



EUROPEAN COMMISSION  
DIRECTORATE-GENERAL FOR ENERGY AND TRANSPORT  
DIRECTORATE F - Air Transport  
**Environnement & air safety**

# **The European Aviation Safety System**

# Presentation Plan

- ❖ **Aviation Safety: the context**
- ❖ **From JAA to EASA**
- ❖ **The European Aviation Safety Agency – the EU Framework and the Basic Regulation**
- ❖ **Relations with Third Countries**

# Aviation safety – the context

- The Chicago Convention - the Annexes
- The Joint Aviation Authorities – JAA (1990) – 39 members/cand's
- Domains covered
  1. certification and maintenance of products, parts and appliances
  2. organisation approvals (design, production and maintenance)
  3. flight crew licensing and air operations
- Regulation 3922/91 harmonization of technical requirements & administrative procedures
- 1992 - The 3rd Liberalisation Package – the creation of the internal market in aviation
- Need to give Europe a real aviation safety authority: Regulation 1592/2002 common rules on aviation safety creation of EASA

# From JAA to EASA

In 1991 the Community Regulation 3922/91 strengthened the role of the JAA for the European member states by requiring them to join the JAA, to adopt the JAA Requirements and to accept products designed, manufactured, operated and maintained under common rules and procedures and to recognise certification of products, organisations & personnel.

# From JAA to EASA

The JARs which are part of the Regulation became in that way directly applicable and fully binding in all Member States without any further time consuming national legislative procedure

# From JAA to EASA

- The creation of the European Aviation Safety Agency in 2002 was the inevitable result of ties among European Member States growing ever closer thanks to the achievement of the internal market in aviation and due to the inherent weaknesses of the JAA.
- The JAA is a cooperative body without legal personality. EASA is a Community Agency vested with legal personality having clearly defined rights and obligations and being able to dispose of movable and immovable property and be a party to legal proceedings.

# Basic Principles of Aviation Safety

- A product is an aircraft, an aircraft engine or a propeller.
- Type certification of a product means the process of examination by an authority with a view to verifying that this product corresponds to the design and manufacturing standards established by the manufacturer.

# Basic Principles of Aviation Safety

- The Civil Aviation Authority responsible of safety of a country will only issue product design approvals to an applicant in a country with which it has concluded a bilateral agreement for the export and import of such products.
- The Civil Aviation Authority responsible of safety of a country does not normally issue a type design approval for a product manufactured outside its territory.
- Foreign applicants for design approval must provide this authority with evidence that the product will be imported into their country, or will be installed in an aircraft registered in that country.

# Basic Principles of Aviation Safety

- All aircraft in Europe are subject to airworthiness certification in accordance with the EASA Regulation, for which prior type certification in respect of the aircraft, aircraft systems and equipment is required and performed according to the European implementing rules.
- The issue of a type certificate is the confirmation by EASA of official acceptance and declaration of the airworthiness of a particular aircraft design.
- For each individual aircraft, airworthiness certification based on type certification, is required in connection with the performance of air transport services. The individual airworthiness certificate is issued by the NAAs.

# Basic Principles of Aviation Safety

- The issuance of a type certificate is subject to the successful completion of type inspection, which results in official declaration of the aircraft type airworthiness. The airworthiness of a type of aircraft is subject to fulfilment of the design and airworthiness requirements as defined in approved type design documentation and as demonstrated by calculation and/or testing and/or trials of safe, trouble-free and sufficiently reliable operation in accordance with the specified operating and environmental requirements.

# From JAA to EASA

In 1992 the Community adopted a package of Regulations concerning the regime applicable to air carriers established in the Community and the conditions for market access. The link between safety and market access became pre-eminent.

The licensing rules made it clear that an operating licence could not be issued unless the company concerned had been issued and was holding a valid AOC.

# From JAA to EASA

In 1994 the Community adopted Directive 1994/56/EC on fundamental principles governing the investigation of civil aviation accidents and incidents. The first step towards a more systematically organised handling of safety data.

