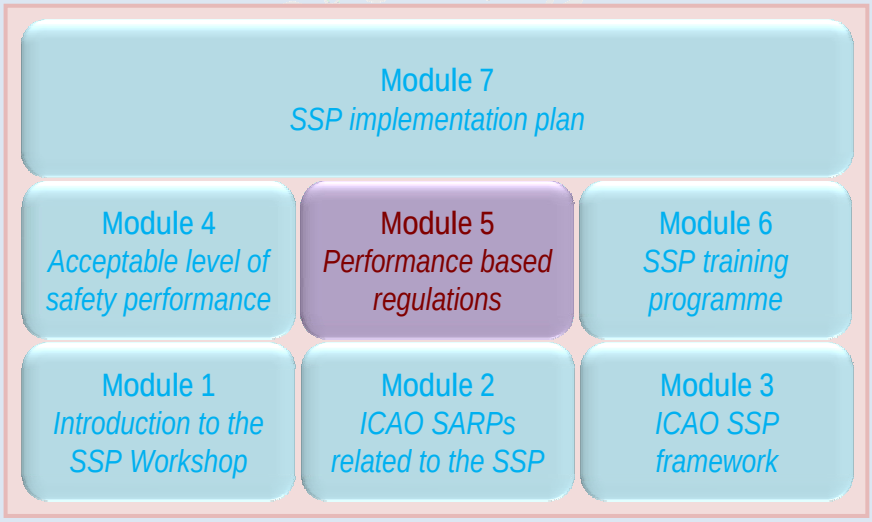
International Civil Aviation Organization

AFI Comprehensive Implementation Programme (ACIP)

ICAO Regional Workshop on State Safety Programme (SSP) Implementation

Module 5 – Performance based regulations

SSP – A structured approach



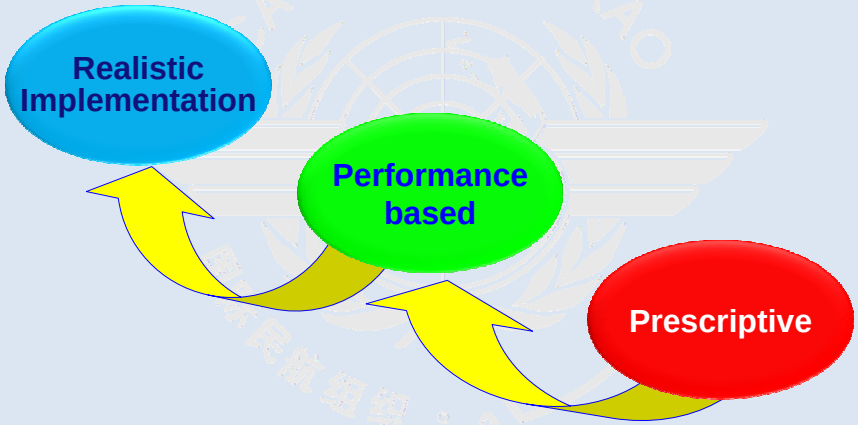
Objective

- *Describe the concepts of prescriptive versus performance and the State's safety risk management and the State's safety assurance.*

