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(DG MOVE)
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the implementation of performance and
charging schemes for the single
European sky for oversight
competences**

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(Task 4.A.3 of the Work Plan)**

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Explanatory note for DG MOVE

The Training Material is the deliverable associated to Task 4.A.3 of the project. It is designed as a *vademecum* for the Verification Programme (Tasks 2.A.2 and Task 4.A.1), providing for each section of the Verification Programme additional explanations, guidance and, where possible, best practices for the performance of the indicated procedures. It is therefore to be read in conjunction with the Verification Programme.

This Training Material will be synthesised in an e-training module for Task 5.2.

This note will be removed for the version of the material to be made available to the NSAs.

Abbreviations

ANS	Air Navigation Services
ANSP	Air Navigation Service Provider
ATCO	Air traffic controller
ATM Systems	Air Traffic Management Systems
AuP	Agreed-upon procedures
CAPEX	Capital expenditure
CEF	Connecting Europe Facility
CNS	Communication, navigation and surveillance services
CRCO	Central Route Charges Office
DG MOVE	Directorate-General for Mobility and Transport
EC	European Commission
EU	European Union
Eurocontrol	European Organisation for the Safety of Air Navigation
FTE	Full-time equivalent
GA	Grant Agreement
GL	General ledger
HICP	Eurostat Harmonised Index of Consumer Price
HR	Human resources
IAS 16	International Accounting Standard 16 - Property, Plant and Equipment
IAS 19	International Accounting Standard 19 - Employee Benefits
IAS 38	International Accounting Standard 38 - Intangible Assets
IACS	International Association of Classification Societies
ICAO	International Civil Aviation Organisation
IFRS	International Financial Reporting Standards
IFRS 15	International Financial Reporting Standards 15 - Revenue from Contracts with Customers
INEA	Innovation & Networks Executive Agency
ISRS 4400	International Standard on Related Services 4400 - Agreed-upon Procedures Engagements
IT	Information technology
MET	Meteorological

NBV	Net book value
NSA	National supervisory authority
OPEX	Operating expense
P&L	Profit and Loss
Power BI Dashboard	Power Business Intelligence Dashboard
PRB	Performance Review Body
QE	Qualified entity
RP	Reference Period
RP2	Reference Period 2
RP3	Reference Period 3
SDM	SESAR Deployment Manager
SES	Single European Sky
SESAR	Single European Sky ATM Research
TEN-T	Trans-European Transportation Network
TMA	Terminal Manoeuvring Area
VFR	Visual Flight Rules

Introduction

1. Objective of the Verification Programme and of the Training Material

The Verification Programme and the present Training Material are tools which aim to assist in the cost-eligibility verifications performed by National Supervisory Authorities (NSAs) as part of their oversight attributions. They are a continuation of the work done in the context of the 'Manual for the Verification of Air Navigation Services (ANS) Costs in the context of the Single European Sky Charging Scheme'¹ and complement the latter by proposing a structured programme for verifications accompanied by step by step guidance.

The main goal of the Verification Programme and of the Training Material is therefore to support the development of a structured and systematic approach for NSAs regarding the verification of the determined and actual ANS costs of Air Navigation Service Providers (ANSPs). The end users of these two tools (Verification Programme and of the Training Material) need to have basic accounting background as it will be an added value while performing the verification process.

The need for this structured approach comes especially as a result of the recommendations issued by the European Court of Auditors (ECA) in a special report issued in 2017², which noted that the Commission and the NSAs should regularly conduct the inspections set out in the current Single European Sky (SES) legislation, covering in particular the eligibility of costs charged and their allocation between en route and terminal charging zones.

2. Legal basis - NSA attributions in the area of cost-eligibility

The NSAs are tasked with the realisation of verifications in the context of their oversight attributions. They are responsible for overseeing the implementation of the SES3 charging scheme requirements and, specifically, according to Art. 2 of Regulation (EC) No 550/2004 and Regulation (EC) No 1070/2009, the NSAs need to "ensure the appropriate supervision" of the application of the Regulation, and to "organise proper inspections and surveys to verify compliance" with the Regulation. We consider this as the overarching legal basis for the cost-eligibility verifications to be performed by the NSAs.

In the context the third Reference Period (RP3) of the EU performance scheme, the specific elements that need to be subject to the verification of NSAs are further included in the Commission Implementing Regulation (EU) 2019/317. We re-take these main elements below,

¹ Developed by EY upon request of the European Commission DG MOVE, March 2019.

² ECA Special Report No 18/2017, publicly available at:
https://www.eca.europa.eu/Lists/ECADocuments/SR17_18/SR_SES_EN.pdf

³ The SES legislative framework is complex and a comprehensive overview regarding this framework is not in the scope of the present text. We indicate for further reference the descriptions for this area included in the 'Manual for the Verification of Air Navigation Services Costs in the context of the Single European Sky Charging Scheme' and the regulatory texts themselves, out of which the most relevant ones for the present material are the Framework Regulation (EC) No 549/2004, the Service Provision Regulation (EC) No 550/2004 amended by the Regulation (EC) No 1070/2009, the RP2 Commission Implementing Regulations (EU) No 390/2013 and 391/2013 and the Commission Implementing Regulation (EU) 2019/317 governing RP3.

as also presented in the 'Manual for the Verification of Air Navigation Services Costs in the context of the Single European Sky Charging Scheme':

- Recital 29 states that NSAs should verify that the established determined costs only comprise cost items that are eligible under the performance and charging scheme.
- Art. 22(7) states that the NSAs shall verify that the cost bases for en route and terminal charges are compliant with the requirements of Art. 15(2) of Regulation (EC) No 550/2004 and Regulation (EC) No 1070/2009 and with Art. 22 of the Regulation (EU) 2019/317. For this purpose, the NSAs shall examine the relevant accounting documents, asset books and any other material relevant to the establishment of the cost base for charges.
- Art. 23 mentions that the provisions of Art.22 shall apply also to actual costs.
- Art. 28 sets the rules governing a cost risk sharing mechanism between the airspace users and ANSPs. This concerns the situation where the ANSP actual costs exceed or fall below the corresponding determined costs over a reference period. General principles assume that the difference is covered or retained by the ANSP or the Member State concerned. However, Art. 28(3) allows for notable exceptions, in particular related to unforeseen changes in several types of costs.
- Article 28(7) states that NSAs shall elaborate an annex to its annual performance monitoring report in which it reports the verification of the correct application by ANSPs of the provisions of Article 28. In the year after the final year of a reference period, the report shall include the balance over the reference period regarding variation of actual costs of the new and existing investments and costs associated with pension costs, interest on loan repayments, and law changes.

These elements constitute the main legal reference for the specific objectives of the NSAs while performing cost-eligibility verifications. As such, the verification procedures included in the Verification Programme are built considering the need for compliance with these provisions.

3. Structure and scope of the Verification Programme and of the Training Material

Considering the general objective of offering a structured approach to cost-eligibility verifications, the Verification Programme and Training Material tackle several main areas that need to be covered by the checks of the NSAs, as presented in the below table. In order to ensure a consistent and coherent treatment of these areas of interest, the structure of the Verification Programme and of the Training Material follows also the relevant sections of the reporting tables from the Annexes of Regulation (EU) 2019/317:

Areas addressed:	Sections in the reporting tables addressed:
<ul style="list-style-type: none"> – Reconciliation between the audited statutory financial statements and the regulated accounts of ANSP; – Allocation between en route and terminal and between charging zones; 	<ul style="list-style-type: none"> – Table 1 (Annex VII of Reg. (EU) 2019/317): <ul style="list-style-type: none"> ○ Detail by nature and by service; ○ Complementary information (asset base, cost of capital, common

Areas addressed:	Sections in the reporting tables addressed:
<ul style="list-style-type: none"> – Eligibility of determined costs for the second Reference Period (RP2) and RP3; – Verification of actual costs for RP2 and RP3, in particular costs exempt from cost risk sharing mechanism; – Deduction of other revenues from the determined costs. 	<p style="text-align: center;">projects, investments, Eurocontrol costs).</p> <ul style="list-style-type: none"> – Table 2 (Annex IX of Reg. (EU) 2019/317): <ul style="list-style-type: none"> ○ Differences between determined and actual costs referred to in Art. 28(4) to 28(6); ○ Other revenues - Union assistance programmes and National public funding. – Table 3 (Annex IX of Reg. (EU) 2019/317) – Table 4 (Annex IX of Reg. (EU) 2019/317)

The procedures in the Verification Programme are therefore organised so as to cover the above areas.

The areas related to the verification of the traffic elements going into the calculation of the unit cost and unit rate (service units, traffic risk sharing adjustment) as well as the other adjustments included in the calculation of the unit rate (i.e. modulation of charges, financial incentives, cross-financing and differences from the temporary application of unit rates) do not fall in the scope of the Verification Programme and the Training Material.

The Verification Programme is organised in two parts: the first one containing verification procedures for determined costs, and a second one for actual costs. Each part is organised into three sections, considering the typical phases of a financial verification process:

- Planning phase: preparation phase prior to going on-the-spot to visit the ANSP, for setting the scope of the verification, collecting documentation and performing initial checks.
- Execution phase: phase in which the verification procedures are carried out, normally during a visit at the ANSP.
- Conclusion phase: finalisation phase during which a verification report is prepared and any findings are shared and discussed with the ANSP, considering any correction measures and recommendations.

The Training Material has the same structure of the Verification Programme, for easy reference.

A toolkit complements both the Verification Programme and the Training Material, including templates and additional information on very specific topics, in order to facilitate a better understanding.

A. Determined costs

A.1 Planning Phase

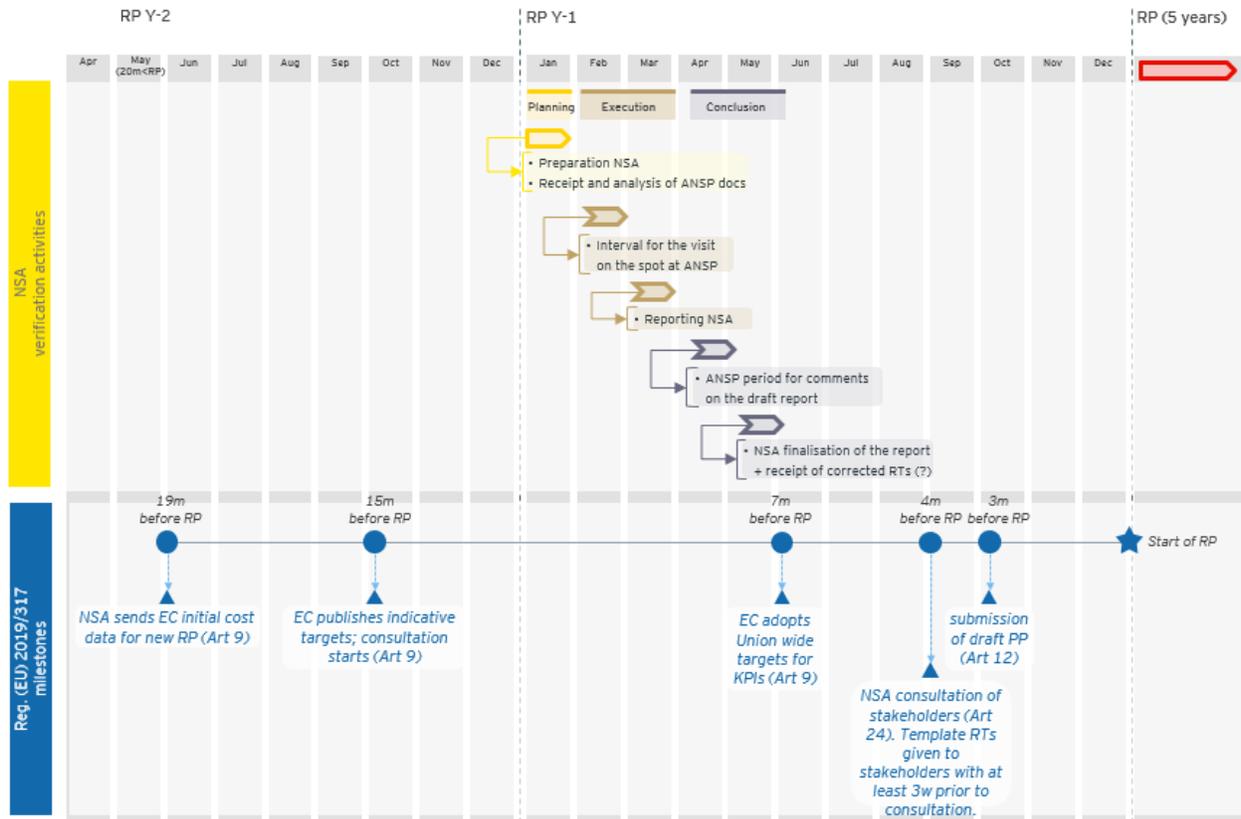
For the determined costs, we foresee a verification process that takes place ahead of each reporting period (RP).

The Planning phase represents the start of the verification process. Generally, the NSA should use this period to organise internally and to secure the required resources for performing the verification, as well as to deal with any administrative and logistical aspects. At this stage, it is expected also that the ANSP is requested, and provides, relevant preliminary documentation which the NSA will use in order to perform initial checks and for the identification of risk areas. Most importantly, during this phase the NSA should align internally on the objective of the verification (what should be achieved) and the scope of the verification (how comprehensive should the verification be). These aspects are detailed in the following sub-sections.

Timing

The timing of the verification process for determined costs, and implicitly for the Planning phase, is bound by the deadlines indicated in Regulation (EU) 2019/317 for the process of the adoption of the Performance Plans. For the purposes of this guidance material, the proposed approach is that the NSA performs and concludes the verification process prior to the start of the consultation process on the Performance Plans foreseen under Art. 24 of Regulation (EU) 2019/317. This will ensure that at the start of the consultation, the assumptions used for setting the determined cost will have been verified. In this context, the trigger for the Planning phase could be the setting of the baseline value for the determined costs and for the determined unit costs for each charging zone, according to Art. 10(2) of Regulation (EU) 2019/317.

The following timeline graphic below provides an overview of the timing of the verification process for determined costs. This is explained in further detail below.



A.1.1 Define objective and scope

1. Objective of verification

Determined costs are established by the NSAs, based on prior inputs submitted by the ANSPs. The NSAs bear the ultimate responsibility for setting the determined costs and ensuring that these comply with the criteria and principles stated in the SES regulatory framework.

In this context, the objective of the verification therefore should be the compliance of the ANSPs' practices and their reported costs with the criteria and principles outlined as regards ANS costs in the SES regulatory framework.

Specifically, the main objectives of the verification should be to validate that:

- The provisions of Article 12 of Regulation (EC) No 550/2004 and Regulation (EC) No 1070/2009 are complied with, which refer that the ANSPs shall publish their annual reports, regularly undergo an independent audit and comply with the international accounting standards adopted by the European Union as well as the requirement to maintain separate accounts for ANS and non-ANS costs.
- The costs by nature reported in the reporting tables (Annexes VII and IX of Regulation (EU) 2019/317) comply with the provisions of Articles 22 of Regulation (EU) 2019/317. These refer to the cost elements that can be included and reported under staff costs, operating costs other than staff costs, depreciation costs, cost of capital and exceptional costs.

- The principles foreseen in Article 15 of Regulation (EC) No 550/2004 and Regulation (EC) No 1070/2009 are complied with. These refer to the transparency of the cost base for charges, avoidance of cross-subsidy between en route and terminal services and the need to keep out of the cost base the costs of penalties and the costs of any corrective measures imposed by Member States.
- The provisions of Article 28 of Regulation (EU) 2019/317 are complied with. These refer in particular to the cases as per paragraphs 3 to 6 with the exceptions to the application of the cost risk sharing mechanism in case of unforeseen changes in costs of new and existing investments, Air Traffic Management (ATM) systems (common projects), pension costs, interest rates, national taxation law or other unforeseeable cost items required by law.
- The provisions of Article 25(3) and Annex IX of Regulation (EU) 2019/317 are complied with. These refer for the calculation of the unit rate to a deduction as 'other revenue' of ANSPs' funds obtained from public authorities, including EU assistance programmes, revenue from commercial activities and, potentially, revenue obtained from contracts or agreements concluded between the ANSP and airport operators.

2. Scope of the verification

For determined costs, the recommended approach is always an in-depth review of all the elements of the cost base ahead of the start of the next Reference Period, considering that the determined costs are used to establish, as part of the Performance Plans, the stable cost base for the charges to airspace users during the five-year period.

A specific case is the revision of the performance targets during a Reference Period, foreseen under Art. 18 of Regulation (EU) 2019/317, which entails revised cost-efficiency targets, and thus, revised cost base charges. In such instances, the NSA could focus its verification of the determined costs only on the category of cost impacted by the changes. An in-depth review is again recommended, and the NSA may use for this end the sections that apply from the Verification Programme.

The objective and the scope of the verification should be adequately communicated to the ANSP. In this respect, it is recommended that a formal approach is taken, e.g. communication via a letter/a formal message (refer to Tool 1 for a communication template announcing the verification procedure). Informing the ANSP management of the verification objective, timing, and of the extent of the procedures and the required documentation allows the ANSP to organise and prepare, which will likely determine a smoother verification process. Also, it provides transparency as regards the steps of the process, thus increasing the likelihood of good cooperation.

It is important to note that the level of depth and detail of the testing to perform could be adjusted based on the risk assessment results taken by the NSA. Please refer to section A.1.3 for more details on the risk assessment.

A.1.2 Request information to the service provider

According to the Regulation (e.g. Recital 7 of Regulation (EU) 2019/317), ANSPs should facilitate inspections and surveys carried out by the NSAs for the purpose of monitoring the implementation of the performance and charging schemes. From the perspective of the Verification Programme, this entails both access to financial and business information and the availability of the relevant staff for discussions throughout the verification process. In addition to this, during the conclusion phase of the verification, the ANSP management should be involved more closely in the discussions with the NSA regarding potential corrections and recommendations.

In this context, it is therefore recommended that the NSA approaches the ANSP with a structured list of requests for the verification. As regards the information to be provided, this should be formalised and shared with the ANSP. To this end, we provide in Tool 2 a standardised list of financial and business information to be requested to the ANSP for the verification. This structured list of requests can be used as a starting point for the NSAs for gathering the information they need during the planning phase. It can be tailored as per the specificities of the service providers planned to be verified from the NSAs.

Generally, as regards the determined costs, the NSA is required to obtain and analyse the information specified under Annex VII of Regulation (EU) 2019/317, considering any other documentation that may be required to support the verification procedures included in the Verification Programme. In Section 2 of the Annex VII, the Regulation lists the additional information to be provided on the reporting tables and unit costs, ahead of each RP. The NSAs should obtain from the ANSPs, *inter alia*, information regarding the methodology and assumptions used to establish ANS regulated costs, allocation criteria between en route and terminal, method adopted for the calculation of depreciation costs, assumptions used to compute the cost of capital and the description of the determined costs of common projects.

A.1.3 Perform preliminary risk assessment and sampling

After establishing the verification objective, the NSA is recommended to perform a set of initial checks in order to define the areas of risk associated with the verification. This will enable the NSA to further refine the scope of the verification work (in terms of depth and also extent of areas verified) for a better use of the existing resources. A specific tool that the NSA may use for this step is the Preliminary Risk Assessment and Sampling template (Tool 6 - specifically tab Risk Levels).

What constitutes an area of risk can be an element general to the reporting of all ANSPs but also an element specific to each ANSP, considering national and legal specificities. A non-exhaustive list of examples of such areas or risk for determined costs includes:

- General checks on the overall quality of the submitted reporting tables, considering the integrity of the formulas and that no error message is showing.
- Large variations between the determined costs by nature and the actual costs of the previous RP (or the baseline) and insufficient explanatory information in the Performance Plans.
- Large variations in the yearly actuals of the previous RP with a peak in the year before the last year of the RP. ANSP may try to delay costs to the year that will serve as basis

for the determined costs of the new RP. It would enable an ANSP to overestimate the determined costs and unit rates.

- The value of funded projects (i.e. common projects, public funding and Union assistance programmes) in Reporting Table 4 does not correspond with the amounts (total CAPEX for the project) in the investment section of the Annual Monitoring Report.
- Weak or insufficiently elaborated allocation methodology for the allocation of costs between en route and terminal and between charging zones, not revised since the previous RP.
- Specific legal considerations as regards ownership of assets used for providing ANS, etc.

These examples and other ones depending on the case, need to be guiding the NSAs while assessing the level of risks they might face when performing the verifications.

The NSA needs to consider a wide variety of sources of information when performing the risk analysis, including, inter alia:

- The reporting tables and the additional information thereon provided according to the Regulation.
- The internal methodologies and policies of the ANSP regarding allocation of costs, depreciation of assets, financial treatment of common projects and of EU-funded projects.
- The organisational set-up of the ANSP and, for ANSPs that are public entities, any changes in the institutional arrangements or relevant governing legislation.
- Results from NSA verifications of cost-eligibility from previous RPs.
- Overall replies provided by the ANSP to the Pre-fieldwork Questionnaire.

The NSAs can use the preliminary risk assessment template (Tool 6 of the Verification Programme - specifically tab Preliminary Risk Assessment) which covers horizontal and vertical review of the costs by nature declared.

This workbook which focuses on the information extracted from Reporting Table 1, aims to assist the NSAs identify the service providers and, or costs by nature potentially of a higher risk nature, as well as document the risk assessment and the sample chosen for verification.

When assessing the risks, the NSA needs to document its decision on the scoped cost categories and service providers. NSAs may follow the below mentioned steps in order to properly document the risk level related to each ANSP.

1. Proper use of previous experiences with the service providers and their reporting tables:

While performing the risk assessment, based on their professional judgement, the NSA might decide to focus on two elements:

i. The environment of ANSPs and NSA's previous experiences

This element is important because through an analysis of the ANSPs' environment (legal, organisational, etc) the NSA can identify what risks will be faced when reaching the execution phase, such as integrity of management, unusual pressure on

management, nature of the business, factors affecting the industry, risk related to fraud, changes in management during the period, complexity of the organisation, etc.

A higher risk resulting from the ANSPs' environment contributes to a higher probability of potential misstatements and therefore NSAs should increase the number of selected transactions to be tested, costs by nature, ANSPs, etc. in order to cover these risks.

ii. Work of other auditors (internal, statutory) and, or previous NSA audit or verification reports:

The NSAs might identify service provider and/or costs by nature for which findings have been identified in previous verification experiences, and as such these entities might be included as well in the current year verification. If NSAs are aware that a qualified audit opinion is issued from the statutory auditor, then this should serve as a red flag when assessing the reliance (or not) on the work performed by other auditors.

The NSAs need to document properly their risk levels detailed in the Tool 6 as this will impact the size of the sample to be tested.

2. *Analyse the costs by nature declared by the ANSPs and the service providers and their variances compared with the previous years' costs.*

The NSA needs to perform a horizontal analysis of the received reporting tables per each reporting entity. If considerable variances between the determined costs and the prior year are identified, then this might serve as a red flag for the NSAs, to further investigate the case by including these entities in the verification process. Those service providers that do not reflect a significant variance compared to previous year costs claimed, then, the NSA might decide to perform a less thorough verification.

Additionally, the NSA needs to perform vertical analysis in order to assess the contribution level of the each ANSP towards the consolidated total cost by nature. Tool 6 covers in details the risk levels for both horizontal and vertical reviews that the NSA will perform. The higher the risks identified, the more items or transactions need to be verified.

3. *Document the preliminary risk assessment and the final decision of scoping the entities and cost categories for the verification process:*

It is crucial to mention that the NSA should document the preliminary risk assessment and the final decision of scoping the entities and cost categories for the verification process as per the levels of risks identified during their assessment. Tool 6 with its different tabs, is built to assist the NSA for documenting the NSA's preliminary risk assessment and its decisions on which entity and what kind of cost categories (cost by nature) they will verify during the execution phase.

There is a direct relationship between the identified risks and the sample size and this relationship should to be considered when performing the Preliminary Risk Assessment. The risk assessment will impact the sample size in terms of number of items to be tested (i.e. the higher the risk level, the higher the number of items to be tested). The set of steps detailed below are important to be followed while determining the sample which will be tested during the fieldwork.

When determining the samples related to the verification of the eligibility of costs, referring to the total costs reported in Reporting Table 1, these steps need to be followed:

Step 1: Professional judgement on internal controls as well as other audit reports

Understanding the environment of the ANSPs, their internal controls in place as well as being aware of the deficiencies identified by other auditors, is the initial step towards mitigating the risks before reaching the fieldwork. Based on the quality and the quantity of information gathered from the above mentioned, will assist the NSAs tailor the samples according to each specific ANSP.