# From JAA to EASA

In 2003 and 2004, after the creation of EASA, and following lengthy negotiations since 1998 the safety regulatory network was further enlarged to encompass rules on occurrence reporting - Directive 2003/42 and safety of foreign aircraft – Directive 2004/36 introducing the ECAC SAFA programme into the Community.

# The EU framework

- **5 actors:**

- the Legislator (Council and Parliament)
- the Commission
- the Agency
- the Member States
- the Court of Justice

- **4 types of tasks:**

- setting binding standards
- developing regulatory material
- issuing certificates
- judicial control

# The creation of EASA

- ✓ **Ever growing regulatory convergence created the need of applying in aviation safety the principle of 'one stop shop'**
- ✓ **The European Aviation Safety Agency was created to permit the development and the uniform implementation of common rules in aviation safety**
- ✓ **Objective: to achieve a high level of safety across the entire Community and set aside national diverging practices**

# Setting up the Agency

## The structure of the Agency

- The Management Board
- The Executive Director
- The Board of Appeal

# Setting up the Agency

## The Management Board

- ↓ is composed of one representative per Member State, plus one representative of the Commission,
- ↓ deals exclusively with administrative and financial matters: work programme and priorities, budget, staffing, financial regulation, working methods,
- ↓ Decisions are made by 2/3 majority voting (1 member = 1 vote)
- ↓ appoints the Board of Appeal,
- ↓ appoints the Executive Director

# Setting up the Agency

## The Executive Director

- ↓ Shall be neutral and independent
- ↓ Shall manage the Agency
- ↓ shall take all safety decisions of the Agency:
  - technical specifications and guidance material  
(including airworthiness codes)
  - individual decisions on conformity with the rules
  - recommendations to the Commission on any subject covered by the Regulation

# Setting up the Agency

## The Board of Appeal

- ↓ acts as a first administrative instance to verify the legality of the acts of the Agency.
- ↓ is created on an ad hoc basis: the chairperson and the members are appointed by the Management Board from a list established by the Commission.
- ↓ chairperson and members shall be neutral and independent;
- ↓ decisions are binding on the Agency.