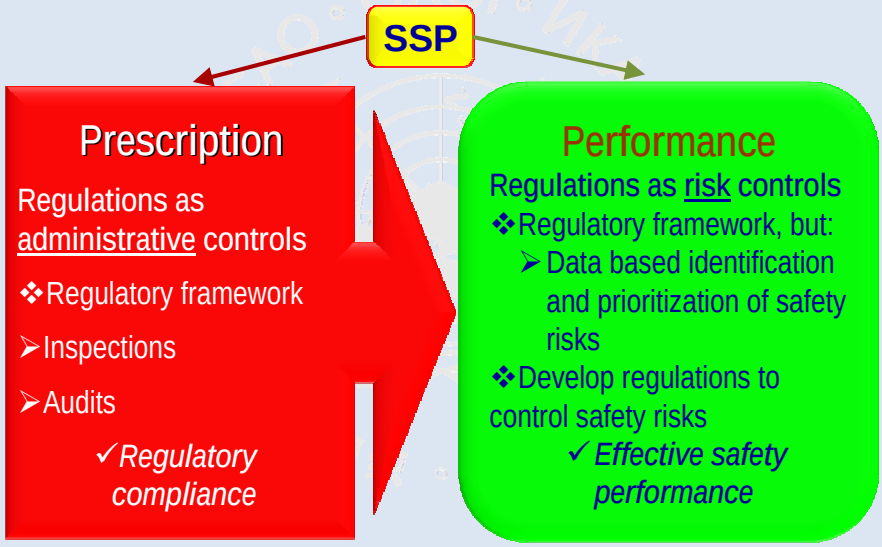
Contents

- Prescriptive *versus* performance
- ICAO SSP framework
- SSP – State's safety risk management
- SSP – State's safety assurance
- The bridge – again
- Acceptable levels of safety performance – SMS and SSP
- Fixing the puzzle
- Workshop # 2 – *Development of guidance on acceptable levels of safety performance (ALSP)*

Shift from prescription to performance



Prescription *versus* performance



ICAO SSP framework

1. State's safety policy and objectives
   - 1.1 CAA safety standards
   - 1.2 CAA safety responsibilities and accountabilities
   - 1.3 Accident and incident investigation
   - 1.4 Enforcement policy
2. State's safety risk management
   - 2.1 Safety requirements for service providers SMS
   - 2.2 Agreement of service providers acceptable levels of safety performance
3. State's safety assurance
   - 3.1 Safety oversight
   - 3.2 Safety data collection, analysis and exchange
   - 3.3 Safety data driven targeting of oversight on areas of greater concern or need
4. State's safety promotion
   - 4.1 Internal training, communication and dissemination of safety information
   - 4.2 External training, communication and dissemination of safety information

SSP – State's safety risk management

- State's safety risk management
  - 2.1 Safety requirements for service providers SMS
  - 2.2 Approval of service providers acceptable levels of safety performance

Control mechanisms that allow the State to carry out safety risk management based on an efficient prescriptive performance architecture.

SSP – State's safety risk management

- State's safety risk management
  - 2.1 Safety requirements for service providers SMS
  - 2.2 Approval of service providers acceptable levels of safety performance
- Prescriptive element
  - Initial standards/requirements for service providers.
  - Modified or additional standards/requirements for service providers
    - ✓Standards/requirements for the service providers' SMS operation.

SSP – State's safety risk management

- State's safety risk management
  - 2.1 Safety requirements for service providers SMS
  - 2.2 Agreement of service providers acceptable levels of safety performance
- Performance element
  - Agreement with the service provider on SMS short-, medium- and long-term objectives.

ICAO SSP framework

1. State's safety policy and objectives
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4. State's safety promotion
   - 4.1 Internal training, communication and dissemination of safety information
   - 4.2 External training, communication and dissemination of safety information

SSP – State's safety assurance

- State's safety assurance
  - 3.1 Safety oversight
  - 3.2 Safety data collection, analysis and exchange
  - 3.3 Safety data driven targeting of oversight on areas of greater concern or need

Control mechanisms that ensure the State to carry out safety risk management based on an efficient prescriptive performance architecture.

SSP – State's safety assurance

- State's safety assurance
  - 3.1 Safety oversight
  - 3.2 Safety data collection, analysis and exchange
  - 3.3 Safety data driven targeting of oversight on areas of greater concern or need
- Prescriptive element
  - Supervision based on inspections and audits.

SSP – State's safety assurance

- State's safety assurance
  - 3.1 Safety oversight
  - 3.2 Safety data collection, analysis and exchange
  - 3.3 Safety data driven targeting of oversight on areas of greater concern or need
- Performance element
  - Compliance verification of service provider's SMS short-, medium- and long-term objectives.

