1.2 The percentages to be applied in calculating the amortisation of investment expenditure shall be determined in accordance with the expected operating life and the pertinent IAS/IFRS standards. This would typically be:

- a. between 20 and 40 years in the case of freehold buildings, including related works services;
- b. over the period of the lease in the case of leasehold buildings;
- c. between 10 and 15 years in the case of furniture and fittings;
- d. between 4 and 10 years in the case of motor vehicles;
- e. between 7 and 15 years in the case of electronic equipment (including telecommunications equipment);
- f. between 7 and 10 years in the case of general equipment;
- g. between 3 and 10 years in the case of computer equipment;
- h. between 3 and 8 years in the case of basic software and, if appropriate, application software;
- i. between 10 and 20 years in the case of aircraft.

When it becomes apparent that the operating life of an asset being amortised will be shorter than was anticipated when the original amortisation schedule was drawn up, one of the following two methods should be adopted:

- the net book value of the asset may be written off over the remaining years of the revised operating life;
- the precise amount of the residual value less any proceeds from its disposal may be added in full, in the financial year in which it occurs, to the amortisation charged in that year.

No amortisation shall be calculated for land.

Contracting States experiencing high rates of inflation may need to use alternative approaches to calculating amortisation. Such approaches should be based on generally accepted accounting principles. An approach that may be used involves adjusting the portion which is not amortised of the original book value of the asset concerned by increasing it by a percentage based on the rate of inflation, as measured by an official index, or as reflected in the change of the exchange rate in relation to the euro, when calculating the annual amortisation charged.

In such cases the cost of capital should be reflected by a "net" rate which includes only the rate of inflation in the hard currency selected. If, for example, the euro is used as hard currency, the euro interest rate has to be used.

Another method would be to establish the costs directly in euro and to use the corresponding cost of capital for the euro.

- 3.1.3 The cost of capital falls into two basic categories. The first is the interest paid to the providers of debt capital (other than equity), that is lenders for various financing purposes, usually in connection with the acquisition or provision of assets. The second is the appropriate cost of capital applied to equity. The cost of capital applied to equity to be used is a matter for the Contracting State (or other economic regulator) to approve, taking into account the low financial risk of providing en route services. In both cases the government bond rate, or alternatively rates payable in financial markets by enterprises of comparable low financial risk, may be taken as a guide.

An example is included as Appendix I.

- 3.1.4 The cost of capital should be calculated annually on the capital employed in the organisation. The capital employed should be determined on the basis of the definitions set out in the ICAO Manual on Air Navigation Services Economics (ICAO Doc. 9161 Paragraph 4.38 et seq.).

See Appendix V for the definition of capital employed.

- 3.1.5 Equipment or buildings still in service beyond the above-mentioned amortisation periods are regarded as fully amortised and no amortisation or cost of capital shall be included in respect of them.

If essential changes are made to equipment or buildings already amortised or in course of amortisation, the amount of the capital expenditure relating to these changes shall be amortised in accordance with the same rules.

Proceeds from the disposal of assets shall be credited against the cost-base. In exceptional circumstances this could be spread over a number of years, after prior consultation with the airspace users.

3.2 Operating costs

Gross operating costs shall be taken into account after deduction of income other than non-recoverable taxes.

Operating costs comprise:

- a. the total actual rental for land transmission lines (excluding the cost of terminal equipment, which is included under investment costs);
- b. any rental costs of land, buildings and other facilities including taxes and other charges, where applicable;
- c. the actual cost of utilities including water, heating and all energy supplies;
- d. the total actual rental for the Aeronautical Fixed Telecommunications Network (AFTN), less the appropriate percentage of the rental for the lines between control or communications centres and airports: see Paragraph 3.4 (the cost of the terminal equipment of ATC centres is to be entered under investment costs);
- e. repairs and maintenance excluding internal staff costs but including non capitalised equipment, e.g. spare parts or other small expensed items;
- f. the total operating costs of other operational and technical support facilities, including administrative support, legal, consultancy and audit;
- g. the cost of application software unless considered as an investment.

3.3 Staff costs

Staff costs comprise the actual costs of staff including those in central services, trainees, supervisors and technical support staff including maintenance staff, covering not only salaries but also pension costs (e.g. payments to the Pension Fund in respect of serving staff) and insurance costs, etc.

3.4 Air Traffic Management (ATM) costs

ATM is divided into Air Traffic Services (ATS), Air Traffic Flow Management (AFTM) and Airspace Management (ASM), where ATS is the primary component of ATM.

ATS costs are defined as the costs of Air Traffic Services provided for en route aircraft.

Where the utilisation of ATS facilities between en route services on the one hand and terminal services on the other cannot be allocated on a statistical basis, the said facilities shall be classified as follows:

- facilities provided mainly for en route services (allocation of 75% of the corresponding costs to route services);
- facilities provided virtually to the same extent for en route and terminal services (allocation of 50% of the corresponding costs to route services);
- facilities provided mainly for terminal services (allocation of 25% of the corresponding costs to route services).