Step 2: Analyse the consolidated reporting table versus the individual ANSPs respective reporting tables and identify the total share of each service provider towards the consolidated total cost:

By identifying the types of service providers, NSAs need to assess the volume of the total costs for each service provider (per type) towards the total costs in the consolidated Reporting Table 1. A particular attention should be paid to those service providers that contribute to relatively high shares to the consolidated amounts of cost by nature reflected in Reporting Table 1. The NSAs might choose to focus less on the service providers that contribute at a lower level to the total costs, such as for example, a range between 2% and 5% of the total cost reported in the consolidated Reporting Table 1. The NSAs can assess themselves which of the entities that contribute to a lower amount, can be verified. However, considering their size, it is expected that ANSPs will contribute to a larger extent to the total costs declared in the consolidated Reporting Table 1.

Step 3: Understand the population:

- Ask for the detailed breakdown of costs per each cost by nature to each service provider decided as per the Preliminary Risk Assessment Template (Tool 6) that will be verified.
- Reconcile the total breakdown per each cost by nature with the total amount declared by the service providers per each cost by nature.
- Identify the total number of items per each cost by nature which was previously agreed to be tested in the preliminary risk assessment template.
- Concerning staff cost category, collect the detailed cost breakdown per person (if possible).

Step 4: Determine the sample size and the sampled items:

- Sort the detailed item list per each cost per nature from the biggest amount to the smallest;
- Select the 10 highest value items or 10% of the total number of items per cost category, whichever is the highest. If population is less than 10 items, then full population will be tested. Please refer to the explained example in the Tool 6 The example is focused in staff costs;
- When an ANSP has been considered of a high risk nature (resulting from the Step 1 and 2), then high risk items need to be systematically added in the sample, increasing the sample size to be verified.

When NSAs are faced with ANSPs of a high risk nature then the unusual items or transactions need to be added to the initial sample size explained in the two first bullet points this step.

A non-exhaustive list of examples concerning unusual items or transactions, is detailed as per below:

- Transactions with sudden huge variations;
- The size of the item or result in relation to our expectation or to other similar transactions;
- The transaction or result occurs infrequently (i.e., is non-recurring or non-routine);

When performing the verification procedures, the NSAs need to be aware that the verification process that NSAs will use is an Agreed-upon Procedure (AuP), which relates to ISRS4400. Additionally, the report that the NSAs will issue will not reflect an opinion on the eligibility of costs, cost allocations and cost adjustments. Rather reflects the findings identified during the fieldwork and based on the supporting documents received from the ANSPs. As per ISRS4400, the objective of an AuP engagement is *"for the auditor to carry out procedures of an audit nature to which the auditor and the entity and any appropriate third parties have agreed and to report on factual findings. As the auditor simply provides a report of the factual findings of agreed-upon procedures, no assurance is expressed. Instead, users of the report assess for themselves the procedures and findings reported by the auditor and draw their own conclusions from the auditor's work..."*.

A.2 Execution Phase

A.2.1 Verification of costs by nature (cost base eligibility and accuracy)

A.2.1.1 Procedures transversal to all cost by nature

Three “components” are observed in terms of determined costs reported in the context of this Regulatory Framework: the ANSP official published Financial Statements available for the preceding reference period, the ANS/non-ANS separate accounts available for the preceding reference period and the reporting of determined eligible costs in the official reporting tables. The baseline value for determined costs shall be estimated by using the actual costs available for the preceding reference period and adjusted to take account of latest available cost estimates, traffic variations and their relation to costs.

It is assumed that the actuals used in the costs baseline were already verified by the NSA in the past, meaning that no additional verification is required in addition to the three steps listed below. If they were not or not sufficiently verified, a verification of the actuals should also be performed in line with the procedures described for the actual costs. This includes the assumption that the ANSP’s financial statements for the year from which the actual costs of the preceding reference period were used to estimate the determined costs were subject to an independent financial audit and were published. This is a clear requirement from the Regulation (EC) No 550/2004, Article 12(2) on the transparency of accounts. This ensures that the starting base for the cost base calculation is accurate, allowing the NSA to rely on the information from the financial statements.

The NSA should apply the following verification procedures:

1. Verify that the ANSP has separate accounts for ANS and non-ANS services. Costs that are not related to the provision of air navigation services should not be included in the cost base for setting the unit rate. Inter alia that concerns costs related to equipment not used for providing such services during a given year or costs related to a removal of equipment before its useful end of life.
 - a. ANSPs may conduct operations or provide commercial services other than regulated ANS. These costs are non-eligible and should therefore be excluded from the determined cost base. Inter alia that concerns costs related to equipment not used for providing such services during a given year or costs related to a removal of equipment before its useful end of life.
 - b. It is assumed that the separation between (actuals) ANS and non-ANS accounts was verified when the related actuals were reported in the reporting tables.
 - c. The NSA should verify that these separate ANS accounts from the previous RP were used as the baseline value for determined costs.
2. Verify the consistency between the determined costs included in the reporting tables and the ANSP business plan.
 - a. According to Article 4 of Regulation (EU) 2019/317, the ANSPs are required to provide their business plan as referred to in point ATM/ANS.OR.D.005 of Annex III of Commission Implementing Regulation (EU) 2017/373⁴.

⁴ Commission Implementing Regulation (EU) 2017/373 of 1 March 2017 laying down common requirements for providers of air traffic management/air navigation services and other air traffic management network functions

- b. The NSA should verify the consistency between the reporting tables and the ANSP business plan, and this at least for the determined costs by nature and the investments.
3. Verify that there is an audit trail⁵ between the determined costs of the Reporting Period and the available actual costs for the preceding reference period, taking into account all the adjustments performed (the specific verification procedures on each cost by nature are described in the next sections).

The NSA should verify that the NSA has clearly documented how the actual costs from the preceding reference period were adjusted to obtain the determined costs. This documentation should be both quantitative and qualitative. The quantitative aspects should explain how the actuals were modified across all costs by nature (e.g. the staff cost was increased by 400.000 €, then increased by 1%) while the qualitative aspects should explain the rationales behind these modifications (e.g. 400.000 € is accounted for the costs of 2 additional full time equivalents (FTE) needed compared to the previous reference period and 1% is added to account for the salary indexation). While it is understood that efficiency targets are the main drivers for setting-up the determined costs, the ANSP should translate them into realistic operational numbers and assumptions (i.e. impact on number of staff, etc.) The same type of documentation should exist for the impact on costs by ANS service and on adjustments and specific lines covered in Section A.2.4.

4. Reconcile the values used for the determined costs baseline with the actual costs for the preceding reference period.
 - a. This quick reconciliation ensures that the actuals from the previous RP taken for the preparation of determined costs are correct. This reconciliation also ensures that the adjustments are applied to costs fully related to the provision of ANS.
 - b. According to Regulation 2019/317, the determined costs shall be calculated in respect to the year preceding the start of the reference period. When preparing the determined costs (during the year preceding the start of the reference period), the latest actuals available are for the previous year (i.e. the latest actuals available for the preparation of RP3 determined costs were the 2018 actuals).
5. Check that the reported costs do not include elements that are specifically not allowed under the service provision Regulation⁶, such as the cost of penalties imposed by

and their oversight, repealing Regulation (EC) No 482/2008, Implementing Regulations (EU) No 1034/2011, (EU) No 1035/2011 and (EU) 2016/1377 and amending Regulation (EU) No 677/2011 (OJ L 62, 8.3.2017, p. 1.).

⁵ A document that quantitatively traces how the final determined costs are obtained starting from the actuals of the previous reference period and detailing the impact on all assumptions (traffic forecast, efficiency targets, inflation, detailed expected additional costs and savings, etc. By detailed, it is meant that the overall or net increase or decrease is not enough. All significant ups and downs should be described and quantified.

⁶ Regulation (EC) No 550/2004 of the European Parliament and of the Council of 10 March 2004 on the provision of air navigation services in the single European sky as amended by Regulation (EC) No 1070/2009 (the service provision Regulation).

Member States (according to Article 9 of the framework Regulation⁷) and the cost of any corrective measures imposed by the framework Regulation.

This is verified when checking the adjustments made to the actuals costs. The adjustments made may neither include the cost of penalties imposed by Member States nor the cost of any corrective measures.

A.2.1.2 Procedures for staff costs

According to the Article 22 of Regulation (EU) 2019/317, staff costs should include gross remuneration, overtime payments, and employers' contributions to social security schemes, as well as pension costs and costs of other benefits. Pension costs shall be calculated using prudent assumptions based on the applicable pension scheme or on national law, as appropriate. Those assumptions shall be specified in the Performance Plan.

The NSA is responsible to check that the ANSP complies with these regulatory requirements. The following procedures are recommended to this end:

1. Verify that the only elements included in the staff cost reported in the reporting tables are the ones listed in the regulatory framework.
 - a. This is verified by reviewing the audit trail between the available actual costs for the preceding reference period and the determined costs. The costs added through the adjustments should not be of any other type than the ones allowed by the Regulation (EU) 2019/317 (gross remuneration, overtime payments, and employers' contributions to social security schemes, as well as pension costs and costs of other benefits).
 - b. For example, recent new paid parental leave and benefits announced by the government are valid examples of such adjustments.
 - c. Also, the NSA should ensure with the ANSP that the audit trail is sufficiently detailed to allow for a proper verification. Details on the nature and content of the main adjustments should be included. Indeed, while the actuals of the previous RP may be very close to the total determined operating costs, there could be very different cost items foreseen by the ANSP.
 - d. In accordance with the International Accounting Standard (IAS) 19 list of employment benefits, other benefits may include termination costs, long-term paid absences, jubilee or other long-service benefits, long-term disability benefits, profit-sharing and bonuses and deferred remuneration. These items are all in accordance with the Regulation. More detailed explanations on employment benefits and related IFRS requirements are available in the section of IFRS considerations in the Verification Programme.
2. Check that only the ANS related staff costs were reported in the reporting tables.
 - a. This is verified by reviewing the audit trail between the available actual costs for the preceding reference period and the determined costs. The costs added through the adjustments should not include any component not related to the provision of ANS.

⁷ Regulation (EC) No 549/2004 amended by the Regulation (EC) No 1070/2009.

- b. For example, would the ANSP foresee a certain amount for a new hospitalisation insurance for its employees, it should be verified that the entire insurance cost is not included in the determined cost base but only the part for the employees working on the provision of ANS.
3. Verify that all adjustments performed to the staff costs rely on sound assumptions.
- a. Detail on the assumptions used can be found in the Performance Plan (cost efficiency section) and in its Annex F. Baseline cost efficiency values for RP3. Any other needed information should be enquired to the ANSP.
 - b. These assumptions should be reviewed and their soundness verified. For example:
 - i. If staff costs are foreseen to increase due to additional air traffic controllers (ATCO) being needed, their number should be verified in regards to traffic variation estimations, productivity gains linked to the availability of new systems, etc. Requesting the ANSP staff/hiring plan and checking its consistency with the estimates used for the determined costs is a good verification.
 - ii. If staff costs are foreseen to increase due to a salary indexation, it could be verified against the national salary indexation plan.
 - iii. If staff costs are foreseen to increase due to a change in employer's contributions, it could be verified in regards to a change in the law for the social insurance and health scheme.

4. Verify that the adjustments are correctly reflecting the assumptions.

While the previous verification procedure was about the verification of the qualitative dimension of the adjustments, this procedure is about the verification of their quantitative adjustments. The NSA should verify that the assumptions were correctly reflected in the calculation of the adjustments.

5. Perform an in-depth verification of pension costs, leveraging the Performance Plan details and any actuarial report available. More detailed explanations on pension costs/post-employment benefits and related IFRS requirements are available in the section of IFRS considerations in the Verification Programme.
- a. The NSA should reconcile the determined costs presented in the reporting tables with the detail per pension scheme in the Section 3.4.3 Pensions of the Performance Plan.
 - b. For each pension scheme used, the NSA should:
 - i. Verify the calculations for the pension cost in respect of this scheme.
 - 1. For the verification of defined contributions pension schemes, the pension cost calculation is rather straightforward and a simple reconciliation of costs accounted with the insurance plan is sufficient.
 - 2. For the defined benefits pension schemes, IAS 19 requires the entity to use the projected unit credit method to calculate the service cost (one of the component of expenses related to a

Defined benefits scheme). However, not all ANSPs are compliant with IFRS principles.

- a. For the ANSP reporting pension costs as per the same accounting methodology as in their financial statements, the pension costs will have been validated in the context of the financial audit. In that case, a simple reconciliation by the NSA of reported pension costs with the insurance plan is sufficient.
 - b. For the ANSP reporting pension costs as per a different accounting methodology than in their financial statements (to get closer to the IFRS principles for example), these reported pension costs were not validated during the financial audit. In that case, the NSA needs to review the actuarial reports and validate the assumptions reasonability. The following verification procedures should be envisaged in that case:
 - i. Obtain the actuarial evaluation that was done by the ANSP;
 - ii. Understand how the service cost is calculated;
 - iii. Understand the assumptions used by the actuaries and validate their reasonability;
 - iv. An independent actuarial review of the ANSP could be of interest if the amount is very significant or could represent a high risk.
3. State pension schemes are not a separate category of pension schemes as per IFRS rules. They either enter the defined contributions scheme, either the Defined benefits scheme, or are a combination of both. The above described procedures are thus applicable to the related portions of the state pension schemes.
- ii. Verify that the assumptions underlying the calculations of pension costs comprised in the determined costs are accurate (based on applicable pension scheme or on national law) and correctly taken into account in the calculations.
 - iii. Verify that the actions taken ex-ante to manage the cost-risk (cost increase) associated, as well as the actions taken to limit the impact of the unforeseen change on the costs to be passed on to airspace users are appropriate/reasonable.

A.2.1.3 Procedures for other operating costs

According to the Article 22 of Regulation (EU) 2019/317, operating costs other than staff costs should include the costs incurred for the purchase of goods and services used to provide air navigation services, including outsourced services, material, energy, utilities, rental of buildings, equipment and facilities, maintenance, insurance costs and travel expenses.

The NSA is responsible to check that the ANSP complies with these regulatory requirements. The following procedures are recommended to this end:

1. Verify that the only elements included in the other operating cost reported in the reporting tables are the ones listed in the regulatory framework.
 - a. This is verified by reviewing the audit trail between the available actual costs for the preceding reference period and the determined costs. The costs added through the adjustments should not be of any other type than the ones allowed by the Regulation (EU) 2019/317 (incurred for the purchase of goods and services used to provide air navigation services, including outsourced services, material, energy, utilities, rental of buildings, equipment and facilities, maintenance, insurance costs and travel expenses).
 - b. For example, new software licenses or the externalisation of a certain activity (e.g. security) performed earlier by internal staff are valid examples of such adjustments.
 - c. Also, the NSA should ensure with the ANSP that the audit trail is sufficiently detailed to allow for a proper verification. Details on the nature and content of the main adjustments should be included. Indeed, while the actuals of the previous RP may be very close to the total determined operating costs, there could be very different cost items foreseen by the ANSP.
 - d. Leasing costs are also to be included in the other operating costs according to the Regulation (EU) 2019/317. IFRS 16 (new standard effective since 1 January 2019) introduces a new, broader, definition of leases. As per that definition, any physical asset for which an entity is paying a rental amount would now be considered a lease for the purpose of IFRS 16. While the renting charges were previously considered as an operating expense, the leasing costs are finance (interest) expenses. As a consequence, the ANSP Profit and Loss statements compliant with IFRS have seen a decrease in the operating expenses and an increase in the financial expenses. Nevertheless, the leasing costs shall be included in the operating cost to remain compliant with the Regulation. More details can be found in the section of IFRS considerations in the Verification Programme.
2. Check that only the ANS related other operating costs were reported in the reporting tables.
 - a. This is verified by reviewing the audit trail between the available actual costs for the preceding reference period and the determined costs. The costs added through the adjustments should not include any component not related to the provision of ANS.
 - b. For example, would the ANSP foresee a certain budget for a general information technology (IT) software license, it should be verified that not the entire license cost is included in the determined cost base but only the share that can be attributed to the provision of ANS.
3. Verify that all adjustments performed to the other operating costs rely on sound assumptions.

- a. Detail on the assumptions used can be found in the Performance Plan (cost efficiency section) and in its Annex F. Baseline cost efficiency values for RP3. Any other needed information should be enquired to the ANSP.
 - b. These assumptions should be reviewed and their soundness verified. For example:
 - i. If other operating costs are foreseen to increase, their nature (e.g. outsourced services, material, energy, etc.) and amounts should be verified in regards to their variability (some costs are fixed by nature, while other are variable - any combination in between also exists) and traffic variation estimations, productivity gains, etc.
 - ii. If other operating costs are foreseen to increase due to a general increase in prices, it could be verified against the inflation or consumer price indexes.
 - iii. If other operating costs are foreseen to increase due to a change in a regulated market (energy for example), it could be verified in regards of related official published information.
4. Verify that the adjustments are correctly reflecting the assumptions.

While the previous verification procedure was about the verification of the qualitative dimension of the adjustments, this procedure is about the verification of their quantitative adjustments. The NSA should verify that the assumptions were correctly reflected in the calculation of the adjustments.

A.2.1.4 Procedures for depreciation

According to the legal framework, depreciation costs include costs related to the total fixed assets in operation for the purpose of providing ANS. The value of 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. Historical or current cost accounting shall be applied for the calculation of the depreciation. The methodology used to calculate depreciation costs shall not be altered during the duration of the depreciation and shall be consistent with the cost of capital applied, that is to say nominal cost of capital for historical cost accounting and real cost of capital for current cost accounting.

Where current cost accounting is applied, the cost of capital shall not include inflation and the equivalent historical cost accounting figures shall also be provided to allow for comparison and assessment.

More guidance on IFRS requirements is available in the section of IFRS considerations in the Verification Programme. In particular, IAS 16 (property plants and equipment) and IAS 38 (intangible assets) principles related to assets recognition (also for assets under construction), valuation and depreciation are described.

In relation to depreciation, the NSA should perform the following procedures:

1. Verify that the only depreciation cost included in the reporting tables are the ones allowed by the regulatory framework.

- a. This is verified by reviewing the audit trail between the available actual costs for the preceding reference period and the determined costs.
 - i. The audit trail should be made on the individual asset level of granularity as the determined depreciation costs are the sum of the of individual assets, grouped in investments in the Performance Plan. An example of audit trail could be the asset register from the previous RP in which the depreciation for the next five years are prepared.
 - ii. The depreciation cost of assets in the middle of their operating life should would have constant depreciation costs per year as the straight life method is required. The costs added compared to the actual costs of the preceding RP should be depreciation costs from new assets acquired and put in operation by the ANSP, as approved in the Performance Plan. Similarly, the depreciation costs of assets that were fully depreciated during the previous reference period should not be included in the determined costs anymore.
 - iii. Assets for which costs were included in the depreciation must have been in operation during the year. If they were put in operation during the year, they should only be taken into account on a pro-rata basis.
 - iv. It should be verified that no depreciation is accounted for assets under construction. This can be checked by reviewing the asset register or list of assets, verifying that no costs are capitalised for these assets. Another verification is to review for what assets are costs being capitalised and verify that no depreciation cost is included in the cost base for these assets.
 - b. For example, depreciation costs may be added to the actuals from the previous reference period in the case of a new radar put into operation during the year. Similarly, the depreciation cost of an equipment that would have been fully depreciated during the previous reference period should not be included in the determined costs.
2. Check that only the ANS related depreciation costs were reported in the reporting tables.
 - a. This is verified by reviewing the audit trail between the available actual costs for the preceding reference period and the determined costs. The depreciation costs added compared to the previous RP should only relate to assets required for the provision of ANS.
 - b. For example, would the ANSP put in operation a new asset used both for regulated ANS and other non-ANS activities, it should be verified that the entire asset depreciation cost is not included in the determined cost base but only the proportion that can be attributed to the provision of ANS. Sharing keys and allocation methods (including examples) are fully explained in the corresponding section of the verification of actuals (Section B.2.1.4).
 3. Verify that the value of fixed assets is being depreciated in accordance with their expected operating life, using the straight-line method.

- a. No definition is provided in the Regulation for the terms of “expected operating life”. As per IAS 16, properties, plants and equipment are to be depreciated over their useful life. However, if it can be considered that an asset operating life is equal to its useful life and that the ANSP applies a straight-line depreciation method (one of the three methods accepted under IFRS), the NSA should be able to reconcile the depreciation costs entered in the Reporting Table 1 with the asset register/list of assets. Moreover, the expected operating life shall be declared for each asset in the ANSP’s investment plan which is part of the adopted Performance Plan.
 - b. Straight-line depreciation is the most common and simple method of depreciation where the value of a fixed asset is reduced gradually and evenly over its useful life, meaning that each full calendar year will be allocated the same amount (in absolute value and in percentage) of the asset’s cost.
 - c. It should be verified that any exceptional depreciation resulting from asset impairments and write offs are not included in the depreciation costs but in the exceptional cost category. Also, it should be verified that any written off fixed assets is not included anymore (or with a null value) in the fixed asset register at year end. As a reminder, impairments and write offs require in RP3 an approval from the NSA.
4. Verify that the depreciation methodology used was consistent with the one applied to the cost of capital calculation.
- a. Guidance on key concepts:
 - i. Historical cost accounting: Historical cost implies that an asset is recorded at its original cost when acquired by the ANSP.
 - ii. Current cost accounting: Current cost accounting for asset valuation and depreciation is neither defined in the Regulation (while it is defined for the cost of capital (i.e. “Where current cost accounting is applied, the cost of capital shall not include inflation”) nor in the international accounting or reporting standards. It is however foreseen in IAS 16 that properties, plants and equipment can be valued at “fair value” following the revaluation model. Nothing specifies however that current cost is an equivalent to fair value.

It is required by the Regulation that where current cost accounting is applied, the equivalent historic cost accounting figures shall also be provided to allow for comparison and assessment.
 - b. Meaning of the consistency in the depreciation and cost of capital methods:
 - i. Either use historic cost accounting for the calculation of the depreciation and the nominal cost of capital (including inflation), or
 - ii. Either use current cost accounting for the calculation of the depreciation and real cost of capital (excluding inflation).
5. Verify that the methodology used to calculate depreciation costs was not altered during the duration of the depreciation.

This can be verified by reviewing the detail of the calculations made for the depreciation costs. As the straight line depreciation method should be applied, the annual depreciation costs should remain constant for all full calendar years during which the asset is being depreciated if the expected operating life is not modified and the asset not revalued (any of these would require the NSA approval in RP3). Assets put into operation during that year shall only be taken into account on a pro-rata basis.

6. Verify that all adjustments performed to the depreciation costs rely on sound assumptions.
 - a. Detail on the assumptions used can be found in the Performance Plan (cost efficiency section) and in its Annex F. Baseline cost efficiency values for RP3. Any other needed information should be enquired to the ANSP.
 - b. These assumptions should be reviewed and their soundness verified. For example:
 - i. For the majority of assets, the depreciation costs should remain in line with the previous year as the straight line depreciation method has to be used. The exceptions to that rule are the new assets put into operation and the ones getting fully depreciated.
 - ii. The large movements in the depreciation cost would come from the addition, the asset end of expected operating life, the cancellation or the replacement of assets or new and existing investments put into operation. The assumptions underlying the determined depreciation cost variance should be analysed with regards to the details and justifications to be provided in the investment plan specified in the Performance Plan. Any change requires the NSA approval in RP3.
7. Verify that the adjustments are correctly reflecting the assumptions.

While the previous verification procedure was about the verification of the qualitative dimension of the adjustments, this procedure is about the verification of their quantitative adjustments. The NSA should verify that the assumptions were correctly reflected in the calculation of the adjustments. The ANSP asset register and investment plans are key documents to be leveraged for this verification.

Additional guidance is provided by Eurocontrol⁸:

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' representatives. This practice has however no basis in the Single European Sky regulatory framework.

A.2.1.5 Procedures for cost of capital

According to Regulation (EU) 2019/317, Article 22(4), the cost of capital shall be equal to the product of the following elements:

⁸ European Organisation for the Safety of Air Navigation, Central Route Charges Office, Eurocontrol, "Principles for establishing the cost base for en route charges and the calculation of the unit rates", 2018.

