Stakeholder Consultation Workshop on the Draft Regulatory Material ....

16 May 2008, Brussels, EUROCONTROL
Agenda Item 1:
Welcome and Introduction
Workshop Objectives

Peter STASTNY
Head of Safety Regulatory Unit (SRU)
Mandate Manager
EUROCONTROL
<table>
<thead>
<tr>
<th>ITEM</th>
<th>TIME</th>
<th>SUBJECT</th>
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<td>1.</td>
<td>10h00</td>
<td>Welcome and Introduction</td>
<td>P STASTNY (DG/SRU)</td>
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<td></td>
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<td>Presentation of the Workshop Objectives</td>
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<tr>
<td>2.</td>
<td>10h10</td>
<td>The RCS Mandate</td>
<td>P STASTNY (DG/SRU)</td>
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<tr>
<td>3.</td>
<td>10h30</td>
<td>Coffee Break</td>
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<td>3.</td>
<td>10h45</td>
<td>The Regulatory Approach and the draft rule</td>
<td>F GIRARD (DG/SRU)</td>
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<tr>
<td>4.</td>
<td>11h30</td>
<td>Main Outcome of the Formal Consultation</td>
<td>P STASTNY (DG/SRU)</td>
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<td>Lunch</td>
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<td>5.</td>
<td>13h15</td>
<td>Discussion of Main Outcome of the Consultation</td>
<td>P STASTNY (DG/SRU)</td>
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<td>F GIRARD (DG/SRU)</td>
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<td>15h15</td>
<td>Coffee Break</td>
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<td>6.</td>
<td>15h30</td>
<td>The Way Forward – Next Steps</td>
<td>Peter STASNY (SRU)</td>
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<td>7.</td>
<td>15h45</td>
<td>Conclusions</td>
<td>Peter STASNY (SRU)</td>
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<td>16h00</td>
<td>End of Workshop</td>
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Workshop Objectives

- Discussion on the **MAIN OUTCOMES** of the Formal Consultation
- Reach a **COMMON UNDERSTANDING** on the way forward
Agenda Item 2: The RCS Mandate

Peter STASTNY
Head of Safety Regulatory Unit (SRU)
Mandate Manager
EUROCONTROL
Mandate by EUROPEAN COMMISSION

EUROCONTROL to assist in the development of

A RISK CLASSIFICATION SCHEME FOR THE DESIGN OF ATM

- EC the 15 March 2006
- accepted by EUROCONTROL the 10th April 2006
Mandate Requirements (1)

- to develop appropriate regulatory material regarding the development of a risk classification scheme for the design of ATM, taking into account that:
  - EC regulation 2096/2005 contains a severity classification scheme
  - ESARR 4 contains a risk classification scheme
  - ESARR4 contains a maximum tolerable probability for ATM directly contributing to accidents in the ECAC region.
  - maximum tolerable probability for the severity classes 2 to 5 has to be developed
  - The requirements for risk assessment and mitigation apply to the ATM functional system and supporting arrangements. The applicability will include the following ATM services ATS, ATFM, ASM and, supported by CNS.
Mandate Requirements (2)

Specific Issues:

- To define the risk classification scheme.

- To assess whether or not similar requirements would be applied to other services (MET, AIS).

- To define common criteria for using the risk classification scheme to derive design objectives taking into account the level of provided ATM functions and the environment of operations in which it operates (apportionment).
Mandate Requirements (3)

- Specific Issues:
  - to verify compliance with the risk classification scheme and its criteria for use (role of NSA)
  - To clarify relationships between the risk classification scheme for the design of ATM and the requirements of ICAO annex 11 section 2.26
  - To clarify the role of historical data coming from existing European occurrences reporting process in the establishment of RCS
  - To assess the need for refinement of severity classification
  - To identify the timeframe and scope for implementation of the risk classification scheme
Development Process of the mandate

Main dates:

