

# Guide to Separation of Service Provision and Regulation

**Part One**

- 1\_ Introduction\_p3**
- 2\_ The Concept of Sovereignty\_p3**
- 3\_ Definitions, Characteristics and Benefits of Types of Separation\_p5**
- 4\_ Regulation and Oversight: Definition and Forms\_p5**
  - 4.1\_ Safety Regulation\_p5
  - 4.2\_ Operational Regulation\_p5
  - 4.3\_ Economic Regulation\_p5
- 5\_ Principles of Separation\_p8**
  - 5.1\_ Defined Separation Between Regulatory and Service Provision Functions\_p8
  - 5.2\_ Clearly Defined Objectives for Service Provider\_p8
  - 5.3\_ Clear Definition and Understanding of Roles and Responsibilities\_p8
  - 5.4\_ Governance Structures\_p9
  - 5.5\_ Clearly Defined Coordination Processes between Regulator and Service Provider\_p9
  - 5.6\_ Separation of Budgets and Budgetary Freedom for Service Provider\_p9
  - 5.7\_ Empowerment of Service Provider Management\_p9
  - 5.8\_ Accountability of Management\_p10
- 6\_ Key Elements of the Separation Journey of States and Air Navigation Services Providers\_p10**
  - 6.1\_ Step 1 Planning and Deciding the End of Self-Regulation\_p11
  - 6.2\_ Step 2 Planning and Implementing Separation\_p12
    - 6.2.1\_Functional Separation\_p12
    - 6.2.2\_Organisational Separation\_p13
  - 6.3\_System efficiencies: Horizontal and vertical cooperation\_p14
- Appendix I\_ Summary of Survey\_p15**
- Appendix II\_ Overview Stakeholder Benefits\_p31**
- Appendix III\_ Practice Example of a CANSO Member: Planning and Implementing Separation\_p35**

**Part Two**

- 1\_ Planning Separation\_p35**
  - 1.1\_Develop Strategy (Clear Vision, Mission, Objectives) for Making the Change\_p35
  - 1.2\_Choosing the Model of Separation\_p35
  - 1.3\_Driving Forces Behind Separation\_p35 (Privatisation)
  - 1.4\_Separation Options for States and their Pros and Cons\_p36
    - 1.4.1\_Government Ownership\_p36
    - 1.4.2\_Private Sector Minority Participation in Equity\_p36
    - 1.4.3\_Private Sector Ownership and Control\_p36
  - 1.5\_Application of Options\_p37
  - 1.6\_Legal and Regulatory Aspects\_p38
  - 1.7\_Specific Issues Related to ANS Economics and Management\_p39
  - 1.8\_Risk to States in Privatisation\_p39
  - 1.9\_Reorganisation of ANS Structure\_p39
- 2\_ Implementing Separation\_p40**
  - 2.1\_Developing an Action Plan\_p40
  - 2.2\_Change Management\_p41
  - 2.3\_Key Factors to Successful Implementation\_p43
  - 2.4\_ ANS Performance\_p45
  - 2.5\_Develop Structure for Oversight, Steering, and Execution of Separation Project\_p46
    - 2.5.1\_Supervisory Committee\_p46
    - 2.5.2\_Executive Committee\_p46
    - 2.5.3\_The Transformation Office\_p46
- 3\_ Assistance of Consultants\_p47**
- 4\_ Conclusion\_p47**

## Guide to Separation of Service Provision & Regulation

### Part One

#### 1 Introduction

CANSOs Vision Wheel (see below) describes the main areas of change that need to be addressed to achieve Seamless ANS. This holistic Transformation Process is to be seen as a “journey” with Air Navigation Service Providers (ANSPs) and States setting out from different points of departure, so to speak. Taking this diversity of our industry into account, the “travel plan” for this journey rests on the principles “one size does not fit all” and “think global, act regional”.

The individual areas of the Vision Wheel are addressed by CANSOs various global and regional initiatives and programmes under the coordination of CANSO HQ and CANSOs regional offices.

This document focuses on institutional change and takes a high level look at ‘separation between regulation, oversight and service provision’. If providers of air navigation services will be empowered by their States to concentrate on the “business oriented management of the service function” and the delivery of safe, environmentally sustainable, efficient, cost effective and seamless services, they will be in a better position to respond to the different needs of their stakeholders<sup>1</sup>, in particular their customers. Further,

this empowerment will enable them to employ their choice of vehicles to improve their performance, e.g. enter in agreements<sup>2</sup> with other ANSPs and further industry partners to create regional efficiencies. Figure 2 (see page 4) shows air navigation service provision as an element of the aviation value chain, others being the services rendered by airlines, airports, manufacturers and further industry partners.

The content of this Document takes due consideration of the Chicago Convention, ICAO recommendations and existing SES Regulation while building on existing CANSO global policies such as “Airspace Sovereignty”.

#### 2 The Concept of Sovereignty

“Sovereignty” is a fundamental principle of international law. However, the term is very often used in a political sense, with different notions and interpretations depending on context and intention. The notion of sovereignty is dynamic and evolving with the development of the global environment.<sup>3</sup>

In Article 1 of the Chicago Convention “The contracting States recognise that every State has



Figure 1: Global Vision

<sup>1</sup> Stakeholders – Customers, Staff, States, Public, Airports

<sup>2</sup> Horizontal and vertical Co-operations

<sup>3</sup> CANSO Position Paper: Demystifying Sovereignty

complete and exclusive sovereignty over the airspace above its territory.”

Sovereignty refers to the ownership of airspace and to the exclusive competence of States to exercise their legislative, administrative and judicial powers within their national airspace. National airspace is defined as over land and over the high seas.<sup>4</sup>

But States are not obliged to provide these air navigation services within their “own”

airspace (that is air navigation services over their own territory). Article 28 of the Convention only prescribes that, when and where States choose to provide facilities and services to support international air navigation, these facilities and services must comply with the ICAO Standards and Recommended Practices (SARPS).

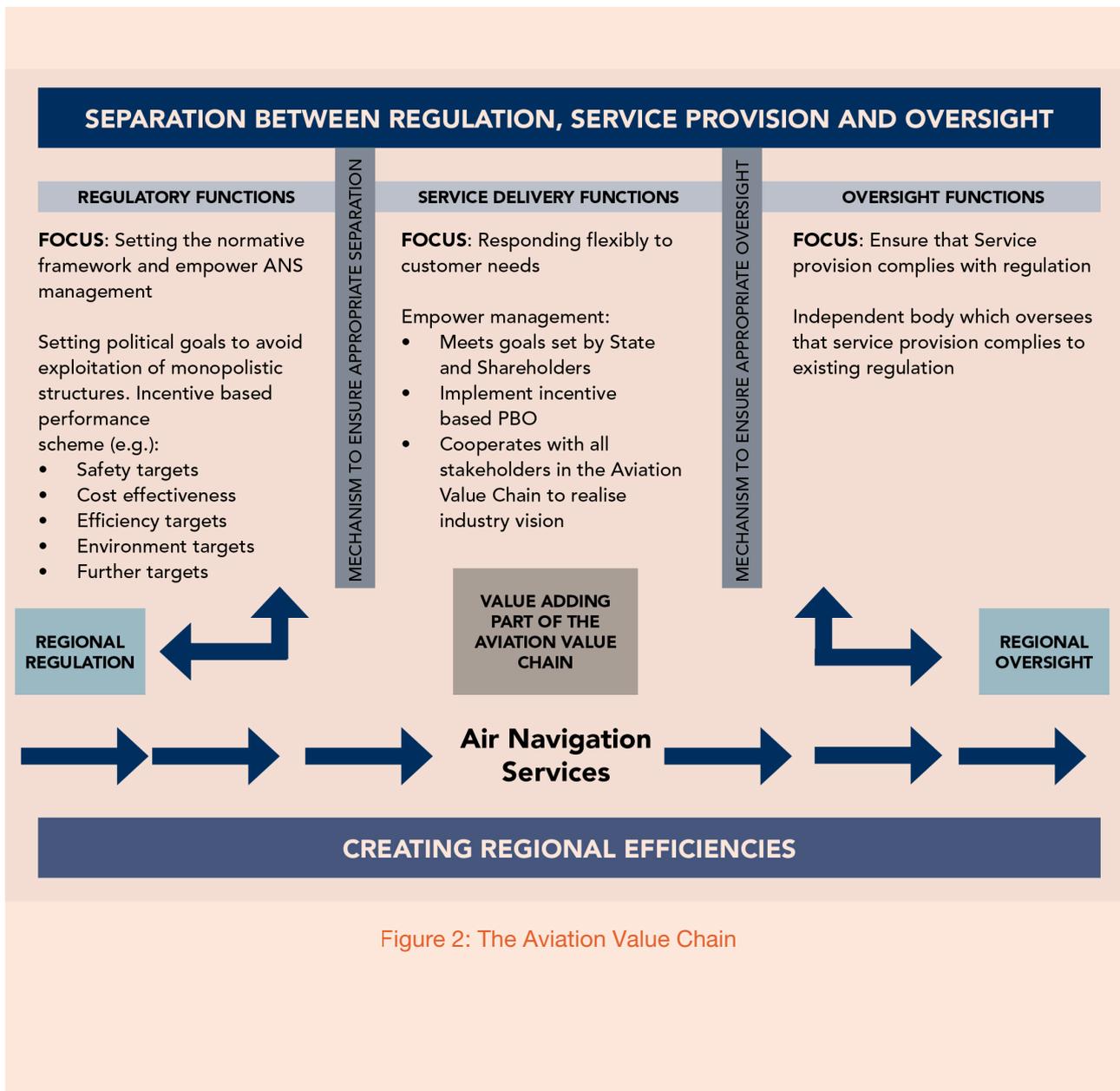


Figure 2: The Aviation Value Chain

Following this rationale, the table below provides a rough overview of the separation of functions.

### 3 Definitions, Characteristics and Benefits of Types of Separation

Figure 4 (see page 6) looks at two basic types of separation, the functional separation and the organisational separation. The Annex contains an overview of stakeholders, their main responsibilities, interests and benefits.

### 4 Regulation and Oversight: Definition and Forms

Based on the principles of separation, roles and responsibilities have to be clearly defined, understood and established.

#### 4.1\_Safety Regulation

Safety Regulation and Oversight can comprise the following tasks (see figure 5, page 7).

#### 4.2\_Operational Regulation

Operational regulation and oversight can comprise the following tasks (see figure 6, page 7).

#### 4.3\_Economic Regulation

In absence of competition, economic regulation prohibits the creation of monopolistic profits, negligence of investment in infrastructure and reduction of safety standards. Economic Regulation and Oversight can comprise the following tasks (see figure 7, page 7).

Separation between Regulation, Service Provision and Oversight			
Regulatory Function		Service Delivery Function	Oversight Function
Focus: Setting the normative framework and empower ANS management.	Mechanism to ensure appropriate separation	Focus: Responding flexibly to customer needs.	Focus: Ensure that service provision complies with regulation.
Setting political goals to avoid exploitation of monopolistic structures Incentive based performance scheme: <ul style="list-style-type: none"> <li>— Safety targets</li> <li>— Cost effectiveness</li> <li>— Efficiency targets</li> <li>— Environment targets</li> <li>— Further targets</li> </ul>		Empower management: <ul style="list-style-type: none"> <li>— Meets goals set by State and shareholders</li> <li>— Implement incentive based PBO</li> <li>— Cooperates with all stakeholders in the Aviation Value Chain to realise industry vision</li> </ul>	Mechanism to ensure appropriate oversight  Independent body which oversees that that service provision complies with existing regulation

Figure 3

Figure 4

Type	Functional Separation	Organisational Separation
Definition <sup>5</sup>	<p>Is defined as where the <b>function</b> is allocated to <b>different units of the same entity</b>, each unit acting independently from the other. Independence is promoted by ensuring that the functions are managed separately and by applying appropriate control mechanisms.</p>	<p>Is also known as <b>structural separation</b>. An entity is defined as being organisationally or structurally separated when it is <b>legally and financially independent</b> and when the appointed management has the powers to take autonomous decisions and bears the <b>legal accountability</b> for these decisions.</p>
Characteristics	<ul style="list-style-type: none"> <li>– State creates a separate unit with its own budget and control over personnel</li> <li>– Clear separation between the different functions: regulation, service provision, oversight</li> <li>– Governance Structures:               <ul style="list-style-type: none"> <li>– Clear definition of roles and allocation of responsibility.</li> <li>– Clear reporting and controlling mechanism.</li> </ul> </li> <li>– Incentive based performance framework with clearly defined targets (Safety, Efficiency, Capacity, etc.) that are suited to measure performance results and improvements</li> <li>– Independent safety regulation with clearly defined target framework and controlling mechanism</li> <li>– Establishes mechanism to ensure that regulatory and oversight functions can be performed at all times (availability of expertise)</li> <li>– Head of ANS unit is responsible for achieving targets, is given independent budget and control over the unit's personnel (accountability)</li> </ul>	<p>Characteristics of functional separation, plus:</p> <ul style="list-style-type: none"> <li>– State delegates the provision of the service to a legally and financially independent entity under private law               <ul style="list-style-type: none"> <li>– State founds a subsidiary in which it holds either 100% or fewer shares</li> <li>– State signs agreements with independent organisation to perform the service. State does not hold any shares in this entity (contracting out)</li> </ul> </li> <li>– Clear separation between the different functions: regulation, service provision, oversight</li> <li>– Changing roles of State as regulator, shareholder/owner, supervisor, contract partner</li> <li>– Management empowered to enter in international contracts, etc.</li> </ul>
Benefits	<ul style="list-style-type: none"> <li>– States focuses on his role as regulator</li> <li>– Clarifies the roles of the State (ownership of airspace, regulation, supervision)</li> <li>– Improves safety due to independent and transparent oversight</li> <li>– Reduces tax payer's burden by creation of separate budget</li> </ul>	<p>All the benefits of Functional Separation, plus:</p> <ul style="list-style-type: none"> <li>– Reduces financial risks of State (through insurance)</li> <li>– State delegates the provision of the service and can concentrate on the role of regulator (responsibility for airspace remains with the State)</li> <li>– Additional reduction of tax payers' burden by removing ANS - cost out of the public budget (civil servants, infrastructure, pensions, etc.)</li> <li>– Use of vertical cooperation models to achieve regional synergies (e.g. cooperation with other players of the aviation market)</li> <li>– Provides the possibility to open the ANS market (e.g. TWR market) to create more efficient service provision</li> </ul>

<sup>5</sup> Following various definitions used by e.g. Eurocontrol and CANSO members, we agreed on the following definitions.

