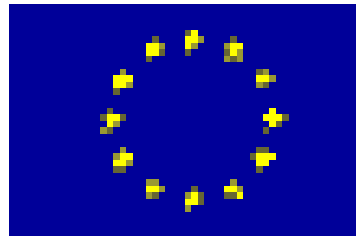


## Summary Presentation

# Study on ATM Market Organisation

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Brussels

28th May 2001

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## Overall Objectives

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- ▶ to review and understand the characteristics and modalities of the provision of ATM-related services
- ▶ to define potential opportunities for reorganisation of the sector
- ▶ to identify the impediments that prevent elements of ATM service provision being organised as a functioning market
- ▶ to provide input to a Community Regulatory Framework to develop, facilitate and enable reorganisation of the market

## Lessons Learned

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- ▶ Other ATM Providers
- ▶ Other Industries

## Analysis of the situation concerning ATM in Australia, Canada and New Zealand allows some conclusions to be drawn

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- ▶ The restructuring undertaken in these individual States has not had the objective of unifying fragmented sections of airspace, promoting cooperation between service providers or creating a uniform pan-European regulatory environment
- ▶ None of the various approaches taken to commercialisation has resulted in any significant unbundling of services or restructuring of the service provision process
- ▶ In all cases a strong safety regulatory regime, organisationally independent from service provision, has been put in place
- ▶ The rights and obligations of the service providers are enshrined in a national law or governed by a licence. This includes the definition of public service obligations
- ▶ Overly light economic regulation can result in concerns about abuse of monopoly position and result in disputes over charging levels whereas overly heavy regulation can result in continuation of the status quo
  - it is important to impose the correct depth of regulation

## Investigation of other markets indicates that there are two principal purposes or objectives of regulation

	Regulation of monopolies	Promotion of competition
Other market	<ul style="list-style-type: none"> <li>• Rail</li> <li>• Water</li> </ul>	<ul style="list-style-type: none"> <li>• Telecommunications</li> <li>• Electricity</li> </ul>
Equivalent ATM market	<ul style="list-style-type: none"> <li>• Direct Core Services               <ul style="list-style-type: none"> <li>- Area control</li> <li>- Approach control</li> <li>- Aerodrome control</li> <li>- ATFM</li> <li>- ASM</li> <li>- ALRS</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Direct Non-Core Services               <ul style="list-style-type: none"> <li>- MET</li> <li>- AIS</li> </ul> </li> <li>• Ancillary Services               <ul style="list-style-type: none"> <li>- CNS</li> <li>- FDP</li> </ul> </li> </ul>

## A number of important lessons can be learned from the restructuring of other markets

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- ▶ Separation of regulatory and operational functions is vital to ensure safe, efficient and cost-effective networks
- ▶ The regulatory framework must view the European ATM system holistically:
  - harmonisation of national rules and imposition of competition rules does not necessarily lead to the creation of a single European market
  - national licensing regimes do not encourage and might actually discourage the setting up of international alliances for service provision
    - ▶ service providers have to follow a variety of different processes and gain multiple licences in order to access multiple national markets
  - different interpretations of rules in different States leads to the creation of a set of national markets, which are dominated by the previous State monopoly at least in the short term
- ▶ Forced unbundling of services can result in over-complexity and inefficiency whereas prevention of unbundling perpetuates the problems associated with current arrangements

## Restructuring the market will also have a major impact on service providers

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- ▶ Service providers might review their business strategies
  - some might decide to become niche players rather than providing integrated services
  - some might decide to diversify into new markets
- ▶ Poorly thought out performance regimes can provoke behaviour on the part of the service providers that is not in the best interest of the customers
- ▶ Limited term licences may result in disincentives to investment which must be addressed through the economic regulatory regime
- ▶ Overly long licence periods may perpetuate the current problems
- ▶ Restructuring the regulatory framework reallocates risk, principally from the State to the service provider
  - service providers must mitigate these risks, for example through insurance schemes