- The sum of the average net book value of fixed assets in operation or under construction and possible adjustments to total assets determined by the national supervisory authority and used by the air navigation service provider and of the average value of the net current assets, excluding interest-bearing accounts, that are required for the purposes of providing air navigation services.
- 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 above and the debts.

For the purpose of establishing the cost of capital, the factors to which weight is to 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 weighted average interest rate on debts of the air navigation service provider. The return on equity shall be that provided in the Performance Plan for the reference period and shall be based on the financial risk incurred by the air navigation service provider.

Where air navigation service providers incur costs from leasing fixed assets, those costs shall not be included in the calculation of cost of capital.

Additional guidance was developed for the ANSP on the determined cost of capital development⁹. The NSA may consult this material for a better understanding of the technical details.

More guidance on IFRS requirements is available in the section of IFRS considerations in the Verification Programme. In particular, IAS 16 (property plants and equipment) and IAS 38 (intangible assets) principles related to assets recognition (also for assets under construction) and valuation are described.

To verify the cost of capital, the NSA performs the following procedures:

1. Verify the eligibility and accuracy of all components of the cost of capital calculation by verifying the assumptions taken for each of them.
 - a. The asset base is made of the three following components:
 - i. The net book value of fixed assets (including the ones in operation and under construction).
 1. As per Point 3.3(e) of Annex II, NSAs are required to describe and justify in their Performance Plans the return on equity applied, the gearing ratio, as well as the level and composition of the regulatory asset base used for the calculation of the cost of capital.
 2. The average net book value for the fixed assets in operation can be verified with the asset register, also used for the calculation of the depreciation under 1.3 Depreciation.

As this is an average, it cannot be reconciled with the balance sheet that displays the end-year value.

⁹ Supporting material for the development of RP3 Performance Plans, developed by EY and Helios upon request of the European Commission Directorate-General for Mobility and Transport (DG MOVE), May 2019.

3. These fixed assets should be used by the air navigation service provider for the purposes of providing air navigation services.
This should have already been mostly verified when checking the assets for the procedures related to the depreciation, additional checks should be performed in case of material assets being in construction (not depreciated yet, meaning that they were not included in the scope of the procedures related to depreciation).
 4. The costs related to the leasing of fixed assets should not be included in the cost of capital calculation (but rather in the other operating costs).
- ii. Fixed assets net book value may include possible adjustments to total assets determined by the national supervisory authority.
1. It is expected that adjustments to (IFRS) total assets will be allowed by the regulatory authority and in consistency with the additional information to be provided in the reporting tables for charging purposes. Examples of adjustments are as follows:
 - a. Cash, rather than IFRS, pension costs;
 - b. Regulatory, rather than accounting, depreciation; and,
 - c. Exclusion of goodwill – determined costs do not include allowances for the impairment of goodwill.
 2. ANSPs should disclose to what the asset adjustment(s) relate(s) and how it can be reconciled with the assets value.
- iii. The asset base should also include the average value of the net current assets.
1. Net current assets are defined as the current assets less the current liabilities, where:
 - a. Current asset means cash or a cash equivalent (i.e. that can be converted into cash within one year - typically inventory and short term receivables).
 - b. Current liability means a payable within one year.
 2. The NSA should verify that the average value of the net current assets value is used, calculated as $\text{Average NBV} = (\text{total NBV fixed Assets at start of the calendar year} + \text{total NBV fixed assets at end of the closing of the calendar year})/2$. ANSPs may also consider it appropriate to use a mid-year figure or the monthly average throughout the year.
 3. Net current assets should not include interest-bearing accounts. When reconciling the assets with the financial statement, the NSA should verify that no interest bearing account (i.e. bank account) is included in the fixed asset net book value (NBV).
- b. The equity capital:

For air navigation service providers that do not have equity capital (more likely for ANSPs that are part of the State administration), the difference between the total of the assets and the debts should be taken as the value of the equity capital in the calculation of the cost of capital.

c. Debt:

The debt amount should be made of the loans financing the provision of air navigation services. For the ANSP financed exclusively through equity (so not having any debt), procedures related to the verification of debt and interest can be disregarded.

d. The interest rate on debts:

- i. The interest rate shall be equal to the weighted average interest rate on debts of the air navigation service provider - see further fourth procedure for more details.
- ii. As per point 3.3(f) of Annex II, ASNPs are required to describe the assumptions used in respect of interest rates for loans and to explain the weighted average interest rate on debt used to calculate the cost of capital pre-tax rate. This includes detailed information on loans including as regards amounts and duration.

e. The return on equity:

- i. The return on equity shall be the one provided in the Performance Plan for the reference period and shall be based on the financial risk incurred by the air navigation service provider.
- ii. As per point 3.3(e) of Annex II, NSAs are required to describe and justify in their Performance Plans the return on equity applied, the gearing ratio, as well as the level and composition of the regulatory asset base used for the calculation of the cost of capital.

2. Validate the cost of capital calculation.

a. The proportion of financing through equity (and debt):

The NSA should redo/verify the calculations to verify that these proportions are equal to the ratios between the ANSP equity (or debt) and total liabilities.

b. The weighted average of the interest rate on debts and of the return on equity:

- i. The NSA should redo/verify the calculation of the weighted average of the interest rate on debts and of the return on equity to verify that it is equal to the sum of:
 1. The proportion of financing through equity multiplied by the return on equity.
 2. The proportion of financing through debt multiplied by the interest rate on debts.
- ii. 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 and the debts.

c. Cost of capital:

The NSA should reperform the calculation of the cost of capital to verify that it is equal to the product of the average net book value of fixed assets and of the weighted average of the interest rate on debts and of the return on equity.

3. Verify that methodology applied to the cost of capital is consistent with the one used to calculate depreciation costs.

Nominal cost of capital should be used in combination with historic cost accounting and real cost of capital should be used in combination with current cost accounting.

4. Perform an in-depth verification of interest rate and costs, leveraging the Performance Plan details.

a. The NSA should reconcile the determined costs presented in the reporting tables with the overall average weighted interest rate % and interest amount from the Section 3.4.4 interest rates of the Performance Plan.

b. For each loan which has a material impact on the ANSP's financial position, the NSA should:

i. Verify the remaining balance and/or interest amount based on the loan contract with the bank or bank statements.

ii. Verify that the assumptions underlying the calculations of interest costs comprised in the determined costs are accurate and correctly taken into account in the calculations.

iii. Verify that the actions taken ex-ante to manage the cost-risk (cost increase) associated, as well as the actions taken to limit the impact of the unforeseen change on the costs to be passed on to airspace users are appropriate/reasonable.

A.2.1.6 Procedures for exceptional costs

According to the legal framework, exceptional costs shall consist of non-recurring costs relating to the provision of air navigation services, including any non-recoverable taxes and customs duties.

In relation to the exceptional costs, the NSA should perform the following procedures:

1. Verify that the only elements included in the exceptional costs reported in the reporting tables are the ones listed in the regulatory framework.

a. This is verified by enquiring the ANSP for the details of what costs are included in that category and verifying that information. Reviewing the audit trail between the available actual costs for the preceding reference period and the determined costs is not an option for this category as these costs should be non-recurring.

b. The determined costs should not be of any other type than the ones allowed by the Regulation (non-recurring costs, including any non-recoverable taxes and customs duties).

- c. Eurocontrol¹⁰ lists the following examples for exceptional costs (the regulatory framework does not confirm nor contradict them):
 - i. Exceptional contributions to top up a pension fund; and,
 - ii. Losses on the disposal of obsolete assets. In particular, the exceptional depreciation resulting from asset impairments and write-offs in the year (Depreciation adjustment for asset revaluations).
2. Check that only the ANS related exceptional costs were reported in the reporting tables.
 - a. This is verified by enquiring the ANSP for the details of what costs are included in that category and verifying that information. Reviewing the audit trail between the available actual costs for the preceding reference period and the determined costs is not an option for this category as these costs should be non-recurring.
 - b. The costs added through the adjustments should not include any component not related to the provision of ANS.
 - c. For example, would the ANSP foresee exceptional contributions to top up a pension fund, the NSA should verify that are included in the cost base only the exceptional contributions for employees related to the provision of ANS.
 3. Verify that all adjustments performed to the exceptional costs rely on sound assumptions.
 - a. Detail on the assumptions used can be found in the Performance Plan (cost efficiency section) and in its Annex F. Baseline cost efficiency values for RP3. Any other needed information should be enquired to the ANSP.
 - b. These assumptions should be reviewed and their soundness verified. For example, if exceptional contributions to top up a pension fund are foreseen, the rationales should be reviewed and verified. Applying IFRS and its projected unit credit method to calculate the obligation and the yearly service cost is a good example as it leads to better compliance with the Regulation and could lead to large payment required to be done to the pensions as no provision was constituted for the purpose of the pension benefits to be paid in the future.
 4. Verify that the adjustments are correctly reflecting the assumptions.

While the previous verification procedure was about the verification of the qualitative dimension of the adjustments, this procedure is about the verification of their quantitative adjustments. The NSA should verify that the assumptions were correctly reflected in the calculation of the adjustments.

A.2.2 Verification of the bookings of costs on cost centres

Cost centres are only used for actuals in the ANSP finance/controlling software. Hence, no verification procedure is required for determined costs.

¹⁰ Eurocontrol, "Specification for Economic Information Disclosure", 2012.

A.2.3 Verification of allocations

According to Regulation (EU) No. 550/2004 and Regulation (EC) No 1070/2009, cross-subsidy is not allowed between en route and terminal charges. Costs that pertain to both terminal services and en route services shall be allocated in a proportional way between en route services and terminal services on the basis of a transparent methodology.

According to Regulation (EU) 2019/317, Article 22(5) the determined costs shall be allocated in a transparent way to the charging zones in respect of which they are incurred. Determined costs that are incurred in respect of several charging zones shall be allocated in a proportional way, on the basis of a transparent methodology.

The key risks related to allocations are incorrect apportionments between en route and terminal, or the mis-allocation of costs relating to activities outside the scope of the regulatory framework.

The NSA is responsible for checking that the ANSP complies with these regulatory requirements. The NSA is also responsible for checking the allocation of costs to different charging zones of the same type and to the different services provided in a charging zone. It can be done by performing the below procedures. They are applicable to these three types of allocations.

1. Verify the allocation methodology for determined costs and analyse any significant changes in the allocation methodology and assumptions compared to the one implemented for the actuals of the preceding reference period.
 - a. The ANSP have to provide the details and assumptions related to the allocations in determined costs. They should be disclosed in the Annex A (additional information on en route determined costs), Annex B (additional information on terminal determined costs) and Annex M (cost allocation).
 - b. The NSA should review the above mentioned information and validate the main allocations.
 - i. The focus should be put on the allocations of the largest costs.

As a consequence, the ANSP allocate the approach costs to the terminal charging zones. The NSA should verify that the allocation is done on reasonable criteria/allocation keys. The 20km rule (i.e. based on the proportion of Terminal Manoeuvring Area (TMA) airspace volume inside versus outside the cylinder of 19,8 km horizontal radius is an example of proportionate allocation key.
 - ii. The allocations should be reviewed for the causality and the accuracy of the driver quantities (or allocation key ratios). The International Civil Aviation Organisation (ICAO)¹¹ provides detailed guidance on that topic, in its Chapter 5, Section D Allocation of costs.
 1. Verify the causality between the source and destination of costs.
 - a. Causality: causality is the most important principle related to cost allocations. All cost allocation model should be principally based on the concept of causality. It is the logical

¹¹ International Civil Aviation Organization, "Manual on Air Navigation Services Economics", 2013.

relation between and cost source (input) and cost destination (output). It means that the cost allocated from a certain source are allocated to (all but only) destinations that “consume” that source for the output to be achieved based on a driver (or allocation key) that reflects best the proportion of source cost consumed by each of the destinations.

- b. For example, the cost of the support functions are allocated to the operational functions being supported.

2. Verify the causality of the drivers/allocation keys.

- a. There should be a logical link between the costs being allocated and the driver/allocation key. Maximising the causality is best practice.
- b. For example, allocating the costs of the support functions to the operational functions being supported based on time spent by the support functions employees is a good practice.
- c. Where costs cannot be allocated on a statistical basis between terminal and en route, the Central Route Charges Office (CRCO) proposed the following apportionments¹²:
 - i. 25% of the costs can be allocated to en route services if the facilities are utilised mainly for terminal navigation;
 - ii. 50% of the costs can be allocated to en route services if the facilities are utilised to the same extent for terminal and en route navigation;
 - iii. 75% of the costs can be allocated to en route if the facilities are utilised mainly for en route navigation.

As highlighted in a study for the EC¹³, the application of these allocation keys by ANSPs that also use activity based costing or other complex allocation methods suggests a possibility that they may either be over-used or favour strategies to reduce terminal charges. The causality principle should be favoured above the CRCO principles.

3. Verify the accuracy of the driver quantities/allocation key ratios.

- a. As this section concerns the determined costs, it is likely that more rough assumptions are taken as the ANSP using a system for management accounting and cost allocations might not use them only for actuals, not for the determined costs. These assumptions should be verified for the accuracy,

¹² European Organisation for the Safety of Air Navigation, Central Route Charges Office, Eurocontrol, “Principles for establishing the cost base for en route charges and the calculation of the unit rates”, 2018.

¹³ Support study to the evaluation of cost allocation to marketable terminal air navigation services, Study contract no MOVE/E3/SER/2018-333/SI2.789318, 2019.

for instance based on the actuals from the previous reference period.

- b. For example, if the cost of the support functions are said to be allocated to the operational functions based on the time spent, a verification procedure could be to review the employees timesheets from the preceding reference period.
2. Verify that the allocation methodology is correctly reflected in the costs by service and costs by charging zone.
 - a. This verification procedure is the quantitative verification that the allocation method described is accurately implemented to obtain the costs reported in the reporting tables.
 - b. The NSA could verify the allocations by reperforming some of the cost allocations, starting from the costs by nature and using the assumptions described in the Annex A, Annex B and Annex M of the Performance Plan. This is a “directional” verification as it is not expected of the ANSP to disclose all detailed allocations and allocation keys. Nevertheless, if the allocation and allocation keys linked to the largest amounts were properly and accurately disclosed, the NSA should obtain amounts in the same range as the one determined by the ANSP.
 - c. The NSA could also ask the ANSP for the calculation file starting from the cost by nature and used to obtain the cost by service and by charging zone. Reviewing it would enable the NSA to do this verification.

A.2.4 Verification of adjustments and specific lines

A.2.4.1 Inflation

According to Article 26 of the Regulation (EU) 2019/317, Art. 26, for each year of the reference period, the determined costs included in the cost bases for en route and terminal charges of year n expressed in nominal terms shall be adjusted on the basis of the difference in percentage between the actual inflation index and the forecast inflation index for that year n and included as an adjustment for the calculation of the unit rate for year $n+2$. The determined costs referred to in the third subparagraph of Art. 22(1), and the determined costs referred to in points (c) and (d) of Art. 22(4) where historical cost accounting is applied, shall not be subject to any inflation adjustment.

The forecast inflation index is defined in the Regulation (EU) 2019/317, Art. 2, as the annual inflation index based on the third year before the start of a reference period and computed by using the latest available inflation forecast of average Consumer Price Index percentage change published by the International Monetary Fund for the Member State concerned at the time of drafting the Performance Plan. In case the percentage change published by the International Monetary Fund (IMF) for a given year is negative, a zero value shall be used.

To verify the inflation indexes and percentage, NSA should apply the following procedure:

1. Verify that the ANSP used the correct forecast inflation percentage, i.e. the one from the International Monetary Fund as foreseen by the legal framework.
 - a. This is done by reconciling the forecast inflation percentages with the latest available inflation forecast of average Consumer Price Index percentage

published by the IMF for the Member State concerned at the time of drafting the Performance Plan. In case the percentage change published by the IMF¹⁴ for a given year is negative, a zero value shall be used.

- b. The determined costs referred to in the third subparagraph of Article 22(1), and the determined costs referred to in points (c) and (d) of Article 22(4) where historical cost accounting is applied, shall not be subject to any inflation adjustment.

A.2.4.2 Procedures for cost items referred to in Article 28(3)

No general verification procedures apply to all cost items referred to in Article 28(3). The specific procedures for each difference are covered in their dedicated sections below.

A.2.4.2.1 Procedures for cost items referred to in Article 28(3) - Unforeseen changes in costs of new and existing investments

This section is not strictly only about the unforeseen changes linked to investments but covers both the verification procedures related to the new and existing investment determined costs and to the addition, cancellation or replacement of major investments. No verification are linked to the related unforeseen changes as actuals are required first and this section only concerns the determined costs. Nevertheless, these verification procedures are included in this section as a verification of the new and existing investments determined costs is required to verify any unforeseen change and in case of adding, cancelling or replacing any major investment.

In RP2, it was not possible for an ANSP to recover (or reimburse) the difference between actuals and determined costs linked to new and existing investments.

RP3 Regulation (EU) 2019/317 defines the new and existing investments as the acquisition, development, replacement, upgrade or leasing of fixed assets where depreciation costs, cost of capital, or in the case of leasing, operating costs, for that investment are incurred during the reference period covered by the Performance Plan.

Annex II describes what the Performance Plan shall include on the new and existing investments, more particularly:

1. The determined costs of new and existing investments in respect of depreciation, cost of capital and cost of leasing over the whole reference period and in respect of each calendar year thereof, as required in Annex VII;
2. Description and justification of the major investments, including with regard to the following elements:
 - a. Total value of each major investment;
 - b. The asset or assets acquired or developed;
 - c. Information on the benefit of the investment for airspace users and on the results of the consultation of airspace users' representatives;

¹⁴ This information can be found at the following link: <https://www.imf.org/en/Publications/SPROLLs/world-economic-outlook-databases#sort=%40imfdate%20descending>

- d. As regards major investments in ATM systems:
 - i. Differentiation between investments in new systems, overhaul of existing systems and replacement investments;
 - ii. Justification of the relevance of each investment with reference to the European ATM Master Plan, and the common projects referred to in Article 15a of Regulation (EC) No 550/2004 and Regulation (EC) No 1070/2009;

Where, during the reference period, air navigation service providers intend to add, cancel or replace major investments with respect to information on major investments identified in the Performance Plan in accordance with point 2.2(b) of Annex II, these changes shall be approved by the national supervisory authority, after consultation of airspace users' representatives.

To verify the costs of new and existing investments, NSA should apply the following procedures:

1. Verify the eligibility of determined costs included, i.e. that the determined costs of new and existing investments are made of depreciation costs, cost of capital and leasing costs.
 - a. This is done by reconciling the costs of new and existing investments, by investment, with their cost by nature components depreciation, cost of capital and other operating costs (for leasing costs).
 - i. A difference in the cost of capital in Reporting Table 1 can be observed between Sections 3.11 and 1.4 (New and existing investments vs by nature), as 3.3 Net current assets is not included in the net book value of new and existing investments.
 - ii. No difference in the depreciation cost can be observed in Reporting Table 1 between Sections 3.10 and 1.3 (New and existing investments vs by nature).

The NSA should be particularly careful with this verification as while Eurocontrol reporting allows that when subsidies are used to finance investments relating to common projects, the revenues associated with these subsidies can be used to net-off the depreciation costs, this is not possible with the performance and charging scheme. A deduction from the unit rate for subsidies received is instead applicable as 'other revenue'.
 - iii. Cost of leasing (if any) are likely to represent a small part of the total other operating costs. Reconciling it with the financial statements enables the NSA to perform this verification as cost of leasing should be reported on a specific line.
 - b. Tool 5 is an Excel-based tool built for the purpose of collecting and easing the verification of ANSPs costs related to the new and existing investments. It details the total cost of new and existing investments by nature (depreciation, cost of capital, cost of leasing), by type (new major investments, other new investments and existing investments) and the related net book value of the fixed assets and by investment type). This detail provides full transparency on

these sections of the cost and enable the NSA to verify that all cost of capital, depreciation and leasing costs tie together and are relatable to the investment plan. Once the table has been filled in by the ANSP, the NSA is recommended to perform the following verifications:

- i. Reconciliation of the new major investments, other new investments, existing investments with the Performance Plan.
 - ii. Reconciliation of the depreciation, cost of capital and cost of leasing with the ones provided in the Reporting Table 1.
 - iii. Reconciliation of the net book value fixed assets and the cost of capital pre tax rate (%) provided in the Reporting Table 1.
 - iv. Verification of the depreciation costs reported, multiplying the net book value fixed assets and the depreciation rate (i.e. the amortisation period in years).
 - v. Verification of the cost of capital reported, multiplying the net book value fixed assets and the cost of capital pre tax rate (%).
 - c. Even if not entering the new and existing investments as such, it is good practice for transparency to disclose the operating costs (i.e. staff costs and other operating costs) linked to new and existing investments. These operating costs do not enter the scope of the adjustments related to unforeseen changes.
2. Reconcile the total determined cost of new and existing investment provided in Reporting Table 1 with the detail by investment/asset from the investment plan included in the Performance Plan.
3. In case an ANSP intends to add, cancel or replace major investments during the reference period, the NSA should verify the updated investment plan and related approval process.
 - a. This verification can be done based on the above described procedures.
 - b. According to the Articles 28(4) and 28(7) of the Regulation (EU) 2019/317, the NSA is responsible for approving these changes once the airspace users' representatives have been consulted.

A.2.4.2.2 Procedures for cost items referred to in Article 28(3) - Unforeseen changes in costs of competent authorities, qualified entities and Eurocontrol

According to the third subparagraph of Article 22(1) Member States may decide to include in the cost base the following determined costs incurred in relation to the provision of air navigation services, in accordance with the second sentence of point (b) of Article 15(2) of Regulation (EC) No 550/2004 and Regulation (EC) No 1070/2009:

- Determined costs incurred by competent authorities;
- Determined costs incurred by the qualified entities referred to in Article 3 of Regulation (EC) No 550/2004;

- Determined costs stemming from the Eurocontrol International Convention relating to cooperation for the safety of air navigation of 13 December 1960 as last amended.

The subsequent procedures are recommended to be followed:

1. Verify that the authorities and entities for which costs are included in the cost base fulfil all the requirements set out in the Regulation.
 - a. The NSAs should identify the authorities and entities for which costs are included in the cost base and confirm that they fulfil all the requirements set out in the Regulation (EC) 550/2004, Article 3 and its requirements listed in Tool 1.
 - i. NSAs should identify each entity for which costs are included in the reporting tables based on Section “1.1 The situation” of the Performance Plan.
 - ii. The NSA should ensure they meet the following requirements set out in Regulation (EC) No 1070/2009:
 1. The national supervisory authorities shall be independent of air navigation service providers. This independence shall be achieved through adequate separation, at the functional level at least, between the national supervisory authorities and such providers.
 2. National supervisory authorities shall exercise their powers impartially, independently and transparently. This shall be achieved by applying appropriate management and control mechanisms, including within the administration of a Member State. However, this shall not prevent the national supervisory authorities from exercising their tasks within the rules of organisation of national civil aviation authorities or any other public bodies.
 3. Member States shall ensure that national supervisory authorities have the necessary resources and capabilities to carry out the tasks assigned to them under this Regulation in an efficient and timely manner.
 - iii. The NSA should ensure the qualified entities meet the requirements set out in Annex I of Regulation (EC) No 550/2004:
 1. Be able to document extensive experience in assessing public and private entities in the air transport sectors, in particular air navigation service providers, and in other similar sectors in one or more of the fields covered by this Regulation;
 2. Have comprehensive rules and regulations for the periodic survey of the abovementioned entities, published and continually upgraded and improved through research and development programmes;
 3. Not be controlled by air navigation service providers, by airport management authorities or by others engaged commercially in

the provision of air navigation services or in air transport services;

4. Be established with significant technical, managerial, support and research staff commensurate with the tasks to be carried out;
5. Be managed and administered in such a way as to ensure the confidentiality of information required by the administration;
6. Be prepared to provide relevant information to the national supervisory authority concerned;
7. Have defined and documented its policy and objectives for and commitment to quality and have ensured that this policy is understood, implemented and maintained at all levels in the organisation;
8. Have developed, implemented and maintained an effective internal quality system based on appropriate parts of internationally recognised quality standards and in compliance with EN 45004 (inspection bodies) and with EN 29001 or most recent requirements, as interpreted by the International Association of Classification Societies (IACS) Quality System Certification Scheme Requirements;
9. Be subject to certification of its quality system by an independent body of auditors recognised by the authorities of the Member State in which it is located.

iv. Finally, as per Article 3 of Regulation (EC) No 550/2004, the delegation granted by a national supervisory authority shall be valid within the Community for a renewable period of three years.

