



**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 PROVISIONS

1.1. Common policy

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 for establishing the cost-base for en route charges and the calculation of the unit rates” (hereinafter “the Principles”).

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, current versions, subject to any modification made in order to take account of other methods specific to the EUROCONTROL route charges system.

1.2. Charging zones

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

1.2.2. The charging zones shall be defined in a manner consistent with air traffic control (ATC) operations and services, after consultation of airspace users’ representatives.

1.2.3. A charging zone shall extend from the ground up to, and including, upper airspace. Contracting States may establish a specific zone in complex terminal areas within a charging zone.

1.2.4. Where 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 these Principles to the airspace concerned and shall notify EUROCONTROL thereof.

1.2.5. Cost-bases and unit rates shall be calculated for each charging zone.

1.3. Options for the calculation of the unit rate

There are two possible methods for the calculation of unit rates: one based on full cost recovery (hereinafter the “full cost recovery method”) and the other based on determined cost recovery (hereinafter the “determined costs method”).

Contracting States shall establish their cost-base in order to account for the costs of the en-route air navigation systems under their jurisdiction in accordance with one of the two methods described below.

The charging zones and the method chosen by each Contracting State are listed at Annex I.

1.3.1. Full cost recovery method

Route charges shall be calculated for the year “n + 1” based on the estimated costs and traffic for that year. An adjustment mechanism shall be applied to ensure that only the actual costs of the service are eventually recovered. This mechanism is described in Paragraph 3.2.2.

Contracting States opting for the full cost recovery method shall establish appropriate forecast operating accounts for the purpose of calculating the unit rate for year "n + 1", 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.

1.3.2. Determined cost method

The cost to be shared among airspace users shall be the determined cost of providing air navigation services. Determined costs shall be the costs determined by the Contracting States at the level of the charging zone either at the beginning of the reference period for each calendar year of the reference period or during the reference period following appropriate adjustments applying an alert mechanism.

The reference period shall cover a minimum of three years and a maximum of five years.

1.4. Transparency of costs and the charging mechanism

1.4.1. Without prejudice to Paragraph 1.4.2 and/or Paragraph 3.7, Contracting States shall establish their cost-base in their national currency.

1.4.2. Where a common charging zone with a single unit rate has been established, the Contracting States shall ensure conversion of national costs into euro or the national currency of one of the States concerned so as to ensure a transparent calculation of the single unit rate. Contracting States shall notify as appropriate EUROCONTROL of the applicable currency.

1.4.3. Contracting States shall report data to the EUROCONTROL Central Route Charges Office (CRCO) in accordance with the specimen tables in Annexes II and III. Preliminary data shall be reported not later than 1 June of each year. Final data shall be reported not later than 1 November of each year.

1.4.4. Contracting States shall ensure that unit rates are set for each charging zone on an annual basis.

1.4.5. For Contracting States applying the full cost recovery method, costs shall cover the period up to "n + 5".

1.4.6. For Contracting States applying the determined costs method, data shall cover the reference period.

For the first year of the reference period, unit rates shall be calculated on the basis of the performance plan communicated by the Contracting State(s) concerned on 1 November of the year preceding the beginning of the reference period. Where performance plans are adopted after 1 November of the year preceding the beginning of the reference period, unit rates shall be recalculated where necessary on the basis of the final adopted plan or the applicable corrective measures.

1.5. Consultation with airspace users

1.5.1. 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 Annexes II or III, and shall organise an effective and transparent consultation hearing to present this information, 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 at the latest three weeks before the consultation hearing.

- 1.5.2. 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 the Principles 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 Annexes II or III (Reporting Tables 1 and 2 plus additional information).

- 1.5.3. Airspace users' representatives (organisations listed at Annex V) shall be consulted by the enlarged Committee for Route Charges, on preliminary and final estimated cost-base figures for year "n + 1", and on any changes to the Principles.
- 1.5.4. The provisions of the Paragraphs above shall also apply to any revision of the unit rate during the course of the year. The Contracting States concerned shall ensure that airspace users' representatives are consulted in the enlarged Committee on the revised estimated cost-base and unit rate figures.

2. ACCOUNTING PRINCIPLES AND COSTS

2.1. General accounting principles

- 2.1.1. 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 / International Financial Reporting Standards (IAS/IFRS). 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.
- 2.1.2. In all cases, the Contracting States shall ensure that air navigation service providers publish an annual report and regularly undergo an independent audit.
- 2.1.3. 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.
- 2.1.4. 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.
- 2.1.5. The accounting period shall be from 1 January to 31 December.

2.2. General provisions on costs

- 2.2.1. 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, and/or other revenues if appropriate without prejudice to the financing of exemptions of certain users of en route services through other sources of financing.
- 2.2.2. 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.
- 2.2.3. 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.
- 2.2.4. 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 qualified entities, i.e. those acting on behalf of these national authorities,
 - (c) the costs stemming from international agreements.
- 2.2.5. 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.
- 2.2.6. The costs of eligible services, facilities and activities 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 implementation of IAS/IFRS may be spread over a period not exceeding 15 years.
- 2.2.7. Costs related to the provision of en route services shall include non-recoverable taxes and may be calculated net of ancillary revenues.
- In this case, details and figures shall be provided in the additional information.
- 2.2.8. Any adjustment beyond the provisions of the IAS/IFRS shall be specified in the additional information to be provided in accordance with Annex II or III.
- 2.2.9. 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.