Figure 5

	Regulation	Oversight
Safety	<p>Rule-making</p> <p>Enforcing rules</p>	<p>Safety oversight including:</p> <ul style="list-style-type: none"> <li>– issuing certificates for organisations and/or persons</li> <li>– approval of changes to services, or to airspace, or to systems and/or components used, or any other conditions covered by such certificates; renewal of such certificates</li> </ul> <p><b>Europe</b></p> <p>Where applicable, under regional arrangements, peer reviews among NSAs or standardisation by a central regional authority</p> <p>Carrying out safety reviews, developing and implementing State safety plans, including under a State safety programme, or any equivalent arrangement.</p>

Figure 6

	Regulation	Oversight
Operational	<p>Rule-making, including:</p> <ul style="list-style-type: none"> <li>– obligations imposed on manufacturers of systems and/or components for commercialising them, or for ANS providers for putting them into service</li> <li>– setting implementation dates and conditions for ANSPs and users or other stakeholders and, where appropriate, exemptions</li> </ul>	<p>Oversight of organisations subject to such rules:</p> <ul style="list-style-type: none"> <li>– where applicable, under regional arrangements, peer reviews among NSAs or standardisation by a central regional authority</li> <li>– carrying out safety reviews, developing and implementing safety action plans, including under a State safety programme, or any equivalent arrangement.</li> </ul>

Figure 7

	Regulation	Oversight
Economic	<p>Rule-making on ATS providers, including:</p> <ul style="list-style-type: none"> <li>– charging principles</li> <li>– consultation of stakeholders</li> <li>– economic information made available to the public and/or to the NSAs and</li> <li>– where appropriate, performance schemes</li> </ul> <p>Approval of yearly unit rates</p> <p>Where appropriate, taking part in a regional performance scheme</p>	<p>Oversight of the organisations, including:</p> <ul style="list-style-type: none"> <li>– ensuring users consultation</li> <li>– approval of charging schemes – where incentive schemes / multi-year schemes apply. This may also cover performance objectives and some related economic incentives for the ANSP</li> </ul>

## 5 Principles of Separation

The purpose of this section is to describe the key attributes necessary for successful separation of the service provision function; whether one plans for structural separation, or if one aims for function separation. Methods for separation and final design of the new organisation may vary, but many of the basic principals are consistent for all methods.

### 5.1\_Defined Separation Between Regulatory and Service Provision Functions

The first step in the separation process is to determine the separation model that will be used to divide the functions of the service provision organisation from the regulatory organisation. As noted in Section 3 of this document, separation can range from “functional” separation to “organisation” separation. Functional separation keeps both the regulatory unit and the service provision unit within the same government entity. Organisation separation indicates that the entities are legally separated.

There are several organisational and legal methods within the above categories for designing a separated service provision function. Some of the methods are discussed in Section 6 and 7. However, all solutions strive to separate accountability, performance, resources, and responsibility to ensure that regulatory functions and service provision are no longer intermingled within a single organisation.

Essential characteristics of a separated function include:

- Separate lines of accountability between regulation and service provision
- Different lines of management and operational authority
- Individual control mechanisms within each body

In addition, the following characteristics are also possible:

- Separated funding mechanisms
- Divided resource allocation
- Non-governmental insurance backing
- Removal of service provision budget from public funds
- Shareholder membership of service provision body

### 5.2\_Clearly Defined Objectives for Service Provider

The first step in the separation journey is to define the objectives for the service provider. This will synthesise the reason for separating the functions and will help determine the model to be followed. For example, if cost reduction is a major goal of the separation initiative, it may be preferable to drive towards a business like service. Likewise, if the government desires to remove the service provision funding from the government budget line, then a structure with a non-government funding source makes the most sense. If the primary objective is improve safety by removing the conflict between management control of service and regulation; then functional separation may be sufficient.

Clearly defined objectives are not only needed for determining the model for separation, but for defining success in the new organisation. Objectives must be openly stated and should have clearly published goals and performance measures attached. The transition period will undoubtedly create turmoil, and it is only through objective measurement of results to pre-agreed goals that one can fairly determine if the separated organisation is operating properly and achieving the purpose set out in the beginning.

### 5.3\_Clear Definition and Understanding of Roles and Responsibilities

Practical experience dictates that significant change in organisational structure (for any type of business or government body) requires a great deal of attention to new roles and responsibilities. Organisation change is difficult for staff members and stakeholders alike and typically creates short-term confusion as roles change and previous lines

of communication are broken. Proper planning is required to prevent gaps in responsibility or duplicative claims of authority.

Roles and responsibilities must be defined, published, and agreed prior to beginning organisational changes. The changes should be fully transparent to employees, management, customers, stakeholders, and owners.

It is worth noting that overall responsibility for service provision results will always remain with the state organisation. It is the management of the operation that becomes delegated. Publication of the new roles and responsibilities will ensure that the Ministry of Transportation is still in charge at the highest level, while helping others understand distinct roles at the lower levels. Likewise, the regulatory function will be as important as ever after the separation occurs. In fact, a well-designed separation model will significantly strengthen the power of the regulatory body. After all, a principal tenet of separation is to increase safety by preventing undue influence of the operational body on the regulatory system.

#### 5.4\_Governance Structures

This is a different function from State oversight; which is provided outside the service provision organisation. The service provider body should have its own management board that is responsible for overseeing the health of the organisation, ensuring proper service delivery, and for approving investment decisions. In an organisationally separated body, the management board typically consists of the shareholders. Because the functionally-separated organisation does not have shareholders, the management board is contained within the body of the organisation. However, this body enables the service provision organisation to operate with the governance necessary to control the entity.

#### 5.5\_Clearly Defined Coordination Processes between Regulator and Service Provider

Even though the service provision functions will be separated from the regulator, there is still an important relationship between the organisations. The objective of service provision separation is not

to terminate the dialog and interactions of regulatory members from service providers. The objective is to create independence with the service provider. Service provision operations, procedures, and infrastructure upgrades will still require approval and oversight from the regulatory body. Therefore it remains critical to define the relationship of the two parties and develop a clear coordination process.

#### 5.6\_Separation of Budgets and Budgetary Freedom for Service Provider

Irrespective of whether the service provision is functionally separated or organisationally separated, the service provision budget must be fully distinct. The service provision organisation should have separate accounting mechanisms, separate funding streams (even if funding come from the State), an independent investment review process, and a staff that resides over acquisition processes. Without this level of financial independence, it's not possible to claim that the service provision is fully separated from the other sections of the state organisation. Even when functionally separated, it's possible, and desirable, to operate the service provision organisation as it's own business entity. This is true even if the service provision organisation continues to receive money through government budget mechanisms.

#### 5.7\_Empowerment of Service Provider Management

Empowerment of the service provider management team can vary significantly depending on the model selected for separation. The level of empowerment should be synchronised to the objectives defined at the beginning of the process. Depending on those objectives, and the degree of separation desired, empowerment may include the following:

- Sign contracts
- Set salaries and compensation packages
- Join alliances
- Conduct union negotiations
- Compete for non-core services
- Provide core services in other regions
- Capitalise infrastructure improvements

### 5.8\_Accountability of Management

In order to have the state government, public, and other stakeholders accept the concept of service provision separation, they must believe the management team for the new service provision organisation is truly accountable for results. In particular, this means management must be accountable for safety results. Otherwise, the community will not trust the service provision team enough to support the separation process.

### 6 Key Elements of the Separation Journey of States and Air Navigation Services Providers

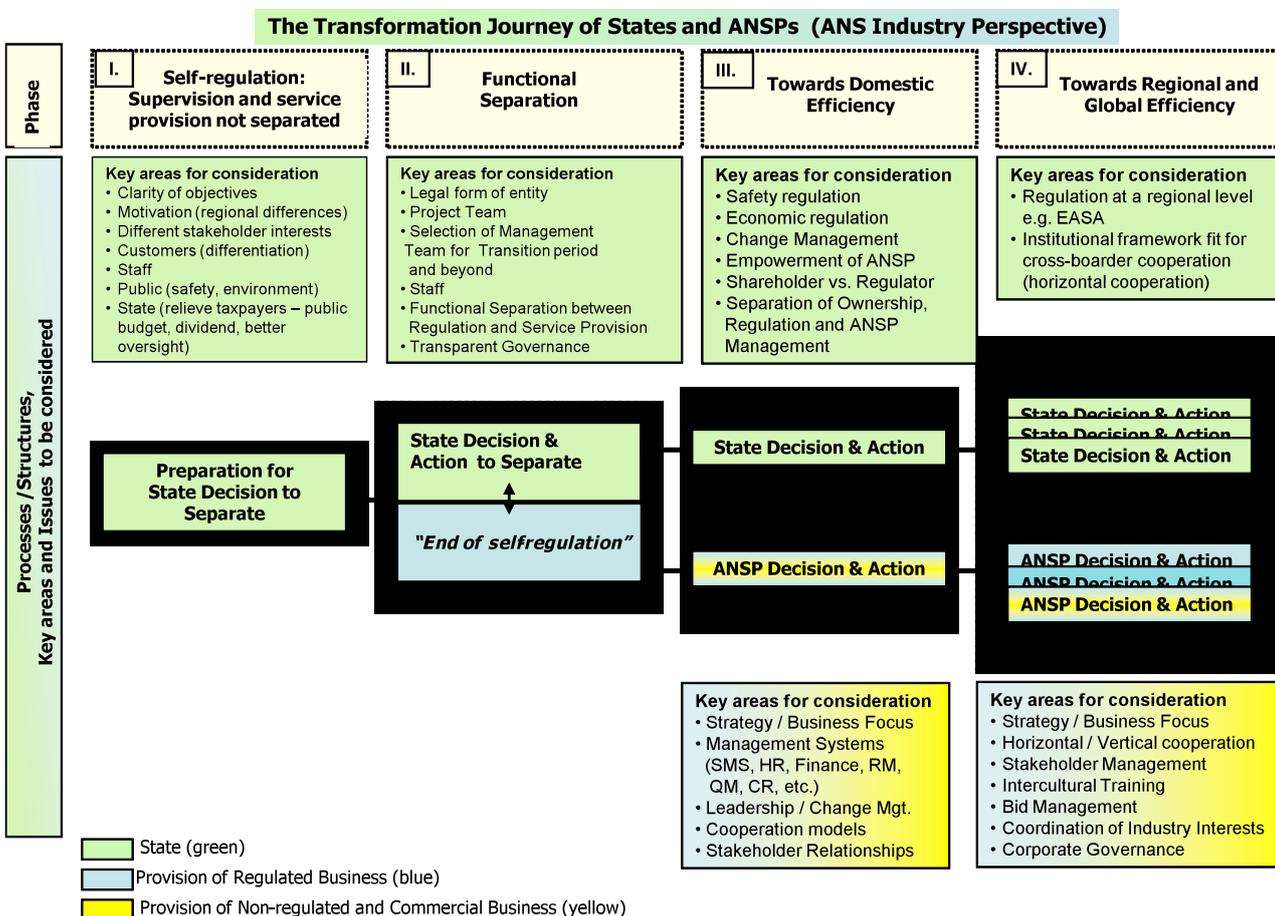
Separation of regulation and service provision has to be initiated by the State. Once those functions are separated, the States and the

provider of the service share the responsibility for an overall functioning ATM System – each party within their clearly defined area.

In the CANSO vision, the ongoing further development to create domestic, regional and global efficiencies is compared to a ‘journey’ – during which States and ANSPs will remain constant ‘travel companions’. Therefore, it is crucial that the relationship between those two parties is built on a solid basis of mutual trust and the common will to work together for the benefit of the ATM industry.

Below graph gives a brief overview of the ‘Transformation Journey’ from an ANS perspective. The main elements, key areas, process steps and decisions will be highlighted for each of the phases.

Figure 8 The Transformation Journey of States and ANSPs



### 6.1\_Step 1: Planning and Deciding the End of Self-Regulation

This phase is initiated by the State's decision to separate the regulatory and service provision functions. Drivers can be to:

- follow the ICAO recommendation to implement proper separation between the regulatory and service provision function
- to meet legal requirements (e.g. SES regulation)

As indicated in Figure 8 (see page 10), the phase preparing for the end of the so-called 'self-regulation' consists of a number of basic but crucial decisions and milestones. We choose to call them 'basic but crucial' as these decisions determine by and large the long-term institutional framework and governance structure of the 'Air Navigation Provider'

During this phase the key areas for consideration are:

#### Vision, Objectives, Strategy

- The 'State' has to have a clear vision and measurable objectives. All further decision such as choosing the Management Team, the legal framework, the scope of activities of the ANSP, financial framework – just to name a few – are means to achieve the vision and the defined short-term and long-term objectives.
- In order to be able to monitor if progress is as desired it is helpful to define the 'long-term vision' and define the crucial milestones.

#### 'Project Structure' and Interdisciplinary Teams

- It is important to set up a project structure consisting of decision making bodies, advisory bodies and working groups.
- It is debatable, if the project team should be set up before the vision and objectives have been determined. However, a pragmatic approach for the State might be to agree a HL Vision, HL objectives and establish a HL steering structure with

a small team of 'leaders'. Following this exercise, an interdisciplinary project team should be established and given the task to develop a project plan.

- Ideally the future management team will be involved from the very beginning or as soon as possible.
- Consultancy should be chosen carefully. As we all know, provision of air navigation services is a very 'special by nature'. In order to ensure that all issues and criteria are taken into account and properly analysed, the consultant should know the specifics of the ANS industry and that of air navigation services providers. A possibility could be to contact ANSPs that have gone through this process themselves and in consequence transformed to customer and performance oriented service providers.
- The interdisciplinary project team has to consist of highly experienced experts in e.g. public and corporate law, finance, all areas of HR, operations, communication, management and strategy, change management, process management, organisational change, who will be tasked to prepare the recommendation for the detailed planning and implementation of the respective separation model.

#### Stakeholder Analysis and Stakeholder Engagement

- Stakeholders have different roles, responsibilities – and different interests. In order to ensure that the needs and interests of all stakeholders are known it is good to conduct a thorough stakeholder analysis. As it is not possible to meet the interests of all stakeholders, it is important to engage the most important stakeholders as soon as possible to build trust and gain their support instead of resistance.

#### Preparing Change of Legal Framework

- Preparation of any draft legislation, decrees, amendments or changes of statutes

### Reviewing Types of Separation and Organisational Models

- As the structure follows the strategy, first analyses of types of separation shall be conducted in search of the best suited organisational model

### Communication and Change Management

- It is crucial to have a holistic communication and engagement strategy and change management initiative in place

### 6.2\_Step 2: Planning and Implementing Separation

During this phase the ‘Separation Project Teams’ will detail the separation plan, prepare and manage all necessary decisions and then execute the implementation.