Where the utilisation of an ATS facility (e.g. between civil and military purposes) cannot be determined directly, civil airspace users should only be charged those costs properly allocable to them.

3.5 Communications, Navigation and Surveillance (CNS) costs

CNS costs shall comprise the costs of communications, navigation and surveillance facilities and services, including Global Navigation Satellite Systems (GNSS, cf. Appendix IV) as soon as applicable.

With regard to point-to-point communications where the costs cannot be allocated exactly, 100% of costs shall be charged to route services or telecommunications centres where the link is between two route service centres, but only 50% where the link is between an area control centre and an aerodrome or an approach control centre.

3.6 Costs of basic and advanced training*

Costs of basic and advanced training shall comprise the costs of instruction at air traffic schools and costs of advanced training of maintenance and operating staff, including costs of accommodation and other facilities.

3.7 Costs in respect of studies, tests and trials*

The costs included in this category are actual annual costs in respect of personnel, equipment and buildings used for studies, tests and trials relating to en route services. Pre-operational application software costs are also included in this category. Costs of studies which are in the nature of basic research should be excluded.

3.8 Administrative costs*

3.8.1 The administrative costs are actual costs of administrative staff and facilities on the understanding that there is a clear connection between these costs to be allocated to airspace users and the concept of services rendered by both operational and technical support staff.

The administrative costs include the costs in respect of traffic data collection and transmission.

3.8.2 These costs will be calculated according to the share of administrative support services in the overall activities related to en route services.

3.8.3 Insurance premia insofar as these constitute a real cost to Contracting States shall form part of administrative costs.

3.9 Aeronautical Information Service (AIS) costs

AIS costs should either be charged to en route services or apportioned between en route services and other services, the latter according to national practice.

3.10 MET costs

3.10.1 Contracting States shall reinforce the co-ordination between the National Authorities concerned (Civil Aviation Authority and MET Authority -when different-) and the service providers concerned (aeronautical MET service provider and Air Navigation Service Provider – when different) in order to ensure that MET costs charged to civil airspace users are justified and properly established.

* For the purpose of filling Reporting Table 1 at Appendix 2, the costs referred to in paragraphs 3.6, 3.7 and 3.8 above shall not be identified. They shall be included in the costs of the relevant services.

- 3.10.2 Contracting States shall ensure that their aeronautical MET service provider draws a comprehensive inventory of the MET facilities and services (direct *and core*) and of the aeronautical MET products and functions exclusively needed to meet aeronautical requirements. Furthermore this inventory shall be supplemented by the relevant references in ICAO Annexes (especially Annex 3), Procedures for Air Navigation Services and European Air Navigation Plan as well as by the references of national regulations concerned.
- 3.10.3 Information shall be disclosed to civil airspace users at the product/function level. Contracting States shall introduce transparent cost-accounting systems as soon as practicable. When implemented, Contracting States shall ensure that detailed documentation on these cost-accounting systems (starting with the inventory) can be made available to civil airspace users relevant representatives.
- 3.10.4 A breakdown of the MET costs by 'input categories' (Staff, Operating costs, Amortisation, Interest, Other), shall be disclosed at multilateral level as an annex to the existing EUROCONTROL reporting tables.

3.11 Search and Rescue (SAR) costs

Costs included in this category are those for search and rescue services provided to civil aviation by any permanent establishment of facilities and personnel maintained for the purposes of providing such services.

Search and rescue services facilities comprise rescue coordination centres (RCCs), rescue sub-centres (RSCs) if any, long, medium and short-range aircraft (including helicopters and ultra-long range or extra-long range aircraft), rescue boats and vessels, mountain rescue units and any other units, forces or facilities which are designated primarily or exclusively, or which are available to perform aeronautical search and rescue functions when required.

With regard to these services the following principles should apply:

- only the aeronautical facilities and services included in the ICAO Regional Air Navigation Plan should be accounted for;
- cost allocation attributable to civil aviation and non-civil aviation users (military, agriculture, land and maritime transport, tourism, etc.) should precede any cost recovery from civil aviation;
- the allocation of costs should be determined in such a way as to ensure that no airspace users are burdened with costs not properly allocable to them;
- these operations must be performed with the precision and transparency required and airspace users should be provided with relevant information, in particular with regard to the costs of the facilities and services provided.