- 5th March 2007: End of informal Consultation on the questionnaire addressing the regulatory approach
- 25th May 2007: end of informal Consultation on Regulatory Approach
- 6th June 2007: Regulatory Approach sent to the Commission
- 31st March 2008: End of Formal Consultation on Draft Regulatory Material
Agenda Item 3: The Regulatory Approach Overview of the Draft IR

Françoise GIRARD
Safety Regulatory Unit
EUROCONTROL
### Regulatory Approach (1)

<table>
<thead>
<tr>
<th>Subjects for prescriptions</th>
<th>Nature of prescription</th>
</tr>
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<tbody>
<tr>
<td><strong>Regulatory Coverage of the RCS</strong></td>
<td></td>
</tr>
<tr>
<td>Objective of the rule</td>
<td>to establish a RCS:</td>
</tr>
<tr>
<td></td>
<td>o To support the development of harmonised systems for ATM service provision</td>
</tr>
<tr>
<td></td>
<td>o To enable objective Safety Targets to be derived such that future systems introduced in European ATM meet common safety performance</td>
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<tr>
<td>Scope</td>
<td>• Air Navigation Services to all GAT in managed airspaces (SES EC regulation 550/2004)</td>
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<table>
<thead>
<tr>
<th>Field of application</th>
<th>Nature of prescription</th>
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<tbody>
<tr>
<td><strong>Regulatory Coverage of the RCS</strong></td>
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<tr>
<td>• The Risk Classification Scheme applies to Air Navigation Services that have the potential to contribute to an aircraft accident</td>
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<tr>
<td>• The Risk Classification Scheme applies to people, procedures, equipments</td>
<td></td>
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<tr>
<td>• The Risk Classification Scheme applies to the airborne, ground and, if appropriate, spatial components of the ATM functional system, through cooperation with responsible parties</td>
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<thead>
<tr>
<th>Responsibilities</th>
<th>Nature of prescription</th>
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</thead>
<tbody>
<tr>
<td><strong>Regulatory Coverage of Deployment Conditions</strong></td>
<td></td>
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<tr>
<td>The NSA to apportion the EU Safety Target to its own airspace and to allocate a Safety Target to ANSPs operating within its airspace</td>
<td></td>
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<tr>
<td>The ANSP to develop the ATM functional system according to the tolerable rate of the RCS.</td>
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<table>
<thead>
<tr>
<th>Definitions</th>
<th>Nature of prescription</th>
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<tbody>
<tr>
<td>Risk Classification Scheme</td>
<td></td>
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<tr>
<td>Safety Target</td>
<td></td>
</tr>
<tr>
<td>Severity</td>
<td></td>
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<tr>
<td>Severity Class</td>
<td></td>
</tr>
<tr>
<td>Severity Classification scheme</td>
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<table>
<thead>
<tr>
<th>Risk classification scheme</th>
<th>Nature of prescription</th>
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<tr>
<td>The RCS is used for assessing the safety risk. A risk table is associated with RCS and contains the tolerable rate of occurrence of an effect having a certain severity.</td>
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## Regulatory Approach (2)