2.3. Costs: Detail by nature

2.3.1. Staff costs

Staff costs shall include gross remuneration, payments for overtime, employers' contributions to social security schemes as well as pension costs and other benefits. Pension costs may be calculated using prudent assumptions according to the governance of the scheme or to national law, as appropriate. Where appropriate, those assumptions shall be detailed in the additional information.

2.3.2. Other operating costs

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.

Operating costs shall include non-recoverable taxes and be calculated net of ancillary revenues.

Operating costs comprise:

- a. rental costs for land transmission lines;
- b. rental costs of land, buildings and other facilities including taxes and other charges, where applicable;
- c. costs of utilities including water, heating and all energy supplies;
- d. rental costs for communication lines;
- e. repairs and maintenance costs, excluding internal staff costs, but including non capitalised equipment, e.g. spare parts or other small expensed items;
- f. operating costs of other operational and technical support facilities, including administrative support, legal, consultancy and audit;
- g. costs of application software unless considered as an investment.

2.3.3 Depreciation

- 2.3.3.1. Fixed assets (tangible and intangible assets) shall comprise equipment and buildings, including related works services, land, basic software and, where appropriate, application software, including taxes and/or customs duty paid, where applicable.

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 costs of the assets being depreciated.

Historic or current cost accounting may be applied for the calculation of the depreciation. The methodology shall not be altered during the duration of the depreciation and shall be consistent with the cost of capital applied. Where current cost accounting is applied, the equivalent historic cost accounting figures shall also be provided to allow for comparison and assessment.

2.3.3.2. In order to be taken into account in a given year, facilities and services shall either be in operation, or be expected to be put into operation by the end of that year. Facilities put into operation during that 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.

2.3.3.3. The percentages to be applied in calculating the depreciation of fixed assets 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.

2.3.3.4. When it becomes apparent that the operating life of an asset being depreciated will be shorter than was anticipated when the original depreciation schedule was drawn up, one of the following two methods shall 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 depreciation charged in that year.

2.3.3.5. Equipment or buildings still in service beyond the above-mentioned depreciation periods are regarded as fully depreciated and no depreciation 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 depreciation, the amount of the capital expenditure relating to these changes shall be depreciated in accordance with the same rules.

2.3.3.6. No depreciation shall be calculated for land.

2.3.3.7. 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.

2.3.3.8. Contracting States experiencing high rates of inflation may need to use alternative approaches to calculating depreciation, as further detailed in Paragraph 3.7 below.

2.3.4 Cost of capital

2.3.4.1. Cost of capital shall be equal to the product of:

- (a) the sum of the average net book value of fixed assets and possible adjustments to total assets determined by the Contracting States and used by the air navigation service provider in operation or under construction, and of the average value of the net current assets, excluding interest bearing accounts, that are required for the provision of air navigation services; and
- (b) the weighted average of the interest rate on debts and of the return on equity. For air navigation service providers without any equity capital, the weighted average shall be calculated on the basis of a return applied to the difference between the total of the assets referred to in point (a) and the debts.

2.3.4.2. For the purposes of 2.3.4.1 above, the factors to which weight shall be given shall be based on the proportion of 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 be based on the actual financial risk incurred by the air navigation service 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.

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.

2.3.5. Exceptional items

Exceptional items shall consist of non-recurring costs relating to the provision of air navigation services during the same year.

2.4. Costs: Detail by services

2.4.1. Air Traffic Management (ATM) costs

ATM is divided into Air Traffic Services (ATS), Air Traffic Flow Management (ATFM) 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.

2.4.2. Communication costs

Communication costs are costs in respect of aeronautical fixed and mobile services to enable ground-to-ground, air-to-ground and air-to-air communications for ATC purposes.

2.4.3. Navigation costs

Navigation costs are costs in respect of facilities and services that provide aircraft with positioning and timing information and shall include Global Navigation Satellite Systems (GNSS, cf. Annex IV) as soon as applicable.

2.4.4. Surveillance costs

Surveillance costs are costs in respect of facilities and services used to determine the respective positions of aircraft to allow safe separation.

2.4.5. 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.

2.4.6. Aeronautical Information costs

Aeronautical Information costs are costs in respect of services 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.

2.4.7. Meteorological (MET) costs

2.4.7.1. 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.

2.4.7.2. 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 Manual on Air Navigation Services Economics (especially Annex 3, current version), Procedures for Air Navigation Services and European Air Navigation Plan as well as by the references of national regulations concerned.

2.4.7.3. 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.

2.4.8. Supervision costs

Supervision costs shall comprise the costs incurred by Contracting States to supervise the provision of air navigation services, in particular with regard to the safe and efficient operation of air navigation service providers.

2.4.9. Other State costs

2.4.9.1. Definition

Other State costs shall comprise the costs incurred by Contracting States in relation with the provision of en route services as referred to in Paragraph 2.2.4 other than the "Supervision costs" above. The other State costs shall include:

- the EUROCONTROL costs, except the costs related to the Maastricht Upper Area Control Centre, and;
- if applicable, the costs stemming from other international agreements.

2.4.9.2. EUROCONTROL costs

EUROCONTROL costs shall be established in accordance with the Principles and on the basis of the Agency's Annual Accounts submitted for the Permanent Commission's approval.

The various categories of EUROCONTROL costs shall be apportioned among the Contracting States as follows:

- a. staff and other operating costs in respect of Part I of the Agency Budget 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. staff and other operating costs in respect of Maastricht Upper Area 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 depreciation and cost of capital 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 Part I;
 - 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 depreciation of facilities providing route services (e.g. Maastricht Upper Area 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.