3.12 EUROCONTROL Costs

- 3.12.1 EUROCONTROL costs shall be established in accordance with the Principles. The costs shall be established on the basis of the Agency's Annual Accounts submitted for the Permanent Commission's approval, in applying the same method as that mentioned in Paragraph 1.5. of the Principles.
- 3.12.2 The various categories of EUROCONTROL costs shall be apportioned among the Contracting States as follows:

- a. the operating costs for Headquarters, including the Central Flow Management Unit, the Brétigny Experimental Centre and the Luxembourg Institute of Air Navigation Services shall be apportioned among the Contracting States in accordance with the method used for calculating their contributions to the Agency Budget (Article 19 of the Statute of the Agency refers);
- b. operating costs in respect of Maastricht Control Centre shall be allocated to the airspaces in which the facilities provide services in accordance with sharing keys as agreed upon by the Contracting States involved;
- c. EUROCONTROL investment costs shall be apportioned among the Contracting States:
 - either by the method used for calculating their contributions to the Agency Budget, e.g. in the case of capital costs in respect of Headquarters, including the Central Flow Management Unit, the Experimental Centre and the Institute of Air Navigation Services;
 - or according to the regionalisation rule (i.e. costs shall be attributed to the airspace for which the facilities have provided services) in respect of amortisation of facilities providing route services (e.g. Maastricht Control Centre).

Interest earned by the Agency on its own accounts shall be deducted from EUROCONTROL costs before apportionment of such costs among the Contracting States.

- 3.12.3 The Contracting States' shares of the EUROCONTROL costs shall be added to their costs for the subsequent calculation of the unit rates.

4. CALCULATION OF THE UNIT RATE

The unit rate shall be calculated, either:

- by dividing the forecast total number of service units for the relevant year into the forecast cost-base for the same year, or
- by dividing the forecast number of chargeable service units for the relevant year into the forecast cost-base reduced to take account of exempted flights.

Any under-recovery of costs resulting from flights exempted from the payment of en route charges shall not be recovered from other airspace users.

The unit rate shall be determined in accordance with Appendix III.

4.1 Financial results of year "n - 1"

4.1.1 Income/Revenue

The revenues will be the year-end balance of the revenue account from which it can be directly taken to the form for the calculation of the adjustment mechanism (Appendix III). This will usually be represented by flights performed during year "n - 1" and for which a liability for payment has been generated.

4.1.2 Balance

Under-recovery or over-recovery as a result of the difference between income/revenue and costs shall be carried over and included in the cost-base of year "n + 1" or to a period of up to six years (for years "n" up to "n + 5") and included in the corresponding cost-bases. An appropriate cost of capital shall be applied to the amounts carried forward. Amounts carried forward to a given year shall be converted into euros at the rate of exchange applied to the other costs for that year. Contracting States wishing to avail of the flexibility to carry forward under/over recoveries for a longer period than "n + 1" shall inform the enlarged Committee for Route Charges in writing and with the appropriate justifications.

Contracting States opting for the setting of unit rates in compliance with the second indents of Paragraphs 1.4 and 1.9, shall carry forward the cumulated under/over recoveries as results of differences between actual costs and revenues and that have not yet been carried forward, to the following period.

4.2 Exempted flights

The costs in respect of exempted flights shall be calculated on the basis of service units generated by exempted flights as specified in the Conditions of Application of the Route Charges System.

In the cases where the number of service units cannot directly be established the following procedure shall apply:

- a. direct deduction of the costs of exempted flights as identified in Paragraph 2.3;
- b. a deduction shall be made for circular flights. The amount to be deducted, or the number of service units to be taken into account, shall be at the discretion of the Contracting State concerned.

The Contracting States shall ensure that air navigation service providers are reimbursed for the en route services they provide to exempted flights.

4.3 Establishment of service units

Wherever applicable, the establishment of service units and proportional values in relation to exempted flights serving for an appropriate reduction of the cost-base, as well as all related calculations, shall be carried out by the Central Route Charges Office (CRCO). To this end, Contracting States shall transmit to the CRCO all necessary data. Data on exempted flights which are to be taken into account in the calculations shall be included in the normal traffic data which are transmitted to the CRCO at regular intervals. Forecasts of service units, while remaining the responsibility of the Contracting States, may be undertaken by either the CRCO or the States concerned.

5. **CALCULATION OF THE REGIONAL ADMINISTRATIVE UNIT RATE**

The regional administrative unit rate shall constitute the remuneration for the costs incurred by EUROCONTROL in operating the Route Charges System. It shall be established in accordance with the following rules:

- 5.1 The collection cost-base of year "n + 1" shall be established on the basis of the following categories of costs:
 - a. CRCO direct operating costs of year "n + 1" assessed by reference to the

Agency's budget estimates;

- b. investment costs for CRCO administrative purposes to be included in its cost-base for year "n + 1" assessed by reference to the Agency's budget estimates;
 - c. CRCO indirect costs estimated for year "n + 1";
 - d. costs relating to the Internal Auditor assessed by reference to the Agency's budget estimates for year "n + 1";
 - e. balance of the CRCO administrative account of year "n-1" and balance for year "n - 3" carried forward to year "n - 1".
- 5.2 The regional administrative unit rate shall be calculated by dividing the amount of the collection cost-base of year "n + 1" by the total number of service units estimated for year "n + 1" for the en route charges area.
- 5.3 The regional administrative unit rate shall be added to the unit rate applicable in the en route charging zone.

6. COMPLIANCE MONITORING

6.1 Appeal

The Contracting States shall ensure that decisions taken pursuant to the Principles are properly reasoned and are subject to an effective review and/or appeal procedure, as set out in Paragraph 6.2 below.