<table>
<thead>
<tr>
<th>Subjects for prescriptions</th>
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<tbody>
<tr>
<td>Regulatory Coverage of Deployment Conditions</td>
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<tr>
<td>Risk matrix</td>
<td>Express the tolerability of a failure of the service provided by the ANSP with those rates: Effects of hazards of Severity 1 are <strong>extremely exceptional</strong>. Effect of Severity 2 to 5 remains within <strong>tolerable rates</strong>.</td>
</tr>
<tr>
<td>Need for Advisory Material</td>
<td></td>
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<tr>
<td>- Development of the quantitative values of RCS at EU level apportionment to different levels of service</td>
<td></td>
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<tr>
<td>- Expression of “tolerable rates” according to different risk models</td>
<td></td>
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<td>- Verification process of the NSA</td>
<td></td>
</tr>
<tr>
<td>Subjects for prescriptions</td>
<td>Nature of prescription</td>
</tr>
<tr>
<td>Regulatory Coverage Relating to Implementation Conditions</td>
<td></td>
</tr>
<tr>
<td>Implementation timescales.</td>
<td>The regulation and the advisory material dealing with the Establishment of the rates of RCS at EU level and for different types of service provision, with specific rule for apportionment at NSA level and ANSP level Should be implemented consistently with the entry to force of the Commission Regulation Establishing a Safety Oversight Function by National Supervisory Authorities (the transposed ESARR 1).</td>
</tr>
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</table>
Regulation (EC) No 1315/2007 requires mandatory safety oversight by national supervisory authorities of the provisions of the RCS regulation.
Recital (16) of CR stipulates that the maximum tolerable probabilities for ATM defined in ESARR 4 should be updates and mechanisms to apply them in different circumstances should be developed.
CR defines the features of a risk classification scheme in terms of severity classification, and the concept of maximum probability of the effect of hazards for each severity class.
Member States agreed to provide a standardised baseline which should ensure that common apportionment methodology and common set of safety targets are agreed and defined at the European level.
The common apportionment methodology and the common set of safety targets are developed in Community Specifications with the support of EUROCONTROL.
Member States should ensure that safety targets already established at the national level do not suffer any reduction due to the implementation of this regulation.
REGULATION BODY

Article 1: Subject-matter and scope

- the requirements for the definition and implementation of a risk classification scheme and defines the safety target for accidents with an ATM contribution and the tolerable risk of incidents for the functional system.
- This regulation shall apply to organisations providing services to flights operating as general air traffic in controlled airspace.

RCS applicable: apply the risk classification scheme:

- during risk assessments for the design of new functional systems and their changes
- airborne, space-based and ground-based ATM systems through cooperation between responsible parties.

Article 2 Definitions
REGULATION BODY

- Article 3: Establishment of risk classification scheme
  - Member State shall establish a national risk classification scheme which is developed in accordance with a standardised process which:
    - establishes a common set of safety targets;
    - defines a common apportionment methodology;
    - defines tolerable risk for accidents due to ATM contribution as ‘highly improbable’.
  - the Member State shall not degrade the safety targets due to the implementation of this Regulation.
  - Member States shall define the apportionments for their national organisations.
  - Member States shall conduct periodic assessments of their risk classification schemes.

- Article 4: Additional Requirements
  - Organisations shall:
    - implement RCS as part of their safety management systems or risk assessment and mitigation processes.
    - provide at the request of the national supervisory authority, all the relevant evidence W/R use of RCS.
This Regulation shall enter into force on the 20th day following that of its publication in the Official Journal of the European Union.

This Regulation shall be binding in its entirety and directly applicable in all Member States.
Agenda Item 4:
Main Outcome of the Formal Consultation

Peter STASTNY / Françoise GIRARD
Safety Regulatory Unit
EUROCONTROL
Number of Comments and Responses

- Good level of response
- Additional information provided by stakeholders (as position papers)
- Numerous comments

<table>
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<th>Number of comments:</th>
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<td>Authorities</td>
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<td>ANSP</td>
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<td>Industry</td>
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<td>Other</td>
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<tr>
<td>Total</td>
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<td>Responses with no general comments</td>
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<tr>
<td>Full responses</td>
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<tr>
<td>total</td>
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# Comments received by Stakeholders