2. Verify the eligibility of determined costs included in the cost base.

- a. The determined costs of the competent authorities and qualified entities should be verified as per the same methodology as for the ANSP. As these entities have lower costs, often less variety in terms of costs by nature and provide less services than the ANSP, verification procedures could be lighter..
- b. The determined costs provided for Eurocontrol (in the NSA reporting table, under item 3.13) should be verified against the forecasted costs published by Eurocontrol.

A.2.4.2.3 Procedures for cost items referred to in Article 28(3) - Unforeseen changes in pension costs

The verification of determined pension costs is fully covered in the Section A.2.1.2 PROCEDURES FOR STAFF COSTS. Hence, no additional verification procedure is required here.

A.2.4.2.4 Procedures for cost items referred to in Article 28(3) - Unforeseen changes in interest rates

The verification of the determined interest cost is fully covered in the Section A.2.1.5 PROCEDURES FOR COST OF CAPITAL. Hence, no additional verification procedure is required here.

A.2.4.2.5 Procedures for cost items referred to in Article 28(3) - Unforeseen changes in national taxation law or other unforeseeable new cost items

Article 28 of the Regulation (EU) 2019/317 and Article 14 of Regulation (EU) 391/2013 set the rules governing a cost risk sharing mechanism between the airspace users and ANSPs for the RP3. As per Article 28 (3), the general principle (Article 28 (2)) does not apply in case of unforeseen and significant changes in costs resulting from unforeseeable changes in national taxation law or other unforeseeable new cost items not covered in the Performance Plan but required by law.

Some NSAs may include in the determined cost base some unforeseeable/uncontrollable costs (e.g. linked to future taxes or legislation). If this is the case, these ANSPs are required to detail them in the annexes of the Performance Plan.

The NSA are then responsible for verifying these costs, which can be done by performing the following procedures:

1. Verify that the assumptions described in the Performance Plans are accurate.
 - a. Those assumptions should be described in the annex of the Performance Plan, in the additional information on cost efficiency.
 - b. The NSA should verify that the assumption taken as a basis for the determination of the determined costs amount are correct and based on the latest available information.
2. Reconcile the determined costs presented in the Performance Plans with the detail of the reporting tables.
 - a. These costs could be included in multiple cost by nature categories, such as staff cost, other operating cost or exceptional costs.

A.2.4.3 Procedures for other revenues Art. 25(2)(i)

ANSPs are not required to forecast their future grants and revenues. No determined revenue is to be entered in the reporting tables. Hence, no verification procedure is required for the following procedures:

A.2.4.3.1 Procedures for other revenues Art.25(2)(i) - Financial support from Union assistance programmes

A.2.4.3.2 Procedures for other revenues Art.25(2)(i) - Other public funds obtained from public authorities

A.2.4.3.3 Procedures for other revenues Art.25(2)(i) - Revenue from commercial activities

A.2.4.3.4 Procedures for other revenues Art.25(2)(i) - Revenue from contracts concluded between ANSPs and airport operators

A.2.4.4 Common projects

The costs related to the common projects are included in the new and existing investments of ANSP (Section A.2.4.2.1) while the related grants obtained are included in the revenues received from Union assistance programmes (Section A.2.4.3.1).

The NSA is responsible to check the compliance with the above requirements. The following procedures are recommended to this end:

1. Verify that all common projects from the Performance Plan were included in the determined investment costs.
2. Verify the eligibility of determined costs included.
3. Verify the updated investment plan in case an ANSP intends to add, cancel or replace major investments during the reference period.

As the common projects revenue/grants are not to be forecasted and the Reporting Table 4 does only include actuals, the verification procedures applicable to the determined new and existing investments are also applicable to this section (already included in the above procedures). More details on the related verification procedures can be found in Section A.2.4.2.1.

A.3 Conclusion Phase

A.3.1 Summarise draft findings and share draft findings with the service provider

At the end of the fieldwork, the NSAs have to prepare a document which will explain the work performed and the results from the tested procedures. NSAs will present the findings identified in a draft verification report. It aims to introduce the respective findings identified and provide to ANSPs the opportunity to express their comments accordingly.

It is important to mention that the Conclusion phase for determined costs, is not the final step but an intermediate one, as the draft findings which will be sent out to the ANSPs are part of their negotiation process for defining the determined costs.

Considering that the Performance Plans are compiled by the NSAs based on the input of the ANSPs, the final outcome of this phase will be the finalised draft Performance Plan, which will then be consulted with the stakeholders. However, considering that these draft findings will also help the ANSPs to improve their documentation concerning the determined costs, it is important to summarize and communicate them to the service providers concerned. Therefore, while compiling the draft report, the NSA should be careful to display all cases that have been marked as an "E" in the Verification Programme.

While preparing the draft findings, referring to Tool 4 of the Verification Programme Toolkit, NSAs should:

1. Write the number of findings which are being listed in the draft report.
The NSA should list all the exceptions identified and number them. This will help the NSAs to better monitor and keep track of the ANSPs performance in the future.
2. Write a brief caption for the finding being reported.
It is good practice to separate the findings in order to increase the transparency of the information and make it easier for the ANSPs to follow up.
3. Introduce the legal framework breached by the ANSPs which triggered the finding.
This will assist not only ANSPs by introducing them to the right way of calculating the costs in the future, but also the NSAs to categorise and highlight where the problem stands. Once the ANSPs will come back with their replies, comments or additional evidence to be reviewed, it will be easier for the NSAs to quickly check if the new evidences delivered will affect the identified finding.
4. Identify clearly the actions to be taken by the ANSP
5. The Verification Draft Report (and later the Verification Final Report, when the timeline for obtaining the official comments from the ANSP is passed) is a tool not only to monitor and reflect the findings of a certain point in time, but also to impose changes and improvements in the calculation of the unit cost which impact the users of the ASN.

A.3.2 Finalise Verification Report

After delivering to ANSPs the draft verification report, the ANSPs will have two calendar weeks to provide their comments and, or the new supporting evidences for the findings listed in the draft report. After this period is finished, the NSAs need to assess whether the

comments and the new evidences obtained during this period are a sufficient relevant and reliable response for withdrawing the findings or keeping them in the final report.

After auditing the new supporting documents received (if any), NSAs should prepare within a calendar week the final verification report, which will contain the final findings after reviewing the mentioned files.

While preparing the final verification report, the NSAs should reflect the responses of the ANSPs into the final report. There will be three cases:

1. The ANSP provides comments and, or new evidences which support the draft findings, and all the findings are withdrawn.

In this case the NSA should issue a clean report by confirming all the procedures. In an annex of the report, the NSA includes its own comments after the evidence received, but also the reply of the ANSP with regards to each withdrawn finding.

2. The ANSP provides comments and, or new evidences and only a part of the findings are withdrawn.

In this case, the NSA waves from the report those findings for which the evidence received is sufficient, reliable and relevant for assessing the procedure as confirmed. In an annex of the report, the NSA includes its own comments to the evidence received and the reply of the ANSP.

3. The ANSP does not reply.

In this case, the NSA will issue the final report and no changes will be applied to the factual findings. The NSA will document in the annex that no reply was received from the ANSP within the communicated timeframe of two calendar weeks.

The final report will then be delivered to the respective ANSP. No further comments or evidence are allowed to be given by the ANSPs beyond this point, as the verification report would then be final.

When compiling the Verification Final Report, the NSAs should use the same template of Tool 4 which was used for the Verification Draft Report mentioned in Section A.3.1. In addition to what is mentioned in A.3.1, the Final Report will contain:

1. ANSP Comments

The NSA will quote or summarise (depending on the length and the relevance of the comments provided) the reply received within the 2 calendar weeks from ANSP.

2. NSA Final Comments

After evaluating the feedback from the ANSP, their official response and the additional materials provided from them for each, the NSAs should conclude on the final comments and present them in the final report, as explained previously in the third paragraph of this section.

A.3.3 Follow up on the implementation of findings

After issuing the final verification report, a next step for NSAs to follow, will be to keep track of the final findings and follow them up in the next verification missions for the incoming reference period, if they were properly implemented.

Therefore, a database with the findings should be filled in. This database will show in details all the findings identified, the respective cost category, the raised recommendations by the NSA and their status of implementation from the ANSPs. This database should be fed continuously with information after each verification process.

Following up on the implementation of the previous verification process findings is part of the verification process itself.

Keeping these records organised and continuously updated in one database, will help the NSAs to trace back what was identified and monitor the progress of the ANSPs accordingly. This monitoring is in accordance with Article 7.7 of Regulation (EU) No 550/2004, and will also help to answer any queries that the European Commission might have during their monitoring process.

B. Actual costs

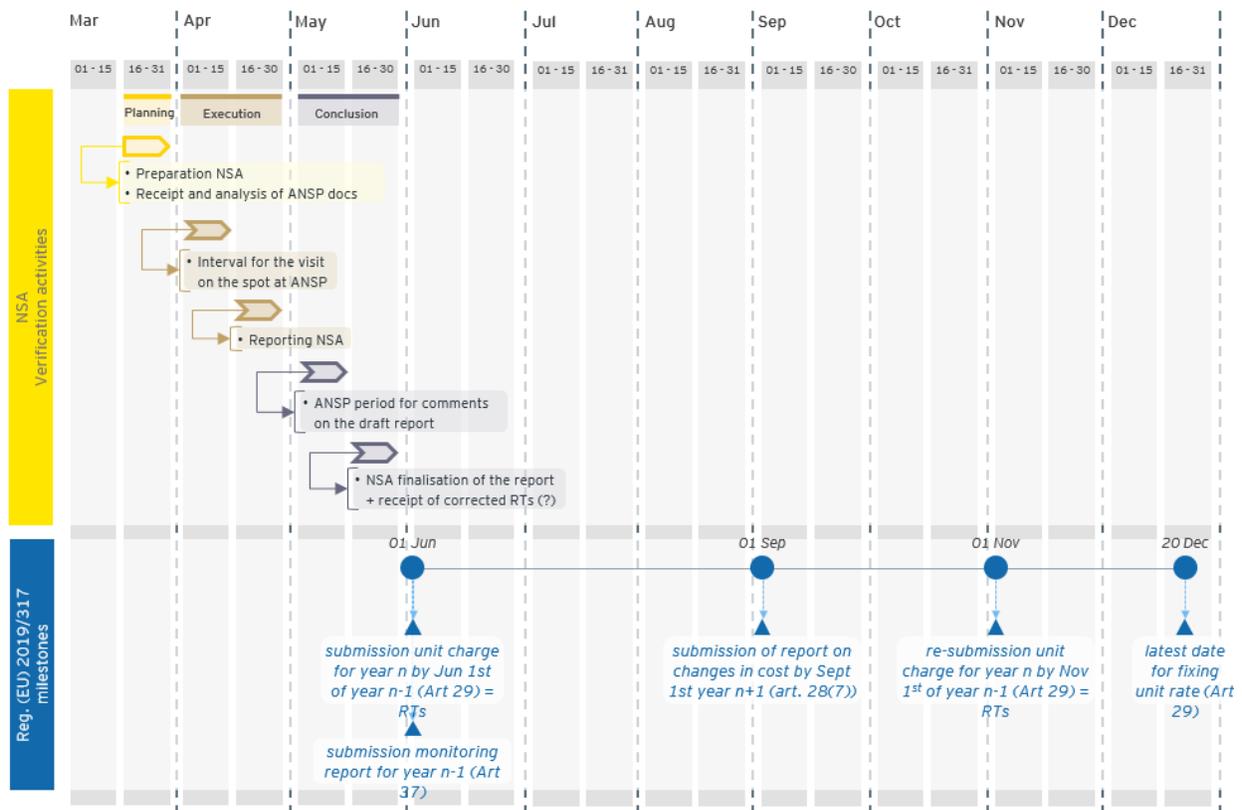
B.1 Planning Phase

For actual costs, an annual verification process is foreseen. During the Planning phase of this process, the NSA should align internally on the objective of the annual verification and the scope of the verification. Also, the NSA should aim to identify during this phase what are the potential areas of risk, based on the information preliminary provided by the ANSPs.

Timing

The timing of the verification process for actual costs is driven by the deadline of submission by the NSAs to the Commission of the calculated unit rate for year n , foreseen in Regulation (EU) 2019/317, Art. 29(2). Thus, considering that the unit rate for year n needs to be submitted by 1 June of year $n-1$ during each year of the RP, the verification process of the NSA needs to be performed on a yearly basis by that date. This deadline for the verification process is considered as essential in view of the Performance Review Body (PRB) and Eurocontrol own verification procedures that ensue the submission of the calculated unit rate.

The following timeline graphic below provides an overview of the timing of the verification process for actual costs. This is explained in further detail below.



B.1.1 Define objective and scope

1. Objective of verification

The review of actual costs should have a similar objective as the one outlined for the determined costs. The objective of the verification therefore should be the compliance of the ANSPs' practices and their reported costs with the criteria and principles outlined as regards ANS costs in the SES regulatory framework.

For actual costs, a specific area of interest will be the verification of the adjustments that impact the unit rate from differences between determined costs included in the Performance Plan and actual costs (cost items referred to in Article 28(3)-(7) of Regulation (EU) 2019/317. As regards RP3, these also concern the costs exempt from cost sharing carried over from RP2.

2. Scope of the verification

For actual costs, the same requirements in terms of cost eligibility apply as for determined costs, as provided for in Art. 23 of Regulation (EU) 2019/317. Also, the fundamental principles of setting the charges stated in Art. 15 of Regulation (EC) No 550/2004 and Regulation (EC) No 1070/2009 apply (e.g. avoidance of cross-subsidy, separate identification of the different ANS cost).

Furthermore, based on Art. 9(4) of Regulation (EU) 2019/317, the baseline value for determined costs is estimated using the actual costs available for the preceding reference period and adjusted to take account of latest available cost estimates, traffic variations and their relation to costs. This will also have an impact on the cost risk sharing mechanism which is required to be applied in accordance with Regulation (EU) 2019/317, Art. 28. The importance of having accurate actual costs year to year cannot therefore be underestimated.

Based on these requirements, all the costs by nature reported annually by the ANSPs need to be tested by the NSA, similarly to the determined costs.

In relation to actual costs however, the level of depth and detail of the testing performed could be adjusted based on the risk assessment performed by the NSA as per section B.1.3. This is in recognition of the fact that the unit rate is calculated starting from the determined costs in nominal terms, however, the reported annual costs form the basis for the determined costs in the following period.

The recommended approach considering the above would be to perform annually a verification of all reported actual costs, with detailed checks on the adjustment elements that impact the unit rate and on other items of risk as identified by the NSA, and with a more high-level approach to the verification for the reported costs by nature, focused on compliance with Art. 23 of Regulation (EU) 2019/317.

Similar to determined costs, it is also recommended that the objective and the scope of the verification are adequately communicated to the ANSP.

B.1.2 Request information to the service provider

Similarly to the Determined Costs, the ANSPs should facilitate inspections and surveys carried out by the NSAs also in the case of actual costs, therefore, we refer to Tool 2 for a standardised list of financial and business information to be requested to the ANSPs for the verification process of actual costs.

As regards the information required for carrying out the verification procedures for actual costs, the NSA should refer primarily to Annexes VII and IX of Regulation (EU) 2019/317, considering any specifics included in the Tool 3. The NSAs should obtain from the ANSPs, *inter alia*, information on costs and on the allocation of costs, data on revenue streams, information on planned investments including new and existing investments and major investments and information for the application of Art. 28.

Most importantly, for the testing of actual costs, the NSA should obtain the complementary information on adjustments, common projects and revenues from Union assistance programmes and from other public authorities.

B.1.3 Perform preliminary risk assessment and sampling

Similar to when testing determined costs, after establishing the verification objective, the NSA is recommended to perform a set of initial checks in order to define the areas of risk associated with the verification. This will enable the NSA to further refine the scope of the verification work (in terms of depth and also extent of areas verified) for a better use of the existing resources. A specific tool that the NSA may use for this step is the Preliminary Risk Assessment and Sampling template (Tool 6).

For actual costs, the NSAs could consider as main areas of risk the elements that adjust the cost base of determined costs and impact the calculation of the unit rate, of which of interest for the present document are the inflation adjustment, the cost items referred to in Article 28(3) of Regulation (EU) 2019/317 and the deductions for other revenues under Art. 25 of Regulation (EU) 2019/317.

While this perspective on the risk areas is valid, we recommend that the actual costs by nature reported by the ANSPs are also considered in the risk overview of the NSA, even if they do not directly impact the calculation of the unit rate. This is because for RP3 the reporting for several types of costs has been better defined and has essentially changed compared to RP2, for example as regards pension costs and depreciation. Pension costs will raise specific IFRS reporting concerns that the NSA needs to be aware of, while depreciation cost also needs to take into account the reporting on new and existing investments, common projects and EU-funded projects.

As for determined costs, the NSA needs to consider a wide variety of sources of information when performing the risk analysis, including, *inter alia*:

- The reporting tables and the additional information thereon provided according to the Regulation;
- General checks on the overall quality of the submitted reporting tables: the integrity of the formulas, which at the first glance can be identified in the first tab of the reporting tables “Checks”. In case of “False” messages, further information needs to be asked to the ANSPs and further evidences might be requested.

- The report of costs exempt under the cost sharing mechanism (Art.14 of Regulation (EU) 391/2013) from RP2;
- The underlying breakdowns and information as regards Table 4 (Annex IX of Regulation (EU) 2019/317);
- The organisational set-up of the ANSP and, for ANSPs that are public entities, any changes in the institutional arrangements or relevant governing legislation;
- Results from NSA verifications of cost-eligibility from previous RPs;
- Overall replies provided by the ANSP to the Pre-fieldwork Questionnaire.

In a similar way as per the determined costs, the NSAs can use the risk assessment template (Tool 6) which covers horizontal and vertical analysis of the costs by nature declared and follow the same steps for the additional cross checks of Reporting Table 1 as mentioned in the determined costs section A.1.3.

Using this tool, the NSA will be able to better define the scope of its verification work (in terms of depth and also extent of areas verified) for a better use of the existing resources, as well as document the risk assessment and the sample chosen for verification.

The Preliminary Risk Assessment and Sampling follows under the same steps and procedures as described in the determined costs section, however, due to specificities between determined and actuals costs, additional steps need to be considered by the NSAs.

When assessing the risks, the NSA needs to document its decision on the scoped cost categories and service providers. NSAs should consider the following elements in order to properly document the risk level related to each ANSP:

A. For the verification of the eligibility of costs, referring to the total costs reported in Table 1, the same procedures as mentioned previously in section A.1.3 are applicable.

1. *Proper use of previous experiences with the service providers and their reporting tables:*

Further details are mentioned in section A.1.3 in determined costs.

2. *Analyse the costs by nature declared by the ANSPs and the service providers and their variances compared with the previous years' costs (risk of unusual items or transactions):*

Further details are mentioned in section A.1.3 in determined costs

It is crucial to mention that the NSA should document the preliminary risk assessment and the final decision of scoping the entities and cost categories for the verification process as per the levels of risks identified during their assessment. Tool 6 with its different tabs, is built to assist the NSA for documenting the NSA's preliminary risk assessment and its decisions on which entity and what kind of cost categories (cost by nature) they will verify during the execution phase.

The steps needed to be followed while determining the sample to be verified are detailed as per below:

Step 1: Professional judgement on internal controls as well as other auditors' reports

Further details are mentioned in section A.1.3 in determined costs

Step 2: Analyse the consolidated Reporting Table 1 versus the individual ANSPs respective reporting tables and identify the total share of each service provider towards the consolidated total cost:

Further details are mentioned in section A.1.3 in determined costs.

Step 3: Understand the population:

Further details are mentioned in section A.1.3 in determined costs.

Step 4: Determine the sample size and the sampled items:

Further details are mentioned in section A.1.3 in determined costs.

B. For the verification of the adjustments resulting from the unforeseen changes reported as per the requirements of the Article 28 of the Regulation (EU) Art. 28 and reflected in Reporting Table 2B.

The NSAs can verify those adjustments incurred that have significant variance between the determined and the actual costs.

C. For the verification of the cost allocations:

NSAs can start the verification of the cost allocations based on the information they have at hand during the second part of the prior year.

At this point in time, the final information is not yet available, however, the NSAs can manage their fieldwork time efficiently by verifying the information in hand. Once the service providers will have the finalized data, the NSAs can verify during the fieldwork of the current year only the differences from the last verification performed during the second part of year n-1. As such, there will be no need for the NSAs to sample the cost allocations to be verified.

B.2 Execution Phase

B.2.1 Verification of costs by nature (cost base eligibility and accuracy)

B.2.1.1 Procedures transversal to all cost by nature

Three “components” are observed in terms of cost reporting in the context of this Regulatory Framework: the ANSP official published Financial Statements, the creation of ANS/non-ANS separate accounts and the reporting of eligible costs in the official reporting tables.

It is understood in the verification programme and this guidance material that the numbers provided in the Reporting Table 1 of Annex VII, Regulation (EU) 2019/317 are the result of the following process and documents as outlined in Regulation 550/2004 and Regulation (EC) No 1070/2009, Article 12:

The ANSP maintain financial statements (or statutory accounts), i.e. keeps formal records of the financial activities and position of its business in a dedicated software. The Financial Statements fairness and compliance with International Financial Reporting Standards (IFRS) is regularly attested by independent auditors.

1. According to article 12(1) of Regulation (EC) No 550/2004, for ANSP for which full compliance with the international accounting standards is not possible, the provider shall endeavour to achieve such compliance to the maximum possible extent.
2. It was observed that some ANSPs have their financial audit process finalised after the first of June, deadline for submitting the reporting tables. In that case, the NSA should start their verifications on the basis of partial information and adapt their findings once audited accounts are available.

The ANSP have to establish also regulatory accounts by excluding non-eligible cost items. These regulatory accounts only include the costs and income linked to the provision of ANS in the regulated area under their responsibility.

The ANSP report their costs related to regulated ANS in the reporting tables by regrouping the costs from their regulatory accounts and possibly doing some adjustments to the source numbers.

As a start for the verification of actuals cost by nature, the following five checks should be performed by NSA:

1. The first verification that NSA should do when verifying cost eligibility is to verify whether the ANSP's financial statements were subject to an independent financial audit and were published.

This is a clear requirement from EC Regulation 550/2004 and Regulation (EC) No 1070/2009, Article 12 on the transparency of accounts. This ensures that the starting base for the actuals is accurate, allowing the NSA to rely on the information from the financial statements.

2. The second check to be done by NSA is to verify that the ANSP has separate accounts for ANS and non-ANS services. ANSPs may conduct operations or provide commercial services other than regulated ANS. These costs and revenues are non-eligible and should therefore be excluded from the regulatory accounts. For these services, separate accounts should be kept as they would be required to do if the services in question were provided by separate undertakings. Costs that are not related to the provision of air navigation services should not be included in the actuals. Inter alia that concerns costs related to equipment not used for providing such services during a given year or costs related to a removal of equipment before its useful end of life. For this reason, the total expenses and income in the financial statements should be equal or higher than the separated ones for regulated ANS.
 - a. ANSPs must identify the eligible costs and revenues and only include those ones in the regulatory accounts, i.e.:
 - i. In relation to the facilities and services provided for and implemented under ICAO Regional Air Navigation Plan, European Region;
 - ii. Relevant for air navigation services; and,
 - iii. In the charging zones under their responsibility.
 - b. Given the number of activities conducted by ANSPs, there are many cost items which could be potentially improperly considered eligible. Several examples of services provided by ANSPs in EU Member States have been identified:

- i. Provision of training to third-party entities (e.g. ATCO training organisations which are part of ANSPs or owned by ANSPs);
 - ii. Sales of consulting services to other ANSP's or aviation sector entities;
 - iii. Calibration flights performed for other ANSPs or airports;
 - iv. ANS provided under market conditions (e.g. terminal ANS subject to market conditions and exempted from most of the performance and charging scheme); and,
 - v. Paid ANS provided in non-EU countries.
3. Review the grouping/mapping of the ANS costs into the cost by nature categories in the reporting tables.

The objective of this verification procedure is to get a first view on the grouping/mapping of the ANS costs into the cost by nature categories in the reporting tables. It will allow the NSA to understand the overall methodology for grouping/mapping the costs and identify costs being potential excluded. The verification in detail of costs included in each of the cost by nature category is subject to specific verification procedures in the next sections.