Major activities – regardless of the type of separation – include among others:

- In-depth analyses of the current situation and description of the desired future state
- Identification and detailed description of regulatory tasks and service provision tasks
- Identification and description of the separated processes (process, tasks, deliverables, owner, interaction with other processes, accountability, etc.)
- Identification and assessment of required competences and resources to ensure effective supervision, regulation and service provision
- Description and agreement of governance structures and reporting systems and mechanisms (accountability)
- Ensure continuity of safe, efficient and orderly provision of air navigation services during the transition period
- Finalisation of draft legislation, decrees, amendments and changes of Statutes and submission thereof
- Involvement of all required stakeholders, bodies and organisations
- Assessment of existing contracts (HR, facilities, equipment, suppliers, etc.) –

execution of any required amendments / preparation of new contracts

- Appropriate representation in international bodies (State – Service Provider)
- Business plan of air navigation services provider (including financial plan)
- Empower management team (new Head of Units or Board of Directors)
- Final evaluation of organisational models and reconfirm choice of model
- Set up holistic change management initiative
- Further activities depending on the individual situation

### 6.2.1\_Functional Separation

Detailed planning and implementation of Separation in the following key area:

#### Function / Organisation / Processes

- Implement the separation of functions and separation of units
- Select and appoint department heads
- Establish ‘ANS Department’ (with corresponding processes, units, facilities, etc.)
- Confer duties and accountability to new responsible parties
- ‘Quality Management’ as management tool

#### Governance

- Establish a new reporting mechanism and system
- Set up the necessary oversight bodies (e.g. safety oversight)
- Ensure independent regulation, service provision and oversight

#### HR

- Amend work contracts if applicable (new tasks, new departments etc.)
- Change management initiatives
- HR Planning
- HR Training

#### Finance

- Establish budget of ANS Department (revenues)
- ANS Department business plan (including investment plan)

#### Legal

- Establish a legal department to take care of all legal issues (aviation, HR, contractual etc.)
- Amend existing contracts or negotiate new ones if applicable

#### Operations

- Ensure continuity of service provision

#### New Management of ANSP

- Set up the new ‘ANS Department’ (organisational structure, appoint heads of departments, delegation of power, ...)
- Involve staff to ensure customer orientation
- Create a communication strategy
- Manage the critical transition phase
- Build a customer oriented and performance-based ‘ANS Department’
- Join CANSO

### 6.2.2 Organisational Separation

In the case of organisational separation, the role of the State will change during the planning and the implementation phase. After ‘corporatisation’ the state and the newly founded organisation are responsible for their specific area and work in parallel (but coordinated).

Detailed planning and implementation of Separation in the following key area:

#### Function / Organisation

- Select and approve legal form of the company
- Approve Articles of Association
- Execute incorporation
- Select and appoint management team
- Separate and transfer functions, tasks, etc. in new entity

#### Governance

- Establish appropriate governance and reporting mechanism (including risk management)
- Select and establish board structure
- Nominate Board Members (depending on structure: Board of Directors, Supervisory Board etc.)
- Set up oversight bodies

#### HR

- Amend work contracts or negotiate new ones if applicable
- Change management initiatives (customer orientation, competency etc.)
- Establish a human resource management process
- Establish social dialogue process (in cooperation with legal unit)

#### Finance

- Develop and approve a corporate business plan (financial plan incl. revenue planning etc.)
- Establish planning and controlling processes (including a risk management process)
- Establish all required services (book keeping)

#### Legal

- Establish a legal department to take care of all legal issues (Aviation Law, HR, contractual, etc.)
- Transfer contracts to new entity if applicable
- Amend all contracts based on results of assessment during Step 1
- Transfer of assets
- Establish social dialogue process

#### International and Institutional

- Establish links to all relevant national and international bodies
- Ensure continuity of representation in national, regional and international bodies (e.g. ICAO, etc.)

- Ensure continuity of provision of expertise in national, regional and international bodies and work groups (ICAO, etc.)

#### Task of New ANSP Management

- Set up the new company and show strong leadership during the crucial transition phase
- Leadership
- Build a customer oriented, performance-based and financially sound ANSP Organisation
- Involve staff to ensure their contribution to the corporate targets (safety, customer orientation, etc.)
- Communicate and engage with all stakeholders
- Build a customer oriented and performance-based 'ANS Department'
- Represent the organisation
- Join CANSO

#### 6.3\_System efficiencies: Horizontal and vertical cooperation

Cooperation is a means to an end and not an end in itself. For that reason the targets have to be clear before partners enter into any form of cooperation agreement. Today, there are a number of co-operations in the ANS-industry that were founded on the basis of solid business cases and that provide measurable value to their shareholders and stakeholders alike.

As cooperation will become increasingly important for providers of air navigation services the CANSO Business Performance Workgroup decided to study those cooperation models that currently exist in the ANS industry and develop a separate guidance document focusing on the 'Principles and Benefits of cooperations in the ANS Industry'.

Figure 9 below gives a rough overview of the thinking that has been developed within CANSO with regard to cooperations: We strongly believe that cooperations are the most powerful tool we have to create Aviation System Efficiency. However, in order to create measurable value for our customers and the entire systems, cooperations have to be planned and managed based on sound business case recommendations.

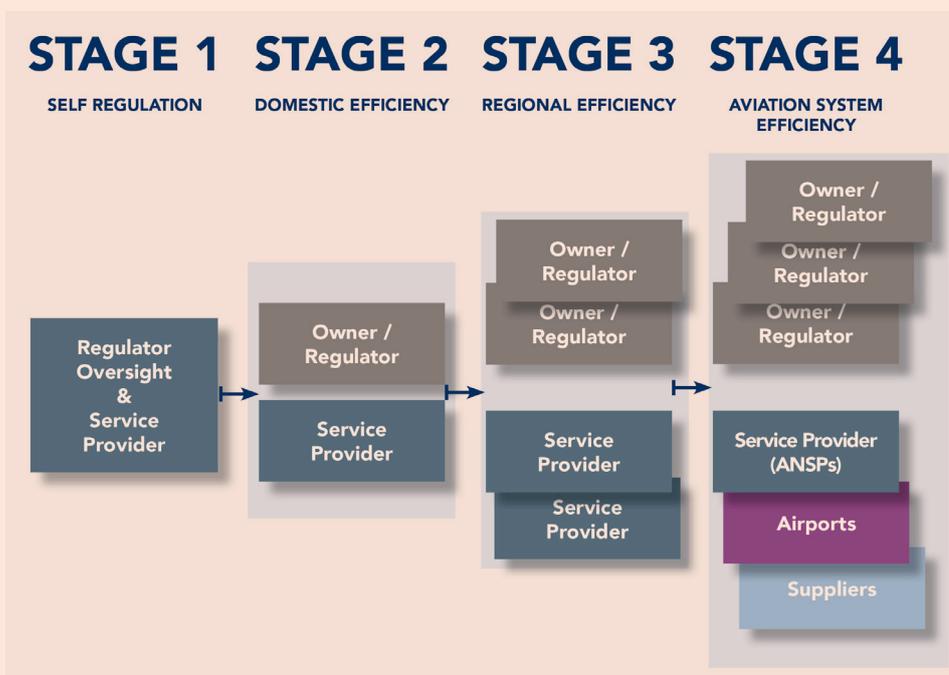


Figure 9:  
Evolution of  
Air Traffic  
Management

Appendix I  
Summary of Survey

Question	Responses
Please briefly describe the objectives of the separation (or driving reason for separating the service) as determined by the State.	
Functional Separation	<ul style="list-style-type: none"> <li>– To ensure the independency of decision making</li> <li>– To ensure that the different functions are identified, clearly described and embedded in clearly separated units</li> <li>– To comply with the community law (SES regulation)</li> <li>– To comply with national law</li> <li>– To create the conditions for SES certification</li> <li>– To minimise the political influence on the service provision function (to eliminate pressure on the regulatory side to comply with operational demands of the ANSP side)</li> <li>– Ensure that regulatory standards are not compromised</li> <li>– To comply with minimum requirements of the SES regulation</li> <li>– Functional separation at present. The SES regulations are the main driving force for separation at present.</li> </ul>
Organisational Separation	<ul style="list-style-type: none"> <li>– To reduce the federal deficit</li> <li>– Find a solution to ever rising costs in the development of new technology in and for ATC which was affecting capital expenditures in other areas of transport</li> <li>– To find a solution to rising delays caused by staff shortages</li> <li>– Argument: a private company would be better suited to quickly address these challenges</li> <li>– Make ANSP independent of the Federal Government budgetary and employment system</li> <li>– Enhance the safety of operations through establishment of an independent safety regulation</li> <li>– To ensure fair and transparent decision making on access to airspace by different user groups</li> <li>– To increase the efficiency of operations</li> <li>– Establish an organisation with clearly defined management accountability</li> <li>– To make ANS provision independent from the government and create a financially sustainable entity</li> <li>– To make several areas of government more efficient and effective.</li> <li>– Ensure that the service provider has an efficient investment programme that meets the need of customers in terms of service and capacity.</li> <li>– Enable / encourage the Service Provider to develop a customer oriented culture</li> <li>– Clearly separate streams of funding – public for the regulatory functions and user charges for the service provider</li> <li>– Ensure independent safety supervision</li> <li>– To avoid conflicts of interest between regulation (political targets) and service provision (customer – industry driven targets)</li> <li>– Gain more flexibility</li> <li>– Separation between regulation and service provision is required in 549/2004/EC regulation and is identified by the Eurocontrol Performance Review Commission as a “fundamental step in ensuring effective regulation and avoiding conflicts of interest”.</li> </ul>

Question	Responses
Relationship with shareholder / owner and scope of freedom to employ vehicles to improve the organisation's performance (e.g. form cooperations)	
Functional Separation	<ul style="list-style-type: none"> <li>— Subject to public or state regulation for procurement, hiring people (subject to public offer). Independent from government budget with own investments, loans, etc.</li> <li>— ANSP part of CAA – under the control of the Ministry for Transport and Ministry for Finance; CEO is chosen by the Government – bound by 'contract for public servants'; contracts are signed by CEO; CEO must fulfil targets set by the Government – and fulfil commitments to the Government vis-à-vis European Parliament / Commission</li> <li>— ANSP has a very formalised relationship with the State and very little freedom. State budget control often extends to very low levels</li> <li>— Relationship with our owner is generally very good and flexibility is provided to implement initiatives to improve our organisation. Our shareholders do not give bank guarantees for loans and the authority we must fund its own borrowings.</li> </ul>
Organisational Separation	<ul style="list-style-type: none"> <li>— Customers are primary stakeholders, extensive consultation process with the Board and Advisory Committee with broad representation and individual customers, no limits other than 'prudent business practices' to improve performance</li> <li>— Strategic Partnership Agreement which defines the matters reserved for approval by the 'Shareholders' (mainly constitutional) and the matters reserved for decisions by the Holding Board (major investment decisions,...). The agreement defines the major framework, e.g. the information requirements of the shareholders, the financial delegation to the executive team, the composition of the Board, etc.). The Chief Executives are accountable to the Holding Board for all aspects of their performance. They provide monthly reports to the Board on operational, safety, financial and project performance. Within this governance framework they have freedom to organise and manage the business as they think best.</li> <li>— ANSP still belongs to the 'Public Finance Sector'; supervision in compliance with SES regulation; private-public partnerships are permitted to organise the provision of air traffic services</li> <li>— ANSP is governed by corporate law; the company must grow to 'be as profitable as possible'. Shareholder receives quarterly and annual reports, the annual business plan and are generally informed on any major initiative or policy change; managerial freedom to pursue cooperations – a vehicle which has been used frequently to improve operational and financial performance.</li> <li>— In general, ANSP has a very good relationship with its Shareholder and flexibility is provided to implement initiatives to improve the organisation; ANSP must take of its own funding – no support is provided by Shareholder</li> <li>— Shareholder approves budget, investment plan, HR policy and ANS charges. Basically ANSP has freedom to employ all vehicles to improve performance, but certain actions have to be approved by the Shareholder. Also ANSP has to be a 100% State owned company.</li> </ul>

Question	Responses
Organisational Separation	<ul style="list-style-type: none"> <li>– The Board determines the overall strategy and activities. The Director manages the day-to-day business with some freedom</li> <li>– No budgetary freedom – need to apply for funding. Within agreed framework freedom to manage projects and the organisation.</li> <li>– The scope of freedom is principally limited by the definition of the scope of business. ANSP is allowed to perform and the Federal rules which apply for all enterprises owned by the Federal Government. The foundation of subsidiaries is possible but needs the approval of the Fed. Government.</li> <li>– The company budget, investment plans, financing and HR policy as well as air navigation charges are established by the company based on forecasts and objectives. All these plans must be approved by the shareholder. Basically the company has the freedom to employ all vehicles to improve performance, but certain actions have to be approved by the Board of Directors, or the shareholder (these actions are defined in the Deed of Foundation). There is however one thing which is strictly regulated by law: the company has to be owned 100% by the State.</li> <li>– The ANSP is a government-owned statutory authority, established under an Act of the Parliament and is accountable to the Parliament through its Minister. The Minister provides a formal Statement of Expectations that includes expectations that ANSP acts in accordance with its Act and other governing and relevant legislation and regulatory obligations. The organisation through its Board is required to inform its Minister of the organisation's activities. The State department responsible for aviation acts as an adviser to the Minister on matters relating to the ANSP.</li> </ul>

Question	Responses
Briefly describe your relationship with your customers. Do you have a regular consultation process in place?	
Functional Separation	<ul style="list-style-type: none"> <li>– The ANSP has specific committee for interacting and reporting to customers, and consultation is in place when is required by any of the parties</li> <li>– The Authority has a very mature and comprehensive Customer Care Programme.</li> <li>– In compliance with the SES regulation No 549/2004, a mechanism has been established for consulting the stakeholders about the implementation of the Single European Sky. The consultation is performed by the ANSP by means of a Commission for Strategy where are invited other ANSPs, airlines, airport operators and trade unions. In this forum, the ANSP presents and discuss its five year strategic plan, covering the development and introduction of new concepts and technologies as well as new funding schemes, if any. In addition, the ANSP conducts surveys to identify its customer requirements with the purpose to include them in its strategic plan, in accordance with the ISO 9001 standards.</li> <li>– The ANSP consults with customers through many forums. It's important to note, however, that all input from customers is considered "advisory" and is not accepted as legal direction. Consultation boards consists of multi-industry panels (such as the Air Traffic Management Advisory Committee, RTCA task forces, Research and Development Advisory Committee) and stakeholder operational groups.</li> </ul>
Organisational Separation	<ul style="list-style-type: none"> <li>– Customer needs, issues and concerns are identified through continuous consultation at the regional and national levels and through representation on the ANSPs Board of Directors and the ANSPs Advisory Committee. The ANSP routinely meets with its major customers and their industry associations to seek ways to be more responsive to their requests.</li> <li>– Customer orientation is a key principle. A systematic Customer Relations Management process has been developed and implemented. Our active involvement in the CANSO Customer Relations Work Group has revealed that our processes are best practice in the industry. Consultation processes are established at various levels. The Advisory Board consists of representatives of various airlines and airspace user associations at CEO level. Regular meetings are organised addressing operational and technical issues at expert level. An annual user consultation is organised to consult airlines and trade associations on financial issues and the ANSPs Strategic Investment Plan. In addition, the ANSP introduces partnership agreements with customers laying down service levels and methods of cooperation. Customer needs, issues and concerns are identified through continuous consultation at the regional, national and International levels (ICAO, Eurocontrol, IATA, CANSO etc.). ANSP meets routinely with its major customers and their industry associations to seek ways to be more responsive to their requests.</li> <li>– The ANSP is always in contact with local airline representatives. If there are some claims we discuss them locally. We conducting surveys / questionnaires with airlines on the quality of our services (METEO services, ATC, CNS); We are in cooperation with IATA trying to match airline needs.</li> <li>– A number of customer consultation processes are in place. In addition to the statutory consultation on en route charges,</li> </ul>