## Scope for Restructuring the Market

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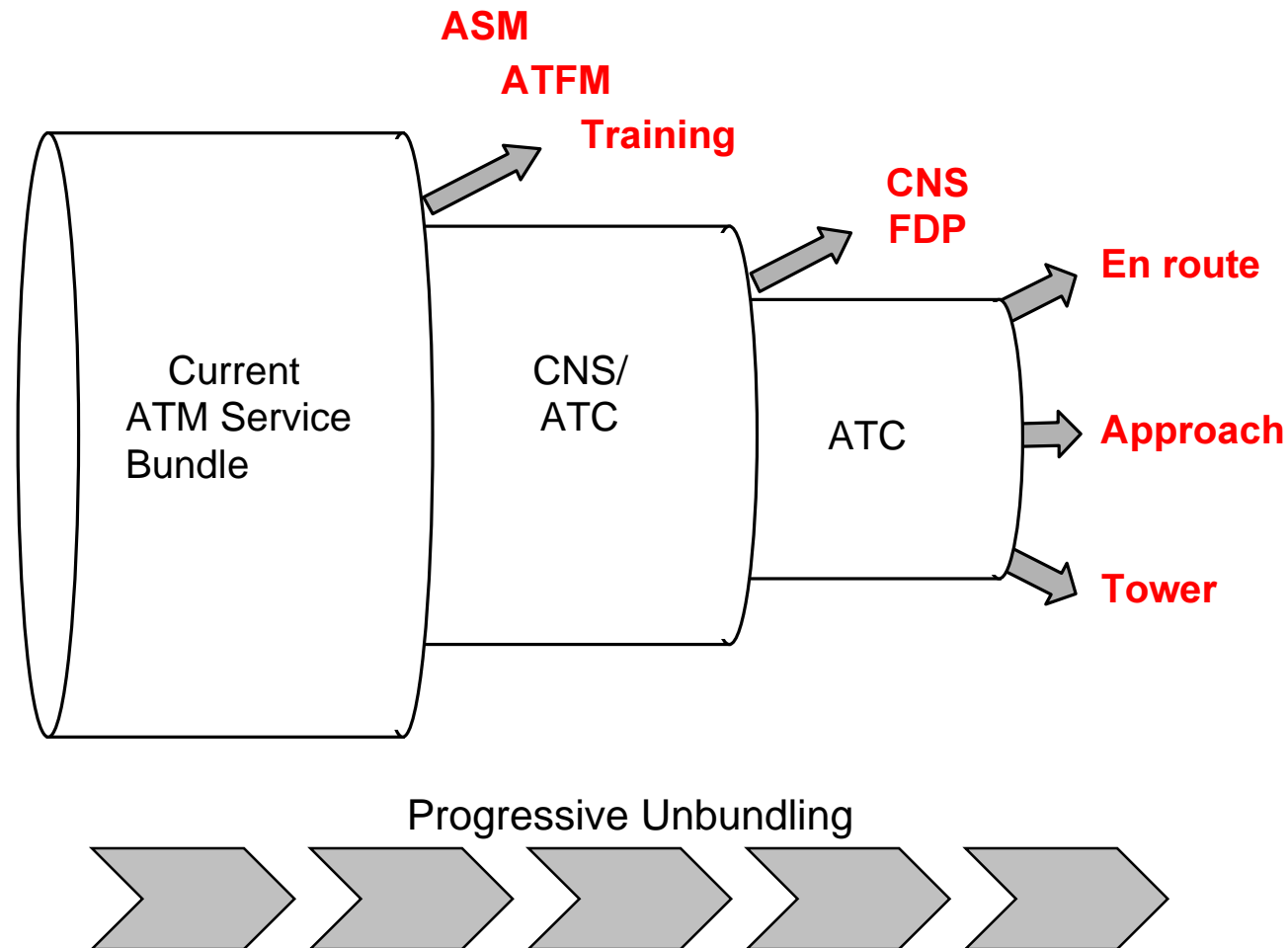
## There are a number of basic premises that must be included in consideration of the scope for restructuring the market