4. Reconcile the cost by nature amounts reported in the Reporting Table 1 by the ANSP to the ANS separate accounts and to the audited Financial Statements.

In addition to the separation of accounts between ANS and non-ANS, IFRS adjustments may be performed:

- a. For ANSP for which full compliance with the International Financial Reporting Standards (IFRS) is not possible, the provider may (have to) modify the figures when reporting them in the reporting tables in order to achieve the compliance to IFRS principles to the maximum possible extent.
 - i. An example is the depreciation cost that may have to be accounted differently as the Regulation requires the straight-line method to be used (while IFRS (IAS16) allows for three depreciation methods, the straight line being one of them).
 - ii. Other examples are the elements that are specifically not allowed under the service provision Regulation¹⁵ such as the cost of any corrective measures imposed by the Framework Regulation¹⁶.
 - b. Any adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Commission Regulation (EC) No 1126/2008 needs to be described and justified in the Performance Plan for review by the Commission and in the additional information to be provided in accordance with Annex II.
5. Check that the reported costs do not include elements that are specifically not allowed under the service provision Regulation, such as the cost of penalties imposed by

¹⁵ Regulation (EC) No 550/2004 of the European Parliament and of the Council of 10 March 2004 on the provision of air navigation services in the single European sky as amended by Regulation (EC) No 1070/2009 (the Service Provision Regulation).

¹⁶ Regulation (EC) No 549/2004 amended by the Regulation (EC) No 1070/2009.

Member States (according to Article 9 of the Framework Regulation) and the cost of any corrective measures imposed by the Framework Regulation.

The methodology recommended for the verification of whether the modifications done to the actuals from the financial statements to the reporting tables are justifiable, logical and accurate is described in the next sections.

B.2.1.2 Procedures for staff costs

According to the Article 22 of Regulation (EU) 2019/317, staff costs should include gross remuneration, overtime payments, and employers' contributions to social security schemes, as well as pension costs and costs of other benefits. Pension costs shall be calculated using prudent assumptions based on the applicable pension scheme or on national law, as appropriate.

To verify the eligibility of costs included in staff costs, three checks should be performed:

1. Verify that the costs included in the reporting tables are only the elements listed for staff costs in the regulatory framework.
 - a. The staff costs that can be included in the actual costs as per the Regulation (EU) 2019/317, Articles 22 and 23 are the following ones: gross remuneration, overtime payments, and employers' contributions to social security schemes, as well as pension costs and costs of other benefits.
 - b. The first verification that should be done is a reconciliation of the staff costs included in the actual costs and the statutory accounts. Costs from the statutory accounts could be excluded from the actual costs, but not added.
 - c. To verify the nature of the staff costs included in the actual costs, a review of the general ledger (GL) accounts list (breakdown) (on the lowest level of detail) should be performed. Any unclear GL account for which the NSA has a doubt on whether they enter the scope of eligible staff costs, supporting accounting documents/evidence (e.g. invoices) could be requested for a sample of GL entries. The content and accuracy of costs booked on the GL accounts should however not be verified by the NSA as this is verified by the independent auditor.
 - d. In accordance with the IAS 19 list of employment benefits, other benefits may include termination costs, long-term paid absences, jubilee or other long-service benefits, long-term disability benefits, profit-sharing and bonuses and deferred remuneration. These items are all in accordance with the Regulation.
2. For a sample of Staff costs, check whether the costs have been correctly shared between ANS and non-ANS.
 - a. Staff costs can either be fully and directly linked to regulated ANS, partially or not at all.
 - i. The costs that are fully and directly linked to regulated ANS should be fully included in the reporting tables. Examples are all salaries, pension costs, etc. of all ATCO working on all the regulated charging zones.

- ii. The costs not at all related to the regulated ANS should not enter the reporting tables. An example could be the salary cost of marketing team in charge of the ANSP commercial activities.
 - iii. ANSP can also incur costs that are partially for the provision of regulated ANS and partially for other activities. An example could be the salary cost of support department of an ANSP that has both regulated ANS services and commercial activities. Only a proportionate part of these costs should be allocated to the regulated ANS services and reported in the reporting tables. More details on possible verification procedures are provided below.
- b. This is done by reviewing extracts from the timesheet reporting system, employment contracts or calculations in case of other apportionment basis used.
- c. An ANSP can separate staff costs between its regulated and non-regulated activities based on different elements: actuals (i.e. excluding the cost of resources not working on the provision of ANS and a part of the cost of employees working on ANS and non-ANS services), statistical measures based on historical data (e.g. based on number of full time equivalents (FTE)) and/or sharing keys (e.g. 75% ANS and 25% non-ANSP). The factors based on which the splits are made have to be agreed in advance between the NSA and ANSP.
 - i. The most accurate option is to do the split based on actuals but the information is not always available (e.g. if the ANSP does not use timesheets).
 - ii. The second best option is to use statistical measures linked to the cost consumption. An example could be the following: if an ANSP provides services for both regulated and non-regulated airspace, the total cost of the ATCO could be split in proportion of the number of ATCO working for the regulated area vs for the non-regulated area. This method is slightly less accurate than the one based on the actuals as it relies on the assumption that the ATCOs serving the regulated and non-regulated area are paid on average the same salary while it might not necessarily be the case.
 - iii. The third option is to use predetermined sharing keys (e.g. 75% ANS and 25% non-ANSP). While this is the easiest to implement and verify, it is also likely to be the less accurate as once adopted they are rarely challenged nor their accuracy verified on a regular basis.
- d. Often, the three above factors are used by a single ANSP on different type of resources. For example, the full actual staff costs of ATCOs by control zone are normally easy to identify as ATCOs only work on one control zone. In terms of split, the first method can be easily used for ATCO costs. On the contrary, a support function such as Finance or Human resources (HR) is very likely to be responsible for the support of the entire ANSP, regulated ANS and non-regulated ANS. The cost of these support functions, which are more indirect costs, is more difficult to split based on actuals (especially if the time spent on supporting regulated ANS vs other activities is not clearly captured in

timesheets). This is the reason why statistical measures are very often used for these support functions and indirect costs.

- e. Depending on the factor(s) used, different check should be done:
 - i. If a split is made based on actuals, it should be verified that 1) only the costs of the staff working fully or partially on regulated ANS is included in the actual costs and 2) that the cost of these resources included in the actual costs is correct.
 - 1. The first point can be verified by requesting an organisational chart to understand how the organisation is structured and by identifying which employees/departments are included or excluded from the actual costs. In case of unclarity around the work performed by the certain employees/departments, timesheets (if used) or employment contract could be requested. In case none of the above is conclusive, the last option for verification would be to request to meet a sample of employee(s) and ask them to describe their tasks and responsibilities. This last verification method is however not recommended due to the time required for both the ANS and ANSP employees and the poor added value of the test.
 - 2. Once the resources (and/or share of their costs) for inclusions/exclusion of the actual costs are identified, their staff cost should be linked on a personal level (anonymised if required) and verified. This can be done by reconciling the staff costs with the payroll records and/or the payments related to social security for example.
 - ii. If a split is made based on statistical measures, it should be verified that:
 - 1) there is a good level of causality between the costs allocated and the statistical measure used to allocate these costs, and 2) that the quantitative data used for the statistical measures are correct and accurate.
 - 1. The verification of the causality between the costs allocated and the statistical measure used to allocate these costs is based on the auditor common sense and understanding of the ANSP activities. For example, split (between regulated ANS vs non-regulated ANS) the costs of the HR department based on the number of operational employees working for the regulated vs not regulated services implies a high level of causality as it can be assumed that the HR department workload is proportional to the number of employees. On the contrary, allocate the costs of the HR department based on the costs of the regulated vs non-regulated ANS would be a less causal/logical as there is no causal relationship between these HR costs and the statistical measure.
 - 2. The verification that quantitative data used for the statistical measures is correct and accurate is done by reconciling the statistical measures quantities with its source. Taking the example of the HR department cost allocated based on the

number of employees, the proportion of costs allocated to regulated versus non-regulated ANS could be verified by requesting the ANSP what employees were considered as linked to regulated ANS and non-regulated ANS and reconcile these amounts with the organisational chart.

- iii. If a split is made based on predetermined sharing keys, the NSA should challenge the ANSP on whether the sharing keys represent adequately the costs incurred by regulated ANS versus the rest of the activities. This can be done for example by identifying the big components of costs and determining whether they relate to regulated ANS or not. The NSA should encourage ANSP to opt for the most accurate and transparent method possible, i.e. a split based on actuals (if possible) or based on a statistical measure (if a relevant and available one can be identified).
3. Perform an in-depth verification of pension costs, leveraging any actuarial report available (especially in the case of Defined benefits pension schemes) – more detailed explanations on pension costs/post-employment benefits and related IFRS requirements are available in the section of IFRS considerations in the Verification Programme.
 - a. For each pension scheme used, the NSA should:
 - i. Verify the pension cost amounts and calculations in respect of this scheme.
 1. For the verification of defined contributions pension schemes, the pension cost calculation is rather straightforward and a simple reconciliation of costs accounted with the financial statements or the insurance plan is sufficient.
 2. For the defined benefits pension schemes, IAS 19 requires the entity to use the projected unit credit method to calculate the service cost (one of the component of expenses related to a Defined benefits scheme). However, not all ANSP are compliant with IFRS principles.
 - a. For the ANSP reporting pension costs as per the same accounting methodology as in their financial statements, the pension costs will have been validated in the context of the financial audit. In that case, a simple reconciliation by the NSA of reported pension costs with the financial statements and insurance plan is sufficient.
 - b. For the ANSP reporting pension costs as per a different accounting methodology than in their financial statements (to get closer to the IFRS principles for example), these reported pension costs were not validated in the context of the financial audit. In that case, the NSA needs to review the actuarial reports and validate the assumptions reasonability. The following verification procedures should be envisaged in that case:

- i. Obtain the actuarial evaluation that was done by the ANSP.
 - ii. Understand how the service cost is calculated.
 - iii. Understand the assumptions used by the actuaries and validate their reasonability.
 - iv. An independent actuarial review of the ANSP could be of interest if the amount is very significant or could represent a high risk.
- 3. State pension schemes are not a separate category of pension schemes as per IFRS rules. They either enter the defined contributions scheme, either the defined benefits scheme, or are a combination of both. The above described procedures are thus applicable to the related portions of the state pension schemes.
 - ii. Verify that the information regarding the national pension regulations, the pension accounting regulations on which the actuals are based and whether changes of those regulations happened during the year.
 - iii. Verify that the assumptions underlying the calculations of pension costs comprised in the actual costs are accurate (applicable pension scheme or on national law) and correctly taken into account in the calculations

B.2.1.3 Procedures for other operating costs

The other operating costs that can be included in the actual costs as per the Regulation (EU) 2019/317, Articles 22 and 23 are the following: costs incurred for the purchase of goods and services used to provide air navigation services, including outsourced services, material, energy, utilities, rental of buildings, equipment and facilities, maintenance, insurance costs and travel expenses. In addition to this, the principles related to cost allocation will need to be respected.

Therefore, to verify the eligibility of costs included in other operating costs, two checks should be performed:

1. Verify that the only elements included in the other operating cost reported in the reporting tables are the ones listed in the regulatory framework. This can be checked by following the steps indicated below:
 - a. The first verification that should be done is a reconciliation of the other operating costs included in the actual costs and the statutory accounts. Costs from the statutory accounts could be excluded from the actual costs, but not added.
 - b. To verify the nature of the other operating costs included in the actual costs, a review of the GL accounts list (breakdown) (on the lowest level of detail) should be performed. Any unclear GL account for which the NSA has a doubt on whether they enter the scope of eligible costs, supporting accounting documents/evidence (e.g. invoices) could be requested for a sample of GL entries. The content and accuracy of costs booked on the GL accounts should

however not be verified by the NSA as this is verified by the independent auditor.

- c. Leasing costs are also to be included in the other operating costs. IFRS 16 (new standard effective since 1 January 2019) introduces a new, broader, definition of leases. As per that definition, any physical asset for which an entity is paying a rental amount would now be considered a lease for the purpose of IFRS 16. As a consequence the previous operating expense related to the lease is now considered as a financial expense (related to the removal of one year of discounting until the end of the lease (i.e. a sort of the interest expense). The interest impact of IFRS 16 shall be included in the operating cost to remain compliant with the Regulation and for the calculation of the cost of capital. More details can be found in the section of IFRS considerations in the Verification Programme.
2. For a sample of other operating costs, check whether the costs have been correctly shared between ANS and non-ANS.
 - a. Other operating costs can either be fully and directly linked to regulated ANS, partially or not at all.
 - i. The costs that are fully and directly linked to regulated ANS should be fully included in the reporting tables. An example could be the licence fee of a CNS (Communication, navigation and surveillance services) system.
 - ii. The costs not related to the regulated ANS should not enter at all the reporting tables. An example could be the rental of equipment's required for a commercial activity.
 - iii. ANSP can also incur costs that are partially for the provision of regulated ANS and partially for other activities. An example could be any utilities (electricity, water, fuel, etc.). Only a proportionate part of these costs should be allocated to the regulated ANS services and reported in the reporting tables. More details on possible verification procedures are provided below. Another example are consulting costs that may relate to regulated ANS or not. The main contracts should be reviewed in order to identify the nature of service provided by the consultants and determine what proportion is related to regulated ANS.
 - b. The exact same elements can be used to separate other operating costs as to separate staff costs (i.e. actuals, statistical measures and predetermined sharing keys) - see further Section B.2.1.2, paragraph 2.c.
 - c. This is done by analysing the basis for the separation and possible allocation of other operating costs between regulated ANS and non (regulated) ANS, and test how this is put in practice. For the sample of other operating costs selected, the NSA should request the supporting evidence used as a basis for the apportionment and check whether the costs have been correctly shared between regulated ANS and non (regulated) ANS.
 - d. An ANSP can separate other operating costs between its regulated and non-regulated activities based on different elements: actuals (i.e. excluding all expenditures not related to the provision of ANS and a part of the other

operating costs shared between ANS and non-ANS services), statistical measures based on historical data (e.g. based on a detailed calculation done a couple of years ago) and/or sharing keys (e.g. 75% ANS and 25% non-ANSP). The factors based on which the splits are made have to be agreed in advance between the NSA and ANSP.

- i. The most accurate option is to do the split based on actuals but the information is not always available (e.g. if the ANSP does not capture this information in a systematic and/or accurate way).
 - ii. The second best option is to use statistical measures linked to the cost consumption. An example could be the following: if an ANSP provides services for both regulated and non-regulated airspace, the cost of a certain ATM system maintenance could be split in proportion of the number of flights managed for the regulated area vs for the non-regulated area. This method is slightly less accurate than the one based on the actuals as it relies on the assumption that all flights from both area require the same use of the system while it might not necessarily be the case.
 - iii. The third option is to use predetermined sharing keys (e.g. 75% ANS and 25% non-ANSP). While this is the easiest to implement and verify, it is also likely to be the less accurate as once adopted they are rarely challenged nor their accuracy verified on a regular basis.
- e. Often, the three above factors are used by a single ANSP on different type of resources. For example, certain costs can be incurred only for the purpose of one charging zone. These costs should be allocated fully and directly to the related charging zone. On the contrary, indirect costs may be more difficult to split based on actuals. This is the reason why statistical measures are very often used for these indirect costs.
- i. Depending on the factor(s) used, different verifications should be done (these verification procedures follow the same process and logic as for the staff costs). If a split is made based on actuals, it should be verified that: 1) only the other operating costs related fully or partially to regulated ANS are included in the actual costs and 2) that the amount of cost included in the actual costs is correct.
 1. The first point can be verified by reviewing the main cost items included in the other operating costs and by identifying which items are included or excluded from the actual costs. In case of unclarity around the link to regulated ANS, contracts or purchase invoice should be requested.
 2. Once the cost items (and/or share of their cost) for inclusions/exclusion of the actual costs are identified, the amount of cost should be linked on an item level and verified. This can be done by reconciling the other operating costs with related GL accounts from the financial statements for example.
 - ii. If a split is made based on statistical measures, it should be verified that 1) there is a good level of causality between the costs allocated

and the statistical measure used to allocate these costs, and 2) that the quantitative data used for the statistical measures are correct and accurate.

1. The verification of the causality between the costs allocated and the statistical measure used to allocate these costs is based on the auditor common sense and understanding of the ANSP activities. For example, split (between regulated ANS vs non-regulated ANS) a radar maintenance cost based on its coverage proportion of the regulated vs not regulated area implies a high level of causality. On the contrary, allocate these costs based on the number of ATCO per area would be a less causal/logical as there is no causal relationship between the cost and coverage of a specific radar and the number of ATCO per area.
 2. The verification that quantitative data used for the statistical measures is correct and accurate is done by reconciling the statistical measures quantities with its source. Taking the example of the radar maintenance cost allocated based on its coverage, the proportion of costs allocated to regulated versus non-regulated ANS could be verified by requesting the ANSP a map showing the radar coverage and the controlled areas. The proportion allocated to both areas could be verified on the basis of that documentation.
- iii. If a split is made based on predetermined sharing keys, the NSA should challenge the ANSP on whether the sharing keys represent adequately the costs incurred by regulated ANS versus the rest of the activities. This can be done for example by identifying the big components of costs and determining whether they relate to regulated ANS or not. The NSA should encourage ANSP to opt for the most accurate and transparent method possible, i.e. a split based on actuals (if possible) or based on a statistical measure (if a relevant and available one can be identified).

B.2.1.4 Procedures for depreciation

According to the legal framework, depreciation costs include costs related to the total fixed assets in operation for the purpose of providing ANS. The value of 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. Historical or current cost accounting shall be applied for the calculation of the depreciation. The methodology used to calculate depreciation costs shall not be altered during the duration of the depreciation and shall be consistent with the cost of capital applied, that is to say nominal cost of capital for historical cost accounting and real cost of capital for current cost accounting.

Where current cost accounting is applied, the cost of capital shall not include inflation and the equivalent historical cost accounting figures shall also be provided to allow for comparison and assessment.

More guidance on IFRS requirements is available in the section of IFRS considerations in the Verification Programme. In particular, IAS 16 (property plants and equipment) and IAS 38 (intangible assets) principles related to assets recognition (also for assets under construction), valuation and depreciation are described.

To verify the eligibility of costs included in depreciation, the following five checks should be performed:

1. Verify that the only depreciation cost included in the reporting tables are the ones allowed by the regulatory framework.
 - a. The first verification that should be done is a reconciliation of the depreciation cost included in the actual costs and the statutory accounts. Costs from the statutory accounts could be excluded from the actual costs, but not added.
 - i. This is particularly important to avoid the double charging of the same costs via operating costs and depreciation costs. Either a cost is incurred in a certain year and is included in the actual costs, either it is capitalised and depreciated (not before it is in operation – see below). Whether a cost can be capitalised or should be reported in the profit and loss (P&L) is defined by the accounting standards adopted by the entity and verified by the independent financial auditor.
 - b. Depreciation costs should only include costs related to the total fixed assets in operation
 - i. Assets for which costs were included in the depreciation must have been in operation during the year. If they were put in operation during the year, they should only be taken into account on a pro-rata basis.
 - ii. It should be verified that no depreciation is accounted for assets under construction. This can be checked by reviewing the asset register or list of assets, verifying that no costs are capitalised for these assets. Another verification is to review for what assets are costs being capitalised and verify that no depreciation cost is included in the actual costs for these assets.
2. For a sample of depreciation costs, check whether the costs have been correctly shared between ANS and non-ANS.
 - a. Depreciation costs of assets can either be fully and directly linked to regulated ANS, partially or not at all.
 - i. The costs that are fully and directly linked to regulated ANS should be fully included in the reporting tables. An example could be a radar depreciation cost if the radar is exclusively used for the ATM of regulated airspace.
 - ii. The costs not at all related to the regulated ANS should not enter at all the reporting tables. An example could be a training centre used exclusively for the provision of training to other organisations than the ANSP ATCO.
 - iii. ANSP can also incur costs that are partially for the provision of regulated ANS and partially for other activities. An example could be the

depreciation cost of a radar covering both regulated and non-regulated airspace. In that case, an apportionment should be made to exclude a part of the radar depreciation cost from the regulated actual costs, for example based on the volume or surface covered in both airspaces.

- b. The exact same elements can be used to separate depreciation costs as to separate staff costs (i.e. actuals, statistical measures and predetermined sharing keys) - see further Section B.2.1.2, paragraph 2.c.
- c. This is done by analysing the basis for the separation and possible allocation of depreciation costs (based on the assets use) between regulated ANS and non (regulated) ANS, and test how this is put in practice. For the sample of depreciation costs selected, the NSA should request the supporting evidence used as a basis for the apportionment and check whether the costs have been correctly shared between regulated ANS and non (regulated) ANS.
- d. An ANSP can separate depreciation costs between its regulated and non-regulated activities based on different elements: actuals (i.e. excluding all depreciation costs from assets not used for the provision of ANS and a part of the depreciation costs of assets shared between ANS and non-ANS services), statistical measures based on historical data (e.g. based on a detailed calculation done a couple of years ago) and/or sharing keys (e.g. 75% ANS and 25% non-ANSP). The factor based on which the split is made has to be agreed in advance between the NSA and ANSP.
 - iv. The most accurate option is to do the split based on actuals but the information is not always available (e.g. if the ANSP does not capture this information in a systematic and/or accurate way) or not always possible (if an asset is shared between regulated ANS and other activities).
 - v. The second best option is to use statistical measures linked to the cost consumption. An example could be the following: The depreciation cost of buildings could be split among the ANSP activities and/or charging zones based on the number of direct FTE using them.
 - vi. The third option is to use predetermined sharing keys (e.g. 75% ANS and 25% non-ANSP). While this is the easiest to implement and verify, it is also likely to be the less accurate as once adopted they are rarely challenged nor their accuracy verified on a regular basis.
- e. Often, the three above factors are used by a single ANSP on different type of assets. For example, certain assets could be used only for the purpose of one charging zone. These depreciation costs should be allocated fully and directly to the related charging zone. On the contrary, the depreciation costs of shared assets may be more difficult to split based on actuals. This is the reason why statistical measures are very often used for these indirect costs.
- f. Depending on the factor(s) used, different verifications should be done (these verification procedures follow the same process and logic as for the staff costs).
 - i. If a split is made based on actuals, it should be verified that: 1) only the depreciation costs related fully or partially to regulated ANS are

included in the actual costs, and 2) that the amount of cost included in the actual costs is correct.

1. The first point can be verified by reviewing the asset register/list of the ANSP and challenging the ANSP on certain assets for which the use or the link with ANS is not clear (if any).
 2. Once the assets (and/or share of their depreciation cost) for inclusions/exclusion of the actual costs are identified, the amount of cost should be linked on an item level and verified. This can be done by reconciling the depreciation costs with the asset register for example.
 - ii. If a split is made based on statistical measures, it should be verified that 1) there is a good level of causality between the costs allocated and the statistical measure used to allocate these costs, and 2) that the quantitative data used for the statistical measures are correct and accurate.
 1. The verification of the causality between the costs allocated and the statistical measure used to allocate these costs is based on the auditor common sense and understanding of the ANSP activities. For example, split (between regulated ANS vs non-regulated ANS) of a radar depreciation cost based on its coverage proportion of the regulated vs not regulated area implies a high level of causality. On the contrary, allocate these costs based on the number of ATCO per area would be a less causal/logical as there is no causal relationship between the cost and coverage of a specific radar and the number of ATCO per area.
 2. The verification that quantitative data used for the statistical measures is correct and accurate is done by reconciling the statistical measures quantities with its source. Taking the example of the radar maintenance cost allocated based on its coverage, the proportion of costs allocated to regulated versus non-regulated ANS could be verified by requesting the ANSP a map showing the radar coverage and the controlled areas. The proportion allocated to both areas could be verified on the basis of that documentation.
 - iii. If a split is made based on predetermined sharing keys, the NSA should challenge the ANSP on whether the sharing keys represent adequately the costs incurred by regulated ANS versus the rest of the activities. This can be done for example by identifying the ANSP largest assets and determining whether they relate to regulated ANS or not. The NSA should encourage ANSP to opt for the most accurate and transparent method possible, i.e. a split based on actuals (if possible) or based on a statistical measure (if a relevant and available one can be identified).
3. Verify that the value of fixed assets was depreciated in accordance with their expected operating life, using the straight-line method.