The costs related to the Maastricht Upper Area Control Centre shall be reported separately.

2.5. **Cost allocation**

2.5.1. The costs of eligible services, facilities and activities within the meaning of Paragraph 2.2 shall be allocated in a transparent way to the en route charging zones in respect of which they are actually incurred.

2.5.2. 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.

2.5.3. 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.

For the purposes of point (b) above, Contracting States shall define the criteria used to allocate costs between terminal and en route services and inform EUROCONTROL thereof.

For States applying the determined cost method, this shall be done before the start of each reference period.

- 2.5.4. 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 shall only be charged those costs properly allocable to them.

- 2.5.5. 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.
- 2.5.6. Where SAR costs are part of the cost-base, the following provisions shall apply:
- only the aeronautical facilities and services included in the ICAO Regional Air Navigation Plan shall be accounted for;
 - cost allocation attributable to civil aviation and non-civil aviation users (military, agriculture, land and maritime transport, tourism, etc.) shall precede any cost recovery from civil aviation;
 - the allocation of costs shall be determined in such a way as to ensure that no airspace users are burdened with costs not properly allocable to them;
 - these operations shall be performed with the precision and transparency required and airspace users shall be provided with relevant information, in particular with regard to the costs of the facilities and services provided.
- 2.5.7. Aeronautical Information costs shall either be charged to en route services or apportioned between en route services and other services.
- 2.5.8. If exemptions are granted to VFR flights in accordance with Paragraph 3.6, 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.

3. CALCULATION OF THE UNIT RATE

3.1. General provisions

3.1.1 Service units forecasts

Contracting States shall establish forecasts of service units.

3.1.2. Incentive schemes

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.

3.2. Full cost recovery method

3.2.1. Calculation of en route unit rates

Contracting States applying the full cost recovery method shall calculate their en route unit rate 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.

In both cases, the cost-base shall be reduced by other revenues for the calculation of the unit rate.

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 calculated in accordance with Annex II.

3.2.2. Adjustment mechanism

In accordance with Paragraph 1.3.2, 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 in writing and with the appropriate justifications.

3.2.3. Amendment of unit rate

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

3.3. Determined cost method

3.3.1. Calculation of en route unit rates

Contracting States applying the determined cost method in accordance with Paragraph 1.3.2 shall calculate their en route unit rate before the beginning of each year of the reference period.

It shall be calculated by dividing the forecast number of total en route service units for the relevant year into the algebraic sum of the following elements:

- i) the determined costs of the relevant year,
- ii) the application of the difference between forecasted and actual inflation,
- iii) the carry-overs resulting from the implementation of the traffic risk-sharing,
- iv) the carry-overs from the previous reference period resulting from the implementation of the cost risk-sharing,
- v) bonuses and penalties resulting from the financial incentives,
- vi) for the first two reference periods, the over or under recoveries incurred by Contracting States before the application of the determined cost method,
- vii) a deduction of the costs of VFR flights,
- viii) a deduction of other revenues, if appropriate.

For Contracting States applying the determined costs method, for each year in the reference period, the difference between the determined costs expressed in nominal terms prior to the reference period and the determined costs adjusted on the basis of the actual inflation for the year shall be carried over no later than in the year "n + 2".

3.3.2. Consultation

Contracting States applying the determined costs method shall at the latest six months before the start of each reference period, offer to consult with the airspace users' representatives on determined costs, planned investments, service unit forecasts, charging policy and resulting unit rates and shall be assisted by the air navigation service providers. The Contracting States concerned shall, in a transparent manner, make their costs and their unit rates available to airspace users' representatives and EUROCONTROL.

During the reference period, the Contracting States concerned shall, on an annual basis, offer to consult with airspace users' representatives on any deviation from the forecast, especially with regard to:

- (i) actual traffic and costs compared to forecast traffic and determined costs;
- (ii) the implementation of the risk sharing mechanism;
- (iii) incentive schemes.

The consultation shall be organised in accordance with the provisions of Paragraph 1.5 above. Airspace users' representatives shall retain the right to request more consultation. User consultation shall also be organised systematically following the activation of an alert mechanism generating a revision of the unit rate.

The information shall be based on the reporting tables and detailed rules in Annex III hereto.

3.3.3. Risk sharing

3.3.3.1. This Paragraph lays down the traffic and cost risk sharing mechanisms.

The following costs shall not be submitted to traffic risk sharing and shall be recovered irrespective of traffic evolution:

- a. the determined costs established in application of Paragraph 2.2.4 with the exception of agreements relating to cross border air traffic service provision;
- b. the determined costs of meteorological service providers;
- c. the carry-overs authorised from a previous year or reference period and bonuses or penalties resulting from incentive schemes;
- d. the over- or under-recoveries resulting from traffic variations, which shall be recovered no later than in year "n+2".

In addition, Contracting States may exempt from traffic risk sharing the determined costs of providers of air navigation services which have received permission to provide air navigation services without certification in cases where the provider of such services offers them primarily to aircraft movements other than general air traffic.

3.3.3.2. Where, over a given year, the actual number of service units does not exceed or fall below the forecast established at the beginning of the reference period by more than 2 %, the additional revenue or loss in revenue of the air navigation service provider with regard to determined costs shall not be carried over.

3.3.3.3. Where, over a given year "n", the actual number of service units exceeds the forecast established at the beginning of the reference period by more than 2%, a minimum of 70% of the additional revenue obtained by the air navigation service provider(s) concerned in excess of 2% of the difference between the actual service units and the forecast with regard to determined costs, shall be returned to airspace users no later than year "n + 2".