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<tr>
<th></th>
<th>Acceptable without amendment</th>
<th>Acceptable but would be improved with amendments</th>
<th>Not acceptable but would be acceptable with amendments</th>
<th>Not acceptable under any circumstances</th>
<th>Total per stakeholders</th>
<th>%</th>
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<tr>
<td>Civil and Mil. Authorities</td>
<td>3</td>
<td>1</td>
<td>10</td>
<td>0</td>
<td>14</td>
<td>41%</td>
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<td>Services providers</td>
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<td>3</td>
<td>8</td>
<td>3</td>
<td>16</td>
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<tr>
<td>Industry</td>
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<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3%</td>
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<tr>
<td>Other</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>9%</td>
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<th>6</th>
<th>6</th>
<th>19</th>
<th>3</th>
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<tr>
<td>percentage</td>
<td>18%</td>
<td>18%</td>
<td>56%</td>
<td>9%</td>
<td>100%</td>
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</table>
Comments received by Categories of Stakeholders

- Civil and Mil. Authorities: 41%
- Services providers: 47%
- Industry: 3%
- Other: 9%
Categories of Responses received

- Not acceptable under any circumstances: 9%
- Not acceptable but would be acceptable with amendments: 55%
- Acceptable without amendment: 18%
- Acceptable but would be improved with amendments: 18%
Main Outcome of the Formal Consultation

- List of issues raised by the formal consultation on draft implementing rule
- Comments on advisory material
Issues on the Rule (1)

- **The definitions in the rule**
  - Need to amend/simplify the definitions

- **The need for a rule**
  - No need for a rule for quantitative targets (pb. of values)
  - Better to amend EC regulation 2096/2005

- **Relationships with Eurocae Standard ED125**
  - Clarify the role of advisory material versus ED125
  - Several standards may be confusing

- **The scope**
  - To keep the scope of the EC regulation 2096/2005

- **National RCS versus a single European RCS**
  - Potential risks of inconsistent RCS and fragmentation
Issues on the Rule (2)

- **Applicability of the rule**
  - to Member States/ NSA/ Organisations (ANSP, ATFM and ASM)
  - Functional system

- **Standardised process and Community Specifications**
  - Mechanism to be apply for using standardised process
  - Legal basis CS used in the scope of EC regulation 552/2004
  - CS becomes mandatory because they are referred by the rule

- **Qualitative safety targets**
  - Need to take into consideration the qualitative safety targets

- **Values of safety targets in the draft rule**
  - Figures for Safety targets are not defined in the rule

- **Safety target defined only for accidents**
  - target for severity 1 is defined in the rule, not severity 2 to 5
Issues on the Rule (3)

- **Apportionment**
  - Applicability and scope ambiguous
  - Methodology
- **Periodic assessment**
  - Purpose, periodicity
- **Additional requirements**
  - Pertinence, duplicate Common Requirements
- **Implementation Conditions**
  - Agreement on advisory material before the entry into force
  - Dates are too ambitious.
Issues on the Advisory Material

- **Maturity of advisory material**
  - Validity of the data
  - Data base and baseline for calculation
  - Safety nets
  - Order of magnitude / discrepancies between values in advisory material and Ed 125

- **Apportionment**
  - Too much detailed
  - Methodology not approved
Agenda Item 5:
Discussion of Main Outcome of Consultation

Peter STASTNY / Françoise GIRARD
Safety Regulatory Unit
EUROCONTROL
Main issues (1)
Definitions

- **Comments**
  - clarity, completeness correctness and necessity of the definitions as written.
  - Many of the comments relate to the scope of the draft rule

- **Responses**
  - proposed amendments to the definitions are in many cases contradictory especially about the terms within the core of the topic (as risk, safety targets, and risk classification scheme).
  - This can be explained by the complexity of the domain and the variety of the Member States’ approaches which have already developed their expertise in this domain.
  - The doublons will be removed (ICAO, other definitions already in EC regulations)
  - The option is to choice the simplest definition
  - Detailed concepts in ATM should be developed in depth in advisory material
Main issues (2)
The need for a rule

- **Comments**
  - definition of quantitative safety targets is not enough mature at this stage because the statistical material in Europe is considered not sufficient to be used as a basis for establishing a regulation.
  - to limit RCS to design of ATM functional system and to consider only its failures
  - to simply amend the SES common requirements.