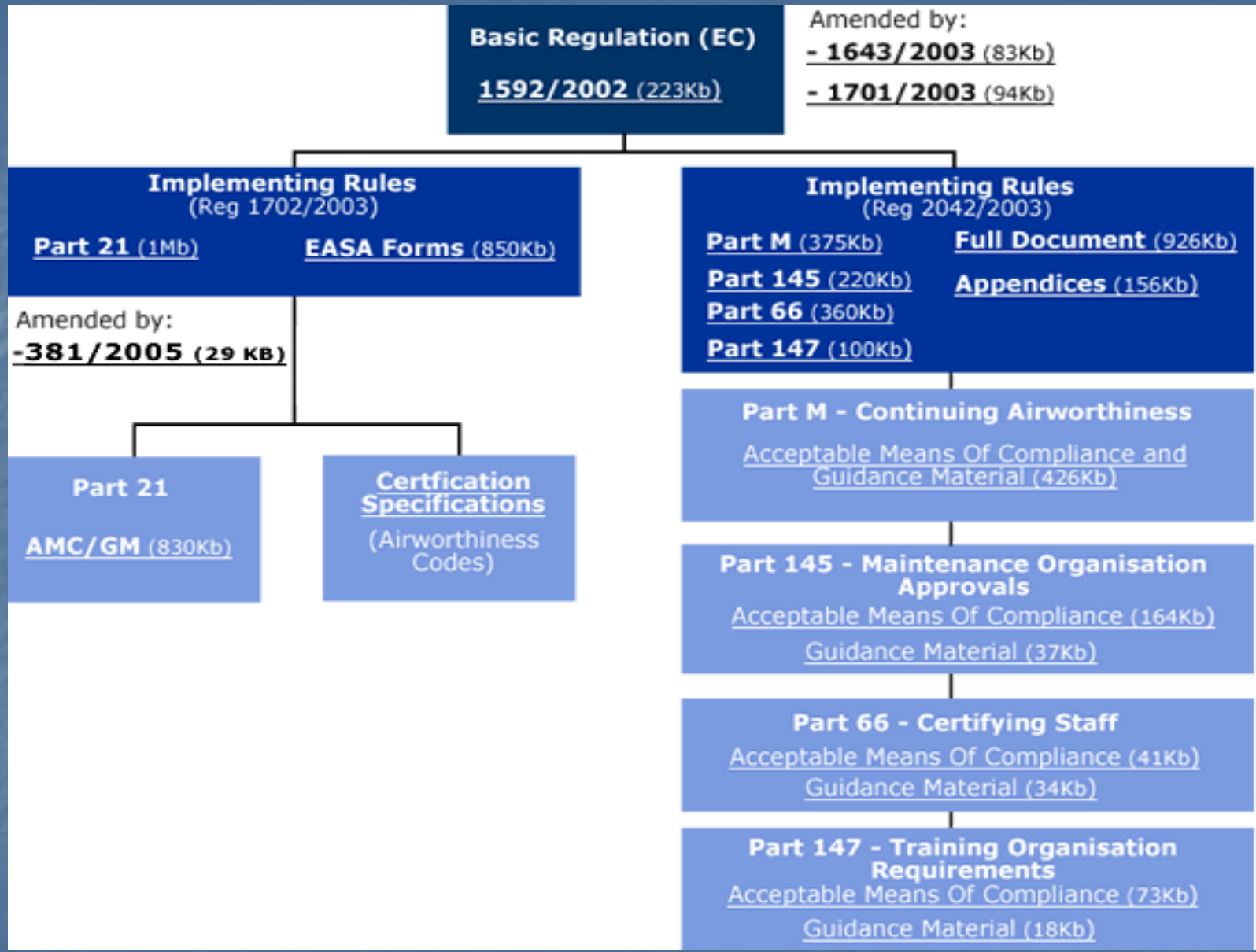
# The EU framework

## The hierarchy of rules

- ✓ **Primary law - the EC Treaties**
- ✓ **Secondary law – the “EASA” Regulation**
- ✓ **The rules for the implementation of the EASA Regulation – Commission Regulations EC No 1702/2003 & No 2042/2003**
- ✓ **Specifications and guidance material developed and adopted by EASA**

# The tasks of EASA

- ✓ **To develop essential requirements & implementing rules to be adopted by COM (Reg. No1702/2003, 2042/2003, 488/2005, 736/2006)**
- ✓ **To develop & adopt acceptable means of compliance & guidance material, airworthiness codes – not mandatory material**
- ✓ **To issue type certificates**
- ✓ **To conduct standardisation inspections of National Aviation Authorities and technical investigations of certificate holders to verify compliance with the rules and monitor continued airworthiness**
- ✓ **To establish relations with international organisations and aviation authorities of non-EU countries**
- ✓ **To carry out research in the field of its expertise & coordinate such activities among EU member States.**



# The EASA Regulation

EC Regulation 1592/2002 establishes the following sharing of roles:

	Rules	Certificates
<b>Airworthiness</b>		
products & organisations		
- Type certificate	EASA/ EC	EASA
a) design product		EASA
organisation		
b) production organ.		NAAs
- Individual certificate	EASA/ EC	NAAs
<b>Maintenance organisations</b>		
- Non EASA country	EASA/ EC	EASA
- EASA country	EASA/ EC	NAAs

NAAs: National Aviation Authorities

# **EASA**

## **from the present to the future**

**Optimal and uniform level of safety respecting fair competition among operators in commercial and non commercial operations can only be achieved by extending the common rules beyond their present remit (annexes 1, 8 and 16) to cover in a first step aircraft operations and pilot licences (annexes 6) and empowering EASA to perform SAFA inspections on foreign aircraft and inspections on EU aircraft; at a later stage EASA competences should further expand to airports (annex 14) and ATM**