3.3.3.4. Where, over a given year "n", the actual number of service units falls below the forecast established at the beginning of the reference period by more than 2%, a maximum of 70% of the loss in revenue incurred by the air navigation service provider(s) concerned in excess of 2% of the difference between the actual service units and the forecast with regard to determined costs shall be borne by the airspace users in principle no later than in year "n + 2". However, Contracting States may decide to spread the carry-over of such loss in revenue over several years with a view to preserving the stability of the unit rate.

3.3.3.5. Where, over a given year "n", the actual service units are lower than 90 % of the forecast established at the beginning of the reference period, the full amount of the loss in revenue incurred by the air navigation service provider(s) concerned in excess of the 10 % of the difference between the actual service units and the forecast in respect of determined costs shall be borne by the airspace users in principle no later than in year "n+2". However, Contracting States may decide to spread the carry-over of such loss in revenue over several years with the view to preserving the stability of unit rate.

3.3.3.6. Where, over a given year "n", the actual service units exceed 110% of the forecast established at the beginning of the reference period, the full amount of the additional revenue obtained by the air navigation service provider(s) concerned in excess of the 10% of the difference between the actual service units and the forecast in respect of determined costs shall be returned to airspace users in year "n+2".

3.3.3.7. The following principles apply to cost risk sharing:

- a. where, over the whole reference period, actual costs fall below the determined costs established at the beginning of the reference period, the resulting difference shall be retained by the air navigation service provider, Contracting State or qualified entity concerned;
- b. where, over the whole reference period, actual costs exceed the determined costs established at the beginning of the reference period, the resulting difference shall be borne by the air navigation service provider, Contracting State or qualified entity concerned without prejudice to the activation of the alert mechanism;
- c. points (a) and (b) may not apply to the difference between actual and determined costs which may be deemed to be out of the control of the air navigation service providers, Contracting States and qualified entities as a result of:
 - unforeseen changes in national pension regulations and pension accounting regulations;
 - unforeseen changes to national taxation law;
 - unforeseen and new cost items not covered in the performance plan but required by law;
 - unforeseen changes in costs or revenue stemming from international agreements;
 - significant changes in interest rates on loans.

3.3.3.8. The categorisation of uncontrollable costs above shall be subject to agreement by the national supervisory authority and be included in the performance plan. Any variation resulting from the agreed variances of uncontrollable costs over the whole reference period shall be carried over into the following reference period. It is important to ensure that the costs are correctly categorised and variations can be justified with the national supervisory authority.

3.3.3.9. An alert mechanism may be applied within a reference period, resulting from circumstances that were unforeseeable at the beginning of the period and insurmountable and outside of the control of the Contracting State.

Unit rates may be amended in the course of the year where an alert mechanism is activated.

3.4. Incentive schemes

3.4.1 Incentive schemes applicable to air navigation service providers

Contracting States applying the determined cost method that decide to adopt financial incentives for the achievement of performance targets by their air navigation service providers, the following shall apply.

The unit rate may be adjusted to provide for a bonus or penalty according to the actual performance level of the air navigation service provider against the relevant target. Such bonuses or penalties shall only be activated where performance variations have a substantive impact on users. The applicable level of bonuses and penalties shall be commensurate with the targets to be reached and the performance achieved. The performance variation levels and the applicable level of bonuses and penalties shall be determined following the offer to consult referred to in Paragraph 1.5 and set by the performance plan.

3.4.2 Incentive schemes applicable to airspace users

When a Contracting State decides to apply an incentive scheme with respect to users of air navigation services, it shall, following the offer to consult referred to in Paragraph 1.5, modulate charges incurred by them to reflect efforts made by those users to, in particular:

- a. optimize the use of air navigation services;
- b. reduce the environmental impact of flying;
- c. reduce the overall costs of air navigation services and increase their efficiency, in particular by decreasing or modulating charges according to airborne equipment that increases capacity or offsetting the inconvenience of choosing less congested routings;
- d. accelerate the deployment of new technologies.

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.

3.5. Calculation of the regional administrative unit rate

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

The collection cost-base of year "n + 1" shall be established on the basis of the full cost recovery method and 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 Audit Unit 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".

3.5.2. 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.

3.5.3. The regional administrative unit rate shall be added to the unit rate applicable in the en route charging zone.

3.6. 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.

If exemptions are granted to VFR flights, the air navigation service providers shall identify the costs of en route services provided to these flights and shall deduct them directly. The costs to be deducted in respect of exempted VFR flights shall be calculated in accordance with Paragraph 2.5.8.

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

3.7. High inflation

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 shall 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 shall 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 shall remain constant throughout the year "n + 1".

Contracting States experiencing high rates of inflation may need to use alternative approaches to calculating depreciation. Such approaches shall be based on generally accepted accounting principles. An approach that may be used involves adjusting the portion which is not depreciated 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 depreciation charged.

In such cases the cost of capital shall 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.

3.8. Calculation of the unit rate in euro value

3.8.1. 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 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.

3.8.2. The enlarged Committee shall adopt the euro value rate for each charging zone, together with the corresponding exchange rate, with a view to their submission for approval by the enlarged Commission, in accordance with Articles 3 and 5 of the Multilateral Agreement.

4. COMPLIANCE MONITORING

4.1. 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 4.2 below.

4.2. 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.

5. 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.