6.2 Review of charges

The enlarged Committee shall provide for the review of compliance with the Principles.

Any Contracting State or airspace users' representative may raise concerns regarding the alleged non-compliance or non-application of the Principles by a Contracting State or one of its providers of en route services.

The enlarged Committee, shall establish the appropriate rules of procedure to organise this compliance review system.

7. ENFORCEMENT MEASURES

Contracting States shall ensure that effective enforcement measures are applied. These measures may include the denial of services, detention of aircraft or other enforcement measures in accordance with applicable law.

8. ENTRY INTO FORCE

These Principles shall enter into force upon their approval by the enlarged Commission.

This version of the Principles supersedes Doc. No. 07.60.01 of 1 October 2007.

APPENDIX I
EXAMPLE FOR THE CALCULATION OF THE COST OF CAPITAL

	1	2	3	4	5	6
	Principal amount in EUR	% share of total debt	% share of total capital	Effective interest %	Weighted interest (2x4)	Weighted cost of capital (3x5)
Loan/Bond "A"	300	43.0		6.4	2.75	
Loan/Bond "B"	200	28.5		6.2	1.77	
Loan/Bond "C"	<u>200</u>	<u>28.5</u>		<u>7.0</u>	<u>2.00</u>	
sub-total	700	100.0	70.0		6.50	4.6
Equity	<u>300</u>		30.0	<u>8.0</u>	<u>8.00</u>	<u>2.4</u>
Total interest bearing liabilities and equity	<u>1000</u>		<u>100.0</u>			<u>7.0</u>

APPENDIX II SPECIMEN REPORTING TABLES

Transparency of the en route cost base: Reporting Table 1 and additional information

The Contracting States shall fill the following **Reporting Table 1** for each en route charging zone under their responsibility. The Contracting States shall ensure the provision of the following Reporting Table 1 for each air navigation service provider concerned.

The Contracting States shall also provide a consolidated Reporting Table 1 for each en route charging zone under their responsibility. When an en route charging zone extends across the airspace of more than one Contracting State, they shall fill the table jointly in accordance with the arrangements referred to in Paragraph 1 of the Principles.

The figures shall be actual figures for year (n-3) until year (n-1) and planned figures for year (n) onwards. Actual costs shall be established on the basis of the certified accounts. Planned costs shall be established in accordance with the business plan required by the certificate referred to in the regulations on service provision, if applicable.

Reporting Table 1
Total costs

Entity:

Charging zone:

Year :

(n - 3) A	(n - 2) A	(n - 1) A	(n) F	(n + 1) F	(n + 2) p	(n + 3) p	(n + 4) p	(n + 5) p
--------------	--------------	--------------	----------	--------------	--------------	--------------	--------------	--------------

Detail by nature (in '000 national currency or '000 euro)

Staff	%i/i-1								
Other operating costs	%i/i-1								
Depreciation	%i/i-1								
Cost of capital	%i/i-1								
Exceptional items	%i/i-1								
Total costs	%i/i-1								

Detail by services (in '000 national currency or '000 euro)

Air traffic management	%i/i-1								
Communication	%i/i-1								
Navigation	%i/i-1								
Surveillance	%i/i-1								
Search and rescue	%i/i-1								
Aeronautical information	%i/i-1								
Meteorological services	%i/i-1								
Supervision costs	%i/i-1								
Other State costs	%i/i-1								
Total costs	%i/i-1								

Reporting Table 1 continuation
Complementary Information: inflation, exchange rate, cost of capital
Actual data and planning assumptions

Entity:

Charging zone:

Year :

(n - 3)	(n - 2)	(n - 1)	(n)	(n + 1)	(n + 2)	(n + 3)	(n + 4)	(n + 5)
A	A	A	F	F	p	p	p	p

Complementary information on the inflation rate

Inflation rate (%)	(n - 3)	(n - 2)	(n - 1)	(n)	(n + 1)	(n + 2)	(n + 3)	(n + 4)	(n + 5)

(n - 3)	(n - 2)	(n - 1)	(n)	(n + 1)	(n + 2)	(n + 3)	(n + 4)	(n + 5)
A	A	A	F	F	p	p	p	p

Complementary information on the exchange rate of the national currency with the euro

Exchange rate (1 EUR =)	(n - 3)	(n - 2)	(n - 1)	(n)	(n + 1)	(n + 2)	(n + 3)	(n + 4)	(n + 5)
$\%i/i-1$									

The actual exchange rate is the average year i rate.

Forecast exchange rate used for year n is the average for September of year n - 1.

Forecast exchange rate used for year n + 1 is the average for April/September of year n.