- **Responses**
  - The mandate is to develop regulatory material dealing with quantitative targets.
  - The RCS, includes people, equipments and procedures and is not limited to the failure of ATM functions.
  - The approach will remain quantitative.
  - The Advisory material will be reviewed by including the information given by the ED125.
  - The mandate is aiming to establish a Risk Classification Scheme function for ANS, and air traffic flow management (ATFM) and airspace management (ASM). The scope of the mandate is wider than the scope of regulation (EC) 2096/2004, the development of a new rule is necessary.
Main issues (3)

Relationships with Eurocae Standard ED125

- **Comments**
  - The existence of quantitative approaches, EUROCAE Standard ED-125 and the advisory material supporting the RCS could create confusion.
  - The proposed regulatory material must contain a clear indication on which one is to be followed or a clear statement that an ANSP has complete freedom of choice.
  - It is considered very important that a safety target should be given under the umbrella of SESAR and from which the ANSP's safety objectives can be derived.
  - In order to work with common safety targets in EC it is important that guidelines for RCS are issued according to a common standard.

- **Responses**
  - According to the informal consultation it has been decided to develop the quantified targets in advisory material and not in the rule.
  - The initial advisory material is addressing the methodology to develop and to implement a RCS at National or European level, the EUROCAE standard ED125 are not addressing the same level requirements.
  - The RCS should be independent from the methodologies used by the organisations and other methodologies than Ed125 can be proposed.
  - The draft regulation is part of further regulations in ATM which should apply to the developments issued from SESAR when they will be implemented in the ATM functional system.
  - The RCS draft rule is applicable at State level (article 6)
  - Some modifications to the advisory material are foreseen in order to better explain that the approaches which are developed in ED125 and in RCS draft advisory material are not contradictory, but they are addressing different levels of guidance.
Comments

- A number of comments questioned why the scope of the Regulation differs from the scope of the Common Requirements.
- Airspace / ATFM may be conducted by a single, FAB wide organisation. The regulator must clarify if that organisation, which is not an ANSP, will be the subject of a RCS.
- There is a risk that the definition of the ATM operational system is not sufficiently defined which might create some difficulties to some States and ANSP to apply the RCS correctly.

Responses

- The scope will remain the same as it is an input of the mandate. While ASM and ATFM organisations are a potential source of hazards to ATM it is beholden to those who carry the risk i.e. the ANSPs to ensure, through consultation with ASM and ATFM that potential hazards from these services are recognised and managed.
- The notion of ATM operational system is not defined in EC regulation. The term used in this context which has a wider extend for the RCS purpose is the functional system, as defined in EC regulation 2096/2004 in article 2 (c). The establishment of RCS at organisational level needs on an apportionment process which can satisfy the issue of the adaptation of the RCS to different operational systems.
- However, as the safety regulatory requirements in ASM and ATFM implementing rules did not anticipate the use of a Risk Classification Scheme at the ATM functional system, regulatory actions should be undertaken to ensure that the use RCS at functional level is required in their respective safety regulatory requirements.
Main issues (5)

National RCS versus a single European RCS

- **Comments**
  - The adoption of National RCS instead a European one is basically against the philosophy and the concept itself the Single European Sky.
  - EC regulation should establish a European set of Safety Targets applicable to all SES Countries.
  - A potential airborne impact can be foreseen: “The regulation shall not result in safety targets defined at national levels for the airborne ATM component that would be multiple and more stringent than a safety objective defined for the same kind of operation at European level”.
  - Setting multi-State targets will not be an easy task, especially when some States would have more stringent targets than neighbouring States.
  - The national Risk Classification Schemes have to be defined from the European RCS but nothing on the proposed draft rule is about this European RCS (Article 3 is only about National RCS).
  - It is not clear what is meant by common set of safety targets.