6. ENTRY INTO FORCE

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

This version of the Principles supersedes Doc. No. 10.60.01 of 1 March 2010.

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ANNEX I

LIST OF EN ROUTE CHARGING ZONES AND THE APPLICABLE METHOD CHOSEN FOR THE CALCULATION OF THE RESPECTIVE UNIT RATES

<u>Name of the Charging Zone</u>	<u>Method chosen for the calculation of unit rates</u>	<u>Contracting State(s)</u>
Albania	Full cost recovery	<u>Republic of Albania</u>
Germany	Determined costs	<u>Federal Republic of Germany</u>
Armenia	Full cost recovery	<u>Republic of Armenia</u>
Austria	Determined costs	<u>Republic of Austria</u>
Belgium - Luxembourg	Determined costs	<u>Kingdom of Belgium – Grand Duchy of Luxembourg</u>
Bosnia and Herzegovina	Full cost recovery	<u>Bosnia and Herzegovina</u>
Bulgaria	Determined costs	<u>Republic of Bulgaria</u>
Cyprus	Determined costs	<u>Republic of Cyprus</u>
Croatia	Full cost recovery	<u>Republic of Croatia</u>
Denmark	Determined costs	<u>Kingdom of Denmark</u>
Continental Spain	Determined costs	<u>Kingdom of Spain</u>
Canaries	Determined costs	<u>Kingdom of Spain</u>
Finland	Determined costs	<u>Republic of Finland</u>
France	Determined costs	<u>French Republic</u>
United Kingdom	Determined costs	<u>United Kingdom of Great-Britain and Northern Ireland</u>
Greece	Determined costs	<u>Hellenic Republic</u>
Hungary	Determined costs	<u>Republic of Hungary</u>
Ireland	Determined costs	<u>Ireland</u>
Italy	Determined costs	<u>Italian Republic</u>
Latvia	Determined costs	<u>Republic of Latvia</u>
Lithuania	Determined costs	<u>Republic of Lithuania</u>
Former Yugoslav Republic of Macedonia	Full cost recovery	<u>The former Yugoslav Republic of Macedonia</u>
Malta	Determined costs	<u>Republic of Malta</u>
Moldova	Full cost recovery	<u>Republic of Moldova</u>
Norway	Determined costs	<u>Kingdom of Norway</u>

<u>Name of the Charging Zone</u>	<u>Method chosen for the calculation of unit rates</u>	<u>Contracting State(s)</u>
Netherlands	Determined costs	<u>Kingdom of the Netherlands</u>
Poland	Determined costs	<u>Republic of Poland</u>
Lisboa	Determined costs	<u>Portuguese Republic</u>
Santa Maria	Determined costs	<u>Portuguese Republic</u>
Romania	Determined costs	<u>Romania</u>
Belgrade	Full cost recovery	<u>Republic of Serbia – Montenegro</u>
Slovakia	Determined costs	<u>Slovak Republic</u>
Slovenia	Determined costs	<u>Republic of Slovenia</u>
Sweden	Determined costs	<u>Kingdom of Sweden</u>
Switzerland	Determined costs	<u>Swiss Confederation</u>
Czech Republic	Determined costs	<u>Czech Republic</u>
Turkey	Full cost recovery	<u>Republic of Turkey</u>
Ukraine	Full cost recovery	<u>Ukraine</u> ¹

¹ Not yet technically integrated.

ANNEX II
SPECIMEN REPORTING TABLES
FULL COST RECOVERY METHOD

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

1. REPORTING TABLE 1

Contracting States as well as air navigation service providers shall fill the following Reporting Table 1 for each charging zone under their responsibility. The Contracting States shall also provide a consolidated Reporting Table 1 for each en route charging zone under their responsibility.

Where charging zones extend across the airspace of more than one Contracting State, they shall fill the table jointly in accordance with the arrangements referred to in Paragraph 1.2.4 of the Principles.

For the purpose of calculating the unit rate for year “n + 1”, the reported 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 of the air navigation service provider and reported in the currency in which they are established in accordance with the Principles.

Table 1 - Total Costs

Charging zone name
Consolidation - all entities or entity name

Year n + 1

Cost details	(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
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1. Detail by nature (in nominal terms)

1.1 Staff									
1.2 Other operating costs									
1.3 Depreciation									
1.4 Cost of capital									
1.5 Exceptional items									
1.6 Total costs									
Total % i/i-1									
Staff % i/i-1									
Other op. % i/i-1									

2. Detail by service (in nominal terms)

2.1 Air Traffic Management									
2.2 Communication									
2.3 Navigation									
2.4 Surveillance									
2.5 Search and rescue									
2.6 Aeronautical Information									
2.7 Meteorological services									
2.8 Supervision costs									
2.9 Other State costs									
2.10 Total costs									
Total % i/i-1									
ATM % i/i-1									
CNS % i/i-1									

3. Complementary information on the cost of capital and on the cost of common projects (in nominal terms)

Average asset base									
3.1 Net book val. fixed assets									
3.2 Adjustments total assets									
3.3 Net current assets									
3.4 Total asset base									
Cost of capital %									
3.5 Cost of capital pre tax rate									
3.6 Return on equity									
3.7 Average interest on debts									
Cost of common projects									
3.8 Common Project 1									

4. Complementary information on inflation and on total costs in real terms

4.1 Inflation % (1)									
4.2 Price index (2)									
4.3 Total costs real terms (3)									
Total % i/i-1									

5. Deduction of costs allocated to exempted VFR flights (in nominal terms)

5.1 Total costs									
5.2 Costs for exempted VFR flights									
5.3 Total costs after deduction (4)									

Costs and asset base items in '000 000 national currency - Service units in '000 000