- a. No definition is provided in the Regulation for the terms of “expected operating life”. As per IAS 16, properties, plants and equipment are to be depreciated over their useful life. However, if it can be considered that an asset operating life is equal to its useful life and that the ANSP applies a straight-line depreciation method (one of the three methods accepted under IFRS), the NSA should be able to reconcile the depreciation costs entered in the Reporting Table 1 with the asset register/list of assets.
 - b. Straight-line depreciation is the most common and simple method of depreciation where the value of a fixed asset is reduced gradually and evenly over its useful life, meaning that each full calendar year will be allocated the same amount (in absolute value and in percentage) of the asset’s cost.
 - c. It should be verified that any exceptional depreciation resulting from asset impairments and write offs should not be included in the depreciation costs but under the exceptional cost category. Also, it should be verified that any written off fixed assets is not included anymore (or with a null value) in the fixed asset register at year end.
4. Verify that the depreciation methodology used was consistent with the one applied to the cost of capital calculation.
 - a. Guidance on key concepts:
 - i. Historical cost accounting: Historical cost implies that an asset is recorded at its original cost when acquired by the ANSP.
 - ii. Current cost accounting: Current cost accounting for asset valuation and depreciation is not defined in the Regulation (while it is defined for the cost of capital (i.e. “Where current cost accounting is applied, the cost of capital shall not include inflation”) nor in the international accounting or reporting standards. It is however foreseen in IAS 16 that properties, plants and equipment can be valued at “fair value” following the revaluation model. Nothing specifies however that current cost is an equivalent to fair value.
 1. It is required by the Regulation that where current cost accounting is applied, the equivalent historic cost accounting figures shall also be provided to allow for comparison and assessment.
 - b. Meaning of the consistency in the depreciation and cost of capital methods:
 - i. Either use historic cost accounting for the calculation of the depreciation and the nominal cost of capital (including inflation), or
 - ii. Either use current cost accounting for the calculation of the depreciation and real cost of capital (excluding inflation).
 5. Verify that the methodology used to calculate depreciation costs was not altered during the duration of the depreciation.

This can be verified by reviewing the detail of the calculations made for the depreciation costs. As the straight line depreciation method should be applied, the annual depreciation costs should remain constant for all full calendar years during

which the asset is being depreciated if the expected operating life is not modified and the asset not revalued. Assets put into operation during that year shall only be taken into account on a pro-rata basis.

Additional guidance is provided by Eurocontrol¹⁷:

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' representatives. This practice has however no basis in the EC Regulation.

B.2.1.5 Procedures for cost of capital

According to the legal framework, the cost of capital shall be equal to the product of the following elements:

- The sum of the average net book value of fixed assets in operation or under construction and possible adjustments to total assets determined by the national supervisory authority and used by the air navigation service provider and of the average value of the net current assets, excluding interest-bearing accounts, that are required for the purposes of providing air navigation services.
- 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 above and the debts.

For the purpose of establishing the cost of capital, the factors to which weight is to 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 weighted average interest rate on debts of the air navigation service provider. The return on equity shall be that provided in the Performance Plan for the reference period and shall be based on the financial risk incurred by the air navigation service provider.

Where air navigation service providers incur costs from leasing fixed assets, those costs shall not be included in the calculation of cost of capital.

Additional guidance was developed for the ANSP on the determined cost of capital development¹⁸. The NSA may consult this material for a better understanding of the technical details.

More guidance on IFRS requirements is available in the section of IFRS considerations in the Verification Programme. In particular, IAS 16 (property plants and equipment) and IAS 38 (intangible assets) principles related to assets recognition (also for assets under construction) and valuation are described.

To verify the eligibility of the cost of capital included in the actual costs, the following four checks should be performed:

¹⁷ European Organisation for the Safety of Air Navigation, Central Route Charges Office, Eurocontrol, "Principles for establishing the cost base for en route charges and the calculation of the unit rates", 2018.

¹⁸ Supporting material for the development of RP3 Performance Plans, developed by EY and Helios upon request of the European Commission Directorate-General for Mobility and Transport (DG MOVE), May 2019.

2. Verify the eligibility and accuracy of all components of the cost of capital calculation by reconciling them with the ANSP regulatory balance sheet and with the profit and loss:
 - a. The asset base is made of the three following components:
 - i. The net book value of fixed assets (including here the ones in operation and under construction)
 1. The average net book value for the fixed assets in operation should be reconciled with NBV used for the calculation of the depreciation under 1.3 Depreciation.
As this is an average, it cannot be reconciled with the balance sheet that shows the end-year value.
 2. The NBV of fixed assets under construction should be reconciled with the statutory accounts and/or the asset register.
 3. These fixed assets should be used by the air navigation service provider for the purposes of providing air navigation services.
This should have already been mostly verified when checking the assets for the procedures related to the depreciation, additional checks should be performed in case of material assets being in construction (not depreciated yet, meaning that they were not included in the scope of the procedures related to depreciation).
 4. The costs related to the leasing of fixed assets should not be included in the cost of capital calculation (but rather in the other operating costs).
 - ii. Fixed assets net book value may include possible adjustments to total assets determined by the national supervisory authority.
 1. It is expected that adjustments to (IFRS) total assets will be allowed by the regulatory authority and in consistency with the additional information to be provided in the reporting tables for charging purposes. Examples of adjustments are as follows:
 - Cash, rather than IFRS, pension costs;
 - Regulatory, rather than accounting, depreciation; and,
 - Exclusion of goodwill – determined costs do not include allowances for the impairment of goodwill.
 2. ANSPs should disclose to what the asset adjustment(s) relate(s) and how it can be reconciled with the assets value at year-end.
 - iii. The asset base should also include the average value of the net current assets.
 1. Net current assets are defined as the current assets less the current liabilities, where:
 - a. Current asset means cash or a cash equivalent (i.e. that can be converted into cash within one year - typically inventory and short term receivables).

- b. Current liability means a payable within one year.
 - 2. The NSA should verify that the average value of the net current assets value is used, calculated as $\text{Average NBV} = (\text{total NBV fixed Assets at the start of the calendar year} + \text{total NBV fixed assets at the end of the calendar year})/2$. ANSPs may also consider it appropriate to use a mid-year figure or the monthly average throughout the year.
 - 3. Net current assets should not include interest-bearing accounts. When reconciling the assets with the financial statement, the NSA should verify that no interest bearing account (i.e. bank account) is included in the fixed asset NBV.
- b. The equity capital:

For air navigation service providers that do not have equity capital (more likely for ANSPs that are part of the State administration), the difference between the total of the assets and the debts should be taken as the value of the equity capital in the calculation of the cost of capital.
- c. Debt:

The debt amount should be made of the loans financing the provision of air navigation services. For the ANSP financed exclusively through equity (so not having any debt), procedures related to the verification of debt and interest can be disregarded.
- d. The interest rate on debts:

The interest rate shall be equal to the weighted average interest rate on debts of the air navigation service provider - see further the fourth procedure for more details
- e. The return on equity:

The return on equity shall be the one provided in the Performance Plan for the reference period and shall be based on the financial risk incurred by the air navigation service provider
- 3. Verify the cost of capital calculation, i.e. the following elements:
 - a. The proportion of financing through equity (and debt):

The NSA should redo the calculations to verify that these proportions are equal to the ratios between the ANSP equity (or debt) and total liabilities
 - b. The weighted average of the interest rate on debts and of the return on equity:
 - i. The NSA should redo the calculation of the weighted average of the interest rate on debts and of the return on equity to verify that it is equal to the sum of:
 - 1. The proportion of financing through equity multiplied by the return on equity, and
 - 2. The proportion of financing through debt multiplied by the interest rate on debts.

- ii. 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 and the debts.
- c. Cost of capital:

The NSA should redo the calculation of the cost of capital to verify that it is equal to the product of the average net book value of fixed assets and of the weighted average of the interest rate on debts and of the return on equity.
- 4. Verify that methodology applied to the cost of capital is consistent with the one used to calculate depreciation costs (i.e. nominal cost of capital for historic cost accounting and real cost of capital for current cost accounting).
- 5. Perform an in-depth verification of interest rate and costs.

The NSA should review the actual interest rate and costs reported and reconcile them with supporting evidence (loan contracts with the bank, banks statements of the proceeded payments, etc).

B.2.1.6 Procedures for exceptional costs

According to the legal framework, exceptional costs shall consist of non-recurring costs relating to the provision of air navigation services, including any non-recoverable taxes and customs duties.

To verify the eligibility of the exceptional costs, two checks should be performed:

1. Verify that the only costs included in the reporting tables are the ones allowed by the regulatory framework.
 - a. The first verification that should be done is a reconciliation of the exceptional costs included in the actual costs and the statutory accounts. Costs from the statutory accounts could be excluded from the actual costs, but not added
 - b. The exceptional costs should include non-recurring costs.
 - i. To verify the (non-) recurring aspect of the exceptional costs, an explanation on the reason, content and nature of the costs should be asked to the ANSP. The review of these elements should enable the NSA to assess whether these costs are indeed non-recurring.
 - ii. Supporting accounting documents/evidence (e.g. invoices) could be requested for a sample of these costs to verify the alignment between the explanations received in point a) above and the content of the ANSP accounting. The content and accuracy of costs booked on the GL accounts should however not be verified by the NSA as this is verified by the independent auditor.
 - c. Regulation (EU) 2019/317, Articles 22.4 and 23 specify that the exceptional costs may include any non-recoverable taxes and customs duties.
 - d. As per Regulation (EC) No 550/2004 and Regulation (EC) No 1070/2009, Article 15.2 (b), these costs shall not include the costs of penalties imposed by Member States according to Article 9 of the framework Regulation nor the

costs of any corrective measures imposed by Member States according to Article 11 of the framework Regulation.

- i. The NSA needs to be validate that the exceptional costs do not include such cost of penalties or corrective measures. This is done by understating the reason, content and nature of the exceptional costs.
 - ii. Supporting accounting documents/evidence (e.g. invoices) could be requested for a sample of these costs to verify the alignment between the explanations received in point a) above and the content of the ANSP accounting. The content and accuracy of costs booked on the GL accounts should however not be verified by the NSA as this is verified by the independent auditor.
 - e. Eurocontrol¹⁹ lists the following examples for exceptional costs (the regulatory framework does not confirm nor contradict them):
 - i. Exceptional contributions to top up a pension fund;
 - ii. Losses on the disposal of obsolete assets. In particular, the exceptional depreciation resulting from asset impairments and write-offs in the year (Depreciation adjustment for asset revaluations).
2. Verify that the exceptional costs are related to the provision of air navigation services.
 - a. The NSA needs to be validate that the exceptional costs are related to the provision of regulated ANS and not to any other non-regulated activity of the ANSP. This is done by understating the reason, content and nature of the costs included in the exceptional costs.
 - b. Supporting accounting documents/evidence (e.g. invoices) could be requested for a sample of these costs to verify the alignment between the explanations received in point a) above and the content of the ANSP accounting. The content and accuracy of costs booked on the GL accounts should however not be verified by the NSA as this is verified by the independent auditor.
 - c. For example, would the ANSP incurred exceptional contributions to top up a pension fund, the NSA should verify that are included in the actual costs only the exceptional contributions for employees related to the provision of ANS.

B.2.2 Verification of the bookings of costs on cost centres

B.2.2.1 Procedures for cost centres

As prerequisite for the process of verifying the cost allocations, the NSA is recommended to check the methodology of the ANSP for the recording of costs on cost centres. The use of cost centres by the ANSP is recommended as cost centres create more transparency in the costs. It is considered as a best practice in management accounting.

To verify the booking of costs on cost centres, the NSA should perform the following procedures:

¹⁹ Eurocontrol, "Specification for Economic Information Disclosure", 2012.

1. Review and validate the structure of cost centres.
 - a. The Regulation requires transparency in the reporting, which is highly supported by a well-structured set of cost centres.
 - b. It is good practice for cost centres to reflect the organisational structure and to be in line with the concept of ownership/responsibilities. Cost centres should support the allocation of costs to services or service centres, in particular to terminal and en route and different charging zones, to services for visual flight rules (VFR) flights and to commercial services. It is also good practice to create cost centres for specific items on which a close financial follow-up is desired or required. Relevant examples are for the ATCO training costs or for the operating expense (OPEX) related to new and existing investments (potentially by individual project).
 - c. In practice, they could be made of the organisation departments (Operations, Engineering, Meteorology, HR, Finance, IT, etc.), services (air traffic management, communication, navigation, surveillance, etc.), traffic control zones (terminal, approach, en route) or geographical areas (Airport 1, Airport 2, etc.) or any combination of these dimensions.
 - d. The number of cost centres can vary from an ANSP to another. Organisations need to find the right balance between less cost centres (more straightforward, easier to maintain but less detailed accounting) and more cost centres (more cumbersome but providing more detailed information).
2. Review and validate the procedure(s) for the booking of costs on cost centres.
 - a. Require the formal procedure(s) for the bookings of costs on cost centres. In case no formal procedure exists, ask what the logic is for booking the staff costs on cost centres, ask what the procurement procedure is with regards to cost centres (e.g. how is an invoiced booked on a certain cost centre).
 - b. Best practices recommend booking the costs of resources on the cost centres that "use" or "consume" these resources instead of on the cost centres that "purchase" these resources.
3. Test the correct implementation of the procedure for the booking of costs on cost centres.
 - a. Request an extract from the ANSP accounting software (before allocations) with the list of all GL accounts and cost centre combinations and the amount of cost booked on each of them.
 - b. Select a sample of GL accounts and cost centre combinations and ask for the list of related journal entries.
 - i. Based on materiality: Ordering the list of GL accounts and cost centre combinations by decreasing amount of costs enable to identify easily the ones with the largest costs and select them in priority.
 - ii. Based on content: It is good practice to also try to test different costs. This can be done by including in the sample costs from different cost centres and GL accounts.

- c. Once the list of journal entries received for the selected sample of GL accounts and cost centre combinations, the NSA can select a sample of journal entries and ask the related invoices, contracts or other supporting evidence.
 - i. Based on materiality: Ordering the list of journal entries by decreasing amount of costs enable to identify easily the ones with the largest costs and select them in priority.
 - ii. Based on content: It is good practice to also try to test different costs. This can be done by looking at the names/codes of the journal entries and selecting different ones. Unusual or unclear items should also be prioritised for inclusion in the sample.
- d. When receiving from the ANSP the lists of 1) GL account and cost centre combinations and 2) of journal entries in the extracts from the system, it is advised to the NSA to perform a reconciliation between the total list of item cost and the total from the accounting. It enables the NSA to verify that the entire population of verified items was provided and that no accounting entries were removed or added to the list.

B.2.3 Verification of allocations

B.2.3.1 Procedures for allocations

According to the service provision Regulation²⁰, cross-subsidy is not allowed between en route and terminal charges and costs that pertain to both terminal services and en route services shall be allocated in a proportional way between en route services and terminal services on the basis of a transparent methodology.

According to Regulation (EU) 2019/317, Article 22(5) the determined costs shall be allocated in a transparent way to the charging zones in respect of which they are incurred. Determined costs that are incurred in respect of several charging zones shall be allocated in a proportional way, on the basis of a transparent methodology.

The key risks related to allocations are incorrect apportionments between en route and terminal, or the mis-allocation of costs relating to activities outside the scope of the regulatory framework.

The NSA is responsible to check that the ANSP complies with these regulatory requirements.

The NSA is also responsible for checking the allocation of costs to different charging zones of the same type and to the different services provided in a charging zone. It can be done by performing the below procedures. They are applicable to these three types of allocations.

²⁰ Regulation (EC) No 550/2004 of the European Parliament and of the Council of 10 March 2004 on the provision of air navigation services in the single European sky as amended by Regulation (EC) No 1070/2009 (the service provision Regulation).

1. Obtain the description for the allocation process the ANSP has in place and validate the overall allocation model logic. It should be validated against the following best practices and guidance:
 - a. Causality: Causality is the most important principle related to cost allocations. All cost allocation model should be based on the concept of causality. It is the logical relation between and cost source (input) and cost destination (output). It means that the cost allocated from a certain source are allocated to (all but only) destinations that “consume” that source for the output to be achieved based on a driver (or allocation key) that reflect best the proportion of source cost consumed by each of the destinations.
 - b. Activity based costing: The costs allocation methodology most widely recognised as best practise is activity based costing. This methodology relies on the identification of one or more intermediary allocation layers in between the first ones (resources, made of GL accounts and cost centres (if used)) and the cost objects (final items towards which all costs are allocated - the charging zones in this context). These intermediary allocation layers are activities. The costs are allocated from the resources to the activities and from the activities to the cost objects according to the actual consumption by each (i.e. based on causality).
 - c. In practice, the organisations have to define the right balance between reliability (the executives must trust the data they receive), timeliness (information must be available when needed for decision making) and relevance (cost information must be at the right level of information).
 - d. A European Commission study²¹ describes three distinct cost allocation methods observed at ANSP. It is strongly recommended to each NSA to understand what method is applied by the ANSP(s) they are responsible or how it deviates from them. This would give them the required overall understanding of the cost allocation methodology used by their ANSP(s).
 - e. The CRCO principles²²: They refer to the case where costs ‘cannot be allocated on a statistical basis’ between terminal and en route. In this case, the recommended apportionments are as follows:
 - i. 25% of the costs can be allocated to en route services if the facilities are utilised mainly for terminal navigation;
 - ii. 50% of the costs can be allocated to en route services if the facilities are utilised to the same extent for terminal and en route navigation;
 - iii. 75% of the costs can be allocated to en route if the facilities are utilised mainly for en route navigation.

As highlighted in the study in point d) above, the application of these allocation keys by ANSPs that also use activity based costing or other complex allocation

²¹ European Commission, “Support study to the evaluation of cost allocation to marketable terminal air navigation services Final Report”, 2019.

²² European Organisation for the Safety of Air Navigation, Central Route Charges Office, Eurocontrol, “Principles for establishing the cost base for en route charges and the calculation of the unit rates”, 2018.

methods suggests a possibility that they may either be over-used or favour strategies to reduce terminal charges. The causality principle should be favoured above the CRCO principles.

2. For complex allocation models made of multiple intermediary allocation layers, the verification of the above principles is not straightforward and requires additional work. For each allocation step, reconcile the total costs from the sources and destinations (e.g. the costs allocated from the resources with the costs received by the activities and the costs allocated from the activities with the costs received by the cost objects in the example of simple resources - activities - cost objects allocation model).
3. For a sample of allocation steps, the NSA should select a sample of allocations and perform the procedures listed below. The ICAO²³ provides detailed good practices in terms of allocations and allocation keys (referred as parameters in the ICAO manual), in its Chapter 5, Section D Allocation of costs.
 - a. Reconcile the costs from the allocation sources and destinations.
 - b. Review and validate the causality (i.e. logical relationship) between the allocation sources and destinations
 - c. Review and validate the causality of the driver, allocation key or criteria used for the allocation from the sources to the destinations.
 - d. Reconcile the driver, allocation key or criteria quantities used for allocations with source information.
 - e. The above mentioned sampling should be done based on:
 - i. Materiality: Ordering the list of allocations by decreasing amount of costs enable to identify easily the ones with the largest costs and select them in priority.
 - ii. Content: It is good practice to also try to test different allocations. This can be done by selecting allocations from different allocation layers. Indirect costs should also be prioritised for inclusion in the sample. Indeed, most issues and inaccuracies are usually found in indirect costs such as of overhead, support functions, etc. It is good practice to make sure to perform a specific review of the allocation methodology used for such costs.

Once an in-depth review of the allocation model has been performed once, following verifications could be lighter, focusing only on the changes compared to previous version (if any). For example:

1. Verify and validate that the overall allocation model remained the same as the previous year, including the following aspects:
 - a. The allocation layers;
 - b. The allocation drivers or keys (not the quantities).
2. If the allocation model remained similar compared to the previous year (and is considered transparent and allocating the actual costs related to in a fair proportion to

²³ International Civil Aviation Organization, "Manual on Air Navigation Services Economics", 2013.

the air navigation services and the charging zones), no additional procedure is required on allocations.

3. In complex allocation models, it is likely to see small adjustments made by the ANSP on a yearly basis to some components of the model. Resources (combinations of cost centres and GL accounts) activities and (to a lesser extent) cost objects may be created, deleted or modified to ensure alignment of the cost allocation model with the ANSP structure and activities.
4. If the allocation model changed compared to the previous year, a verification of these changes is required. This is done by building an exhaustive list of all changes and their impact (in terms of costs) across all allocation steps. The same procedures described in Section 3.b and 3.c can be then be applied on this list of all changes made in the costing model. When reviewing these changes, it is necessary to check whether they are improving causality (i.e. checking whether the changes are better reflecting cost consumption) or justified by a valid business or organisational reason (following a change in the departments structure/organisation for example).
5. Changes to a costing model can be of different types:
 - a. Change in the organisational structure (cost centre structure, possibly in combination with GL accounts);
 - b. Change in intermediary layers (e.g. activities) or final cost destinations;
 - c. New or deleted cost allocation from a certain source to one or multiple cost destinations;
 - d. Change in a cost allocation driver/allocation key.

B.2.4 Verification of adjustments and specific lines

Member States shall calculate the en route and terminal unit rates before the start of each year of the reference period. Those rates shall be calculated by dividing the forecast number of total en route or terminal service units for the relevant year, calculated in accordance with points 1 and 2 of Annex VIII respectively, into the algebraic sum of the following elements:

- Determined costs in nominal terms - VFR excluded (Art. 25(2)(a))
- Inflation adjustment : amount carried over to year n (Art. 25(2)(b))
- Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))
- Cost items referred to in Article 28(3) : amounts carried over to year n (Art. 25(2)(d))
- Financial incentives : amounts carried over to year n (Art. 25(2)(e))
- Modulation of charges : amounts carried over to year n (Art. 25(2)(f))
- Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))
- Other revenues (Art. 25(2)(i))
- Cross-financing between charging zones (Art. 25(2)(j))
- Difference in revenue from temporary application of unit rate (Art. 25(2)(k))

In line with the scope of this guidance material, verifications procedures are detailed below for some of the above listed adjustments.

B.2.4.1 Inflation

According to Regulation (EU) 2019/317, Article 26, for each year of the reference period, the determined costs included in the cost bases for en route and terminal charges of year n expressed in nominal terms shall be adjusted on the basis of the difference in percentage between the actual inflation index and the forecast inflation index for that year n and included as an adjustment for the calculation of the unit rate for year $n+2$. The determined costs referred to in the third subparagraph of Article 22(1), and the determined costs referred to in points (c) and (d) of Article 22(4) where historical cost accounting is applied, shall not be subject to any inflation adjustment.

Concretely, it means that the inflation adjustment amount carried over to year n in Reporting Table 2B is coming from differences between the actual inflation index and the forecast inflation index of two years earlier. The values of these adjustments are tracked year on year in Reporting Table 3 in the case of both RP2 and RP3.

1. The inflation adjustments applied to the two first years of the RP (2020 and 2021 in case of RP3) are carried over from the two last years of the previous RP (2018 and 2019 from RP2 in case of RP3).
 - a. The adjustments carried over from the two last years of the previous RP (2018 and 2019 from RP2 in case of RP3) are calculated in RP2 Reporting Table 2. The calculations of the adjustments are based on:
 - i. Determined costs in nominal terms - VFR excluded (small difference compared to RP3, as during RP3 the determined costs for which historical cost accounting is applied shall not be subject to any inflation adjustment - i.e. cost of capital and depreciation need also to be deducted from the cost base in case the historical cost accounting method is applied. These amounts are automatically taken from RP2 Reporting Table 1.
 - ii. Actual inflation index:
Calculated based on the inflation percentages - As per Regulation (EU) 2019/317, 'actual inflation index' means the annual actual inflation index based on the third year before the start of a reference period and computed by using the actual inflation rate published by the Commission in the Eurostat Harmonised Index of Consumer Price for the State concerned in April of year $n+1$. In case the percentage change published by the Commission for a given year is negative, a zero value shall be used.
 - iii. Forecast inflation index:
Calculated based on the inflation percentages - Regulation (EU) 2019/317 provides the definition of the forecast inflation index. - see further Section A.2.4.1.