(n - 3)	(n - 2)	(n - 1)	(n)	(n + 1)	(n + 2)	(n + 3)	(n + 4)	(n + 5)
A	A	A	F	F	p	p	p	p

Complementary information on the cost of capital ('000 national currency or '000 euro)

Average operating capital	(n - 3)	(n - 2)	(n - 1)	(n)	(n + 1)	(n + 2)	(n + 3)	(n + 4)	(n + 5)
$\%i/i-1$									
Of which, average long term assets									
$\%i/i-1$									
Cost of capital before tax (%)									
Return on equity (%)									
Average interest on debts (%)									

Additional information

In addition, the Contracting States shall ensure the provision of at least the following information:

- Description of the methodology used for allocating costs of facilities or services between different air navigation services based on the list of facilities and services listed in the relevant ICAO Regional Air Navigation Plan, (Doc 7754) and a description of the methodology used for allocating those costs between different en route charging zones;
- Description and explanation of the differences between planned and actual figures for year (n-1);
- Description and explanation of the five-year planned costs based on the business plan;
- Description of the costs incurred by the Contracting States ("Other State costs");
- Description and explanation of the method adopted for the calculation of depreciation costs: historic costs or current costs. When current cost accounting is adopted, provision of comparable historic cost data;
- Justification for the cost of capital, including the components of the asset base;
- Breakdown of the meteorological costs between direct costs and "MET core costs" defined as the costs of supporting meteorological facilities and services that also serve meteorological requirements in general. These include general analysis and forecasting, weather radar and satellite observations, surface and upper-air observation networks, meteorological communication systems, data-processing centres and supporting core research, training and administration;
- Description of the methodology used for allocating total MET costs and MET core costs to civil aviation and between en route charging zones.

**Transparency of the en route cost base: Reporting Table 2 and additional information
Charging Mechanism – Calculation of the unit rate**

The Contracting States shall fill the following **Reporting Table 2** for each en route charging zone under their responsibility. When a en route charging zone extends across the airspace of more than one Contracting State, they shall fill the table jointly in accordance with the arrangements referred to in Paragraph 1.2 of the Principles.

The figures shall be actual figures for year (n-3) until year (n-1) and planned figures for year (n) onwards. The “Total costs” shall be established as the sum of all total costs presented in Table 1 which are allocated to this en route charging zone.

Reporting Table 2 Unit rate calculation

Charging zone:

Year:

(n - 3) A	(n - 2) A	(n - 1) A	(n) F	(n + 1) F	(n + 2) p	(n + 3) p	(n + 4) p	(n + 5) p
--------------	--------------	--------------	----------	--------------	--------------	--------------	--------------	--------------

Costs, amounts, income (in '000 euro) and service units ('000)

Total costs for the zone ⁽¹⁾	%/i-1							
Income from other sources	%/i-1							
EUROCONTROL costs	%/i-1							
Costs of exempted VFR flights	%/i-1							
Costs of exempted IFR flights	%/i-1							
Amounts carried over to year (i)	%/i-1							
Chargeable costs	%/i-1							
Total service units	%/i-1							
Chargeable service units	%/i-1							
Unit rate ⁽²⁾	%/i-1							

⁽¹⁾ As the sum of all costs presented in Reporting Table 1 which are allocated to this charging zone - Correspond to the total costs for the zone in Table 1 (when certain air navigation services are outsourced, the cost to be taken into account shall be the cost of the annual expenditure).

⁽²⁾ Unit rate (in euro) = Chargeable costs/Chargeable service units.

(n - 3) A	(n - 2) A	(n - 1) A	(n) F	(n + 1) F	(n + 2) p	(n + 3) p	(n + 4) p	(n + 5) p
--------------	--------------	--------------	----------	--------------	--------------	--------------	--------------	--------------

Unit rate (in national currency)

Exchange rate (1 EUR =)	%/i-1							
Unit rate	%/i-1							

Reporting Table 2 continuation
Balance to be carried over - Spreading of balances

Charging zone:

Year :

(n - 3) A	(n - 2) A	(n - 1) A	(n) F	(n + 1) F	(n + 2) p	(n + 3) p	(n + 4) p	(n + 5) p
--------------	--------------	--------------	----------	--------------	--------------	--------------	--------------	--------------

Balance to be carried over (in '000 national currency or '000 euro)

Charges billed to users %i/i-1									
Total costs for the zone %i/i-1									
Income from other sources %i/i-1									
EUROCONTROL costs %i/i-1									
Costs of exempted VFR flights %i/i-1									
Costs of exempted IFR flights %i/i-1									
Amounts carried over to year (i) %i/i-1									
Balance of year (i) %i/i-1									

(n - 3) A	(n - 2) A	(n - 1) A	(n) F	(n + 1) F	(n + 2) p	(n + 3) p	(n + 4) p	(n + 5) p
--------------	--------------	--------------	----------	--------------	--------------	--------------	--------------	--------------

Carry over of under / over recoveries (in '000 national currency or '000 euro)

Balance Year n-6									
Balance Year n-5									
Balance Year n-4									
Balance Year n-3									
Balance Year n-2									
Balance Year n-1									
Balance Year n									
Amounts carried over to year (i)									

Additional information

In addition, the Contracting States concerned shall provide or shall ensure the provision of at least the following information:

- Description and rationale for the establishment of the different en route charging zones;
- Description and explanation on the calculation of the forecast chargeable service units;
- Description and explanation of the methodology used with respect to the recovery of the balance resulting from over or under recovery of previous years;
- Description of the policy on exemptions and a description of the financing means to cover the related costs;
- Description of the income from other sources when they exist;
- Description and explanation of incentives applied on air navigation service providers and, in particular, the modalities to be applied in setting regulatory conditions on the level of unit rates. Description and explanation of the objectives in terms of performance and on the modalities to take them into account in the setting of maximum unit rates;
- Description of the plans of air navigation service providers in order to meet projected demand and performance objectives;
- Description and explanation of incentives applied on users of en route services.