(1) Actual inflation – forecast inflation used for establishing the forecast costs

(2) Price index - base 100 in N-3

(3) Actual - Forecast costs in real terms – at N-3 prices

(4) Actual costs after deduction of VFR costs – Forecast costs after deduction of VFR costs

2. **ADDITIONAL INFORMATION TO REPORTING TABLE 1**

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, current version) and a description of the methodology used for allocating those costs between different en route charging zones;
- 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, the possible adjustments to total assets and the return on equity;
- Definition of the criteria used to allocate costs between terminal and en route services;
- 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;
- Description and explanation of the differences between planned and actual figures for year “n - 1”;
- Description and explanation of the five-year planned costs for years “n + 1” to “n + 5” based on the business plan.

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

1. REPORTING TABLE 2

Contracting States as well as air navigation service providers shall fill the following Reporting Table 2 for each charging zone under their responsibility. Contracting States shall also provide a consolidated table for each charging zone under their responsibility.

When a 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 1.2.4 of the Principles.

Table 2 - Unit rate calculation

Charging zone name
Consolidation - all entities or entity name

Year n + 1

Unit rate calculation	(n - 3)	(n - 2)	(n - 1)	(n) F	(n + 1) F	(n + 2) P	(n + 3) P	(n + 4) P	(n + 5) P
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1. Calculation of the national unit rate

1.1 Total costs prior to ded.of VFR costs (1)									
1.2 Costs of exempted VFR flights (1)									
1.3 Costs of exempted IFR flights									
1.4 Amounts carried over to year n									
1.5 Income from other sources									
1.6 Chargeable costs - total % i/i-1									
1.7 Total service units									
1.8 Chargeable service units									
1.9 Unit rate - nat. currency - 1.5/1.7 % i/i-1									
1.10 Exchange rate (September n-1)									
1.11 Basic national rate in euro % i/i-1									

2. Actual/forecast service units (in '000 000 service units)

2.1 Total service units % i/i-1									
2.1 Chargeable service units % i/i-1									

3. Over(-) or under (+) recoveries to be carried over ('000 000 in national currency)

Charges billed to users									
3.1 Charges billed to users									
Net actual costs chargeable to users									
3.2 Total costs prior to ded.of VFR costs (2)									
3.3 Costs of exempted VFR flights (2)									
3.4 Costs of exempted IFR flights									
3.5 Amounts carried over to year i									
3.6 Income from other sources									
3.7 Chargeable costs - total									
Over(-) or under(+) recovery									
3.8 Balance to be carried over									

4. Carry over of over(-) or under(+) recoveries ('000 000 in national currency)

4.1 Balance year n - 9									
4.2 Balance year n - 8									
4.3 Balance year n - 7									
4.4 Balance year n - 6									
4.5 Balance year n - 5									
4.6 Balance year n - 4									
4.7 Balance year n - 3									
4.8 Balance year n - 2									
4.9 Balance year n - 1									
4.10 Balance year n									
4.11 Amount carried over to year i									

5. Unit cost (Total costs after deduction of VFR costs / Total service units - in national currency)

5.1 Total costs 3.2 / Service units 2.1									
5.2 ANSP component of the unit cost									
5.3 MET component of the unit cost									
5.4 NSA-State component of the unit cost % i/i-1									

Costs and asset base items in '000 000 national currency - Service units in '000 000

(1) Forecast costs used to calculate unit rates for (n-3) to (n-1) – Forecast from year "n" are reported from Table 1

(2) Cost data reported from Table 1

2. ADDITIONAL INFORMATION TO REPORTING TABLE 2

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 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;
- Description and explanation of the methodology used with respect to the recovery of the balance resulting from over or under recovery of previous years.

ANNEX III
SPECIMEN REPORTING TABLES
DETERMINED COST METHOD

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

1. REPORTING TABLE 1

Contracting States as well as air navigation service providers shall fill the following Reporting Table 1 for each charging zone under their responsibility and for each reference period. Contracting States shall also provide a consolidated Reporting Table 1 for each charging zone under their responsibility.

When a 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 1.2.4 of the Principles.

Actual costs shall be established on the basis of the certified accounts. The costs shall be established in accordance with the business plan of the air navigation service provider and reported in the currency in which they are established in accordance with the Principles.

Contracting States as well as air navigation service providers shall fill Reporting Table 1 with initial forecast figures eighteen months before the start of a reference period.

Table 1 - Total Costs

Charging zone name	Period of reference : N-(N+4)
Consolidation - all entities or entity name	

	Determined costs					Actual costs				
	N	N+1	N+2	N+3	N+4	N	N+1	N+2	N+3	N+4

Cost details	N	N+1	N+2	N+3	N+4	N	N+1	N+2	N+3	N+4
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1. Detail by nature (in nominal terms)

1.1 Staff										
1.2 Other operating costs										
1.3 Depreciation										
1.4 Cost of capital										
1.5 Exceptional items										
1.6 Total costs										
Total % i/i-1										
Staff % i/i-1										
Other op. % i/i-1										

2. Detail by service (in nominal terms)

2.1 Air Traffic Management										
2.2 Communication										
2.3 Navigation										
2.4 Surveillance										
2.5 Search and rescue										
2.6 Aeronautical Information										
2.7 Meteorological services										
2.8 Supervision costs										
2.9 Other State costs										
2.10 Total costs										
Total % i/i-1										
ATM % i/i-1										
CNS % i/i-1										