**COM(2005) 578 of 15.11.2005**

**COM(2005) 579 of 16.11.2005**

# Certification and safety oversight in the future

<b>Domain:</b>	<b>EASA</b>	<b>NAAAs</b>
<b>EU Air Operators</b>	<b>Part 129 approval of airlines established in non EU countries and in EU countries if requested</b>	<b>AOCs and Part 129 approval for airlines established in EU countries</b>
<b>Flight Crew Licensing</b>	<b>Certification/approval of training centres for non EU countries and assessment bodies (if requested)</b>	<b>Certification/approval of EU training centres &amp; Licenses to pilots</b>
<b>Safety of foreign aircraft (SAFA)</b>	<b>Certification of airlines in the country of origin</b>	<b>Ramp inspections</b>
<b>Air Navigation Services</b>	<b>Certification of Pan-European systems/providers (e.g. Galileo)</b>	<b>Certification of National providers</b>
<b>Air Traffic Management</b>	<b>Oversight of Pan-European functions (e.g. Traffic Flow Management)</b>	<b>Oversight of national functions (e.g. Airspace management)</b>
<b>Airports</b>	<b>//</b>	<b>Certification of airports</b>

# **Introducing JAR-OPS into Community law**

**Formal introduction of JAR-OPS into  
Community law – modification of  
Regulation (EC) No 3922/91 which is  
about to enter into force**

# Introducing JAR-OPS into Community law

- **EU-OPS (JAR-OPS 1 including FCL) is applicable in the Community immediately**
- **when EASA's competences will be extended to cover this field essential requirements for OPS and LIC will reflect EU-OPS**
- **EU-OPS will form the basis for the adoption by the Commission of implementing rules in the EASA system similar to those we have today on airworthiness and maintenance**

# **Managing the SAFA Database transfer to EASA**

**Adoption of Commission Regulation (EC) No  
768/2006 of 19 May 2006  
implementing Directive 2004/36/EC as regards  
the collection & exchange of information on the  
safety of aircraft using Community airports and  
the management of the information system (OJ L  
134, 20.5.2006, p. 16–18 )**

# **Managing the SAFA Database transfer to EASA**

**The SAFA Database is to be managed as from 1st January 2007 by the European Aviation Safety Agency**

**Centralised collection, processing, updating, evaluation, dissemination and reporting of the information contained in the Database**

**One objective:**

**improve level of safety by improving quality of relevant information and reliability of the reporting system**

**Until EASA is empowered to perform SAFA inspections on foreign aircraft and inspections on EU aircraft**

# Standardisation inspections

## What do they cover

Article 45 of Regulation N° 1592/2002: “the application of and its implementing rules – Regulations N° 1702/2003 & 2042/2003”

initial and continued airworthiness of aeronautical products, parts and appliances and personnel and organisations involved in their design, manufacture and maintenance

# Who does what?

EASA assists the Commission to exercise its enforcement powers i.e. to ensure that Community law is correctly applied by

*carrying out standardisation inspections of national aviation authorities and, for the purpose of assessing their performance, inspections of certificate holders under the regulatory oversight of the inspected national aviation authority*

# Qualification requirements

- **EASA establishes the qualification requirements for all inspectors**
- **EASA is responsible for training its own staff – future inspectors (team leaders and members)**
- **EASA trains staff seconded by national aviation authorities – future inspectors (team members)**

# Types of inspections

- 1) **Standardisation inspections on initial and continued airworthiness according to an annual programme**
- 2) **Follow-up inspections in the relevant area to verify implementation of remedial action plans**
- 3) **Ad hoc inspections at the request of the Commission**

# Inspections' procedure

1. a preparatory phase lasting a minimum of 10 weeks prior to the inspection;
2. a visiting phase;
3. a reporting phase lasting a maximum of 12 weeks following the inspection;
4. a follow-up phase lasting a maximum of 16 weeks following the reporting phase;
5. a closure phase to take place at the end of the follow-up phase.

# Enforcement by EASA

- **EASA sends a request for clarifications and/or request remedial action, setting a deadline**
- **If the clarifications do not satisfy the Agency or where no satisfactory remedial action is timely proposed or is not duly implemented EASA sends a supplementary report to the national aviation authority, to the Commission and to the Member State.**
- **The Commission may subsequently transmit this report to all national aviation authorities.**

# Enforcement by the Commission

Following the supplementary report the Commission may take any of the following steps:

- (a) address comments to the Member State concerned or request further explanation to clarify all or part of the findings
- (b) require the Agency to carry out all necessary inspections of national aviation authorities to check the implementation of remedial actions, the minimum notice for such a follow-up action being 2 weeks;
- (c) If all the above remains fruitless, the Commission can decide to launch infringement proceedings against the Member State concerned.