Question	Responses
Organisational Separation	<p>these include:</p> <ul style="list-style-type: none"> <li>– the <b>Operational Partnership Agreement (OPA)</b> was established in 2003 in response to the ANSPs desire to work with its customers to maximize airspace and service delivery. The Agreement’s objective is to develop a long term partnership where the ANSP and its customers work together to resolve demand and capacity issues to maximise the use of airspace</li> <li>– the <b>Safety Partnership Agreement (SPA)</b> has been established for a number of years in response to a strong desire on both the part of the ANSP and its customers to implement operational safety improvement activities</li> <li>– <b>The Customer Consultation Working Group:</b> Meetings have focused on in-depth discussion of customer requirements and priorities around traffic and capacity, safety, fuel efficiency (environment) and operational contingency, service quality metrics and the long term investment plan</li> <li>– The ANSP maintains a program of regular consultation with its customers and has dedicated relationship managers. The ANSP conducts an annual forum with industry customers called Waypoint, to consult on financial strategy, technology implementation, service delivery and any other issues identified by the industry.</li> <li>– The ANSP has a regular consultancy process as required by SES Regulations and consultancy process with airport operators.</li> <li>– Billing and collection of ANS charges is performed under multilateral/bilateral agreements concluded between the State and Eurocontrol. Multilateral consultation is carried out within the framework of Eurocontrol Enlarged Committee and the forum provided by the European Union. Bilateral meetings are held on an ad hoc basis. Customer surveys concerning level of service provision are regularly undertaken.</li> </ul>

Question	Responses
<p>What is regulated in your case (Safety, Economic, Airspace). Briefly describe your relationship with your Regulator and the mechanism in place to ensure the availability of expertise. Is this mechanism supportive and efficient?</p> <p>Functional Separation</p>	<ul style="list-style-type: none"> <li>— Close relation with our CAA to fix policies. We have meeting to coordinate regulation/provision</li> <li>— Safety and Airspace are regulated by the Safety Regulatory Division (SRD) of the ANSP. While functionally separated there is a very good working relationship. Expertise is provided when required by SRD. Our Terminal charges only are subject to Economic Regulation. No expertise is provided to the organisation (Commission for Aviation Regulation CAR) that regulates these charges.</li> <li>— All the domains to be regulated according to the European and national legislations are obviously regulated: safety, economic, airspace, security, liability. The relationship with our Regulator is rather direct since it is another directorate of the CAA. Persons representing the Regulator are most of them recruited and trained as the ANSP staff is. When leaving our national academy for civil aviation, students are appointed to a position either with the Regulator, the NSA or the Provider according to their respective needs. Along their careers, personnel may change from one entity to this other.</li> <li>— The regulator is a separate branch within the same agency. Safety is the primary service that is regulated. Economic regulation is provided by a government branch outside the agency.</li> </ul>
<p>Organisational Separation</p>	<ul style="list-style-type: none"> <li>— The United Transport Administration (CAA) regulates the Airspace and Safety. As to the Economic regulation, the ANSP reports to State Enterprise Management Agency, that approves company's annual budget and the business plan. The compliance with relevant safety and security standards, policies and procedures as well as recommended practices (SARPs) is ensured by means of planned and occasional audits provided by CAA and is regulated by the legislation, and is in compliance with ICAO SARPs.</li> <li>— SES regulations are applicable. Safety regulation by the National Supervisory Authority. Airspace regulation is executed by the DoT. Economic regulation through the approval process for charges by the Fed. Government.</li> <li>— Safety, economic and airspace regulation by the CAA is in place. There is a good professional working relationship with the CAA and there are both formal and informal arrangements for ensuring the availability of professional expertise.</li> <li>— As a government owned statutory authority various Government Acts and Regulations are relevant to the ANSP in the performance of its functions. Some of these relate to Trade practices (pricing for core services), airport curfews, environment protection, air navigation charges, and transport security. The main regulator, the Civil Aviation Safety Authority, undertakes airspace regulation and oversight of providers of communication, navigation, surveillance air traffic management services and aviation rescue and fire fighting services. The ANSP is also regulated by the Competition and Consumer Commission (ACCC) in respect of its pricing and trade practices activities. The ANSP has a positive arms length relationship with the regulators. The regulators recruits and employs its regulatory staff independent of the ANSP.</li> <li>— Regulator is responsible for all areas required by SES Regulations and EUROCONTROL Guidance. The ANSP is included in consultancy process of new UE and national regulations.</li> </ul>

Question	Responses
<p>Briefly describe your funding mechanism (taxes, public budget, charges,...). And does your organization have financial independence (is the organisation fully self-funding, or does it still rely on financial contributions from government?). What are the main strengths of your funding mechanism?</p> <p>Functional Separation</p>	<ul style="list-style-type: none"> <li>— The ANSP is financially independent from National Budget. The main strengths are based on the combination of Airports and Air Navigation. Having both in the same boat we have the possibility to manage most of the ATM environment</li> <li>— Full cost recovery for en-route and HF communications. Price cap for Terminal Charges. ANSP does not receive any financial contributions from the Government.</li> <li>— Basically, the ANSP does not receive any public funding from the Government or other bodies, except for the services rendered on a free basis. The expenses are funded by means of en route charges and terminal charges determined and recovered in compliance with the European regulation. The ANSP may be considered as a self-funded organisation. The current mechanism is the so called “cost recovery system”</li> <li>— The ANSP receives approximately 20% of the budget from the Gov't general fund. The remaining funding comes from ticket taxes for scheduled airline flights and from aviation fuel taxes. Strengths of the funding mechanism include the capability to decouple the FAA budget from extreme market situations.</li> </ul>
<p>Organisational Separation</p>	<ul style="list-style-type: none"> <li>— The ANSP conducts its duties based on self-financing, and is not financed from the State budget. The main sources of finance are aviation charges. The ANSP is obliged to pay taxes in accordance with local legislation. The company is financially independent entity and has a right to engage in economic activities and attract additional financial resources (loans from multilateral and bilateral donors, private and state banks etc.).</li> <li>— Provision of air navigation services is solely funded by charges. The SES charges regulation applies. Main strength is the independence from Government budget.</li> <li>— The ANSP is a financially independent organization receiving its revenues primarily from air navigation services provision through charges. There is no income for the company stemming from the central budget. Of course the level of share capital is defined by the shareholder. Main benefits of this funding method are as follows:             <ul style="list-style-type: none"> <li>— The current financing mechanism within the Eurocontrol framework guarantees full cost recovery.</li> <li>— Charges form ANS provision ensure steady cash flows necessary for smooth operation and continuous system infrastructure upgrade requirements.</li> <li>— The Eurocontrol system is well regulated; it ensures cost transparency towards customers of air navigation services.</li> <li>— The administrative costs concerning ANS charges invoicing and collection are kept low due to economies of scale offered by the regional charging system.</li> </ul> </li> <li>— As with other European ANSPs, the en route operation is funded through the Eurocontrol route charges mechanism. The difference in the case of the ANSP is that the amount of revenue the company can receive from en route (and oceanic) services is capped through the process of independent economic regulation. The regulatory process is relatively complex and time consuming but ensures that there is transparency in the setting of charges for the monopoly services with extensive customer participation and independent decision making.</li> <li>— With the exception of a number of technology and service contracts the ANSPs revenues are derived from charges to customers that are reviewed at least annually.</li> </ul>

Question	Responses
Organisational Separation	<p>For commercial air services, fees are charged for the en-route and in the terminal. The charges are based on time and weight. For general aviation there is an annual fixed fee to access all of the ANSPs ATM services. The legislation that created the ANSP requires that the fee structure be based on a cost recovery model and that fees charged to customer for services in the far north be the same as those applied to the southern, more densely populated, portion of the country. In addition the Company earns a very small amount through the sale of technologies developed by the ANSP. The main strengths of the ANSP's funding model are:</p> <ul style="list-style-type: none"> <li>— The Company must defend its fees, based upon its costs each year to its customers though a formal consultation process</li> <li>— The structure imposes cost discipline on management in order to keep charges reasonable and lower them over time</li> <li>— The Company is able to respond to serious changes in traffic by changing its fees, should it need to, without the need for government approval, as long as it follows the legislated process</li> <li>— The Company receives no government funding or guarantees of any kind</li> </ul> <p>— The ANSP is fully self funded and establishes its charges with its airline and other customers under a five-year Long Term Pricing Agreement using a methodology which allows recovery of all the ANSPs reasonably incurred costs, including a return on capital employed, in providing the services in question. The methodology and charging regime is reviewed by the Government regulator the ACCC. The main strength of this funding mechanism is that it provides autonomy and flexibility. The organisation is required to pay an annual dividend to the Government. This is negotiated through the development of a five year Corporate Plan which is reviewed on an annual basis. The Corporate Plan includes the organisations strategic objectives, the capital expenditure or asset renewal program and operational and financial information. The Plan through the Board must be agreed with the Minister and is subsequently tabled in Parliament.</p> <p>— The Agency leads its own and self financial economy, taking into consideration the European Union laws, international laws and regulations of EUROCONTROL in terms of route charges. The Agency covers its cost out from its own revenues. Main funding (ca. 97% of total revenues) comes from the air navigation charges: the en-route (approx. 81%) and the terminal navigation charges (approx. 16%). Remaining revenues come from the sale of non-aviation services and materials (including AIS - aeronautical charts and publications).</p>

Question	Responses
<p>Is your organisation responsible for Civil/Military integration/co-operation.</p>	
<p>Functional Separation</p>	<ul style="list-style-type: none"> <li>— We are one of the parties but the Ministry is leading this issue, having a Committee for all Civil/military coordination</li> <li>— In the FUA system, the Provider is consulted at Level 1 (airspace and route design) and is one of the actors at Level 2 (airspace management) and Level 3 (real-time coordination). Thanks to our Regulator, the cooperation with the Military is fruitful. The ANSP is working at combining civil and military en route ATS units.</li> <li>— Yes. We have offices that liaise with the Dept of Defense and we also have military personnel with assignments to the ANSP. We have active programs to improve information exchange on Special Use Areas (SUAs, similar to FUAs). We also work with the military on equipage issues, development of net-centric operations, and airspace security.</li> </ul>
<p>Organisational Separation</p>	<ul style="list-style-type: none"> <li>— The relationship between civil and military is regulated by the agreements between the ANSP and Ministry of Defense, approved by the CAA. The ANSP provides Air Navigation Services to military in accordance with relevant agreement(s).</li> <li>— The ANSP is responsible for CIVIL/MIL operational procedures.</li> <li>— Military ANS provision is integrated in the ANSP (provided by the ANSP), with the exception of military aerodromes.</li> <li>— Yes. The ANSP continues to operate as a joint civil/ military undertaking at the operational level. This relationship is governed by a 15 year contract negotiated between the two parties – the ANSP and the Ministry of Defence (MOD) – which specifies the services to be provided and the remuneration for those services. The contract includes service quality incentive targets. In essence, the ANSP provides the infrastructure and equipment while the actual controlling is performed by military controllers</li> <li>— The country / ANSP has integrated ATC systems and co-located OAT and GAT ATC sectors. No ATC services are provided to OAT, which is handled separately in Temporary Reserved Areas (TRA). Civil/military en-route services are integrated.</li> <li>— The ANSP and the Department of National Defense (DND) have a close working relationship. There are more than 130 agreements with DND for the provision of services to the military. In addition DND maintains an office at ANSP's headquarters to ensure cooperation on both strategic and tactical issues that arise between the two parties.</li> <li>— The ANSP is currently participating in the development of a harmonised approach civilian/ military ATM planning in conjunction with the Department of Defence.</li> <li>— The ANSP cooperates with Military Authorities in every possible aspect of airspace creation and management. Therefore even the ANSP is not nominated to play this role it has extremely large impact on such coordination. The ANSP is nominated by law to manage existing elements of the airspace, thus certain military activities depend greatly on the ANSP's decisions related to airspace assignment. As for the CIV/MIL integration, the ANSP is not responsible for integration although it obviously participates in this process. The best catalyst for integration of military procedures with civil ones was the State's access to NATO – it forced military authorities to stick to NATO's procedures being very close or identical to those prescribed by ICAO.</li> </ul>

Question	Responses
Do you have freedom to engage in commercial profit-oriented business.	
Functional Separation	<ul style="list-style-type: none"> <li>– Yes, we do. In fact, we are developing few commercial activities or business developments activities.</li> <li>– Yes and the Authority have a commercial and training division which is a commercial profit orientated business.</li> <li>– We can engage in commercial business, but can only recover cost of service (not profit).</li> <li>– Generally speaking, the ANSP does not perform profit-oriented activities. However, such activities are not forbidden. The sole rule to be applied by the ANSP when carrying out such type of activities on the competitive market (e.g. bidding to a call for tender) would be to ensure a fair competition with the corporate competitors, which would be achieved in including all the costs and a possible profit.</li> </ul>
Organisational Separation	<ul style="list-style-type: none"> <li>– The ANSP is free to engage in business activities compatible with primary function as an Air Navigation Services provider, but the revenues gained have to be solely used for the ANSP needs.</li> <li>– The ANSP is able to provide additional services such as training, consultancy, and communication services if there is a request.</li> <li>– Within the scope laid down in the ANSPs Articles of Association.</li> <li>– Yes, the ANSP is allowed to provide services on top of its core business (en route and terminal air navigation) such as training, consultancy and data provision under market terms on condition that flight safety is not compromised.</li> <li>– The Company is free to engage in business activities compatible with its Letters Patent and its primary function as an Air Navigation Services provider. However, as the ANSP is established as a non-share capital not-for-profit corporation, it cannot use these revenues to generate profits; rather they assist the Company in reducing the charges to our customers.</li> <li>– Yes, only with the agreement of the Board and the Minister.</li> <li>– The ANSP is not prohibited by law to engage in a commercial profit-oriented business. However, the ANSP is predominantly focused on the possibly most effective execution of the core duties using all available assets. The ANSP cannot do all types of businesses. It can not set up a subsidiary. The ANSP can engage in commercial profit-oriented business only, if scope of that business is within the statutory scope of the ANSPs activity and after obtaining a special permission from the Ministry of Infrastructure. Additionally accounting system must allow to separate costs and incomes of commercial activity from statutory costs and incomes.</li> </ul>