3. Complementary information on the cost of capital and on the cost of common projects (in nominal terms)

Average asset base										
3.1 Net book val. fixed assets										
3.2 Adjustments total assets										
3.3 Net current assets										
3.4 Total asset base										
Cost of capital %										
3.5 Cost of capital pre tax rate										
3.6 Return on equity										
3.7 Average interest on debts										
Cost of common projects										
3.8 Common Project 1										

4. Complementary information on inflation and on total costs in real terms

4.1 Inflation % (1)										
4.2 Price index (2)										
4.3 Total costs real terms (3)										
Total % i/i-1										

5. Deduction of costs allocated to exempted VFR flights (in nominal terms)

5.1 Total costs										
5.2 Costs for exempted VFR flights										
5.3 Total costs after deduction (4)										

Costs and asset base items in '000 000 national currency - Service units in '000 000

(1) Actual/forecast inflation used for establishing the determined costs in nominal terms – actual/revised forecast inflation

(2) Price index - base 100 in year N-3

(3) Determined costs (performance plan) in real terms – actual/revised forecast costs at N-3 prices

(4) Determined costs after deduction of VFR costs – actual/revised forecast costs

2. **ADDITIONAL INFORMATION TO REPORTING TABLE 1**

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, current version) and a description of the methodology used for allocating those costs between different en route charging zones;
- 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, the possible adjustments to total assets and the return on equity;
- Definition of the criteria used to allocate costs between terminal and en route services;
- 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;
- Description of the costs incurred by the Contracting States (“Other State costs”);
- Eighteen months before the start of a reference period, description of the reported forecast costs and traffic;
- Every year of the reference period, description of the reported actual costs and their difference against the determined costs.

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

1. REPORTING TABLE 2

Contracting States as well as air navigation service providers shall fill the following Reporting Table 2 for each charging zone under their responsibility and for each reference period. Contracting States shall also provide a consolidated table for each charging zone under their responsibility.

When a 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 1.2.4 of the Principles.

Table 2 - Unit rate calculation

Charging zone name :
Consolidation - all entities or entity name

Period of reference : **N-(N+4)**

Unit rate calculation	N	N+1	N+2	N+3	N+4
<p>1. Determined costs in nominal terms and inflation adjustment</p> <p>1.1 Determined costs in nominal terms - VFR excl. - Table 1 1.2 Actual inflation rate - Table 1 1.3 Forecast inflation rate - Table 1 1.4 Inflation adjustment - § 3.3.1 (1) : year i amount to be carried over</p> <p>2. Forecast and actual total service units</p> <p>2.1 Forecast total service units (performance plan) 2.2 Actual total service units 2.3 Actual / forecast total service units (in %)</p> <p>3. Costs subject to traffic risk sharing (ANSP) - § 3.3.1</p> <p>3.1 Determined costs in nominal terms - VFR excl. (reported from Table 1) 3.2 Inflation adjustment - § 3.3.1 : amount carried over to year i 3.3 Traffic - § 3.3.3.1 : amounts carried over to year i 3.4 Traffic risk sharing - § 3.3.3.3 : add. revenue carried over to year i 3.5 Traffic risk sharing - § 3.3.3.4: revenues losses carried over to year i 3.6 Uncontrollable costs - § 3.3.3.8 : amounts carried over to year i 3.7 Bonus or penalty for performance - § 3.3.3.1 3.8 Over(-) or under(+) recoveries (2) : amounts carried over to year i 3.9 Total for the calculation of year i unit rate</p> <p>3.10 Traffic risk sharing - § 3.3.3.3 : add. rev. year i to be carried-over 3.11 Traffic risk sharing - § 3.3.3.4 : revenue loss year i to be carried-over</p> <p style="padding-left: 40px;">Parameters for traffic risk sharing</p> <p>3.12 % additional revenue returned to users in year i+2 - § 3.3.3.3 3.13 % loss of revenue borne by airspace users - § 3.3.3.4</p> <p>4. Costs not subject to traffic risk sharing - § 3.3.1</p> <p>4.1 Determined costs in nominal terms - VFR excl. (Table 1) 4.2 Inflation adjustment - § 3.3.1 : amount carried over to year i 4.3 Traffic - § 3.3.3.1 : amounts carried over to year i 4.4 Uncontrollable costs - § 3.3.3.8 : amounts carried over to year i 4.5 Over(-) or under(+) recoveries (2) : amounts carried over to year i 4.6 Total for the calculation of year i unit rate</p> <p>5. Other revenues - applied unit rate (in national currency)</p> <p>5.1 Revenues from other sources - § 2.2.1 5.2 Grand total for the calculation of year i unit rate</p> <p>5.3 Year i unit rate (in national currency) 5.4 ANSP component of the unit rate 5.5 MET component of the unit rate 5.6 NSA-State component of the unit rate</p> <p>5.7 Year i unit rate that would have applied without other revenues</p>					

Costs, revenues and other amounts in '000 000 national currency - Service units in '000 000

(1) Cumulated impact of yearly differences between actual and forecast inflation – adjustment of the total determined costs

(2) Over/under recoveries incurred up to the year of entry into force of the determined cost method

2. ADDITIONAL INFORMATION TO REPORTING TABLE 2

In addition, the Contracting States concerned shall deliver 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 service units;
- Description of the policy on exemptions and a description of the financing means to cover the related costs;
- Description of the carry-overs of over or under recoveries incurred by Contracting States up to the year 2011;
- Description by factors of the amounts carried over from previous reference period in accordance with Paragraph 3.3.3.7 and 3.3.3.8;
- Description of the other under recoveries carried over in accordance with Paragraph 3.3.3;
- Description of the other revenues when they exist;
- Description and explanation of incentives applied on air navigation service providers;
- Description and explanation of incentives applied on users of en route services.