**APPENDIX III
CALCULATION OF THE UNIT RATE**

Tableau / Table 1

Assiette des redevances et taux unitaire à partir des comptes prévisionnels "n+1"

Cost - Base and Unit Rate : "n+1" Forecast Account

Zone :

1. Coûts pour la zone / Costs for the zone

"n-1"	Mon./Cur.		Réels /Actual
"n"	Mon./Cur.		Estimation / Estimate
"n+1"	Mon./Cur.		Estimation / Estimate

**2. Coûts EUROCONTROL pour la zone/
EUROCONTROL Costs for the zone**

"n-1"	EUR		Réels /Actual
"n"	EUR		Estimation / Estimate
"n+1"	EUR		Estimation / Estimate

3. Unités de service totales / Total Service Units

% diff.			
"n-1"			Réelles /Actual
"n"			Estimation / Estimate
"n+1"			Estimation / Estimate

**4. Unités de service exonérées /
Exempted Service Units**

% diff.			
"n-1"			Réelles /Actual
"n"			Estimation / Estimate
"n+1"			Estimation / Estimate

**5. Calcul du taux unitaire de la zone /
Calculation of the zonal Unit Rate**

		EUR
5.1	Coûts totaux pour la zone / Total costs for the zone	1
5.2	Recettes autres sources / Income from other sources	2
5.3	Coûts nets pour la zone / Net costs for the zone	3=1- 2
5.4	Coûts EUROCONTROL pour la zone / EUROCONTROL Costs for the zone	4
5.5	Assiette non réduite / Non-reduced cost-base	5=3+4
5.6	Réduction pour vols VFR exonérés/ Reduction for exempted VFR flights	6
5.7	Assiette imputable aux vols IFR / Cost-base of IFR flights /	7=5-6
5.8	Réduction pour vols IFR exonérés / Reduction for exempted IFR flights	8
5.9	Assiette redevances réduite / Reduced cost - base	9=7-8
5.10	Montant reporté sur "n+1" / Amount carried over to "n+1"	10
5.11	Coûts à la charge des usagers / Chargeable costs	11=9-10
5.12	Unités de service payantes pour "n+1" / Chargeable service units "n+1"	12
5.13	Taux unitaire / Unit rate	=11/12

Taux de change appliqué / Exchange rate applied	
Moy. Sep. "n+1" / Average Sep. "n+1" : EUR 1 =	Mon. nat./Nat. Cur.

Mécanisme correcteur - solde entre recettes et coûts en "n-1"
Adjustment mechanism - balance between income and costs in "n-1"

en monnaie nationale ou en euros / in national currency or in euro

Zone:	
1. Recettes / Income "n-1":	
Redevances de route facturées aux usagers / Route charges billed to users	(A)
2. Coûts / Costs "n-1":	
Coûts réels totaux pour la zone/ Actual total costs for the zone	1)
- Recettes autres sources / Income from other sources	-
Coûts EUROCONTROL pour la zone / EUROCONTROL Costs for the zone	2)
- coûts vols VFR exonérés / costs of exempted VFR flights	-
- coûts vols IFR exonérés / costs of exempted IFR flights	-
- Solde reporté sur "n-1" / Balance carried over to "n-1"	3)
Net à recouvrer / Net to be recovered	(B)
3. Solde / Balance "n-1":	
Excédent (+) / déficit (-) de recouvrement de "n-1" / Over (+) / Under (-) recovery for "n-1"	(A) - (B)

1) Y compris coûts radiations de créances et provisions créances douteuses, le cas échéant /
Including costs for write-offs and provisions for bad debts, if applicable

2) Coûts EUROCONTROL pour la zone /
EUROCONTROL Costs for the zone
au taux de / at rate of 1 EUR = EUR
Mon. nat./Nat. Cur.

3) Cf. Tableau de déclaration 2 - Report des déficits/excédents de recouvrement /
Cf Reporting Table 2 - Carry-over of under/over recoveries

**APPENDIX IV
GNSS COSTS**

Work on this area will commence once the operational position becomes clearer.