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- ▶ The **safety** culture must be **reinforced** and safety regulation must take **precedence** over all other types of regulation
- ▶ **Regulation** and **service provision** must be **separate** from each other, at least at the functional level
- ▶ **Air traffic control** in a given volume of airspace is a **natural monopoly** under current and medium-term technical and operational conditions
- ▶ The **system** must be optimised as a **whole** rather than as dis-aggregated parts
- ▶ The structure for **social dialogue** must be **strengthened** to include all affected staff in the reform process
- ▶ The approach taken to **human resource management** and planning must be **improved**

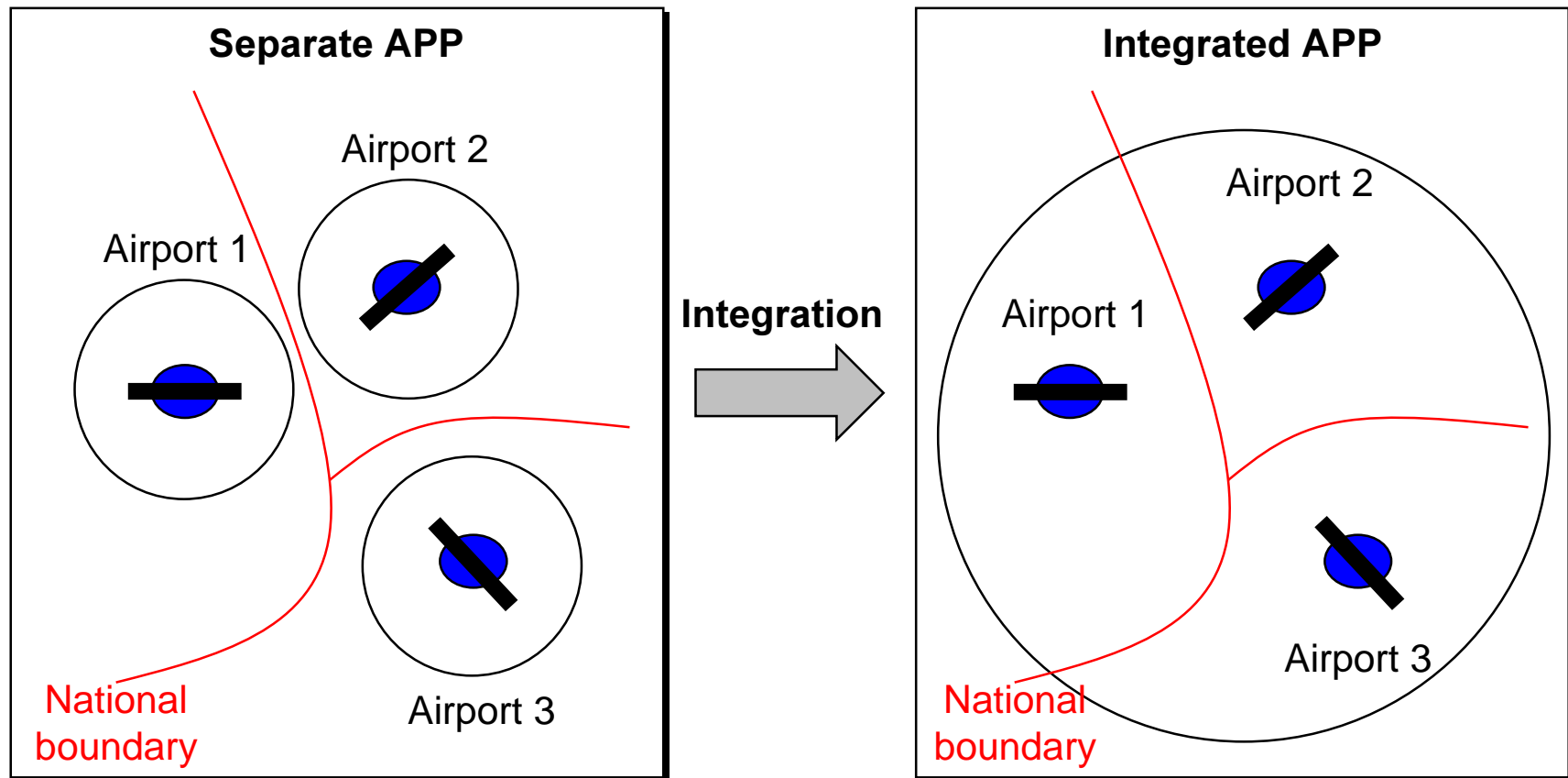
Scope for restructuring the market ...