Question	Responses
<p>Do you use the following financial/strategic planning tools: Strategic Plan, Financial Plan, HR Plan (ATCO / Admin), Operational Plan, Investment Plan, etc.) In which way do they contribute to the success of your organisation?</p> <p>Functional Separation</p>	<ul style="list-style-type: none"> <li>– The ANSP uses a strategic plan (5 years and 1 year), financial &amp; investment plan, and has a HR plan based on public offer of vacancies. All of them are the basis of our business</li> <li>– Yes the ANSP has all the above mentioned tools and finds them essential for running a modern organisation</li> <li>– All these plans are established by the ANSP to manage its performance-driven activities after due consultation of the interested parties. They contribute to the success of the ANSP because they ensure             <ul style="list-style-type: none"> <li>– the appropriate compliance with the standards we have been certified to</li> <li>– the appropriate provision of the services we have been designated for</li> <li>– the appropriate fulfillment of our customers’ requirements</li> <li>– the appropriate management of the human and financial resources</li> <li>– the appropriate consultation of trade associations and the airspace users</li> <li>– And that the approved performance targets are met</li> </ul> </li> <li>– We use all of the above. Even though the ANSP is a gov’t organization, we strive to run the ANSP portion of the agency like a commercial business using performance-based management principles.</li> </ul>
<p>Organisational Separation</p>	<ul style="list-style-type: none"> <li>– The ANSP is using following management tools: business plan, unit work plans, financial plan, LSSIP, investment plan, HR Plan etc. The management tools are supporting the management in proper financial and staff planning, and are ensuring a safe provision of Air Navigation Services to the Airspace users</li> <li>– We have our Strategic plan, Operational Plan, Training plan , Project plans etc. This helps to smoothly implement the tasks. However the problems in implementations can accrue due to the financial dependence from Shareholder</li> <li>– All of these tools are widely used an form an important part of corporate planning functions.</li> <li>– The ANSP draws up and updates all the above listed planning documents on a regular basis. The benefits of such tools are as follows:             <ul style="list-style-type: none"> <li>– Proficient coordination of resources deployment</li> <li>– Elimination of inefficiencies through a system approach taking into consideration the interactions between various factors</li> <li>– Integrated planning tools enable establishing different scenarios through combining major parameters and system elements.</li> </ul> </li> <li>– All of the above. Both of the operating subsidiaries have their own strategic and business plans which are rolled up into a consolidated Business Plan once a year. These Plans are subject to approval by the ANSP’s Board and there is also a process of consultation with shareholders and with customers (the latter through the Operational Partnership Agreement).</li> </ul>

Question	Responses
Organisational Separation	<p>Performance is monitored monthly by management on the basis of a “balanced scoreboard” with the main KPIs reported to the Board on a “traffic light” basis. In addition, once every five years, the monopoly business is required to negotiate and submit a five year business plan to the CAA which forms the basis for the regulatory settlement for the following five year period.</p> <ul style="list-style-type: none"> <li>– The ANSP prepares a three year business plan which establishes the Company’s direction and top priorities. The current 2007-2009 Business Plan contains the following priorities: <ul style="list-style-type: none"> <li>– Enhance air navigation system safety.</li> <li>– Improve employee engagement through the effective management of people, focusing especially on leadership and people practices.</li> <li>– Successfully implement the Automated Air Traffic System (CAATS).</li> <li>– Maintain effective control of overall headcount while improving operational training success to achieve full staffing of our air traffic services facilities.</li> <li>– Reduce the number and severity of customer restrictions on airspace usage that are within the ANSP’s control.</li> <li>– Reduce customer service charges through effective cost controls and revenue generating initiatives.</li> <li>– Complete the development of, and publish, appropriate benchmarking data.</li> <li>– Within the Operations Group, there is an ANS plan which has a 5 year horizon with an outlook to 15 years. Within that there is an Operational Strategic Plan that looks ahead three years and is reviewed each year.</li> <li>– Depending on priorities, other major groups within the Company will establish their own planning process. Many have adopted rolling three year plans that are reviewed annually.</li> </ul> </li> <li>– Yes. These plans allow the ANSP to formulate long term business goals and objectives and to formulate resourcing requirements (both people &amp; financial) to achieve these objectives. The ANSP uses the following strategic planning tools: <ul style="list-style-type: none"> <li>– Overall Strategy and Strategies in CNS / ATM domains,</li> <li>– HR plan,</li> <li>– Investment plan,</li> </ul> </li> <li>– The ANSP plans approved by Ministry of Infrastructure: <ul style="list-style-type: none"> <li>– Financial plan (one year),</li> <li>– 5-years financial plan</li> </ul> </li> </ul>

Question	Responses
<p>Would you say that you are a performance based organisation? Can you briefly describe some of the main performance-based mechanisms?</p>	
<p>Functional Separation</p>	<ul style="list-style-type: none"> <li>– Depends on the meaning of performance based organisation. If by performance based you mean to have some targets associated to objectives, we do. We review, monitor and control all the main targets. Example KPIs associated to Delays.</li> <li>– The ANSP has just commenced a program to introduce the concept of PBO into the complete organisation.</li> <li>– The ANSP is considered as a performance-driven organisation by the Ministry for Transport and the Ministry for Finance and also by the Eurocontrol Performance Review Commission</li> <li>– Yes. Performance-based mechanisms include annual personnel reviews with raises tied to performance; organisational performance goals with monetary payout for achieving goals; metrics targets and measurement; program performance measurement and reporting, etc.</li> </ul>
<p>Organisational Separation</p>	<ul style="list-style-type: none"> <li>– The ANSP is planning to introduce KPIs and other performance measurement tools in order to establish performance-based organisation</li> <li>– Yes – “It’s all about performance” – some mechanism: <ul style="list-style-type: none"> <li>– An internal performance framework is introduced measuring the performance against agreed objectives. KPAs are safety, cost-efficiency, capacity. The KPA environment is being prepared in accordance with the SES II Performance scheme.</li> <li>– Benchmarks with comparable organisations</li> <li>– Incentives for management through bonus payments depending on achieving agreed objectives.</li> </ul> </li> <li>– Generally, because of the current full cost recovery system, the company’s business model is not performance based. Nevertheless the ANSP has introduced some measures towards performance based operation (eg. performance based salaries).</li> <li>– The ANSP is a performance based organisation. Both the institutional structure and internal management structures are specifically designed to encourage performance improvement: The institutional structures include <ul style="list-style-type: none"> <li>– the private sector, commercial environment in which the ANSPs group companies operate, including the need to make a profit and pay dividends etc;</li> <li>– the economic regulatory framework including service quality incentive targets;</li> <li>– the high level of customer involvement in the business through the Airline Group as shareholder, the Operational Partnership Agreement etc.</li> </ul> </li> </ul>

Question	Responses
Organisational Separation	<ul style="list-style-type: none"> <li>– With pressure to improve service quality and increase efficiency coming from shareholders, customers, the economic regulator and the Board, relevant internal management structures include <ul style="list-style-type: none"> <li>– monthly monitoring by the Executive management teams against a ‘scoreboard’ of performance targets covering safety, delay, cost efficiency, environment, staff and major partners (eg SESAR and MOD)</li> <li>– executive and management performance bonus schemes based on company and personal performance targets, with different levels of award set against base level and stretch level performance targets. Company targets are related to service quality, financial performance, project milestones and customer satisfaction.</li> <li>– differentiated pay for executives and managers linked not only to what they achieve but to how they achieve it through their staff (informed by an Employee Opinion Survey completed by staff).</li> </ul> </li> <li>– The ANSP is a performance based organisation. This is demonstrated in a number of ways. <ul style="list-style-type: none"> <li>– Three of the Company’s 5 “overarching objectives”, established by the Board of Directors, are based on performance: <ul style="list-style-type: none"> <li>– To be in the top 10% of all ANSPs with regard to safety</li> <li>– To be in the lowest 25% of ANSPs with respect to charges</li> <li>– To be among the top 25% of all ANSPs with respect to the adoption of technology</li> </ul> </li> <li>– In operations, our service levels are based on performance standards, taking into account traffic, complexity, operational mix of traffic and topography and more</li> <li>– The ANSP continues to work to adopt customer preferred routes with greater frequency</li> <li>– The Company has a very mature Safety Management System that is performance based using a variety of performance metrics to determine its effectiveness.</li> </ul> </li> <li>– The ANSP makes extensive use of performance measures. These performance measures relate to air navigation services, ARFF, safety, environment, people, corporate management, and financial.</li> <li>– The ANSP is a performance based organisation. Key performance indicators (KPIs) are implemented within the ANSP through an integrated management system that integrates all of the ANSP’s systems and processes into one complete framework, enabling an organisation to work as an unified whole with unified objectives. The system can ensure focus on goals, create consistency, balance conflicting targets, improve communications, reduce duplication and therefore costs in an ANSP. KPIs are selected taking into account exogenous factors affecting performance and developments in the aviation environment. They are presented in business and annual plan and measured with a set frequency. The performance system is up-to-date with ongoing changes in the European and national legislation and modified appropriately.</li> </ul>

Question	Responses
<p>Do you have a Financial Risk Management process established? Do you in general receive advance warnings in such ample time, that you can take the appropriate mitigation measures?</p>	<ul style="list-style-type: none"> <li>– The ANSP has mitigations plans but not really a financial risk management plan implemented</li> <li>– The Authority has a mature Financial Risk Management process and in general provides advance warning but is not 100% foolproof.</li> <li>– The ANSP does not have a Financial Risk Management as such until now. Because of our specific professional activity, we are exposed to “market risk”. <ul style="list-style-type: none"> <li>– Our income is directly connected to the air traffic volume. Until the end of 2008, we have experienced a continuous traffic growth, exception made of unexpected non systemic events (Iraq war, price of crude oil).</li> <li>– The cost recovery system is a method to mitigate the “market risk” but with a delayed effect which is sometimes at the wrong moment with regard to market variations and cashflow requirements.</li> <li>– So, the ANSP is promoting a change in the recovery system so as to allow keeping extra income as a reserve for bad times in the coming years.</li> </ul> </li> <li>– We mitigate financial risk by working as closely as possible with the Executive branch of gov’t and with Congress. On the other hand, we don’t have the suite of financial risk reduction mechanisms that available to private companies.</li> </ul>
<p>Functional Separation</p>	<ul style="list-style-type: none"> <li>– The ANSP’s activities are based on business plan, which is updated annually. The volumes of traffic, revenues and costs are being monitored on a regular basis. Economic department monitors the cash position of organisation, so any potential deterioration of the financial situation may be immediately communicated to the top management to decide on further strategies. In case of unsatisfactory annual financial results of Sakaeronavigatsia the respective analysis may lead to the steps towards the unit rate increase according to the cost recovery mechanism.</li> <li>– A risk management process is established throughout the company with a quarterly risk assessment report.</li> <li>– There is no separate procedure for Financial Risk Management. Risk management in general is part of our daily routine (liquidity management, currency matching, interest rate risk management etc.).We face mainly liquidity management risks and have therefore a liquidity plan for the whole business year, which is monitored during the year. We also have forecasts for the years ahead, where we monitor possible effects of events, like the crisis (and the so arisen under recovery of the costs), or modifications of the investment plan etc.</li> <li>– The ANSP has a well established risk management process which covers not only financial risk but all other aspects of risk to the business. The company maintains a list of “top risks”, which are determined as part of the annual business planning process. As part of the regular review of risk management arrangements, two of these top risks and the mitigations in place for managing them are discussed in detail at each Board meeting.</li> </ul>
<p>Organisational Separation</p>	

Question	Responses
Organisational Separation	<ul style="list-style-type: none"> <li data-bbox="308 629 1359 846">– The ANSP has a Financial Risk Management process through which the Board of Director’s Audit Committee receives regular information. Under the broader process there are specific risk management programs in place to deal with pensions, investments, accounts receivables and other volatile areas. The various risk management processes involve careful monitoring and as specific metrics changes this may trigger actions which will further mitigate the risk. These processes are dynamic and as such generally provide an opportunity to take additional mitigation on a timely basis</li> <li data-bbox="308 857 1359 947">– Yes, the Board of the ANSP has risk management and internal control policies supported by an enterprise risk management framework which sets out the cooperate requirements for risk management throughout the organisation.</li> <li data-bbox="308 958 1359 1176">– The ANSPs activity is based on the five years’ plans updated annually. The volumes of traffic, revenues and costs are being monitored on a monthly basis. According to the internal regulations the cash position of the ANSP is monitored on a daily basis, so any potential deterioration of the financial situation may be immediately communicated to the top management to decide on further protective steps. In case of unsatisfactory annual financial results of the ANSP the respective analysis may lead to the steps towards the unit rate increase according to the cost recovery mechanism.</li> </ul>

Appendix II

Overview Stakeholder Benefits

Type	Role / Responsibility	Interests	Benefits
		State	
Ministry / Department of Transport	Responsibilities range from preparing transportation legislation, negotiation and implementation of international transportation agreements, enforcing airline consumer protection regulations, issuance of regulations to prevent alcohol and illegal drug misuse in transportation systems	<ul style="list-style-type: none"> <li>– Safe, orderly and efficient flow of traffic</li> <li>– Providing capacity</li> <li>– Ensuring balance between public interest, airspace users, ANS Providers, and out-sourced services</li> </ul>	<ul style="list-style-type: none"> <li>– Improves safety</li> <li>– Improves efficiency</li> <li>– Strengthens the role of State as independent regulator (concentration on regulation)</li> <li>– Strengthens the role as supervisor (functional supervision)</li> <li>– Clarifies different roles and responsibilities (regulator, owner, legislator)</li> <li>– Increase level of transparency / cost control of ANS</li> </ul>
Ministry / Department of Finance	<ul style="list-style-type: none"> <li>– Responsibilities cover a wide range of area, such as the public budget, taxes, etc.</li> <li>– In addition, steering and coordinating the economic regulation - setting the financial targets (for example return on assets, economic value added)</li> </ul>	<ul style="list-style-type: none"> <li>– Balance State Budget</li> <li>– Decrease State deficit or increase budget surplus</li> <li>– Transparent allocation of funds</li> <li>– Reduction of financial risk of the State</li> <li>– To ensure proper implementation of international agreements</li> <li>– To ensure implementation of state's economic policy</li> </ul>	<ul style="list-style-type: none"> <li>– Removal of ANS cost from State Budget (decrease number of employees in the public sector, etc.)</li> <li>– Relieve of tax payer by funding through charges instead of taxes</li> <li>– Separate Organisation becomes a tax paying enterprise</li> <li>– Transparent allocation of funds</li> <li>– Reduce financial risk for State / tax payer (insurance of separated ANSP, risk management)</li> <li>– No conflicts of interests between transport regulation and economic regulation</li> </ul>
Ministry / Department of Interior (Environment)	Among a range of responsibilities, to safeguard the interior safety and security of the country and its citizens.	<ul style="list-style-type: none"> <li>– Home land security</li> <li>– Public safety (risks caused by aviation)</li> <li>– Protect the environment</li> <li>– To ensure proper implementation of international agreements</li> </ul>	<ul style="list-style-type: none"> <li>– Easier and more efficient implementation and control of standards regarding home land security</li> <li>– Contributes to a leaner and cleaner future</li> </ul>