**APPENDIX V
DEFINITION OF CAPITAL EMPLOYED**

Capital employed may be defined in terms of the capital invested in the air navigation services organisation or of its assets. The alternatives are:	
Capital Definition	Asset Definition
Total Capital: share capital reserves long-term liabilities current liabilities	fixed assets current assets
Long-term Capital: share capital reserves long-term liabilities	fixed assets net current assets (i.e. current assets minus current liabilities)*
Equity Capital: share capital reserves	fixed and net current assets minus long-term debt

* In some cases the total cost of fixed and current assets can be reduced by non-interest bearing liabilities.

APPENDIX VI GLOSSARY OF TERMS

- 1) "air traffic control (ATC) service" means a service provided for the purpose of:
 - (a) preventing collisions:
 - between aircraft, and
 - in the manoeuvring area between aircraft and obstructions; and
 - (b) expediting and maintaining an orderly flow of air traffic;

- 2) "air traffic controller" means:

Generic: A person holding a licence and/or a rating entitling him to act as an air traffic controller.

Trainees undergoing initial training at Air Traffic Control (ATC) schools therefore do not fall into this category.

For reporting (Appendix II, Reporting table 2): Air Traffic Controller posts assigned to the en route Area control centres for the en route services.

Included are:

- radar en-route controllers
- coordination controllers
- supervisors (full-time equivalent)

Excluded are:

- students
- on-the-job trainees
- flight data processing staff
- other ATC staff;

- 3) "aerodrome control service" means an ATC service for aerodrome traffic;
- 4) "aeronautical information service" means a service established within the defined area of coverage responsible for the provision of aeronautical information and data necessary for the safety, regularity, and efficiency of air navigation;
- 5) "air navigation services" means air traffic services; communication, navigation and surveillance services; meteorological services for air navigation; and aeronautical information services;
- 6) "air navigation service providers" means any public or private entity providing air navigation services for general air traffic;
- 7) "airspace management" means a planning function with the primary objective of maximising the utilisation of available airspace by dynamic time-sharing and, at times, the segregation of airspace among various categories of airspace users on the basis of short-term needs;
- 8) "airspace user" means the operator of the aircraft at the time when the flight was performed or, if the identity of the operator is not known, the owner of the aircraft, unless he proves that another person was the operator at that time;

- 9) "airspace users' representative" means any legal person or entity representing the interests of one or several categories of users of air navigation services;
- 10) "air traffic flow management" means a function established with the objective of contributing to a safe, orderly and expeditious flow of air traffic by ensuring that ATC capacity is utilised to the maximum extent possible, and that the traffic volume is compatible with the capacities declared by the appropriate air traffic service providers;
- 11) "air traffic management" means the aggregation of the airborne and ground-based functions (air traffic services, airspace management and air traffic flow management) required to ensure the safe and efficient movement of aircraft during all phases of operations;
- 12) "air traffic services" means the various flight information services, alerting services, air traffic advisory services and ATC services (area, approach and aerodrome control services);
- 13) "area control service" means an ATC service for controlled flights in a block of airspace;
- 14) "approach control service" means an ATC service for arriving or departing controlled flights;
- 15) "bundle of services" means two or more air navigation services;
- 16) "certificate" means a document issued by a Contracting State in any form complying with national law, which confirms that an air navigation service provider meets the requirements for providing a specific service;
- 17) "communication services" means aeronautical fixed and mobile services to enable ground-to-ground, air-to-ground and air-to-air communications for ATC purposes;
- 18) "en route charging zone" means a volume of airspace for which a single cost base and a single unit rate are established;
- 19) "EUROCONTROL Conditions of Application of the Route charges system and Conditions of Payment" means the rules for calculating the EUROCONTROL route charge and the conditions of its payment, as specified in document N°06.60.02/2 or its subsequent versions;
- 20) "general air traffic" means all movements of civil aircraft, as well as all movements of State aircraft (including military, customs and police aircraft) when these movements are carried out in conformity with the procedures of the ICAO;
- 21) "global navigation satellite system (GNSS)" means a world-wide position and time determination system, that includes one or more satellite constellations, aircraft receivers, and system integrity monitoring, augmented as necessary to support the required navigation performance for the actual phase of operation;
- 22) "ICAO" means the International Civil Aviation Organisation, as established by the 1944 Chicago Convention on International Civil Aviation;
- 23) "IFR" means Instrument Flight Rules, as defined in Annex 2 of the 1944 Chicago Convention on International Civil Aviation (Tenth Edition – July 2005);

- 24) "International Accounting Standards" means International Accounting Standards (IAS), International Financial Reporting Standards (IFRS) and related Interpretations (SIC-IFRIC interpretations), subsequent amendments to those standards and related interpretations, future standards and related interpretations issued or adopted by the International Accounting Standards Board (IASB);
- 25) "meteorological services" means those facilities and services that provide aircraft with meteorological forecasts, briefs and observations as well as any other meteorological information and data provided by States for aeronautical use;
- 26) "navigation services" means those facilities and services that provide aircraft with positioning and timing information;
- 27) "putting into service" means the first operational use after the initial installation or an upgrade of a system;
- 28) "surveillance services" means those facilities and services used to determine the respective positions of aircraft to allow safe separation;
- 29) "terminal area" means a control area normally established at the confluence of ATS routes in the vicinity of one or more major aerodromes;
- 30) "VFR" means Visual Flight Rules, as defined in Annex 2 of the 1944 Chicago Convention on International Civil Aviation (Tenth Edition – July 2005).