- **Responses**
  - The safety target calculated at European level, the European RCS, is proposed in draft advisory material.
  - The initial intention for the development of RCS at different level was to keep the national RCS when they have been developed by the State in order to take into account the effort made by State to comply with the regulatory framework previously developed.
  - According to the draft advisory material this opportunity to keep a national RCS has been proposed only when the National RCS is more stringent than the European one.
  - According to these comments, it will be proposed a single European RCS, developed in Advisory material.
  - Despite that this options satisfies number of comments, and is consistent with the idea of a single approach within Europe; this approach is an important change to the initial proposal. Therefore further modification of the draft advisory material should be envisaged.
Main issues (6)
Applicability of the rule

- **Comments**
  - The regulation is unclear with regard to its applicability to Member States, Organisations or at European level. Applicability of this regulation to organisations rather than providers or their units raises a concern.
  - This regulation must be applied by states, not only by organisations

- **Responses**
  - The EC regulations apply systematically to the Member States.
  - The organisations should develop the ATM functional system in accordance with the targets defined at European level and commonly agreed by the states.
Main issues (7)

Standardised process and Community Specifications

- **Comments**
  - There were five comments relating to the use of a “standardised process”. There were two main concerns. The “standardised process” is not provided or even defined, and it is unclear as to who will set it and what that standard shall be.
  - Is there a legal basis for importing the community specification concept, as defined in the interoperability regulation, into this regulation?

- **Responses**
  - The term standardised process and Community Specification will be replaced by the Means of Compliance. The standardised process is the process described in the Means of Compliance for the establishment of the safety targets, apportionment methodology and tolerable risk for accident due ATM contribution.
  - The use of community specification is explicitly referred by interoperability regulation. The use of standards which are referenced by regulation is a principle which is authorised by EC regulation and are currently in use in EASA regulatory framework. This allows flexibility in order to adapt the standard to the evolutionary nature of technical development.
Main issues (8)
Qualitative safety targets

- **Comments**
  - There were a number of comments relating to the need to consider qualitative values also. One commentators expressed regret that this regulation only deals with quantitative approach, exclusively of any other.
  - Due to the complexity of ATM operations, besides quantification, there is a need for qualification of safety risks. Qualitative safety objectives shall complement quantitative safety objectives. Quantitative Safety Targets can be used for risk assessment of technical equipment. However, risk assessment of people and procedures should use qualitative targets.

- **Responses**
  - The mandate was explicitly addressing the development of a quantitative approach by developing the safety target for severity 2 to 4. Therefore approach which has been chosen cannot focus on qualitative approach.
  - In addition, it is recommended that the establishment of the safety objective by the organisation should not be exclusively qualitative or exclusively quantitative.
  - Finally, the determination of safety objectives which should be made by the organisations which are in the scope of EC regulation 2096/2004 (section 3.2.2 section (b)), incorporates both qualitative and quantitative approaches.
  - The organisations which are outside the scope of the Common Requirement should include similar requirements for the establishment of qualitative and quantitative safety objectives.
Main issues (9)

Values of safety targets in the draft rule

- **Comments**
  - Safety Targets are not defined in the Regulation although the scope of this article indicates that they are.
  - One comment referred to the fact that the Safety Targets for Severity classes 2 to 5 were required by the mandate, but have not been included in the draft IR.

- **Responses**
  - The draft rule in referring in regulation to the further Means of Compliance (derived from advisory material) which gives all safety targets for all severities.
  - The mandate required the development of regulatory material and not the development of a single implementing rule containing the values safety targets.
  - In order to allow flexibility and adaptability to the improvement in ATM, it has been chosen to develop the safety targets in draft advisory material, which after improvements would become the Means of Compliance.
  - It is recognised that the advisory material need further work in order to better integrate uncertainties concerning safety targets.
  - It is advised to keep the safety targets within advisory material (further Means of Compliance), this approach allows flexibility for the improvement of RCS values in accordance with the new developments within the industry.
  - However additional regulatory material would be required in order to ensure that the organisations implement adequately the RCS values as defined by common agreed standards.
Main issues (10)

Safety target defined only for accidents

- **Comments**
  - The regulation only establishes a tolerable risk for accidents without allowing any provision for distinction between different types of accident.
  