One of the key elements of restructuring the market will be to facilitate the unbundling of services



Scope for restructuring the market ...

On the other hand there may also be some advantages to integration of services, for example approach control



Integration can contribute to the optimisation of the ATM system as a whole

Scope for restructuring the market ...

## Although unbundling or integration should not be mandated, measures must be put in place to facilitate such an approach by service providers

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- ▶ Apply licences to services on a service-by-service basis
- ▶ Ensure the level of transparency in the provision of services is sufficient to determine the validity and effectiveness of any unbundling
- ▶ Ensure that reporting and accounting processes are separate and distinct for each service
- ▶ Apply performance requirements to services on a service-by-service basis
- ▶ Additionally, when services are provided on an integrated basis, the regulatory framework should
  - require the services to be provided by independent cost centres within the service provider organisation, with the appropriate service level agreements and internal cash flows governing the relationship between cost centres
  - ensure that standard and transparent cost allocation procedures are applied to determine how costs of shared functions are allocated to individual service lines.

## Restructuring the market will impact on and have implications for many of the stakeholders

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- ▶ Restructuring of the ATM market will have significant impacts on
  - impact on human resources
  - rights and obligations of service providers
  - regulatory requirements
  - competition issues
  - disputes and appeals
  - accident investigation
  - military issues
- ▶ Re-organisation of the market will also create the need to introduce new mechanisms including the ability to resolve disputes or raise appeals and accident investigation for trans-national applications

## Scope of Regulation

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## The exercise of regulatory powers is critical to the creation and operation of the Community Regulatory Framework

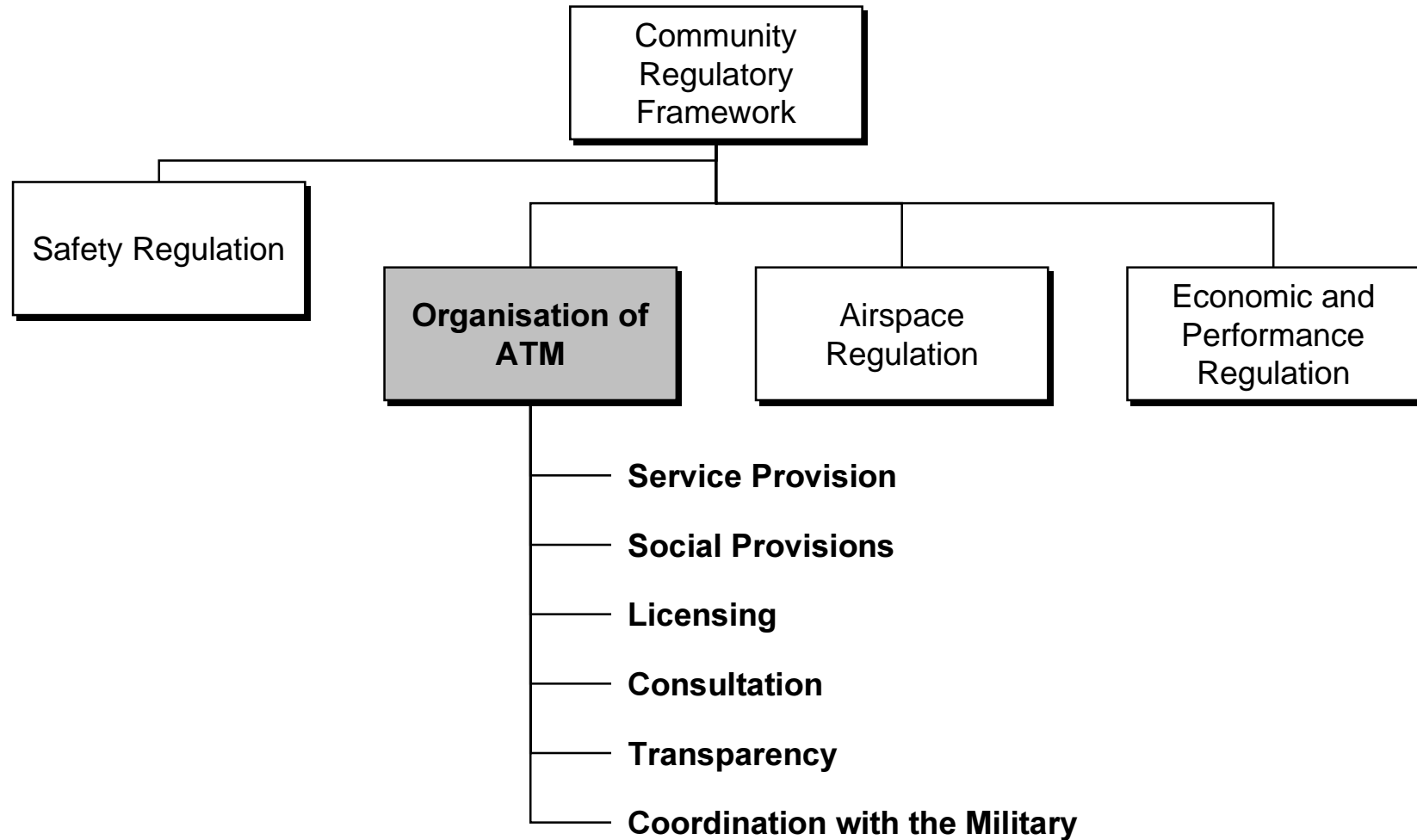
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- ▶ Acknowledging the principles of subsidiarity and proportionality, the overall requirements of the framework indicates that some tasks must be performed at Community level, whereas others should remain at State level
- ▶ At the Community level, the regulator should be responsible for:
  - development and implementation of rules
  - defining blocks of airspace
  - defining standard licences
- ▶ National regulators would operate within the Community level framework with specific responsibilities
  - granting local licences
  - collaborating, perhaps through a mutual recognition process, to grant trans-national licences
- ▶ EUROCONTROL should facilitate the implementation of the regulatory regime in the ECAC states that are outside of the EU



