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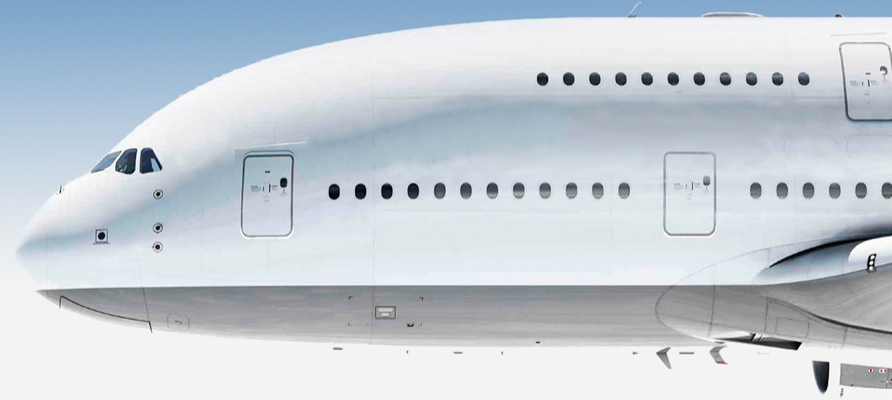
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SESSION 7

Global Aviation Safety Roadmap





Overview

- Purpose of roadmap
- Structure
- ORG and OPS roadmaps
- Safety enhancement initiatives (SEIs)



Purpose of Roadmap

- Roadmap is action plan to assist aviation community in achieving GASP goals
- It provides structured, common frame of reference
 - for all relevant stakeholders
 - to develop and implement NASP/RASP
 - by presenting series of SEIs
 - linked to the GASP goals and targets
- Use of roadmap as basis for national/regional safety planning enhances coordination
 - reducing inconsistencies and duplication of effort





Structure of Roadmap

- Roadmap outlines specific SEIs
 - associated with GASP goals and targets
- Each SEI is supported by set of actions
- Roadmap includes specific initiatives for 3 different stakeholders
 - States
 - Regions
 - Industry
- Success relies upon close collaboration & cooperation of all stakeholders





Structure of Roadmap (2)

- Roadmap is composed of 2 pieces:
 1. Organizational challenges – ORG roadmap
 2. Operational safety risks – OPS roadmap



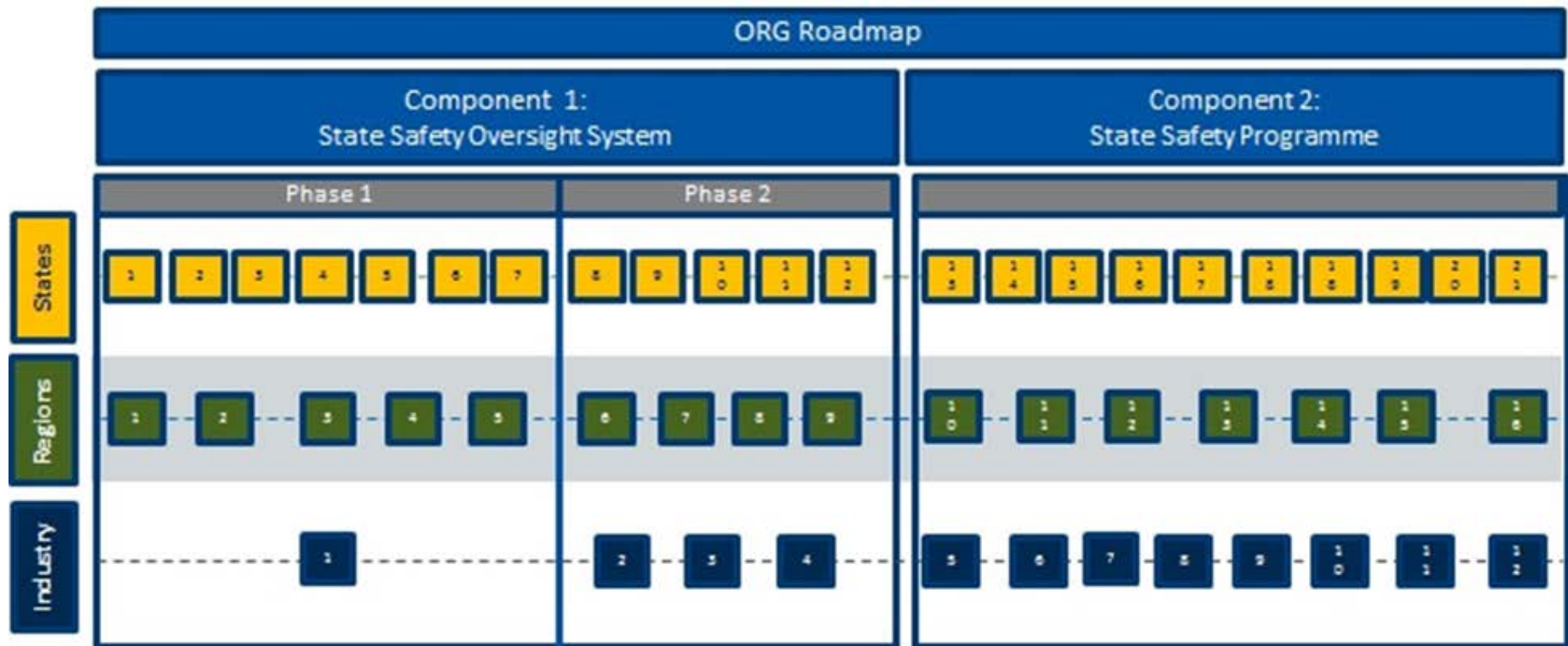
Structure of Roadmap (2)