2. The inflation adjustments applied to the three last years of the current RP (2022, 2023 and 2024 in case of RP3) and to the first two years of the next RP (2025 and 2026 from RP4 in case of RP3) are carried over from the five years of the current RP (2020 - 2024 in case of RP3).
 - a. The adjustments carried over from the three first years of the current RP (2020, 2021 and 2022 in case of RP3) are calculated in Reporting Table 2A. The calculations of the adjustments are based on:
 - i. Determined costs subject to inflation adjustment (small difference compared to RP2, as during RP2 the determined costs of depreciation and cost of capital were subject to inflation adjustment even where historical cost accounting was applied).
 1. These 3 amounts are automatically taken from Reporting Table 1: Total determined costs (after deduction of costs for services to exempted flights (in nominal terms)), depreciation, and cost of capital.
 2. If historical cost accounting is not applied, the formula should be modified, not to deduct depreciation and cost of capital from the total costs after deduction of costs for services to exempted flights.
 - ii. Actual inflation index.
 - iii. Forecast inflation index.

To verify the inflation adjustments, NSA should apply the following procedures:

1. Reconcile the amounts of the adjustments carried over with the data from the year that the adjustments originate (from previous and current RP). As the inflation adjustments presented under Reporting Table 2B are automatically populated via formulas from Reporting Table 2, the NSA should do the following:
 - a. Reconcile the values of the two first years of the current RP (2020 and 2021 in case of RP3) from Reporting Table 2B with the values of RP2 Reporting Table;
 - b. Reconcile the values of the three last years of the current RP (2022, 2023 and 2024 in case of RP3) from Reporting Table 2B with the values of Table 2;
 - c. In case the values do not reconcile, NSA should verify whether any of the cells formulas is incorrect or was modified (for example referring to the correct cell but of the wrong sheet (referring then to the inflation adjustment of another of the Member State entities (ANSP(s), NSA, MET).
2. Verify that the ANSP used the correct actual inflation percentage (in case that the inflation percentages were filled in by the ANSP), i.e. the one published by the Commission in the Eurostat Harmonised Index of Consumer Price for the State concerned as foreseen by the legal framework. In case the percentage change published by the Commission for a given year is negative, a zero value shall be used²⁴.

²⁴ This information can be found at the following link: <https://ec.europa.eu/eurostat/web/hicp/data/database>, clicking on the "HICP (2015 = 100) - annual data (average index and rate of change) (prc_hicp_aind)" measure and changing the unit of measure to the Annual Average rate of change.

The costs referred to in the third subparagraph of Article 22(1), and the costs referred to in points (c) and (d) of Article 22(4) where historical cost accounting is applied, shall not be subject to any inflation adjustment.

B.2.4.2 Procedures for cost items referred to in Article 28(3)

According to Regulation (EU) 2019/317, Article 28(2), the general principle is that where, over the whole reference period, actual costs fall below (or exceed) the determined costs, the air navigation service provider or the Member State concerned shall retain (or cover) in full the resulting difference. This, however, does not apply if the differences between determined costs and actual costs result from at least one of the following changes:

- Unforeseen changes in costs of new and existing investments;
- Unforeseen changes in costs referred to in the third subparagraph of Article 22(1), i.e. costs of competent authorities, qualified entities and Eurocontrol;
- Unforeseen and significant changes in pension costs established in accordance with Article 22(4) resulting from unforeseeable changes in national pensions law, pensions accounting law or unforeseeable changes in financial market conditions, on the condition that such changes in pension costs are outside the control of the air navigation service provider and, in the case of cost increases, that the air navigation service provider has taken reasonable measures to manage cost increases during the reference period;
- Unforeseen and significant changes in costs resulting from unforeseeable changes in interest rates on loans that finance costs arising from the provision of air navigation services, on the condition that such changes in costs are outside the control of the air navigation service provider and, in the case of cost increases, that the air navigation service provider has taken reasonable measures to manage cost increases during the reference period;
- Unforeseen and significant changes in costs resulting from unforeseeable changes in national taxation law or other unforeseeable new cost items not covered in the Performance Plan but required by law.

While the verification of the adjustments for each category of cost included in Article 28 coming from this RP are presented more in detail below, the ones coming from the previous RP require a slightly different method (i.e. when the adjustment applicable to a year of RP3 comes from a difference between the determined and actual costs in a year of RP2), even if the general principle remains the same. These adjustments coming from the previous RP are impacting RP3 unit rates via the item “13.4 Differences in costs as per Art. 28(4) to (6)” in RP3 Reporting Table 2B. While in RP3 each adjustment is presented distinctly, they were grouped and are reported through the item “Cost exempt from cost sharing” in RP2 Reporting Tables 1 and 3.

The NSA should apply the following verification procedure: Reconcile the amounts of the adjustments carried over from RP2 as cost exempts with the data from the year that the adjustments originate (from previous RP).

These adjustments coming from the previous RP are presented (also including a breakdown by nature and by factor/item) in RP2 Reporting Table 3A item “Costs exempted from cost sharing”.

Finally, and according to the Article 28(7) of Regulation (EU) 2019/317, national supervisory authorities shall verify annually whether air navigation service providers apply correctly the provisions of Article 28. National supervisory authorities shall draw up a report by 1 September of year n+1 on the changes in costs referred to in paragraph 3 which occurred in year n. The report shall be subject to consultation of airspace users' representatives. National supervisory authorities shall also include in the report which is due by 1 September of the year following the final year of the reference period the balance over the whole reference period in respect of the unforeseen changes in the costs referred to in points (a), (c), (d) and (e) of Article 28 paragraph 3.

B.2.4.2.1 Procedures for cost items referred to in Article 28(3) - Unforeseen changes in costs of new and existing investments

According to Article 28 (3) and (4), the general principle (Article 28 (2)) does not apply in case of unforeseen changes in costs of new and existing investments. These requirements are new in RP3 compared to RP2.

- Where, over a calendar year or over the whole reference period, actual costs fall below the determined costs, the air navigation service provider or the Member State concerned shall reimburse the resulting difference to airspace users, through a reduction of the unit rate in year n+2 or in the following reference period, unless, based on a detailed justification of the air navigation service provider, the national supervisory authority decides, after consultation with airspace users' representatives, that the air navigation service provider shall not reimburse a part of the resulting difference.
- Where, over a calendar year or over the whole reference period, actual costs exceed the determined costs by not more than 5%, Member States may decide that the resulting difference is recovered from airspace users by the air navigation service provider or the Member State concerned, through an increase of the unit rate in year n+2 or in the following reference period, subject to the approval by the national supervisory authority of a detailed justification provided by the air navigation service provider in particular as regards the need to increase capacity and after consultation with airspace users' representatives.
- Where, during the reference period, air navigation service providers intend to add, cancel or replace major investments with respect to information on major investments identified in the Performance Plan in accordance with point 2.2(b) of Annex II, these changes shall be approved by the national supervisory authority, after consultation of airspace users' representatives.

To verify the unforeseen changes in costs of new and existing investments, NSA should apply the following procedures:

1. Reconcile the amounts of the adjustments carried over with the data from the year that the adjustments originate (from current RP).
 - a. For the current RP, it consists in verifying the integrity of the formulas linked to the new and existing investments used for the amounts of Reporting Table 2B item 13.4 Differences in costs as per Art. 28(4) to (6): amounts carried over to year n (Art. 25(2)(d)) and reconciling all components with the data from the year that the adjustments originate (from current RP) in Reporting Table 2A

items 3.1 New and existing investments (Art. 28(4)) as well as with the values of the difference in investment costs in Reporting Table 3.

- b. In the previous RP, difference in investment costs could not be carried over to adjust the unit rate. As a consequence, no costs from previous RP should be reported to the two first year of the current RP.
2. Verify the eligibility of actual costs included and adjustments.
 - a. The changes in costs of new and existing investments were unforeseen.
 - b. Verify and reconcile the values provided for the actual new and existing investments costs, made of the three following components: 3.10 Depreciation, 3.11 Cost of capital and 3.12 Cost of leasing.
 - i. This is done by reconciling the costs of new and existing investments, by investment, with their components in 1.3 Depreciation, 1.4 Cost of capital and 1.2 Other operating costs.
 1. A difference in the cost of capital in Reporting Table 1 can be observed between Sections 3.11 and 1.4 (New and existing investments vs by nature) as 3.3 Net current assets is not included in the net book value of new and existing investments.
 2. No difference in the depreciation cost can be observed in Reporting Table 1 between Sections 3.10 and 1.3 (New and existing investments vs by nature).

The NSA should be particularly careful here as while Eurocontrol reporting allows that when subsidies are used to finance investments relating to common projects, the revenues associated with these subsidies can be used to net-off the depreciation costs, this is not possible in the reporting for the EC.
 3. Cost of leasing (if any) are likely to represent a small part of the total other operating costs. Reconciling it with the financial statements enables the NSA to perform this verification as the cost of leasing should be reported on a specific line.
 - ii. Tool 5 is an Excel based tool built for the purpose of collecting and easing the verification of ANSPs costs related to the new and existing investments. It details the total cost of new and existing investments by nature (depreciation, cost of capital, cost of leasing), by type (new major investments, other new investments and existing investments) and the related net book value of the fixed assets and by investment type). This detail provides full transparency on these sections of the cost and enable the NSA to verify that all cost of capital, depreciation and leasing costs tie together and are relatable to the investment plan. Once the table has been filled in by the ANSP, the NSA is recommended to perform the following verifications:
 1. Reconciliation of the new major investments, other new investments, existing investments with the Performance Plan.

2. Reconciliation of the depreciation, cost of capital and cost of leasing with the ones provided in the reporting table.
 3. Reconciliation of the net book value fixed assets and the cost of capital pre tax rate (%) provided in the Reporting Table 1.
 4. Verification of the depreciation costs reported, multiplying the net book value fixed assets and the depreciation rate (i.e. the amortisation period in years).
 5. Verification of the cost of capital reported, multiplying the net book value fixed assets and the cost of capital pre tax rate (%).
- iii. Even if not entering the new and existing investments as such, it is good practice for transparency to disclose the operating costs (i.e. staff costs and other operating costs) linked to new and existing investments. These operating costs do not enter the scope of the adjustments related to unforeseen changes.
 - iv. The actual costs of investments shall be reported in the annual monitoring report by the NSA. NSA have to input the yearly progress of assets under construction and the costs incurred for assets in operation since the correctness of values and years impact the actual depreciation costs.
- c. In terms of thresholds, none applies when actual costs fall below the determined costs but not more than 5% can be recovered from airspace users when actual costs exceed the determined costs.
3. The carry-over mechanism was applied to the appropriate years in alignment with the regulatory framework and with the required approval and consultation.
 - a. The NSA should verify that a difference is reimbursed (or recovered) through a reduction (or increase) of the unit rate in year $n+2$ or in the following reference period.
 - b. It is of the responsibility of the NSA to verify that the carry-over is only applied based on a detailed justification of the air navigation service provider and after consultation with airspace users representatives.
 - i. In case the actual costs fall below the determined costs, the national supervisory authority may decide based on a detailed justification of the air navigation service provider and after consultation with airspace users representatives, that the air navigation service provider shall not reimburse a part of the resulting difference.
 - ii. In case the actual costs exceed the determined costs by not more than 5%, Member States may decide that the resulting difference is recovered from airspace users by the air navigation service provider or the Member State concerned, subject to the approval by the national supervisory authority of a detailed justification provided by the air navigation service provider in particular as regards the need to increase capacity and after consultation with airspace users' representatives.

- iii. In terms of timing, the NSA needs to officially approve the carry-over by the 1st of June of each year, meaning that the discussions between the NSA and the ANSP as well as the official consultation need to happen earlier.

B.2.4.2.2 Procedures for cost items referred to in Article 28(3) - Unforeseen changes in costs of competent authorities, qualified entities and Eurocontrol

Article 28(5) of Regulation (EU) 2019/317 sets the guidelines for sharing the risks and costs between the airspace users and the ANSPs for RP3. The costs of competent authorities, qualified entities and Eurocontrol and their related adjustments can be identified in Reporting Table 1 (line 3.15 Eurocontrol costs), Reporting Table 2A (lines 3.3 and 3.4), Reporting Table 3 (total adjustment relating to competent authorities and qualified entities (QEs) costs and total adjustment relating to Eurocontrol costs) and Reporting Table 2B (line 13.4).

As per the Regulation (EU) 391/2013, actual and determined Eurocontrol costs are foreseen to be part of the reporting tables. In the previous RP, these costs can be found in Reporting Table 1 (line 2.9 as part of the other state costs, Reporting Table 3A (line 1.1 Eurocontrol costs), Reporting Table 3B (under the item: Costs exempted from cost sharing) and Reporting Table 2 (line 4.4 "Costs exempt from cost sharing: amounts carried over to year n ").

For validating the unforeseen changes in costs of competent authorities, qualified entities and Eurocontrol, the NSAs should follow the following procedures:

1. Reconcile the amounts of the adjustments carried over with the data from the year that the adjustments originate (from current RP).
 - a. For the current RP, the adjustments for year n will be reflected in the unit cost of year $n+2$, therefore the formulas and values should be verified from Reporting Table 2B item "13.4 Differences in costs as per Art. 28(4) to (6)", Reporting Table 3 items "Total Adjustment relating to Eurocontrol costs (Art. 28(5))" and "Total adjustment relating to component authorities and QEs costs (Art. 28(5))" with Reporting Table 2A items "3.3 Competent authorities and qualified entities costs" and "3.4. Eurocontrol costs".
 - b. In case the values do not reconcile, NSA should verify whether any of the cells formulas is incorrect or was modified (for example referring to the correct cell but of the wrong sheet (e.g. of another of the Member State entities (ANSP(s), NSA, MET)).
2. Verify that the authorities and entities for which costs are included in the actual costs fulfil all the requirements set out in the Regulation.

This verification procedure is exactly the same as for the determined costs - please refer to Section A.2.4.2.2.

3. Verify the eligibility of actual costs included and related adjustments:

Eligibility of costs and adjustments:

- a. The changes were unforeseen by the ANSPs and outside their control.

- b. The actual costs of the competent authorities and qualified entities should be verified as per the same methodology as for the ANSP. As these entities have lower costs, often less variety in terms of costs by nature and provide less services than the ANSP, verification procedures could be lighter.
- c. Eurocontrol publishes annual accounts and relevant positive or negative balance of costs following the adoption of the Eurocontrol accounts by the Enlarged Commission.

If Eurocontrol is beneficiary of an EU grant, these funds are returned to Member States once the final report of the project has been approved by the Innovation & Networks Executive Agency (INEA). The EU grant received by Eurocontrol is also to be deducted from the unit rate at the benefit of airspace users. However, differently from EU grants where ANSPs are the beneficiaries and grants are deducted under other revenue as per Art. 25(3)(a), the value of EU grants paid to Eurocontrol are to be deducted within the scope of Art. 28(5)(2) by performing an adjustment of the Eurocontrol cost to be charged or deducted in the unit rate.

- 4. Verify that the carry-over mechanism was applied to the appropriate years in alignment with the regulatory framework and with the required approval and consultation.
 - a. The NSA should verify that a difference is reimbursed (or recovered) through a reduction (or increase) of the unit rate in year $n+2$ or in the following reference period.
 - b. In case the actual costs exceed the determined costs by not more than 5%, Member States may decide that the resulting difference is recovered from airspace users by the air navigation service provider or the Member State concerned, subject to the approval by the national supervisory authority of a detailed justification provided by the air navigation service provider in particular as regards the need to increase capacity and after consultation with airspace users' representatives.

B.2.4.2.3 Procedures for cost items referred to in Article 28(3) - Unforeseen changes in pension costs

Article 28(6) of Regulation (EU) 2019/317 sets the guidelines for sharing the risks and costs between the airspace users and the ANSPs for RP3. The pension costs and related adjustments can be identified in Reporting Table 1 item 1.1, Reporting Table 2A item 3.5 (Pension costs Art. 28(6)), Reporting Table 2B item 13.4 Differences in costs as per Art. 28(4) to (6): amounts carried over to year n (Art.25(2)(d) and Reporting Table 3 item "Total adjustment relating to pension costs (Art.28(6))".

In RP2, pension costs are included in staff costs (without visibility on the two components separately), which contained also gross remuneration, overtime payments, employer's contribution to social security schemes, other benefits. The prudent assumptions which are the basis of the pension costs calculations, shall be detailed in the Performance Plan. The adjustments from RP2 impacting RP3 linked to these costs can be found in the Reporting Table 3A item 3.7 Pension (and included in 3.1 Staff) and in Reporting Table 3B as part of the totals of item "Total costs exempt from cost sharing" and in Reporting Table 2 as part of item

4.4. For validating the unforeseen changes in pension costs the NSAs should follow these procedures:

1. Reconcile the amounts of the adjustments carried over with the data from the year that the adjustments originate (from previous and current RP).
 - a. For the current RP, the adjustments for year n will be reflected in the unit cost of year $n+2$ (or in the following reference period or in the following two reference periods), therefore the formulas and, or values should be verified from Reporting Table 2B item "13.4 Differences in costs as per Art. 28(4) to (6)", Reporting Table 3 item "Total adjustment relating to pension costs (Art. 28(6))" and to Reporting Table 2A items "3.5 Pension costs".
 - b. For the adjustments coming from the previous RP, see Section B.2.4.2 (2).
 - c. In case the values do not reconcile, NSA should verify whether any of the cells formulas is incorrect or was modified (for example referring to the correct cell but of the wrong sheet (e.g. of the Member State entities (ANSP(s), NSA, MET)).
2. Verify that the adjustments are eligible.
 - a. Please note that the actual pension costs verification procedures are described as part of the verification procedures for staff costs. Hence, they are not repeated here.
 - b. The changes in costs were unforeseen and outside of the ANSPs control. This means that the NSAs should validate if these changes are resulting from changes in the national legislation, changes in the pension accounting law, pension schemes or unforeseen financial market conditions. A close check on the actuarial reports and the Performance Plan for identifying and understanding the assumptions considered should be performed.
 - c. The assumptions related to the actuals were prepared based on the actuarial reports and the national legal requirements.
 - d. The actual costs claimed were reconciled with the supporting evidence (accounting records, invoices, banks statements of the proceeded payment, etc).
3. Verify that the carry-over mechanism was applied to the appropriate years in alignment with the regulatory framework.

The NSAs should verify that a difference is reimbursed (or recovered) through a reduction (or increase) of the unit rate in year $n+2$, in the following reference period or in the following two reference periods if the amounts to be recovered impact the unit rate in a disproportionate manner

B.2.4.2.4 Procedures for cost items referred to in Article 28(3) - Unforeseen changes in interest rates

Article 28(6) of Regulation (EU) 2019/317 sets the guidelines for sharing the risks and costs between the airspace users and the ANSPs for RP3. The average interest rate on debts, the related cost and the related adjustments can be identified in:

- Reporting Table 1 item 3.7 "Average interest on debts";

- Reporting Table 3 as part of the item “Total adjustment relating to interest on loans (Art. 28(6))”
- Reporting Table 2B item 13.4 “Differences in costs as per Art. 28(4) to (6): amounts carried over to year n (Art. 25(2)(d))”;
- Reporting Table 2A item 3.6 “Interest on loans (Art.28(6))”.

In RP2 the interest rates can be found in Reporting Table 1 item 3.7 as a percentage, which falls under the item “Cost of Capital %” (total amount of items: 3.5 - 3.7), in Reporting Table 3A item 3.8 as part of item 3.12 (Total costs exempted from cost sharing), in Reporting Table 3B as part of the item “Total costs exempted from cost sharing” and part of Reporting Table 2 as part of item 4.4 “Costs exempt from cost sharing: amounts carried over to year n ”.

For validating the unforeseen changes in interest rates, the NSAs should follow the following procedures:

1. Reconcile the amounts of the adjustments carried over with the data from the year that the adjustments originate (from previous and current RP).
 - a. For the current RP, the adjustments for year n will be reflected in the unit cost of year $n+2$ (or in the following reference period or in the following two reference periods), therefore the formulas /values should be verified from Reporting Table 2B item “13.4 Differences in costs as per Art. 28(4) to (6)”, Reporting Table 3 item “Difference in interest on loans” and to Reporting Table 2A items “3.6 Interest on loans (Art. 28(6))”.
 - b. For the adjustments coming from the previous RP, see Section B.2.4.2 (2).
 - c. In case the values do not reconcile, NSA should verify whether any of the cells formulas is incorrect or was modified (for example referring to the correct cell but of the wrong sheet (e.g. of the Member State entities (ANSP(s), NSA, MET)).

2. Verify that the adjustments are eligible.

The actual interest rate and cost verification procedures are described as part of the verification procedures for cost of capital. Hence, they are not repeated here.

3. Verify that the changes in costs were unforeseen and outside of the ANSPs control. This means that the NSAs should validate if these changes are resulting from changes in national economic situation or unforeseen financial market conditions.

A close check of the Performance Plan for identifying and understanding the assumptions considered should be performed.

4. Verify that the carry-over mechanism was applied to the appropriate years in alignment with the regulatory framework.

The NSAs should verify that a difference is reimbursed (or recovered) through a reduction (or increase) of the unit rate in year $n+2$, in the following reference period or in the following two reference periods if the amounts to be recovered impact the unit rate in a disproportionate manner.

B.2.4.2.5 Procedures for cost items referred to in Article 28(3) - Unforeseen changes in national taxation law or other unforeseeable new cost items

Article 28 of the Regulation (EU) 2019/317 and Article 14 of Regulation (EU) 391/2013 set the rules governing a cost risk sharing mechanism between the airspace users and ANSPs for RP3. These unforeseen changes can be found in the following reporting tables:

- Reporting Table 3 as part of the line “Total adjustment relating to interest on loans (Art. 28(6))”;
- Reporting Table 2B item 13.4 “Differences in costs as per Art. 28(4) to (6): amounts carried over to year n (Art. 25(2)(d))”;
- Reporting Table 2A item 3.7 “Changes in law (Art.28(6))”.

In RP2, the changes in national taxation law and other unforeseeable new cost items, can be found in Reporting Table 1 as part of item 3.9 “Total costs exempted from cost sharing”, in Reporting Table 3A item 3.9 and 3.10 as part of item 3.12 (Total costs exempted from cost sharing), in Reporting Table 3B as part of the line “Total costs exempted from cost sharing” and part of Reporting Table 2 as part of item 4.4 “Costs exempt from cost sharing: amounts carried over to year n”.

For testing the unforeseen changes in national taxation law or other unforeseeable new cost items, the NSAs should perform the following procedures:

1. Reconcile the amounts of the adjustments carried over with the data from the year that the adjustments originate (from previous and current RP).
 - a. For RP3: as per Art. 28(6) requires that unforeseen changes associated with the changes in laws from year n are settled through an increase or reduction of the unit rate in year n+2 (or in the following reference periods). Therefore the verification of the formulas is needed, linking Reporting Table 2B item 13.4, Reporting Table 3 items “Total adjustment relating to change in law (Art. 28(6))”, with Reporting Table 2A item 3.7.
 - b. For the current RP, the adjustments for year n will be reflected in the unit cost of year n+2 (or in the following reference period or in the following two reference periods), therefore the formulas /values should be verified from Reporting Table 2B item “13.4 Differences in costs as per Art. 28(4) to (6)”, Reporting Table 3 item “Costs relating to change in law” and to Reporting Table 2A items “3.7 Changes in law (Art. 28(6))”.
 - c. For the adjustments coming from the previous RP, see Section B.2.4.2 (2).
 - d. In case the values do not reconcile, NSA should verify whether any of the cells formulas is incorrect or was modified (for example referring to the correct cell but of the wrong sheet (e.g. of the Member State entities (ANSP(s), NSA, MET)).
2. Verify that the actual costs and adjustments are eligible
 - a. The changes in costs were unforeseen and outside of the ANSPs control. This means that the NSAs should validate if these changes are resulting from changes in national economic situation or unforeseen financial market conditions.

- b. The actual costs claimed were reconciled with the supporting evidence (tax declarations, bank statements of the paid taxes, accounting records of the amounts claimed, etc.).
3. Verify that the carry-over mechanism was applied to the appropriate years in alignment with the regulatory framework.

The NSAs should verify that a difference is reimbursed (or recovered) through a reduction (or increase) of the unit rate in year n+2, in the following reference period or in the following two reference periods if the amounts to be recovered impact the unit rate in a disproportionate manner.

B.2.4.3 Procedures for other revenues Art. 25(2)(i)

Article 2 of Regulation 391/2013 defines 'other revenue' as revenues obtained from public authorities, including the financial support from Union assistance programmes such as the Trans-European transport network (TEN-T), Connecting Europe Facility (CEF) and the Cohesion Fund, revenues obtained from commercial activities and/or, in the case of terminal unit rates, revenues obtained from contracts or agreements between air navigation service providers and airport operators.