APPENDIX VII GUIDELINES FOR CONTRACTING STATES INTENDING TO ADOPT THE ALTERNATIVE MECHANISM

Regulation

Independence and legal status

- There should be a credible and robust institutional structure for economic regulation; the regulator should be separate from the service provider and airspace users, and should not be a direct beneficiary from the financial performance of either the provider or the airspace users;
- the contracting state should require its regulator to comply with its international obligations;
- regulation of the ATC provider can be one of a range of duties;
- the regulator can be national or regional (i.e. his remit can extend to more than one contracting state), although states who set up a regional arrangement should be able to retain separate unit rates;
- the regulator's objectives and duties should be published, by the competent national authorities, at the time of the launching consultation and of any subsequent revision to his objectives and duties;
- the regulator should be required to demonstrate that he has acted impartially.

Regulatory objectives and duties

Taken in total, the regulator's objectives and duties will reflect national and international transport policies (including, where appropriate, military interests), and priorities as determined by Contracting States and/or competent international organisations. They may vary from state to state. Objectives and duties specific to the route charges system should include:

Objectives

- furthering the interests of airspace users;
- encouraging efficiency and value for money in service provision;
- encouraging investment in time to satisfy reasonable demand;
- ensuring an appropriate quality and level of service provision (taking account of guidance provided and norms set according to the EUROCONTROL performance review system);
- having regard to the financial position of the service provider.

Duties

- promoting and participating in meaningful consultation between both the regulator and the service provider (jointly and/or separately) with airspace users;
- setting standards for and ensuring provision of information (including financial and forward-looking) by the service provider;

- conducting periodic reviews of the provider's forecasts, actual costs and income, and ensuring that these are published;
- monitoring and enforcing service standards;
- setting the conditions which determine the maximum level of charges (subject to final approval by the enlarged Commission of annual unit rates);
- ensuring transparency of his own processes by publishing his decisions and the reasons for them.

Consultation

Contracting States who opt for a system of independent economic regulation should recognise that user consultation, and the provision of information to airspace users, will be an essential part of the process.

Processes

- Launching consultation to be held before the alternative option is implemented by a contracting state. Contracting States must allow sufficient time for the launching consultation and must consult airspace users, the national service provider and EUROCONTROL (i.e. the enlarged Commission or successor body). The Commission would probably want to consult the PRC and CRCO, and the state would, of course, also be free to take advice from anyone else they wished. The information provided to consultees must include:
 - regulator's status, objectives and duties,
 - regulatory process and timetable,
 - proposals for future consultation.
- Consultation at the beginning of each review period between regulator, service provider and airspace users. Contracting States may also wish to consult EUROCONTROL at this stage. Information provided must include:
 - current regulatory cost base,
 - projected costs and revenues, traffic forecasts, investment plans and planned capital employed for the review period,
 - principles the regulator intends to apply (e.g. appropriate cost of capital).
- Regulator proposes the conditions on charges for the review period and invites comments on his proposals before reaching a decision.
- Regulator should consult service provider and airspace users again if the conditions on charges are changed during a review period.
- On going consultation, as required by the revised Convention (and following the best practice guidance drawn up by the FIFU group) between provider and airspace users/regulator on other aspects of the service.

General principles

- Information requirements of regulator and airspace users: regulator should be given access to any information he needs in order to do his job; he decides any dispute over what information provider gives airspace users, subject to what is permissible under national and international legal codes on e.g. commercial confidentiality.
- Contracting States should ensure that all airspace users or their representatives are able to participate in the consultation process.

Financial issues

- Regulator should take account of market returns of businesses facing equivalent risk, views of airspace users and of provider in determining "reasonable return";
- regulator may be free to impose clawback, profit sharing, or a cap on "reasonable return", but this should be left to national discretion;
 - regulator should be able to consider requests, from either the service provider or airspace users, for an interim review, but only under exceptional circumstances e.g. if either the service provider or airspace users as a group was seriously disadvantaged to the point of being unable to finance their functions;
- existing procedures for adoption of unit rates to continue;
- presentation of annual financial information to the enlarged Committee and the Commission to be in a common format as laid down in the Principles for establishing the cost-base for route facility charges and the calculation of the unit rates.

Service levels

- Regulator to monitor and enforce performance standards established by international norms and guidance from the EUROCONTROL performance review system so as to ensure that the provider does not make profits at the expense of service standards;
- regulator may be able to impose financial penalties if service standard falls, but must be subject to national discretion.

Relationship between Contracting States and EUROCONTROL

Contracting States may wish to inform the enlarged Committee of the relevant economic regulatory procedures applicable at national level in order to exchange information and advice which may be of interest or assistance to others.