# Link with other EC rules

- **Standardisation inspections and accreditation of national aviation authorities for the purpose of outsourcing certification tasks – art. 24 of 1592/2002.**
- **Standardisation inspections and imposition of operating bans on air carriers according to Regulation 2111/2005.**
- **Standardisation inspections and the application of the liberalisation rules.**

# Possibilities for coordination

- **The annual programme of standardisation inspections is to be published along with EASA's Work Programme, i.e yearly before 30/09**
- **MOU between EASA and ICAO for the purpose of conducting USOAP inspections**
- **Peer reviews of national supervisory authorities – ESIMS - Regulation 2096/2005 on common requirements for the provision of air navigation services**

# **Relations with third countries**

**involvement of European countries**

**co-operation with major aeronautical partners**

**technical cooperation with and assistance to third countries**

# Relations with third countries

- **The involvement of European Countries**
- **The objective is to associate all current Joint Aviation Authority members and other European Civil Aviation Conference countries, depending on their own willingness to be committed by the EASA decisions.**
- **EASA became a member of JAA in November 2003**

# Relations with third countries

## Three levels of cooperation

First level: technical working arrangements binding only EASA

EASA concludes working arrangements of technical nature with its counterparts in third countries which have aeronautical production such as Brazil, Japan, Canada, China, Israel, UAE, Russia - IAC, or with international organisations ICAO - ART. 18 of EASA REG.

# Relations with third countries

## Second level: fully fledged Community agreements ART. 9

Negotiations by the Community with major partners, such as the USA and Canada, with a view to concluding bilateral agreements binding for all Member States on the mutual acceptance of certification approvals

Our aim: to ensure a smooth transition so as to maintain:

- ↓ Current partnerships with European countries
- ↓ Existing harmonisation of arrangements
- ↓ Cut down double work and waste of time
- ↓ After conclusion: existing bilaterals will be replaced

# Relations with third countries

**Third level: full integration into the EASA structure and the Community safety system – ART. 55 of Reg.**

**The Community concludes agreements with European third countries – members to the Chicago Convention where these countries adopt and apply Community law covered by the EASA Regulation and the implementing rules.**

**Result: these countries (currently Iceland, Norway and Switzerland) and in the future the ECAA countries participate in the administrative, financial and budgetary management of EASA.**