## Organisation of the Regulatory Framework ...

The overall Community Regulatory Framework will cover a number of areas with contributions coming from the various studies and elsewhere



### Service provision ...

## The approach to service provision must cover a number of critical issues governed by the regulation itself or through the licensing scheme

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- ▶ Regulation and service provision must be separated organisationally
  - this will require restructuring on the part of the majority of existing service providers
  - freedom from political interference is desirable for both regulation and service provision
- ▶ Service providers should have management and financial autonomy but no particular legal status should be pre-supposed
- ▶ Trans-national services are best organised by the service providers themselves rather than through complex multi-lateral agreements
- ▶ Service providers should determine the optimal degree of unbundling and integration of services facilitated by the Community Regulatory Framework
- ▶ Interconnection of systems and non-discriminatory access to and exchange of data is critical
  - message formats and content
  - interface standards
  - confidentiality/privacy
  - security and integrity
  - ownership, IPR, access and pricing

### Social provisions ...

## Restructuring of the market for ATM for service provision will have a number of social impacts that must be addressed through the Community Regulatory Framework

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- ▶ ATM is critically dependent on the employees that form the core of the system, including controllers, engineers and air crew
  - Social dialogue should be promoted to the maximum degree possible
  - A harmonised European training scheme and portable personnel licence should be established for controllers and engineers
    - ▶ each licence will still require additional, local qualifications
- ▶ Public service obligations should be enshrined in the licence for service provision, covering:
  - service outside of controlled airspace, i.e. for use by general aviation
  - services to remote or low traffic density regions
  - provisions for contingency to other service providers in case of system failure
- ▶ An independent appeals mechanism should be established