Type	Role / Responsibility	Interests	Benefits
Ministry / Department of Justice	<ul style="list-style-type: none"> <li>— Responsible for investigating and prosecuting violations of laws.</li> <li>— Represents the State in all legal matters.</li> <li>— Providing legal services to all government departments and agencies</li> </ul>	<ul style="list-style-type: none"> <li>— Compliance with the law</li> <li>— Having the institutional framework in place in time for procedural and technological development</li> </ul>	<ul style="list-style-type: none"> <li>— Align legal framework with developments in ANS (e.g. Just Culture)</li> <li>— Clarity of roles and responsibilities</li> <li>— Strengthen the position of the Department by being able to concentrate on legal issues</li> </ul>
Ministry / Department of Defence	<ul style="list-style-type: none"> <li>— Protection of citizens</li> <li>— Provide national security</li> <li>— Integrity of territory</li> <li>— Participating in setting of general policy for civil/military cooperation</li> <li>— Strategic level of FUA</li> </ul>	<ul style="list-style-type: none"> <li>— Use of airspace according to needs / when required</li> <li>— Synthesised real time information on air traffic</li> <li>— Optimisation of military – civil interface</li> <li>— To ensure that military defence interests are followed and executed</li> </ul>	<ul style="list-style-type: none"> <li>— Clarity on roles and responsibility</li> <li>— Direct links between the respective levels on government side and the ANSPs</li> <li>— Efficient use of civil airspace provides more flexibility / capacity for military activity</li> <li>— Military is perceived as “customer” whose needs have to be met (customer focus!)</li> </ul>

Type	Role / Responsibility	Interests	Benefits
Customers			
Airlines	<p>Depending on the vision, strategy and targets of the individual airlines or airline alliance.</p> <p>Mainly:</p> <ul style="list-style-type: none"> <li>— provide reliable and save mobility</li> <li>— contribute to economic growth of state</li> <li>— contribute to image of state</li> </ul>	<ul style="list-style-type: none"> <li>— Safe ANS service</li> <li>— Cost efficient</li> <li>— On time</li> <li>— Flexible respond to their short-term and long-term needs</li> <li>— Fair and equal terms for all customers</li> <li>— Opportunity to participate in setting of standards for the services rendered</li> </ul>	<ul style="list-style-type: none"> <li>— Improvement of Safety</li> <li>— Performance based management enables more efficient service provision.</li> <li>— Optimised and customer oriented airspace structure.</li> <li>— Focus on customer needs</li> <li>— Coordinated activities to improve environmental protection combined with joint PR</li> <li>— Reduction of service fees (as all customers pay for those)</li> </ul>
Business and General Aviation	<p>Depending on the vision, strategy and targets of the individual airlines or airline alliance.</p> <p>Mainly</p> <ul style="list-style-type: none"> <li>— Provide flexible mobility to business travellers (cater to individual needs)</li> </ul>	<ul style="list-style-type: none"> <li>— Safe ANS service</li> <li>— Highest degree of flexibility in flight planning including destination</li> </ul>	<ul style="list-style-type: none"> <li>— Better equipped for cooperative approaches with Airports</li> <li>— More flexibility through CDM procedures</li> </ul>
Military	National Defence	<ul style="list-style-type: none"> <li>— Use of airspace according to needs / whenever required</li> <li>— Flexibility in flight planning incl. destination</li> </ul>	<ul style="list-style-type: none"> <li>— Efficient use of civil airspace provides more flexibility / capacity for military activity (Flexible Use of Airspace (FUA))</li> </ul>
Staff	<ul style="list-style-type: none"> <li>— The key resource of an ANSP</li> <li>— Contributes to ANSP performance</li> <li>— Provides / ensures safe, reliable and orderly ATC</li> </ul>	<ul style="list-style-type: none"> <li>— Job security and constant increase of fixed salaries; social packages</li> <li>— Modern equipment</li> <li>— Working conditions in line with changing requirements</li> <li>— Involvement in management decisions</li> <li>— Job enrichment, further development</li> <li>— Work – life balance</li> <li>— Recognition</li> <li>— Fair pay</li> </ul>	<ul style="list-style-type: none"> <li>— Better possibility to establish Just Culture</li> <li>— Compensation equal to market conditions</li> <li>— Job mobility</li> <li>— Social benefit package •</li> <li>— State of the art equipment</li> <li>— Increased bargaining power of the Unions</li> <li>— Better and quicker response to traffic demand</li> <li>— Involvement in decision making process processes</li> <li>— Increased safety</li> <li>— Work for innovative, internationally operating and successful organisation</li> <li>— Job enlargement and job enrichment</li> <li>— Performance based payment schemes</li> </ul>

Type	Role / Responsibility	Interests	Benefits
Customers			
Public / Citizens		<ul style="list-style-type: none"> <li>– Safety</li> <li>– Environment</li> <li>– Separate ANS budget from state budget and spend less money for ANS</li> <li>– Re-allocation of money for other uses</li> <li>– Cheap, flexible and easily accessible air transport system</li> <li>– Safe and secure air transportation services</li> <li>– Transparent information</li> <li>– Environmental concerns covered</li> </ul>	<ul style="list-style-type: none"> <li>– Improved safety</li> <li>– Improved responsiveness to environmental goals</li> <li>– Better tools for public relations</li> <li>– Removal from State budget</li> <li>– More responsive to customer needs</li> </ul>
Aviation Industry	<ul style="list-style-type: none"> <li>– Provide mobility</li> <li>– Provide environmentally sustainable, state-of-the-art equipment</li> <li>– Contribute to national, regional and global growth</li> <li>– Innovation</li> <li>– Job creation</li> </ul>	<ul style="list-style-type: none"> <li>– Easy access to contracts</li> <li>– Innovative, prosperous and growing ANS industry</li> <li>– Funds available and secured financing</li> <li>– Long-term and stable partnerships</li> <li>– Reliable and short decision making processes</li> <li>– Expanded role in the industry</li> </ul>	<ul style="list-style-type: none"> <li>– More innovate and prosperous ANS industry</li> <li>– Better managed procurement process (faster decision making processes)</li> <li>– Greater Transparency</li> <li>– More reliable planning circles</li> </ul>
Airport	<ul style="list-style-type: none"> <li>– Provide support to mobility</li> <li>– Contribute to growth of region</li> </ul>	<ul style="list-style-type: none"> <li>– Safety</li> <li>– Stable and long-term partnerships;</li> <li>– Coordinate strategic and tactical planning</li> <li>– Increase capacity and traffic expedition</li> <li>– More passengers</li> <li>– Investment in ANS equipment as low as possible</li> <li>– Implement strategic goals and long-term financial success (profit)</li> </ul>	<ul style="list-style-type: none"> <li>– Better mutual understanding</li> <li>– Increased flexibility to respond to partners' needs</li> <li>– Higher degree of efficiency more capacity</li> <li>– Alignment of long-term capacity planning</li> <li>– Coordinated activities to improve environmental protection combined with joint PR</li> </ul>

### **Appendix III**

#### **Practice Example of a CANSO Member Planning and Implementing Separation**

This chapter will shed some light on the separation of the regulatory and service provision function, specifically establishing interdependent “Air Navigation Service Provision”. It will also provide some guidance material from planning to implementation for States who wish to pursue such a change in order to have full picture of the whole process and its implications/consequences.

## **Part Two**

### **1 Planning Separation**

#### **1.1\_Develop Strategy (Clear Vision, Mission, Objectives) for Making the Change<sup>6</sup>**

In the planning stage a well prepared strategy should be created which provides the complete picture of the organisation. The strategy should include a clear vision, mission and objectives. It explains how the organisation will accomplish its objectives. Usually the strategic plan is developed by a specialised consultant in this field.

#### **Vision**

A vision statement should be a few short phrases or a sentence that conveys your hopes for the future. Catchy phrases such a “professional excellence and safety” illustrate the common characteristics of a vision statement.

Create a statement that is:

- Understood and shared by members of the community.
- Broad enough to include a diverse variety of perspectives
- Inspiring and uplifting
- Easy to communicate

#### **Mission**

A mission statement is more specific than your vision. As the next step in the planning

process, it expresses the “what and how” of your effort, describing what your faculty is going to do to make your vision a reality. While your vision statement inspires people to dream, your mission statement should inspire them to action. Make it concise, outcome-oriented and inclusive.

#### **Objectives**

Objectives are the specific, measurable steps that will help you achieve your mission. Develop objectives that are SMART: Specific, Measurable, Achievable (eventually), Relevant to your mission, and Timed (with a date for completion.) An example of an objective would be: “By the year (x), the ANS will develop and implement a plan to recruit 100 ATC controllers with high potential for success.”

#### **1.2\_Choosing the Model of Separation Introduction<sup>7</sup>**

Privatisation in the provision of air navigation services commenced as a part of globalisation and liberalisation of the economies of the world and a general move towards privatisation of commercially oriented industries and services which were managed by States. Privatisation of air navigation services is following privatisation of airport services in a limited number of States. The pressure for privatisation in the provision of airport and air navigation services has mainly come from the owners, that is, the government.

#### **1.3\_Driving Forces Behind Separation (Privatisation)**

Privatisation in the provision of air navigation services has not been seriously considered in most of the States. These services are considered as more connected with safety of aircraft operations, and to have national defence and external relation implications, and consequently less suited for privatisation. Air navigation services are also perceived as closely related to the sovereignty of a State as it provides

<sup>6</sup> See <http://ctb.ku.edu/en>

<sup>7</sup> Tulsu R. Kesharwani, ICAO Consultant, Privatization in the Provision of Airports, and Air Navigation Services Seminar (Guatemala City, 13-16 December 1999)

for aircraft and air carriers of foreign States to enter national airspace. However, pressure to liberalise and commercialise is growing on all air navigation service providers. There are many reasons for ANS separation. However, some of the major reasons for this transformation are as follows:

- ATC needs to be more customer focused and cost-efficient
- Need to respond to user demands
- Efficiency needs are more likely achieved by private management
- Transition from supply drive to customer driven operations
- Sustainability of critical infrastructure must be ensured
- Remove the financial burden of service provider from the State
- Free to go to the market and bring in investment when necessary
- Develop, manage and operate ATC in a way that is both stable and viable
- Promote innovation
- Bringing in outside technology, expertise and capabilities
- Benefits of non-civil service culture
- Financing of ANS infrastructure by the States is becoming increasingly difficult because of pressure to finance other high priority services, especially social services
- The expectations of the airlines and other users in regard to the quality of service are growing
- There is a general perception that privatisation can lead to improvement in the management of ANS, although this may not always be the case, especially because the ANSs are essentially monopolies.

#### 1.4\_Separation Options for States and their Pros and Cons<sup>8</sup>

Generally, the States have the following options, apart from direct control of ownership

and management of ANSs by government. Major options include the following:

##### 1.4.1\_Government Ownership

- An autonomous corporation established under the provisions of a special statute
- A public limited company with all the shares held by government
- An enterprise established by an administrative order

Under this option air navigation services basically remain under the overall ownership of government, but the management is transferred to another organisation which is generally autonomous in financial and operational matters. However, the autonomy can be restricted. A government organisation is generally expected to serve the public interest better as profit is not its motive and the objective is to serve public interest. This option may provide flexibility to States in ensuring development of ANSs to suit its political, social and economic requirements from time to time.

##### 1.4.2\_Private Sector Minority Participation in Equity

- Private sector participation limited to less than 50 percent stake in equity

Under this option the ownership of ANS is partially transferred to the private sector. Under this system the government has the option of deciding from time to time what proportion of ownership or equity to retain for itself and what to transfer to the private sector. The advantage is that the transfer of ownership can be in stages.

##### 1.4.3\_Private Sector Ownership and Control

- Private sector participation with more than 50 percent stake in equity

Under this option the majority ownership of the ANS is transferred to the private entity.

However, once the equity shares are transferred, it may not be possible to get the ANS back unless the government decides to buy back the shares and private investors are prepared to sell. In such an event the government may have to pay a higher price. The following table shows the different ownership models<sup>9</sup> :

### 1.5\_Application of Options<sup>10</sup>

All these options are being exercised in different parts of the world to a greater or lesser degree. This is so because political, social and economic environments differ from country to country. Moreover, the volume of air traffic and financial viability, which can considerably influence

<b>Government Department</b>	<p>Developing countries: Afghanistan, Algeria, Angola, Armenia, Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belize, Bolivia, Botswana, Brunei, Chad, Chile, Cook Island, Costa Rica, El Salvador, Ethiopia, Gambia, Ghana, Guatemala, Iran, Iraq, Israel, Jamaica, Jordan, Kenya, Kuwait, Laos, Liberia, China, Brazil, Mexico, Indonesia, Malaysia, South Korea, Syria, UAE</p> <p>Selected industrial countries: France, Greece, Japan, Luxembourg, KSA (GACA)</p>
<b>Government Agency</b>	Nigeria (NAMA), USA (FAA)
<b>State Enterprise</b>	Australia (Airservice Aus.), Belgium (Belgocontrol), Bulgaria (ATSA), Czech Republic (ANS CR), Denmark (Naviair), Egypt (NANSC), Finland (Finnish CAA), Hungary (Hungarocontrol), Malta (MATS), Netherlands (LVNL), Portugal (NAV EP), Poland (PL), Romania (ROMANTSA), Russia, Slovakia (LPS), Spain (AENA), Sweden (LFV), Thailand (AEROTHAI)
<b>Corporatised Entity</b>	Austria (Austro Control), Croatia (Croatia Control), Estonia (EANS), Germany (DFS), Ireland (IAA), Italy (ENAV), New Zealand (Airways Corp), Norway (Avinor)
<b>Partly Private Entity</b>	ATC at selected airports in UK, Canada (Nav Canada), United Kingdom (NATS), Switzerland (Skyguide)

<sup>9</sup> Source: GACA Strategic Plan, Booz Alen Company

<sup>10</sup> Tulsi R. Kesharwani, ICAO Consultant, Privatization in the Provision of Airports, and Air Navigation Services Seminar (Guatemala City, 13-16 December 1999)

the choice of ownership and management option, differ from country to country.

The available data do not establish that one particular option is better than another option. What is best for a State depends upon the situation in the State, including volume of traffic and its growth potential, condition of the existing infrastructure, improvement and expansion requirements, managerial expertise available and the overall policy of the government to changes in the ownership and management of infrastructure.

It has to be noted that air navigation services is a service industry, the primary objective of which is to provide safe, secure, efficient and economical service to the airlines and other users. The ownership and management structure of the ANS should be considered as a means to achieve this end. However, financial and operational autonomy is the key to success of ownership and organisational structure. Moreover, in a privatised regime economic regulation as well as safety and security regulation will be very important. Furthermore, it seems certain that in the future there will be increasing dependence of the States on the private sector for financing air navigation services capital development programmes, irrespective of the choice of ownership and management option.

If a State wishes to consider change in the ownership or management structure of its ANS, a number of issues will require consideration. While considering such issues ANS management should be involved at every stage of the process. It is also necessary to be clear about the short-term and long-term objective of the change.

Some of the initial issues, which require consideration, are:

- Examine in depth the present stage of the ANS infrastructure in the country and the problems faced by it, including financial and managerial problems
- Prepare a detailed profit and loss account

of the air navigation services and make a forecast for the future, if feasible for the next twenty years. Also, make an assessment of the capital development requirements and the possible options to meet financial and managerial needs.