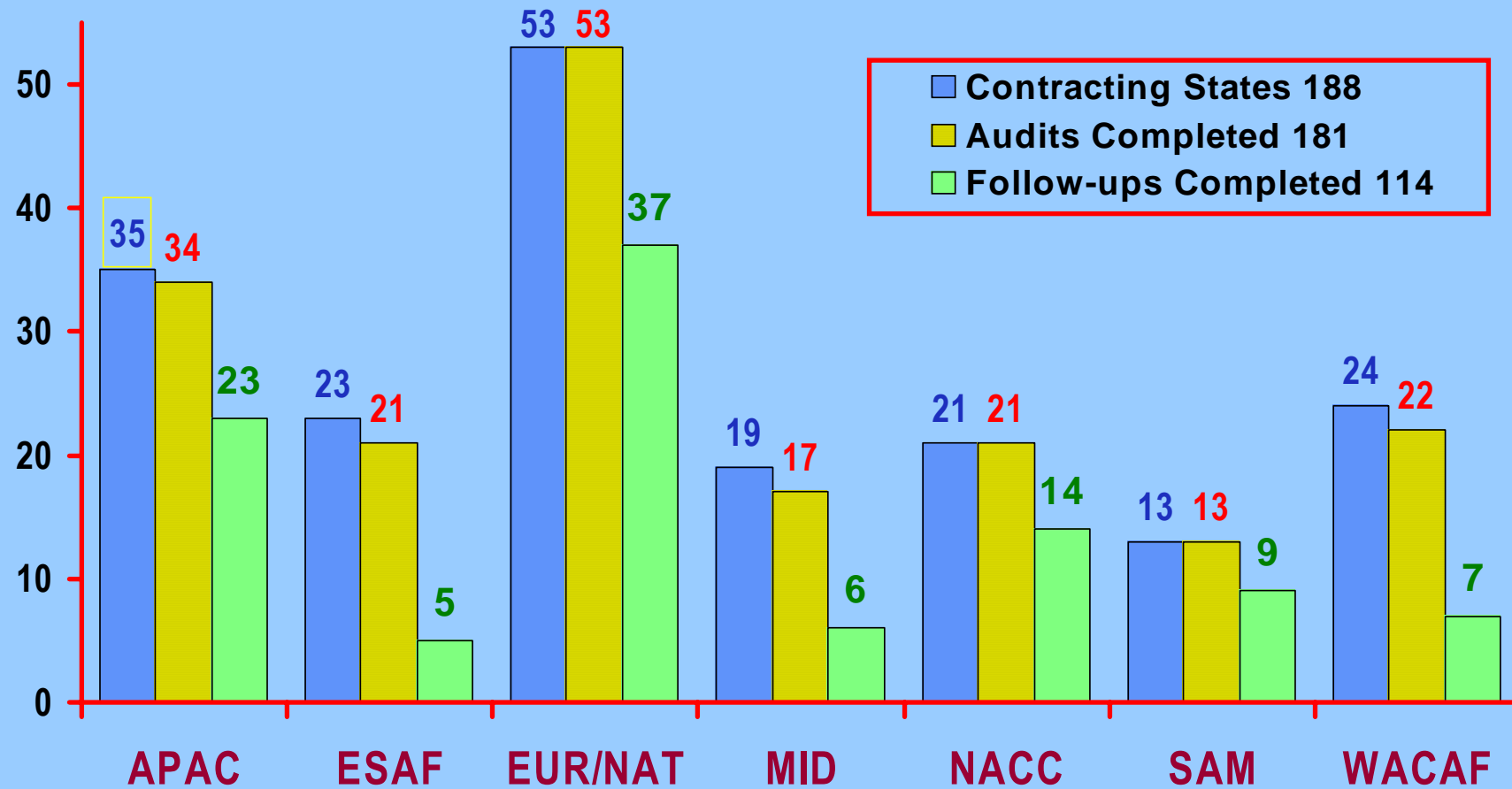
# How to best cooperate

- **Provisions on mutual cooperation and assistance in technical arrangements with EASA**
- **Provisions on regulatory cooperation in EC-wide bilateral agreements with a third country on the mutual acceptance of certification findings**
- **Participation in COSCAP projects**

# Regulatory co-operation for Safety Oversight at Regional level



# USOAP Achievements in 2004



# ICAO Audit Results

- ICAO audits have revealed the following deficiencies to be common to many countries
- Primary aviation legislation: out-of-date
- Institutional structures : regulators lack authority
- Qualified personnel : too few
- Financial resources : aviation revenue diverted to other activities

# Regulatory cooperation

- **With developing countries in regional clusters**
- **Focused on USOAP findings on AIRW and OPS with possible extension to ATM, airport safety...**
- **Mainly with ICAO TCB (but also JAA and industry...)**
- **How to update local standards in compliance with ICAO SARPs – training activities**

# Industrial cooperation

- **Mainly for emerging countries**
- **With manufacturers but also airlines and Civil Aviation Authorities**
- **Include substantial safety components (AIRW, OPS, “corporate safety”)**
- **Mainly ongoing projects in Asia**
  - China – 14.2 million €**
  - South and South East Asia – 15 million €**
  - India – 18 million €**

# Where to find more information...

- [http://europa.eu.int/comm/dgs/energy\\_transport/index\\_en.html](http://europa.eu.int/comm/dgs/energy_transport/index_en.html)
- [http://europa.eu.int/comm/transport/air/international/cooperation\\_fr.htm](http://europa.eu.int/comm/transport/air/international/cooperation_fr.htm)
- <http://www.easa.eu.int/home/index.html>
- <http://www.jaa.nl>
- [http://europa.eu.int/comm/external\\_relations/index.htm](http://europa.eu.int/comm/external_relations/index.htm)

# The European Aviation Safety System

*Thank you for your attention!*

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