  - There were a number of comments addressing the safety targets asking why the rule seems to define safety target only for accidents, and tolerable risk only for incidents.

- **Responses**
  - In ATM different examples of accidents show that the number of fatalities do not depend on the type of accident. For instance, an example of mid-air collision between a commercial aircraft and a glider with no fatalities exists.
  
  - The regulatory approach provided within the intermediate report proposed to keep a safety target for accident and tolerable risk for accidents.
  
  - The value of the target for incident of severity 3 and 4 is not enough reliable to impose a stringent and definitive safety target.
  
  - The relationship between accidents and incidents can be considered as not deterministic.
  
  - This choice gives a certain level of flexibility in order to allow the use of different methodologies, ED125 or other methodologies focusing essentially on the value for accident.
Comments
- The scope of the apportionment method is ambiguous. Establishment of an apportionment methodology should not be left to States, but included in this IR.
- However, there is no recognised apportionment methodology.
- Order to define and implement a common apportionment methodology we should need more practical and operational guidelines – and training.

Responses
- The rule will be modified in order to eliminate the ambiguity. The apportionment will be done by organisation for the part of the functional system under their responsibilities.
- The apportionment methodology is proposed in the Means of Compliance. It will be clarified.
Main issues (12)
Periodic assessments

- **Comments**
  - The purpose of the "periodic assessments" is undefined; the need for should be enhanced.
  - However, this requirement could be interpreted very differently from one State to another depending on what is considered to be an adequate “period”.

- **Responses**
  - The objective and the methodology of the periodic assessment is defined in advisory material. An explicit reference will be made to the Means of Compliance.
  - The requirement is kept in the rule and a recital has been added to explain the objective of this review.
Main issues (13)
Additional requirements

- **Comments**
  - A number of issues were raised concerning this article; its value was questioned given the content of the other articles, and the regulation (EC) 2096/2005.
  - Commenters considered it to be redundant.

- **Responses**
  - These additional requirements concern specifically the organisations which are not within the scope of the regulation (EC) 2096/2005.
• **Comments**
  - The timescale for entry into force is impractical and should be dependent on the availability of a mature RCS scheme, and a harmonized methodology.
  - The Regulation should not enter into force until the “common apportionment methodology and the common set of safety targets” have been agreed in the supporting Community Specification.

• **Responses**
  - The entry into force proposed in the draft rule would take into account the improvement of draft advisory material as proposed in next chapter.
**Comments**

- The database used is not adequate as a basis for the RCS. Incident reporting in Europe is incomplete, varies by State and is inconsistent in its allocation of severity classes.

- The implication of making a distinction between accidents with direct and indirect ATM contributions for the data to be used is not clear.

- The statistical material used for the calculations has a lot of uncertainty built in which will affect the definition of Safety Target Levels.

- Terminology such as “The AST reporting allows the different types of (accidents) to be identified,” is understood but may be misguided and politically untenable.
**Comments**

- “For the design of new systems, safety nets may be included in the calculation of RCS values…” Inconsistent with Eurocontrol position.

- The text doesn’t explain why Severity Levels 2, 3, and 4 are not linked with the RCS rule.

- The estimations for Safety Targets, confidence levels, and the RCS are inappropriately rigorous.

- It seems to be desirable a consistency check between ED125 and draft advisory material.