## The principle of licensing forms the cornerstone of the future arrangements for ATM service provision

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- ▶ A standard European licence is required:
  - to create a level playing field
  - to act as a regulatory tool for monopoly services
  - facilitate unbundling of services
  - enable cross-border service provision or integration of services
  - facilitate competition **for** or **in** the market if appropriate
- ▶ Two levels of licence are envisaged:
  - an **authority** certifying that a service provider is fit and suitable to provide a specific service
  - a definition of the **service to be provided** allowing the service provider to operate and defining the obligations and requirements of the operation
- ▶ Direct services will require both levels of licence
- ▶ Ancillary services will require the authority but the service itself could be defined through a service level agreement with the appropriate direct service provider

## The award of the licence should follow a standard procedure with assessments being made against uniform criteria

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- ▶ Top-level assessment criteria should determine the suitability of the potential service provider and could include:
  - past experience and credibility
  - safety and quality management systems and processes
  - financial health, long-term viability and sustainability
  - human resource policies and practices
  - customer focus
- ▶ In order to avoid the need for award of multiple licences, the appropriate mechanisms need to be put in place for trans-national service provision
  - mutual recognition of a single licence by the States concerned
  - award by a European Regulatory Authority
- ▶ Local licences will remain the responsibility of national regulators

## Licensing ...

# The licensing regime can be used to facilitate the unbundling of services

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- ▶ Each service will require licensing irrespective of whether it is provided individually or in a bundle
- ▶ Full accounting transparency and cost allocation should be required for each service and for overheads to enable the true costs of the individual services to be assessed
- ▶ Performance requirements should be specified on a service-by-service basis
- ▶ Service providers must be structured so that the costs and efficiency associated with the individual licensed services are transparent
- ▶ The licence should mandate the requirements for interconnectivity of systems and data exchange, relying on open standards and preventing the use of proprietary standards as far as possible

**This approach will ensure that services can be compared in an identical and objective way irrespective of whether they are provided in an integrated or unbundled way**

Consultative process ...

## The consultation process is an integral part of the Community Regulatory Framework

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- ▶ To ensure that the views of all stakeholders are considered in the rulemaking, requirements definition and technology development processes
- ▶ To promote consensus and ensure that changes, new rules, etc. are acceptable to all stakeholders to the maximum degree possible
- ▶ Obtain feedback on proposed changes
- ▶ To increase public access and participation in the rulemaking process
- ▶ To ensure adequate data is available for regional and global coordination

**Consultation should be included as a mandatory requirement in the Community Regulatory Framework**

### Transparency ...

## Transparency is required for the successful operation of the restructured ATM environment not least to generate public confidence

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- ▶ Both the service provision and regulatory processes should be transparent
- ▶ The economic regulatory regime will require the implementation of standard accounting and financial reporting regimes
  - to support the regulatory process, e.g. in setting targets for user charges
  - to monitor cross-subsidy
  - to facilitate the unbundling of services
- ▶ Similarly the performance regulatory regime will require:
  - the definition of standard sets of measurable performance indicators
  - the monitoring of these performance indicators
  - the reporting of the performance indicators to a standard template
- ▶ The safety regulatory regime will require a standardised safety monitoring and reporting regime



### Coordination with the military ...

## Due to the strategic and security implications of airspace and ATM, coordination with the military remains an important consideration in the Community Regulatory Framework

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- ▶ Flexible use of airspace is critical in opening up new capacity
  - this issue is being addressed in the Airspace Regulation Study
- ▶ There are many dual-use systems in operation and sharing of frequency bands
  - many existing arrangements are informal
  - in the future they can be addressed through service level agreements and transparent cost-allocation procedures
- ▶ Arrangements for regional and trans-national services need to take into account the potential requirements for reversion to State control in times of tension or crisis
- ▶ Currently consultation arrangements are made at several levels:
  - individual State
  - through the EUROCONTROL Military Expert Unit
  - through NATO

**Civil-military matters need to be addressed through the appropriate mechanisms, which could be based on the CFSP**

## Input to the Community Regulatory Framework

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Input to the Community Regulatory Framework...

## The ATM Market Organisation Study has made inputs to the development of the Community Regulatory Framework under several headings

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- ▶ Scope of regulation
- ▶ Requirements for service provision
- ▶ Modalities of service provision
- ▶ Relations between stakeholders
- ▶ Ruling arrangements