The bridge – again

Prescriptive

Performance

Acceptable levels of safety performance – SMS

Safety requirements	1. Training course for drivers / installation of sp c signage 2. Thrice-daily walk-in ramp inspection pro 3. …
Safety performance targets	1. Maintain no more than 20 rized vehicles on the taxiways per 10.000 2. By January 2009 vents on the apron per 10.000 operations 3. …
Safety performance indicators	1. 20 thorized vehicles on the taxiways per 10.000 ope 2. 15 events on the apron per 10.000 operations 3. …
Service provider	Shall comply with all applicable national and international stan

Performance

Prescriptive

Acceptable levels of safety performance – SSP

Safety requirements	1. Installation of ASDE/X in 5 international airports 2. Video on ground de-icing / revision of the … on in-flight icing / briefings on pitot tube ice formation … -icing boots 3. …
Safety performance targets	1. By 2010 reduce runway … per 100.000 operations 2. By 2009 reduce in … events due to ice accumulation … ations 3. …
Safety performance indicators	1. 0.8 … ions per 100.000 operations 2. 4 i… …ss of control events due to ice accumulation per 1.000 ope… …ns 3. …
State	Shall comply with all applicable international Sta…

Performance

Prescriptive

ICAO SSP framework

1. State's safety policy and objectives
   - 1.1 CAA safety standards
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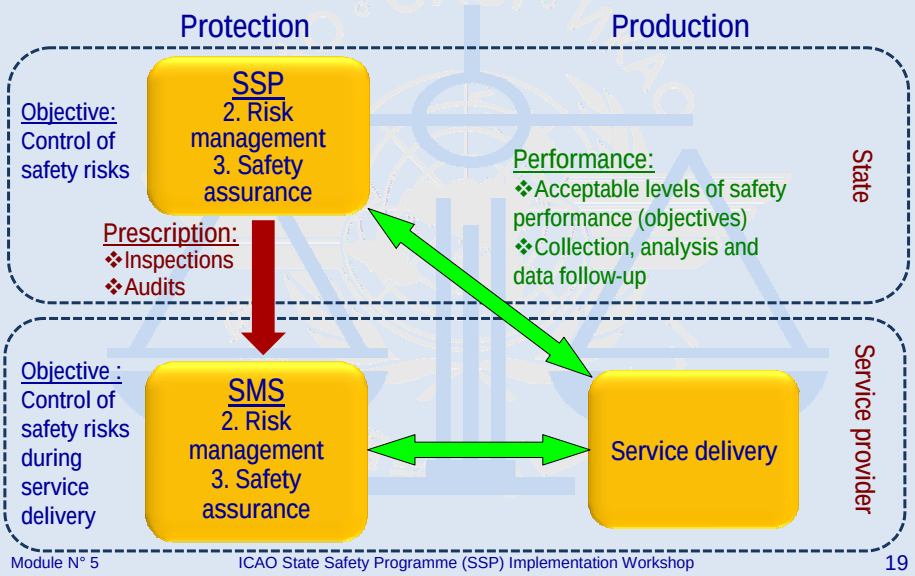
Fixing the puzzle



Performance based regulations

Workshop # 2 – *Development of guidance on acceptable levels of safety performance (ALSP)*

Working group activities

- Participants will be divided into groups.
- A facilitator will be appointed, who will coordinate the discussions and activities of each group.
- A summary of discussions will be written *(flip charts or electronic forms).*
- A draft report, using the form provided to this effect, will be prepared for its presentation in the plenary sessions, and a member of the group will brief on the results.

Objective

- To develop guidance of an acceptable level of safety performance (ALSP) for service providers and for States on the basis of the information provided in Module 4 and in this Module 5 (See Slides 16 and 17), taking into account the following aspects:
  - Safety performance indicators
  - Safety performance targets
  - Safety requirements
- For aircraft operators, ATS service providers and aerodromes operators (three sub-groups)

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This is only an example of my proposal for your consideration per my message

Acceptable levels of safety performance – SSP

State	Shall comply with all applicable international Stan…
Safety requirements	1. Installation of ASDE/X in 5 international airports 2. Video on ground de-icing / revision of the … on in-flight icing / briefings on pitot tube ice formation a… -icing boots 3. …
Safety performance targets	1. By 2010 reduce runwa… per 100.000 operations 2. By 2009 reduce in-f… events due to ice accumulation …ations 3. …
Safety performance indicators	1. 0.8 …ions per 100.000 operations 2. 4 i… …s of control events due to ice accumulation per 1.000 ope… …ns 3. …

Prescriptive

Performance