Article 25 of Regulation (EU) 2019/317 states that for the calculation of the unit rates, the following revenues of air navigation service providers obtained in year n shall be deducted from the determined costs as 'other revenue':

- Public funds obtained from public authorities, including financial support from Union assistance programmes;
- Revenue obtained from commercial activities, where the Member State or Member States concerned have decided that those revenues are to be deducted;
- With regard to terminal air navigation services, revenue obtained from contracts or agreements concluded between air navigation service providers and airport operators, where the Member State or Member States concerned have decided that those revenues are to be deducted.

The revenues referred in above points need to be deducted from the determined costs as per specific requirements for each category. This is the reason why no specific procedure were defined at this level but that they were specified for each category in the next sections B.2.4.3.1 to B.2.4.3.4.

B.2.4.3.1 Procedures for other revenues Art.25(2)(i) - Financial support from Union assistance programmes

The difference between the Union assistance programme funds and the other public funds is that the former are required to be reported and monitored in Reporting Table 4 (Annex IX (3) of Regulation (EU) 2019/317) while it is optional for other public funding.

To verify the deduction of these revenues, NSA should apply the following procedures:

1. Reconcile the value of funded projects in Reporting Table 4 with the corresponding amounts (Total capital expenditure (CAPEX) for the project) in the investment section of the Annual Monitoring Report.

2. Reconcile the amounts granted with the amounts provided in the Grant Agreement.

The NSA should reconcile the amounts granted in Reporting Table 4 with the amounts allocated in the Grant Agreement.

These amounts should be updated in case of any amendments along the duration of the Grant Agreement.

3. Verify the actual amounts received, using also reports and tools provided by the PRB and the European Commission for cross-check of amounts received by the ANSP.

a. Depending on the source of funding of projects, different sources should be looked into. We refer to Section B.2.4.3 of other revenues for more information on this topic. There are several ways of doing so:

i. If the funding is coming directly from the SESAR Deployment Manager (SDM), a Power BI dashboard is available on a website from the EC (<https://webgate.ec.europa.eu/eusinglesky/>).

The information required for the verification is available in Tab: "Monitoring report funding versus SDM payments". This tool is based on the SDM bank payment statements. The detail available is by ANSP, not by project.

ii. If the funding is provided directly by INEA, the Financial Transparency System website (https://ec.europa.eu/budget/fts/index_en.htm) contains information on the funding provided by the Union budget - please refer to the other revenues section.

iii. In some cases EU grants support projects where multiple ANSPs are beneficiaries of the financial support as part of a single grant agreement. In these cases, the NSA shall verify grants paid and to be deducted into the Other Revenue only for those funds received by the ANSP under its supervision. If the grant agreement is not sufficiently clear about the amounts to be paid to each individual ANSP, the NSA has the possibility to request the above mentioned Power BI dashboard or query the INEA in order to verify that the grants overseen by the NSA were paid to the ANSP.

iv. Audited financial statements of the ANSPs.

IFRS standards require a split of the main types of revenues and income. For the ANSP applying the IFRS standards, the EU funding obtained could be reported on a distinct line of the P&L in the other operating income section. Additional information can also be found in the complementary information disclosed with the financial statements.

v. Accounting records - Verify that the booked amounts received reconcile with the amounts claimed.

vi. Bank statements - Verify that amounts on the bank statements reconcile with the amounts claimed by the ANSPs.

vii. If the above sources do not provide enough information, NSAs are recommended to ask for explanations and supporting documents from ANSPs.

An enquiry should be done by the NSAs to the ANSPs to know if any amendments or adjustments have been done after EU programme audits took place on the projects, which could alter the amounts that have been received or are to be received.

4. If any, verify the eligibility of the amounts for administrative costs.
 - a. The ANSP should demonstrate that the amount of costs reported as administrative costs were indeed incurred because of the administration of the funded projects.
 - b. A Member State may decide not to deduct from determined costs an amount related to the administrative costs incurred for the reporting on the funding agreement if these administrative costs are not included in the cost base for charges. In general, good practice project managements leads to administrative costs below 10% of the total granted amounts.
5. Verify the calculations and sums in Reporting Table 4.
 - a. Filling in Reporting Table 4 is required for funded projects and financial support from Union assistance programmes. The following verification procedures should be implemented:

The sum of amount granted across all charging zones should equal the total of the amounts granted as per the Grant Agreement (GA).

 - i. If all funds were received, the amounts granted (as per GA) for the charging zone should be equal to the sum of the split by year of actual amounts received (charging zone).
 - ii. The Amounts granted (as per GA) should be equal to the sum of the amounts retained in respect of administrative costs for the charging zone and of the total to be reimbursed for the charging zone.
 - iii. If all funds were distributed, the total to be reimbursed for the charging zone should be equal to the sum of the split by year of the amounts reimbursed to users.
6. Reconcile the amounts of the adjustments carried over were reconciled with the data from the year that the adjustments originate (from previous and current RP).
 - a. The data from the year that the adjustments originate are located for the current RP in Reporting Table 2A item 10.1 and for previous RP in Reporting Table 2 item 5.3.
 - b. In case the values do not reconcile, NSA should verify whether any of the cells formulas is incorrect or was modified (for example referring to the correct cell but of the wrong sheet (referring then to the funded projects costs of another of the Member State entities (ANSP(s), NSA, MET)).
7. Verify that the carry-over mechanism was applied to the appropriate years in alignment with the regulatory framework (no later than in year $n+2$ for OPEX and as per the depreciation schedule for the CAPEX parts of each funded project)²⁵.

²⁵ According to Regulation (EU) 2019/317, Article 25(3)

ANSPs should be asked to provide a detailed split of the grants received between OPEX and CAPEX. This is important because these grants will be reimbursed to users, (via the deduction on the unit rate) at different points in time. OPEX related funds will be reflected in year n+2, while CAPEX related funds will be taken in line with the depreciation schedule.

8. Reconcile the amounts reimbursed to users from Reporting Table 4 with the adjustments carried over in Reporting Table 3 and 2B.

This is to verify that the amounts reimbursed to users are properly taken into account in the calculation of the unit rates.

B.2.4.3.2 Procedures for other revenues Art.25(2)(i) - Other public funds obtained from public authorities

This section is related to other public funding than from Union assistance programmes. While these funds are treated similarly, the reporting requirements are lower.

While filling in Reporting Table 4 for the Union assistance programme funds is required, it also is allowed for other public funding (the Regulation does not state otherwise). It has the benefit to increase the transparency.

To verify the deduction of these revenues, NSA should apply the below procedures. They are very similar to the one described for the EU funding, with the exception that the reference to Reporting Table 4 was removed as not necessarily used for other public funding.

1. Reconcile the value of funded projects with the corresponding amounts (Total CAPEX for the project) in the investment section of the Annual Monitoring Report.
2. Reconcile the amounts granted with the amounts provided in the Grant Agreement

The NSA should reconcile the amounts granted with the amounts allocated in the Grant Agreement.

These amounts should be updated in case of any amendments along the period of the grant agreement.

3. Verify the actual amounts received.
 - a. The possible verification methods could differ Member State by Member State. Some may share this information publicly (e.g. on online portals) while others may not. Below are presented possible verification sources that should work across all Member States. NSA can also leverage local resources for the verification as long as the information is reliable.
 - i. Audited financial statements of the ANSPs.

IFRS standards require a split of the main types of revenues and income. For the ANSP applying the IFRS standards, the national funding obtained should be reported on a distinct line of the P&L in the other operating income section. Additional information can also be found in the complementary information disclosed with the financial statements.
 - ii. Accounting records - Verify that the booked amounts received reconcile with the amounts claimed.

- iii. Bank statements - Verify that amounts on the bank statements reconcile with the amounts claimed by the ANSPs.
 - iv. If the above sources do not provide enough information, NSAs are recommended to ask for explanations and supporting documents from ANSPs.
- 4. If any, verify the eligibility of the amounts for administrative costs.
 - a. The ANSP should demonstrate that the amount of costs reported as administrative costs were indeed incurred because of the administration of the funded projects.
 - b. A Member State may decide not to deduct from determined costs an amount related to the administrative costs incurred for the reporting on the funding agreement if these administrative costs are not included in the cost base for charges. In general, good practice project managements leads to administrative costs below 10% of the total granted amounts.
- 5. Verify the calculations of the amounts reimbursed.

While filling in Reporting Table 4 is required for common projects and financial support from Union assistance programmes, this is not the case for national funding. Nevertheless, the exact same procedures are required:

- a. The sum of amount granted across all charging zones should equal the total of the amounts granted as per the Grant Agreement.
 - b. If all funds were received, the amounts granted (as per GA) for the charging zone should be equal to the sum of the split by year of actual amounts received (charging zone).
 - c. The Amounts granted (as per GA) should be equal to the sum of the amounts retained in respect of administrative costs for the charging zone and of the total to be reimbursed for the charging zone.
 - d. If all funds were distributed, the total to be reimbursed for the charging zone should be equal to the sum of the split by year of the amounts reimbursed to users.
- 6. Reconcile the amounts of the adjustments carried over were reconciled with the data from the year that the adjustments originate (from previous and current RP).
 - a. The data from the year that the adjustments originate are located for the current RP in Reporting Table 2A item 10.2 and for previous RP in Reporting Table 2 item 5.4
 - b. In case the values do not reconcile, NSA should verify whether any of the cells formulas is incorrect or was modified (for example referring to the correct cell but of the wrong sheet (referring then to the funded projects costs of another of the Member State entities (ANSP(s), NSA, MET).
- 7. Verify the carry-over mechanism was applied to the appropriate years in alignment with the regulatory framework (no later than in year n+2 for OPEX and as per the depreciation schedule for the CAPEX).

ANSPs should be asked to provide a detailed split of the grants received between OPEX and capex. This is important because these grants will be reimbursed to users, (via the calculation of unit costs) at different points in time. OPEX related funds will be reflected in year n+2, while capex related funds will be taken in line with the depreciation schedule.

8. Reconcile the amounts reimbursed to users with the adjustments carried over in Reporting Table 3 and 2B.

This is to verify that the amounts reimbursed to users are properly taken into account in the calculation of the unit rates.

B.2.4.3.3 Procedures for other revenues Art.25(2)(i) - Revenue from commercial activities

For the NSA having revenues from other activities than the provision of ANS, these revenues should not be falling in scope of this article as per the requirement of separating the accounts. Only incidental revenues (if any) linked to the provision ANS are thus in the scope of this article and to be deducted in the calculation of the unit rates.

Article 25 of Regulation 2019/317 foresees that the revenue from commercial activities shall be deducted from the determined costs no later than in year n+2.

To verify the deduction of these revenues, NSA should apply the following procedures:

1. Verify the amounts related to the commercial revenues
 - a. The non-ANS related revenue (and costs) should not be included in the reporting tables as per the principle of separation of accounts. This deduction of other commercial revenue remains applicable if some "residual" commercial revenue were still included in the regulatory accounts (also if the related costs were included).
 - b. IFRS standards require a split of the main types of revenues. For the ANSP applying the IFRS standards, the commercial revenue should be reported on a distinct line of the P&L. Additional information can also be found in the complementary information disclosed with the financial statements. This additional information may disclose the split between the ANS and non-ANS revenue. If not, this split should be enquired by the NSA to the ANSP and verified.
 - c. Based on the above, the NSA should reconcile the revenue amount reported with the Financial Statements.
 - d. More details on IFRS 15 (Revenues from contract with customers) and revenue recognition are provided in the section of IFRS considerations in the Verification Programme.
2. Reconcile the amounts of the adjustments carried over with the data from the year the adjustments originate (from previous and current RP).
 - a. The data from the year that the adjustments originate are located for the current RP in Reporting Table 2A item 10.3 and for previous RP in Reporting Table 2 item 5.5.

- b. In case the values do not reconcile, NSA should verify whether any of the cells formulas is incorrect or was modified (for example referring to the correct cell but of the wrong sheet (referring then to another of the Member State entities (ANSP(s), NSA, MET) data.
3. Verify the carry-over mechanism was applied to the appropriate years in alignment with the regulatory framework.

The requirement from Regulation (EU) 2019/317 is that this revenue in year n is deducted from the cost base in the calculation of the unit rate no later than in year n+2.

4. Reconcile the amounts reimbursed to users with the adjustments carried over in Reporting Tables 3 and 2B.

This is to verify that the amounts reimbursed to users are properly taken into account in the calculation of the unit rates.

B.2.4.3.4 Procedures for other revenues Art.25(2)(i) - Revenue from contracts concluded between ANSPs and airport operators

Article 25 of Regulation (EU) 2019/317 foresees that the revenue from contracts concluded between ANSPs and airport operators shall be deducted from the determined costs no later than in year n+2.

The revenues from contract concluded between ANSPs and airport operators can be traced in Reporting Table 3 (section with the same line description), in Reporting Table 2A item 10.4 "Revenues from contracts with airport operators (Art. 25(3)(c))" and Reporting Table 2B as part of item 13.8 "Other revenues (Art. 25 (2)(i))".

To verify the deduction of these revenues, NSA should apply the following procedures:

1. Verify the amounts related to the revenues from contracts concluded between ANSPs and airport operators.
 - a. IFRS standards require a split of the main types of revenues. For the ANSP applying the IFRS standards, the commercial revenue should be reported on a distinct line of the P&L. Additional information can also be found in the complementary information disclosed with the financial statements. This additional information may disclose the split between the ANS and non-ANS revenue. If not, this split should be enquired by the NSA to the ANSP and verified.
 - b. The NSA should reconcile the revenue amount reported with the financial statements, accounting records and/or the contract terms.
 - c. IFRS standards require a split of the main types of revenues. For the ANSP applying the IFRS standards, the revenue from contracts concluded between ANSPs and airport operators may be included in the commercial revenue (depending on whether this is considered as part of the ANSP "regular activities"), so not being reported on a distinct line of the P&L. Additional information may be found in the complementary information disclosed with the financial statements. This additional information may disclose the split between the contract with the airport operator and the rest of the commercial activities

if the contract revenue is significative. If not, this split should be enquired by the NSA to the ANSP and verified.

- d. From an IFRS point of view, the revenues of contract with the airport operators may be grouped with the commercial revenue if it enters the scope of the ANSP "regular activities" definition. More details on IFRS 15 (Revenues from contract with customers) and revenue recognition are provided in the section of IFRS considerations in the Verification Programme.
2. Reconcile the amounts related to the adjustments carried over with the data from the year the adjustments originate (from previous and current RP).
 - a. The data from the year that the adjustments originate are located for the current RP in Reporting Table 2A item 10.4 and for previous RP in Reporting Table 2 item 5.6.
 - b. This is to verify that the amounts reimbursed to users are properly taken into account in the calculation of the unit rates.
 3. Verify the carry-over mechanism was applied to the appropriate years in alignment with the regulatory framework (no later than in year n+2).

The requirement from the Regulation (EU) 2019/317 is that this revenue in year n is deducted from the cost base in the calculation of the unit rate no later than in year n+2.

4. Reconcile the amounts reimbursed to users with the adjustments carried over in Reporting Tables 3 and 2B.

This is to verify that the amounts reimbursed to users are properly taken into account in the calculation of the unit rates.

B.2.4.4 Common projects

The costs related to the common projects are included in the new and existing investments of ANSP while the related grants obtained are included in the revenues received from Union assistance programmes. Where the actual costs of new and existing investments exceed the corresponding determined costs over a reference period, national supervisory authorities should be responsible for verifying the detailed justifications provided by air navigation service providers and for authorising any subsequent recovery of additional costs from airspace users. Any material difference in those costs should not be charged to users, unless the national supervisory authority has established that the additional costs were exclusively due to new and existing investments required for operational changes consistent with the implementation of the European ATM Master Plan and in particular SESAR common projects.

It is the responsibility of the NSAs to identify which investments are common projects and to ensure that the amount of costs funded by the EU programmes is not charged to users via the calculated unit rate in order to avoid double funding.

For the calculation of unit rates, the other revenues have to be deducted from the determined costs as per the paragraphs 2 and 3 of Article 25, Regulation (EU) 2019/317.

The public funds covering staff costs and other operating costs shall be deducted from the determined costs no later than in year n+2. Public funds covering depreciation costs shall be deducted from the determined costs in accordance with the depreciation schedule of the financed asset (duration and annuity). A Member State may decide not to deduct from determined costs an amount related to the administrative costs incurred for the reporting on the funding agreement if these administrative costs are not included in the cost base for charges. Equally, a Member State may decide not to deduct from determined costs public funds received to cover costs not known at the time of drafting the Performance Plan and therefore not included in the cost base for charges. Airspace users shall not be charged for the costs covered by public funds.

The NSA is responsible to check the compliance with the above requirements. The following procedures are recommended to this end:

2. Verify that all common projects from the Performance Plan were included in the investment costs and in Reporting Table 4.
 - a. The Performance Plan, investment section details the key investments and identifies the common projects. This verification is also performed via the reconciliation in next point.

Would a project not have been implemented, the NSA should enquire a clear justification for the cause or reason from the ANSP.
 - b. NSA should verify that Reporting Table 4 also includes common projects not being funded in case they did not meet the requirements.
3. Verify the eligibility of actual costs of common projects by:
 - a. Reconciling the amount in Reporting Table 1 item "3.9 Common projects" with the detail of the investments amounts presented in the Annual Monitoring Report of the respective RP, under investments.

The table reflects the total costs for new and existing investments (i.e. depreciation, cost of capital and cost of leasing). Please refer to Section B.2.4.2.1 of new and existing investments for more details.
 - b. Reconciling the amount in the Reporting Table, 1 item "3.9 Common projects", with the detail of the 1.3 depreciation costs, 1.4 cost of capital and their cost of leasing (if any) included in 1.2 Other operating costs (covered under the verification procedures required for the new and existing investments if those were already implemented).
4. Reconcile the amounts of the adjustments carried over with the data from the year the adjustments originate (from previous and current RP).

The data from the year that the adjustments originate are located for the current RP in Reporting Table 2A items 3.1 (new and existing investments) and 10.1 (Union assistance programmes), and for previous RP in Reporting Table 2 item 5.3.

In case the values do not reconcile, NSA should verify whether any of the cells formulas is incorrect or was modified (for example referring to the correct cell but of the wrong sheet (e.g. of another of the Member State entities (ANSP(s), NSA, MET))).

While the above procedures are very close to the ones related to the new and existing investments, the ones below are exactly the same as for the revenues from Union assistance

programmes. Please refer to the related Section (B.2.4.3.1) for more details on the proposed verification procedures.

5. Reconcile the value of funded projects in Reporting Table 4 with the corresponding amounts (total CAPEX for the project) in the investment section of the Annual Monitoring Report.
6. Verify the amounts granted.
7. Verify the actual amounts received, using also reports and tools provided by the PRB and the European Commission for cross-check of amounts received by the ANSP.
8. If any, verify the eligibility of the amounts for administrative costs.
9. Verify the Reporting Table 4 calculations and sums for each project.
10. Check that the carry-over mechanism was applied to the appropriate years in alignment with the regulatory framework (no later than in year n+2 for OPEX and as per the depreciation schedule for the CAPEX).
11. Reconcile the amounts reimbursed to users from Reporting Table 4 with the adjustments carried over in Reporting Tables 3 and 2B.

B.3 Conclusion Phase

B.3.1 Summarise draft findings and share them with the service provider

At the end of the fieldwork, the NSAs have to prepare a document which will explain the work performed and the results from the tested procedures. NSAs will present the findings identified in a draft verification report. It aims to introduce the respective findings identified and provide to ANSPs the opportunity to express their comments accordingly.

Another importance of this document is that it will increase the communication flow between the NSAs and ANSPs concerning the accuracy of the costs declared. It will contribute to better cost reports in the following years from the part of ANSPs but also NSAs will better understand how to treat specific findings in the future.

The findings to be presented in this document need to be introduced as per the Draft/Final Report template in Tool 4.

The Draft Report should display all cases that have been marked as an “E” in the Verification Programme.

While preparing the draft findings, referring to Tool 4, NSAs should:

1. Write the number of findings which are being listed in the draft report.
The NSA should list all the exceptions identified and number them. This will help the NSAs to better monitor and keep track of the ANSPs performance in the future.
2. Write a brief caption for the finding being reported.
It is good practice to separate the findings in order to increase the transparency of the information and make it easier for the ANSPs to follow up.
3. Introduce the legal framework breached by the ANSPs which triggered the finding.

This will assist not only ANSPs by introducing them to the right way of calculating the costs in the future, but also the NSAs to categorise and highlight where the problem stands. Once the ANSPs will come back with their replies, comments or additional evidence to be reviewed, it will be easier for the NSAs to quickly check if the new evidences delivered will affect the identified finding.

4. Identify clearly the actions to be taken by the ANSP, the respective corrective actions or penalties imposed to the ANSP and the relevant deadline for implementing the corrective actions.

The Verification Draft Report (and later the Verification Final Report, when the timeline for obtaining the official comments from the ANSP is passed) is a tool not only to monitor and reflect the findings of a certain point in time, but also to impose changes and improvements in the calculation of the unit cost which impact the users of the ASN.

Based on the EU legal framework²⁶ the NSAs have the right tools in hand to impose changes and creativeness from the ANSPs through sanctions for the regulation infringements. Therefore, it is of a high importance to make a proper use of these tools when verifying the costs declared by the ANSPs. Article 9 of Regulation (EU) 549/2004 clearly states that *"Member States shall lay down sanctions...shall be effective, proportional and dissuasive"*.

B.3.2 Finalise Verification Report

After delivering to ANSPs the draft verification report, the ANSPs will have two calendar weeks to provide their comments and, or the new supporting evidences for the findings listed in the draft report. After this period is finished, the NSAs need to assess whether the comments and the new evidences obtained during this period are a sufficient relevant and reliable response for withdrawing the findings or keeping them in the final report.

After auditing the new files received (if any), NSAs should prepare within a calendar week the final verification report, which will contain the final findings after reviewing the mentioned files.

While preparing the final verification report, the NSAs should reflect the responses of the ANSPs into the final report. There will be three cases:

3. The ANSP provides comments and, or new evidences which support the draft findings, and all the findings are withdrawn.

In this case the NSA should issue a clean report by confirming all the procedures. In an annex of the report, the NSA includes its own comments after the evidence received, but also the reply of the ANSP with regards to each withdrawn finding.

4. The ANSP provides comments and, or new evidences and only a part of the findings are withdrawn.

In this case, the NSA waves from the report those findings for which the evidence received is sufficient, reliable and relevant for assessing the procedure as

²⁶ Regulation (EU) 549/2004 Article 9 "Sanctions", Regulation (EU) 550/2004 and Regulation (EC) No 1070/2009 Article 15.

confirmed. In an annex of the report, the NSA includes its own comments to the evidence received and the reply of the ANSP.

5. The ANSP does not reply.

In this case, the NSA will issue the final report and no changes will be applied to the factual findings. The NSA will document in the annex that no reply was received from the ANSP within the communicated timeframe of two calendar weeks.

The final report will then be delivered to the respective ANSP. No further comments or evidence are allowed to be given by the ANSPs beyond this point, as the verification report would then be final.

When compiling the Verification Final Report, the NSAs should use the same Tool 4 which was used for the Verification Draft Report mentioned in Section B.3.1. In addition to what is mentioned in B.3.1, the Final Report will contain:

1. ANSP Comments

The NSA will quote or summarise (depending on the length and the relevance of the comments provided) the reply received within the 2 calendar weeks from ANSP.

2. NSA Final Comments

After evaluating the feedback from the ANSP, their official response and the additional materials provided from them for each, the NSAs should conclude on the final comments and present them in the final report, as explained previously in the third paragraph of this section.

B.3.3 Follow up on the implementation of findings

After issuing the final verification report, a next step for NSAs to follow, will be to keep track of the final findings and follow them up in the next verification missions if they were properly implemented.

Therefore, a database with the findings should be filled in. This database will show in details all the findings identified, their respective level (3/2/1), the respective cost category, the raised recommendations by the NSA, the sanctions applied, the foreseen date of the implementation and their status of implementation from the ANSPs. This database should be fed continuously with information after each verification process.

Following up on the implementation of the previous verification process findings is part of the verification process itself.

Keeping these records organised and continuously updated in one database, will help the NSAs to trace back what was identified and monitor the progress of the ANSPs accordingly. This monitoring is in accordance with Article 7.7 of Regulation (EU) No 550/2004, and will also help to answer any queries that the European Commission might have during their monitoring process.

In the next year's verification process, additionally to validation of the declared costs of the year, the NSAs will have to validate and check the implementation status of the previous year findings.