- If privatisation is considered as an option, decide what services and facilities are to be privatised and the method of privatisation. Also consider what is to be done for the remaining services.

### 1.6\_Legal and Regulatory Aspects<sup>11</sup>

For a change in the ownership and management structure of air navigation services, changes in national laws may be necessary. It can be done by amending the existing laws or enacting a new legislation. The nature of legislative action will depend upon the provisions of the existing laws, rules and regulations and the selected option. The new laws apart from enabling the government to make changes in the ownership and management should enable the government to restructure the remaining civil aviation organisation. ICAO, which is the international regulatory body for civil aviation, has developed Standards and Recommended Practices to assist States in ensuring safety of operations. Periodic inspections and audit of aerodrome facilities are required by the aerodrome operator and the regulator. Safeguards regarding environment, which includes noise abatement, emissions, water, sewage, fuel storage, and waste disposal should be adequately provided for.

It needs to be ensured that the monopoly power which an ANS provides is not misused. Sometimes an unregulated monopoly may be more harmful than a relatively inefficient public monopoly. International obligations, such as freedom of access, non-discrimination between categories of users, ICAO cost recovery policies, principles and procedures, etc. especially with regard to air traffic charges, should be honoured. There may be a need to have some control over other charges and the quality of services to be provided by the private operator.

Regulations come at a price because they place constraints on the flexibility of the private operator. Discretionary powers with the States in the regulations increase the risks of the private operator and these may lead to higher expectations of return on investment and possibly less value for the State. It is important that regulations should be the minimum necessary and precise. Wherever discretionary powers are unavoidable, the principles or guidelines, to the extent possible, should be laid down. Ideally, the regulatory authority should be an independent entity.

The overall objective of the State should be to balance the interests of various stakeholders including private investor, airlines, business interests, local communities and wider public at large.

### 1.7\_Specific Issues Related to ANS Economics and Management<sup>12</sup>

The following are issues specific to air navigation services:

#### Governance, Ownership and Control

While autonomous and commercialised ANSPs have been established in many States around the world, financing is still an issue in other States. It is also important to consider the importance of further promotion of ICAO's policies on the establishment of autonomous ANSPs, including separation between regulatory and operational functions. Furthermore States should review the commercialisation experiences and discuss its influence on the performance of ANSPs, with particular attention to governance and management structures.

#### Cost Basis for Charges

The cost basis of an ANSP for charging purposes has usually been established by taking into account the costs of operation and maintenance, plus cost of capital and depreciation of assets, as well as a "reasonable" return on assets. There are possible ways to assess what would constitute a

"reasonable" rate of return for ANSPs. Another issue that States should consider the allocation of contingency funds in order to cater for unforeseen severe drops in traffic/revenues.

#### Cost Allocation and Charging Systems

The allocation of costs to air traffic control services has traditionally followed the categorisation of services between aerodrome control, approach control and area control. There are alternative categorisations of services based on the portions of airspace and on the phase of flight, which could lead to the introduction of zone (differential) charges.

### 1.8\_Risk to States in Privatisation

Every business activity has certain risks and ANSPs is no exception. The major risks are:

- The private entity may ignore safety requirements
- The private entity may increase the charges too much, which may not be in the best interest of the State or region

Therefore states should pay great attention and consideration to these risks as well as any other risk that could have a negative impact on safety, performance on quality of services.

### 1.9\_Reorganisation of ANS Structure

Presently, air navigation services in different States are operated under various organisational formats. Considering the diverse circumstances involved, ICAO does not recommend one organisational format over another, but rather it provides guidance to States by describing relevant aspects of each format. However, keeping in view the experience gained worldwide, ICAO recommends that governments may wish to explore the possibility of establishing autonomous authorities to operate their air navigation services where this is in the best interest of providers and users.

<sup>12</sup> <http://www.icao.int/ceans/ConfAgenda.htm#AnsIssues>  
<http://www.icao.int/ceans/>

The existing ANS structure will need to be reorganised consequent to the changes in the ownership and management structure of certain facilities and services. The nature and extent of the reorganisation will primarily depend upon what remains with the government after the change-over. In a normal situation the air navigation services may continue with the government. This option may be preferred by States with limited traffic. Also an autonomous entity can be created for the provision of air navigation services with a commitment from the government to meet financial needs to cover the deficits and capital development requirements.

Under all the options regulatory powers need to be kept either with the government or with an independent authority. In larger countries, it may be desirable to have an independent authority. However, as the regulatory requirements may increase in a privatised regime, the unit in the government dealing with regulatory issues will need to be strengthened.

## 2 **Implementing Separation**

This section will present the key elements of successful transition management, including:

- Developing an action plan
- Empowering an Interim Management Team / Head of Department
- Ensuring continuity of service
- Financing a transition period
- Change management
- Communication strategy
- Define measures for success

### **2.1\_Developing an Action Plan**

An action plan specifies in detail who will do what, by when, to make what changes happen. It may also note the resources required, potential barriers or resistance, and collaborators or communication lines that need to be active. An action plan guides you to your dream through “do-able” steps. You can rely on this plan to know what actions you should take day by day. An action

plan is an opportunity to turn your dreams for your organisation into a reality. It is also an opportunity to make your ANS vision concrete. An action plan outlines the strategies and action steps that ANSP will use to meet its goals and objectives.

Developing an action plan is a critical first step toward ensuring quality assurance projects success. An action plan may lend credibility to your organisation and its initiative, increase efficiency, and provide accountability. In addition, the action plan provides a tool for mobilising the faculty and encouraging members to share responsibility for solving the problems and improving the situation you have decided to change. The following people can be invited to help prepare an action plan:

- Influential people from all departments affected
- People directly involved in the transformation and implementation

The action plan should include the strategies you plan to use and the action steps you will take to achieve your goals and objectives. It should also identify a role for each department or group involved in the transformation.

### **A Successful Planning Process<sup>13</sup>**

The following points are some of the key aspects for a successful planning process. These points will help the implementation group to be more effective and to be able to gain greater consensus from members in the organisation. Moreover it will reduce the resistance to the change especially when implementing a change management plan as will be discussed later.

### **Be Inclusive**

Good planning is active and inclusive. Seek out key players with diverse viewpoints on the problem or issue. Once a diverse group of important players is at the table, it is important to get them to communicate with each other. Effective leaders often call on silent members during pauses in the discussion. They convey the value of each person’s voice on the issues. Occasionally, it may be

necessary to discourage an overly enthusiastic member from talking too much or dominating meetings. Leaders may do so by thanking them for their comments and indicating the importance of hearing from other members of the group.

### Manage Conflict

If the group is effective in attracting diverse views, conflict among members may result. Group facilitators can recognise differences, perhaps noting the diverse experiences that give rise to divergent views. To resolve conflicts, leaders may attempt to elevate the discussion to a higher level on which there may be a basis for agreement.

### Use Brainstorming Rules

Group facilitators must avoid making judgments about ideas and suggestions. Brainstorming rules apply. All ideas must be heard and noted without criticism.

### Be Efficient

Planning meetings must be efficient, starting and ending on time. It is helpful to have an agenda or to build a consensus at the beginning of the meeting about what will be accomplished and in what time frame.

### Communicate Products of Planning

Planning will result in a useful product. Try to structure every planning session so that it results in a product, such as a list of issues or ideas. Show off the product at the end of planning meetings, distributing copies of the products of planning to all members.

### Provide Support and Encouragement

Finally, it is important to provide support and encouragement throughout the process of planning. Good planning takes time; it usually requires months to produce a detailed plan of action. Acknowledgement of the contributions of all participants is needed, especially key leaders and let the team know when it is doing a good job.

## 2.2\_Change Management<sup>14</sup>

The term “change management plan” means different things to different people. Technology professionals are likely to view it as a formal process for tracking and documenting changes to systems and code. Human Resource professionals may argue that it is an intangible process that deals with how organisations view opportunities associated with change. At an organisational level, a change management plan means defining and implementing the best strategic and tactical plans to deal with changes in the business environment and to profit from those opportunities. Depending on the situation, any one of these answers can be correct; however, for the purpose of this article, we will focus on managing organisational change.

Change can be threatening to individuals and organisations. Yet successful adaptation to change is crucial to the success of any organisation. It is common for leadership teams to focus their attention on creating the best strategic and tactical plans, failing to consider the human side of change management. Failing to address the human side of change can be costly. Studies show that employee resistance and a lack of proper training are key hindrances to organisational change. While no single change management plan or methodology fits every organisation, there is a set of best practices that can be adapted to a variety of situations.

Here are five best practices that can be implemented to create a solid foundation for successful change:

**1. Involvement.** Change is inherently unsettling for people at all levels of an organisation. All eyes are on the leadership team for guidance and support when organisational change occurs. For change to be successful, the key stakeholders must model the way. The senior leadership team must visibly embrace the new approaches to motivate and challenge the rest of the organisation. Change is aborted when leaders do not demonstrate the same commitment they expect from others. Equally important is the need for the change efforts to include plans for involving leaders throughout the

company in order to create a sense of ownership. Pushing responsibility for design and implementation down so that change “cascades” through the organisation helps to ensure that all concerned feel they have a stake in the plan’s success.

**2. Communication.** Senior leaders must focus on creating a communication plan that clearly articulates the vision of where they want to go and the benefits of doing so. Too often, leaders make the mistake of believing that others understand their vision as clearly as they do. Even when employees understand the vision and need for change, they often resist because change involves loss (loss of control, predictability, and often jobs). Leaders need to listen and acknowledge these feelings in order to reduce the level of employees’ anxiousness. The best change programmes reinforce core messages through regular, timely communications that are both practical and inspirational. When creating a community strategy, leaders should ensure that it is:

- **Timely** - Prepare employees well in advance of possible merger, acquisition, downsizing or layoffs. Employees are better able to deal with negative information personally from their managers than from the news media.
- **Clearly Written** - Communicate clearly and honestly with employees throughout the change process. Always keep the target audience in mind when communicating change information. Messages directed at investors should be significantly different than those targeted for first-line managers.
- **Business Necessity** - It is critical that employees understand why the organisation needs to make the change(s). In order for employees to buy into the organisation’s change effort, they must understand why the organisation is facing a period of change and potential benefits to them.

**3. Training.** Over-train whenever possible prior to start-up (using the new technology and work processes in simulations). Training early allows employees to build greater skills and confidence which in turn reduces stress and resistance. In addition to understanding the new technology or process, managers need to be trained in the skills that will help them manage resistance to the change initiatives. Skills that can help managers “manage change” include: team building, coaching, feedback, setting priorities, negotiating priorities, stress management, dealing with conflict, systematic problem-solving and effective delegation.

**4. Feedback & Recognition.** While it is always important to “inspect what you expect,” it is equally important to set up the change effort so that people in the organisation experience some early wins. These early wins increase individual support for change while also having the benefit of helping to sway the attitudes of change-skeptical employees. It is also important to communicate how the employees’ work will change and how they will be measured during and after the change effort. Setting clear expectations and providing frequent informal feedback will help to build employee confidence and shape the key behaviours needed for positive results. Lastly, it is important to keep in mind that for recognition to be most effective, it needs to be personal, immediate, sincere and specific. Highly visible rewards are a great way to reinforce the organisation’s commitment to the change. Likewise, disciplining people who stand in the way of change will reinforce the organisation’s commitment to the change effort.

**5. Stay the Course.** We have found that any new process left unmanaged or improperly measured deteriorates over time -- there are no exceptions. If leaders wish to institutionalise change, the change must become part of the organisation’s culture. Change cannot be viewed by employees as the “flavour of the month.” Leaders will need to recognise that change is viewed by many as risky and scary. These emotions make it easy for employees to slip back into their comfort zones and

return to familiar habits and processes. Leaders must make sure they are hyper vigilant to what employees are doing to ensure that follow-through is timely.

Study after study has shown that successful change demands more than plans and processes; it requires an understanding of the human side. Plans and processes themselves do not create the change. Organisational change occurs only through the sustained, collective actions of the employees who are responsible for designing, executing and living the change. Therefore it is essential that leaders model the way and communicate with exceptional clarity. Leaders must provide training to build new skills and they must pay greater attention than usual to what employees are doing.

### 2.3\_Key Factors to Successful Implementation

The following are the key factors to ensure a successful implementation:

- Prepare a detailed implementation timetable stating the start and end date for each activity
- Select ANS key leaders from the pool of management who have with the right skills to lead and monitor the implementation
- Create and promote the right culture throughout the implementation period supported by change management, trainings and communication initiatives.
- Enable the right technology Enterprise Resource Planning (ERP) to ease and facilitate the implementation of ANS deliverables
- Provide sufficient time to assess and manage the impact of the implementation
- Support visibly the implementation throughout the entire process
- Spend reasonable overseeing efforts to support employees in charge of implementing the deliverables
- Understand employee's resistance to

change, if any, and the need to manage the reaction of the people side

- Communicate regularly the reason and the needs for implementation via multiple channels
- Move to the next phase of the implementation plan only after assuring the completion and successful implementation of the previous phase
- Ensure overcoming of all barriers standing behind the successful implementation of deliverables
- Reduce business risk through a clear go / no-go criteria and decision point
- The main purpose of the Implementation Plan is to assist the Team in successfully implementing the deliverables of the project

Below are a set of guidelines and activities that need to be considered over the course of the implementation:

- Identifying and empowering appointed personnel
- Supporting
- Monitoring and reporting and
- Communicating

### Empowering Employees

Key employees will be appointed to lead and monitor the implementation effort as well as to ensure compliance, ownership, participation and support of all ANS employees in the implementation activities. Usually Divisions GMs and Departments Directors are appointed to lead the implementation.

In order to achieve a successful implementation of deliverables, the appointed leaders need to be effectively empowered so that they can contribute to the implementation efforts successfully.

Key duties of appointed employees for implementation:

- Drive the implementation through successful and effective communication and presentation to their subordinates
- Possess excellent knowledge of ANS Business and Strategy
- Participate in sessions and meetings to maximise employees' awareness of ANS developed deliverables and implementation process and
- Discuss employee questions / concerns and gain their trust within their functions
- Recognise and celebrate achievement success

The key messages that need to be communicated by the appointed employees are:

- Their roles with respect to the implementation
- The implementation approach and timeline
- The implementation efforts
- The expectation of some challenges at the beginning (it will fall on each Division general Manager/s Departments Directors to educate subordinates and to alleviate concerns in order to ensure smooth and successful implementation)

The key activities that need to be performed by the appointed employees are:

- Provide implementation timeline to subordinates
- Distribute copies of related documentations to subordinates and
- Conduct workshops to explain related documentations to subordinates

### Supporting

Appointed employees will be responsible for providing full support to key activities of implementation within their Divisions/ Departments.