ANNEX IV
GNSS COSTS

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

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ANNEX V

ORGANISATIONS OF AIRSPACE USERS' REPRESENTATIVES

Organisation	Contact person(s)
<p>Air Transport Association (ATA) 1301 Pennsylvania Avenue, N.W. Suite 1100 20004-1707 WASHINGTON DC UNITED STATES Main phone: + 1 202 626 4000</p>	<p>Ms Cecilia BETHKE Managing Director-International Affairs Phone: + 1 202 626 4112 cbethke@airlines.org</p>
<p>Association of European Airlines (AEA) Avenue Louise 350 Bte 4 1050 BRUSSELS BELGIUM Main phone: + 32 2 639 89 89</p>	<p>Mr Vincent DE VROEY General Manager Technical and Operations Phone: + 32 2 639 89 86 vincent.de.vroey@aea.be</p>
<p>European Business Aviation Association (EBAA) Avenue de Tervuren 13 a-b Box 5 1040 BRUSSELS BELGIUM Main phone: + 32 2 766 00 70</p>	<p>Mr Belarmino GONÇALVES PARADELA Manager, Technical Affairs Phone: + 32 2 766 00 79 bgparadela@ebaa.org</p> <p>Mr Pedro VICENTE AZUA Chief Operating Officer Phone: + 32 2 766 00 77 pedrovazua@ebaa.org</p> <p>Mr Fabio GAMBA Chief Executive Officer Phone: + 32 2 766 00 70 fgamba@ebaa.org</p>
<p>European Low Fares Airline Association (ELFAA) Avenue des Arts, 46 1000 BRUSSELS BELGIUM Main phone: + 32 2 504 90 05</p>	<p>Mr John HANLON Secretary General of ELFAA Phone: + 44 1832 2743 89 john.hanlon@elfaa.com</p>

<p>European Regions Airline Association (ERA) The Baker Suite Fairoaks Airport Chobham GU24 8HX WOKING – SURREY UNITED KINGDOM Main phone: + 44 1276 8564 95</p>	<p>Mr Simon McNAMARA Deputy Director General Phone: + 44 7770 8687 41 simon.mcnamara@eraa.org</p> <p>Mr Andrew BRAY Manager Industry Affairs Phone: + 44 7713 9847 92 andrew.bray@eraa.org</p>
<p>International Air Carrier Association (IACA) Avenue Louise 228 7th Floor 1050 BRUSSELS BELGIUM Main phone: + 32 2 546 10 60</p>	<p>Mr Guy BATTISTELLA Director Finance Phone: + 32 2 546 10 67 guy.battistella@iaca.be</p>
<p>International Aircraft Owners and Pilots Association (IAOPA) 50a Cambridge Street SW1V 4QQ LONDON UNITED KINGDOM Main phone: + 44 2078 3456 31</p>	<p>Mr Martin ROBINSON CEO Regional Vice-President IAOPA Europe Phone: + 44 2078 3456 31 martin@aopa.co.uk aopa@easynet.co.uk</p>
<p>International Air Transport Association (IATA) Route de l'Aéroport 33 P.O. Box 416 IATA Centre 1215 GENEVA 15 Airport SWITZERLAND Main phone: + 41 22 770 2525</p>	<p>Mr Laurie O'TOOLE Assistant Director, Airport and ATC Charges, Industry Monetary Services, MRC Phone: + 41 22 770 2733 otoolel@iata.org</p> <p>Mr Cesar RAFFO Manager, Airport & ATC Charges Industry Charges, Fuel and Taxation Phone: + 41 22 770 2778 raffoc@iata.org</p>

ANNEX 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.

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" means services 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) "determined costs" means costs pre-determined by the Contracting State;
- 19) "en route charging zone" means a volume of airspace for which a single cost base and a single unit rate are established;
- 20) "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°11.60.02 or its subsequent versions;
- 21) "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;
- 22) "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;
- 23) "ICAO" means the International Civil Aviation Organisation, as established by the 1944 Chicago Convention on International Civil Aviation;
- 24) "IFR" means Instrument Flight Rules, as defined in Annex 2 of the 1944 Chicago Convention on International Civil Aviation (Current Edition);

- 25) "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);
- 26) "Independent Economic Regulation" means the process by which a Contracting State applies incentives or financial modulation;
- 27) "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;
- 28) "navigation services" means those facilities and services that provide aircraft with positioning and timing information;
- 29) "other revenues" means revenues obtained from public authorities or revenues obtained from commercial activities;
- 30) "putting into service" means the first operational use after the initial installation or an upgrade of a system;
- 31) "performance plan" means the plan by which Contracting States set their performance targets for a given period;
- 32) "reference period" means the reference period for the performance scheme;
- 34) "surveillance services" means those facilities and services used to determine the respective positions of aircraft to allow safe separation;
- 35) "terminal area" means a control area normally established at the confluence of ATS routes in the vicinity of one or more major aerodromes;
- 36) "VFR" means Visual Flight Rules, as defined in Annex 2 of the 1944 Chicago Convention on International Civil Aviation (Current Edition).

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