- Using this advisory material will result in a number of different Target Level of Safety in SES countries. The advisory material implicates that every nation shall re-calculate the Safety Targets, this leading to separate Safety Targets for different SES Countries.
Maturity of safety data from a regulatory point of view

<table>
<thead>
<tr>
<th>Maturity of data</th>
<th>Data have uncertainties, the mandatory regulatory reporting should be improved.</th>
<th>Data are not valid despite the mandatory regulatory reporting.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute RCS</td>
<td>● Integrate uncertainties (scientific process) ● Give an objective ● Airborne integration ● Encourage the control of the quality of reported data ● Improvement process</td>
<td>Back to the objective which has been previously agreed 1.55 x 10^-8 per FH (no regulatory decrease of required safety levels)</td>
</tr>
<tr>
<td>Relative RCS</td>
<td>● Depend of the performance of the year of reference, ● No clear means to improve the quality of data (uncertainties, validity) ● Passive approach ● Local feedback, limited to what may be considered as valid ● No European wide approach ● Too much discrepancy with airborne approach</td>
<td></td>
</tr>
</tbody>
</table>
Responses

- The advisory material explains the limitation of existing data bases.
- The historical values are only part of the process for the establishment of safety targets.
- The values of ED125, take into account historical values and other elements, as the experience of experts.
- As it can be seen in the reference chapter of the advisory material, the proposed values and approach take into account existing studies carried on within EUROCONTROL and Member States.
- The values proposed are not totally harmonised but they are of the same order of magnitude.
- A consistency check will be shown in the advisory material proposed for the final report.
- The safety nets are now considered as part of the ATM functional system (result of the SRC CG safety net task force presented at SRC 28)
Responses
- The text will be reworded in order to avoid the ambiguity between safety target (provided at European level) and objectives (at ANSP level).
- The severity 2 to 4 is not made mandatory in the rule for the reason explained in the regulatory approach. This will be developed in the advisory material.
- The values will be rounded at the closest order of magnitude and they will be associated to a percentage of confidence.
- Agreed, the calculation of ED125 will be taken into account.
- Agreed, the National RCS will be removed ads presented in the chapter 3.5
- the advisory material will be reviewed by improving the way to take into account the uncertainties and a clarification of the objectives to be achieved by the review of data.
- The ED125 calculation will be taken into account in the document and consistency check will be made with other studies.
- The values will be rounded and associated to a percentage of confidence.
**Comments**

- The apportionment methodology seems very detailed and the added value of this level of detail when designing safe functional systems is questionable.

- “ANSPs should undertake their own apportionment in order to obtain the specific targets they need in order to achieve the overall safety target.” It should be clarified that in no circumstance this local apportionment should lead to multiple, non-compatible, safety targets for the airborne or the space component that should be only subject to requirements at the highest level, i.e. the EU level.

- “If the targets cannot be viewed as achievable, a more realistic target should be developed, and compensating changes should be made to other ATM elements if compliance with the overall safety target is to be maintained.” Any decision regarding compensating factors on other ATM elements should be taken with consultation of the involved stakeholders. Any compensating change will have also to be deemed realistic.

**Responses**

- The advisory material do not impose a set of phase of flight in step 2 it is said that this grouping depend on the service and that it is strongly recommended to group the phases of flights. This group can be reduced to the one proposed by in ED125.

- This mechanism is at ANSP level (the term target is misleading, it will be changed by objective) not at European level.

- Compensating factor should be envisaged within the article 1 (3b) of the draft rule.
Agenda Item 6: The Way Forward - Next Steps

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The way forward

- Updates of regulatory material (Draft implementing rule) to address received comments
- Update of the relevant parts of the Advisory Material
- Finalisation of the Final Report
- Delivery of the Final Report

And, Other tasks identified during the workshop:
1. Advisory material should take into account a revised apportionment process.
2. An other round of formal consultation based on the received comments (draft rule and advisory material)
Next Steps

- **End of May 2008**
  - Draft final report
    - Finalization of SOR
    - Draft Rule
    - Advisory Material

- **End of July 2008**
  - Submission of Final Report
Agenda Item 7: Conclusions

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