The following are main activities that reflect supporting:

- Show strong concerns for the rest of ANS employees
- Closely understand and appreciate employees' worries and queries
- Respond transparently and openly to queries and questions
- Identify deficiencies and recommend changes' and
- Document and approve any deviation from the Implementation Plan

### Monitoring and Reporting

Appointed employees will be responsible for monitoring and reporting status, issues, deficiencies, deviations, results with regards to key activities of implementation within their Departments. The following are main activities concerning monitoring and reporting:

- Being aware of the current status of implementation
- Predict possible future dilemmas that might prevent proper and complete implementation
- Identify the impact of the implementation on employees
- Monitor the behaviour of employees and the flow of implementation activities for conformity with desired outcomes
- Evaluate the overall success/ failure and performance once each phase is completed and
- Prepare reports detailing the status, issues, deficiencies, deviations and results once each phase is completed

### Communicating

Appointed employees will be responsible for using effective communication channels, since communication is critical and provides employees with the appropriate information.

The following are main activities concerning communication:

- Listen carefully to employees, making them feel involved and preventing arguments
- Help employees feel that the implementation is possible
- Communicate objectives of the initiatives to be implemented
- Communicate the seriousness of the implementation
- Discuss progress of the implementation efforts
- Get feedback and discuss questions and concerns and
- Recognise employees achievements

#### 2.4 \_ANS Performance<sup>15</sup>

By definition, performance management is the ongoing process of defining, measuring, improving and sustaining performance. It translates an organisation's philosophy, mission, strategy, values and culture into action areas and cascades them throughout the organisation.

The five ANS policy areas central to good ANS Performance:

##### 1. ANSP Governance

The unique monopolistic cost recovery environment calls for prudent governance over the operator to avoid abuse of power. The ANSP owner should act as a shareholder and not interfere in day-to-day management decisions. The governance structure should be designed to drive excellence in all operations, based on performance incentives and self-correcting mechanisms. An independent state body qualified to undertake its duties should oversee the fairness of all operations. This body should maintain a watchful eye over the interests of all stakeholders and have clear instruments at hand to correct shortcomings or abuse of monopolistic powers.

##### 2. Empowered Management

In any organisation strong management is central to successful operations. ANSP management should be responsible and accountable for the delivery of all services based on agreed targets. Annual goals and objectives should result from a mature staff and stakeholder consultation and be subject to supervision by a Supervisory Board. Broad management expertise and experience in different business areas is required to address the multitude of HR, technical, operational, financial and customer service issues. European ANS integration will benefit from the empowerment of ANSP management to enter into international agreements based on performance-based principles. Political interference should not be permitted in this process as it will undermine the speed and the quality of service.

##### 3. Incentivised Performance

The pure cost recovery environment lacks in-built drivers for good performance and results in higher charges during a downturn when airlines can least afford them. Today cost recovery leads to interventionist policy-making (economic regulation) to correct induced behaviour. The absence of business risk protects management from basic economic drivers which can lead to inertia. Performance incentives incorporated in the management process have shown to overcome the cost-recovery shortcomings by rewarding best practices, while sanctioning lack of progress. Voluntary agreements between ANSPs and their customers on a mutual sharing of business risk have shown to drive operational excellence. Variability in fees should be permitted to reflect improvements in service delivery and variations in quality of services.

##### 4. Customer Relations

A mature, transparent and open relationship between monopoly service

providers and their customers is central to successful ANS performance. A balanced, effective and progressive relationship between service providers and customers can serve as a substitute for interventionist policy making by States. When compared to other global regions, the European ANSP-Customer relationship remains somewhat underdeveloped. Though several European ANSPs have recognised the positive effects of strong customer relations, others are still in the process of developing effective and transparent relationships. A question remains as to whether a mature ANSP-Customer relationship develops through state policy-making or results from the positive effects of the application of other instruments.

#### 5. Performance measurement.

There is no doubt that effective measurement has a positive influence on ANS performance as it supports an improved understanding of actual performance against annual targets and long-term objectives. Strong ANS performance results from the application of performance measurement for both state and industry, i.e. oversight and licensing and service provision. One has to clearly distinguish between performance measurement as a business tool to support management decision-making and as a state instrument to guide new or improved regulations, as each objective requires different measures. Though mature performance measurement may be in place in many ANSPs, the lack of harmonisation in accounting and reporting standards, in combination with the absence of performance definitions for all business areas, indicates that ANS performance measurement is still under development.

#### 2.5\_Develop Structure for Oversight, Steering, and Execution of Separation Project

The following arrangement can be implemented to facilitate the implementation phase of the transformation. Three levels of

working groups and committees have been proposed as in figure 1. These committees have different task and responsibilities as follows:

##### 2.5.1\_Supervisory Committee

The Supervisory committee is chaired by the Head or the top management of the Air Navigation Services Department and having as members all general directors and department managers. It holds regular monthly meetings to become well informed about the work progress and to make sure that all difficulties and/or obstacles (if any) have been overcome.

##### 2.5.2\_Executive Committee

The Executive Committee is headed by key members of the ANS department who have close connection to the transformation and also who are more experienced in this area.

The committee is entrusted with the following tasks:

- To follow up the work of the transformation office on a periodical weekly basis
- Facilitating the tasks of the transformation office
- Making sure that the project work is progressing according to the established schedule.
- Submission of regular reports to the supervisory committee.
- Seeking the help of a consultant with substantial experience in the ANS Sector in order to ensure a proper and smooth transformation process.

##### 2.5.3\_The Transformation Office

A full-time manager shall be assigned for the transformation office, who will be authorised to assign a full-time team which includes all specialties (human resources, financial, legal and organisational). The office duties shall be as follows:

- Making the required feasibility study
- Prepares a work implementation schedule
- Communicates with expert houses for determining the necessary transformation requirements, and prepares the RFP documents for carrying out the transformation works
- Invites companies to tender for the transformation project, evaluates their proposals, prepares and submits the relevant reports and recommendations to the Supervisory Committee
- Coordinates with and submits periodical monthly reports to the Executive Committee
- Maintains continual follow up and communicates with the executing companies
- Produce periodical brochures about the transformation activity
- Appeals for the assistance of experts from within and outside the sector

### 3 Assistance of Consultants

Since privatisation in the provision of air navigation services is a complex process in which the governments, especially in developing countries, may not have sufficient expertise, it may be desirable and advantageous to obtain the advice of one or more outside consultants.

In so doing, however, it is important that every effort be made to ensure that the consultant selected is thoroughly knowledgeable in the area of expertise. Also, it needs to be ensured that the consultant is only an adviser and all the decisions will have to be taken by the government.

### 4 Conclusion

Air Navigation Services is a service industry, the primary objective of which is to provide safe, secure, efficient and economical services to the airlines and other users. There are several alternative ownership and management options for the provision of the services and such options should be considered as means to achieve the end result. Therefore a State should choose the option, which is best suited for it in achieving the above objectives.

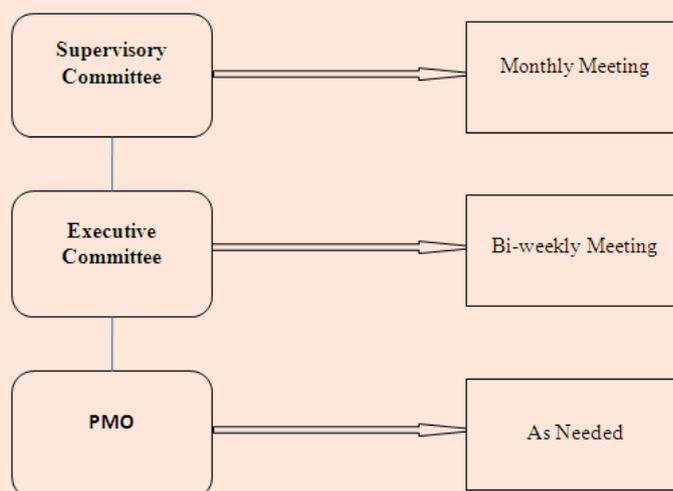
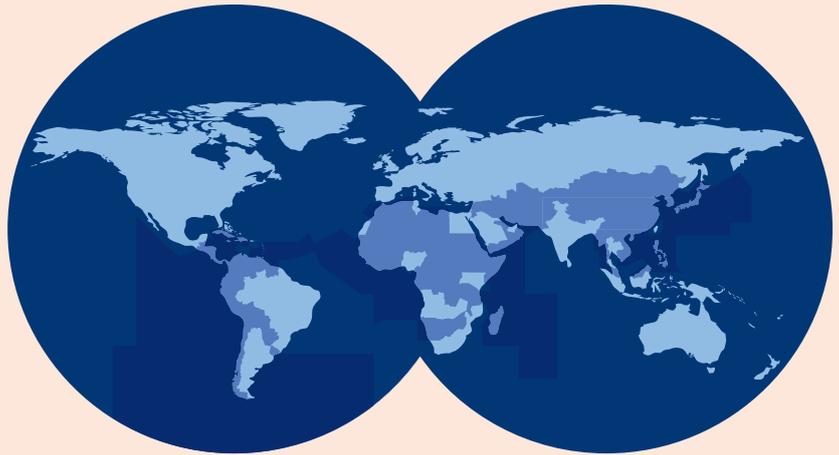


Figure 9:  
Oversight Structure

# CANSO Members

CANSO – The Civil Air Navigation Services Organisation – is the global voice of the companies that provide air traffic control, and represents the interests of Air Navigation Services Providers worldwide.

CANSO members are responsible for supporting over 85% of world air traffic, and through our Workgroups, members share information and develop new policies, with the ultimate aim of improving air navigation services on the ground and in the air. CANSO also represents its members' views in major regulatory and industry forums, including at ICAO, where we have official Observer status. For more information on joining CANSO, visit [www.canso.org/joiningcanso](http://www.canso.org/joiningcanso).



Lighter areas represent airspace covered by CANSO Members

## Full Members - 78

- Aeronautical Radio of Thailand (AEROTHAI)
- Aeroportos de Moçambique
- Air Navigation and Weather Services, CAA (ANWS)
- Air Navigation Services of the Czech Republic (ANS Czech Republic)
- Air Traffic & Navigation Services (ATNS)
- Airports and Aviation Services Limited (AASL)
- Airports Authority of India (AAI)
- Airports Fiji Limited
- Airservices Australia
- Airways New Zealand
- Angkasa Pura I
- Austro Control
- Avinor AS
- AZANS Azerbaijan
- Belgocontrol
- Bulgarian Air Traffic Services Authority (BULATSA)
- CAA Uganda
- Civil Aviation Authority of Bangladesh (CAAB)
- Civil Aviation Authority of Botswana
- Civil Aviation Authority of Singapore (CAAS)
- Civil Aviation Regulatory Commission (CARC)
- Department of Airspace Control (DECEA)
- Department of Civil Aviation, Republic of Cyprus
- DFS Deutsche Flugsicherung GmbH (DFS)
- Dirección General de Control de Tránsito Aéreo (DGCTA)
- DSNA France
- Dutch Caribbean Air Navigation Service Provider (DC-ANSP)
- ENANA-EP ANGOLA
- ENAV S.p.A: Società Nazionale per l'Assistenza al Volo
- Entidad Pública Aeropuertos Españoles y Navegación Aérea (Aena)
- Estonian Air Navigation Services (EANS)
- Federal Aviation Administration (FAA)
- Finavia Corporation
- GCAA United Arab Emirates
- General Authority of Civil Aviation (GACA)
- Hellenic Civil Aviation Authority (HCAA)
- HungaroControl Pte. Ltd. Co.
- Israel Airports Authority (IAA)
- Iran Airports Co
- Irish Aviation Authority (IAA)
- ISAVIA Ltd
- Japan Civil Aviation Bureau (JCAB)
- Kazaeronavigatsia
- Kenya Civil Aviation Authority (KCAA)
- Latvijas Gaisa Satiksmes (LGS)
- Letové prevádzkové Služby Slovenskej Republiky, Štátny Podnik

- Luchtverkeersleiding Nederland (LVNL)
- Luxembourg ANA
- Maldives Airports Company Limited (MACL)
- Malta Air Traffic Services (MATS)
- NATA Albania
- National Airports Corporation Ltd.
- National Air Navigation Services Company (NANSC)
- NATS UK
- NAV CANADA
- NAV Portugal
- Navair
- Nigerian Airspace Management Agency (NAMA)
- Office de l'Aviation Civile et des Aeroports (OACA)
- ORO NAVIGACIJA, Lithuania
- PNG Air Services Limited (PNGASL)
- Polish Air Navigation Services Agency (PANSNA)
- PIA "Adem Jashari" - Air Control J.S.C.
- PT Angkasa Pura II (Persero)
- ROMATSA
- Sakaeronavigatsia Ltd
- S.E. MoldATSA
- SENEAM
- Serbia and Montenegro Air Traffic Services Agency (SMATSA)
- Serco
- skyguide
- Slovenia Control
- State Airports Authority & ANSP (DHMI)
- State ATM Corporation
- Tanzania Civil Aviation Authority
- The LFV Group
- Ukrainian Air Traffic Service Enterprise (UkSATSE)
- U.S. DoD Policy Board on Federal Aviation

- Adacel Inc.
- ARINC
- ATCA – Japan
- ATECH Negócios em Tecnologia S/A
- Aviation Advocacy Sarl
- Avibit Data Processing GmbH
- Avitech AG
- AZIMUT JSC
- Barco Orthogon GmbH
- Booz Allen Hamilton, Inc.
- Brüel & Kjaer EMS
- Comsoft GmbH
- CGH Technologies, Inc
- Abu Dhabi Department of Transport
- Dubai Airports
- EADS Cassidian
- EIZO Technologies GmbH
- European Satellite Services Provider (ESSP SAS)
- Emirates
- Entry Point North
- Era Corporation
- Etihad Airways
- Guntermann & Drunck GmbH
- Harris Corporation
- Helios
- Honeywell International Inc. / Aerospace
- IDS – Ingegneria Dei Sistemi S.p.A.
- Indra Navia AS
- Indra Sistemas
- INECO
- Inmarsat Global Limited
- Integra A/S
- Intelcan Technosystems Inc.
- International Aeronavigation Systems (IANS)
- Iridium Communications Inc.
- Jeppesen
- JMA Solutions
- LAIC Aktiengesellschaft
- LEMZ R&P Corporation
- LFV Aviation Consulting AB
- Micro Nav Ltd
- The MITRE Corporation – CAASD
- MovingDot
- New Mexico State University Physical Science Lab
- NLR
- Northrop Grumman
- NTT Data Corporation
- Project Boost
- Quintiq
- Rockwell Collins, Inc.
- Rohde & Schwarz GmbH & Co. KG
- RTCA, Inc.
- Saab AB
- Saab Sensis Corporation
- Saudi Arabian Airlines
- SENASA
- SITA
- STR-SpeechTech Ltd.
- TASC, Inc.
- Tetra Tech AMT
- Washington Consulting Group
- WIDE

## Gold Associate Members - 14

- Abu Dhabi Airports Company
- Airbus ProSky
- Boeing
- BT Plc
- FREQUENTIS AG
- GE Air Traffic Optimization Services
- GroupEAD Europe S.L.
- ITT Exelis
- Lockheed Martin
- Metron Aviation
- Raytheon
- SELEX Sistemi Integrati S.p.A.
- Telephonics Corporation, ESD
- Thales

## Silver Associate Members - 62