- ORG roadmap provides SEIs to meet GASP goals related
 - State safety oversight capabilities
 - SSP implementation
 - SMS implementation (industry)
- OPS roadmap provides SEIs to meet GASP goals related
 - continuous reduction of ops safety risks
 - SRM activities to address HRCs



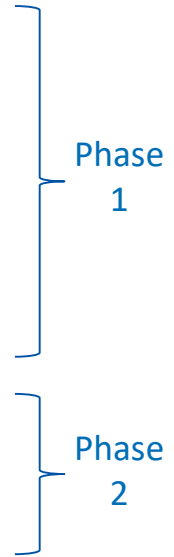
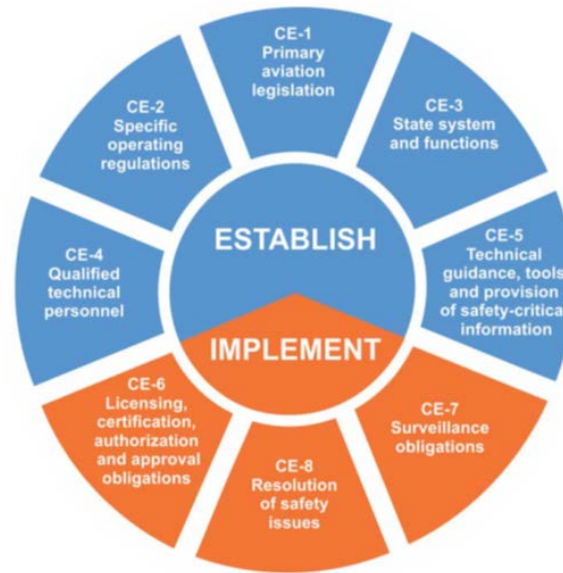
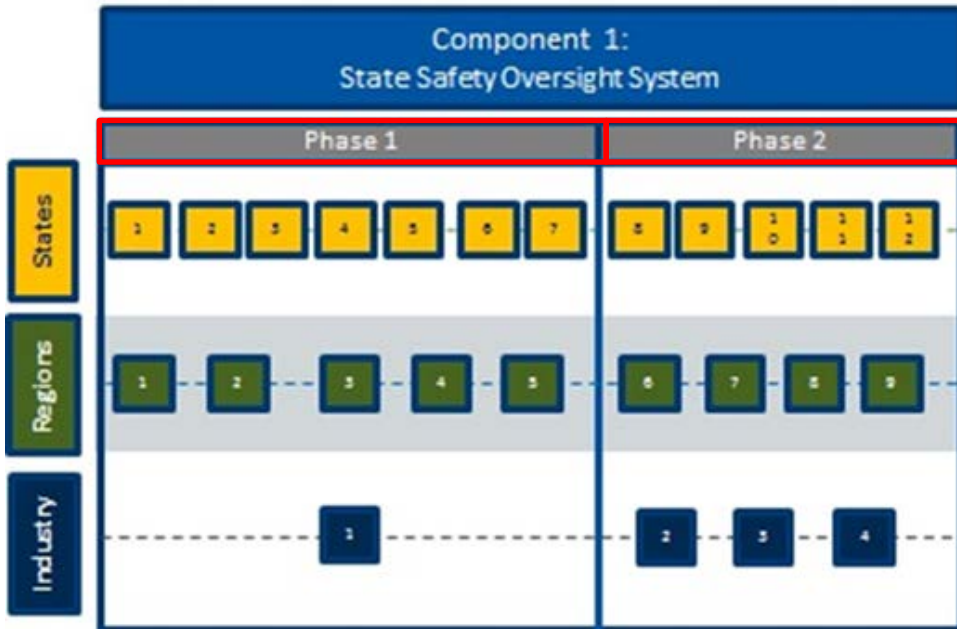
ORG Roadmap

- Contains 2 distinct components, in line with GASP goals, to address SM responsibilities:
 1. State safety oversight (SSO) system
 2. SSP, including service providers' SMS





ORG Roadmap





Layout of SEIs in ORG Roadmap

| | |
|--------------------------------------|--|
| <i>Safety enhancement initiative</i> | SEI-7 — Provision of the primary source of safety information to ICAO by completing, submitting and updating all relevant documents and records |
| <i>Stakeholder</i> | States |
| <i>Actions</i> | <ul style="list-style-type: none"><input type="checkbox"/> 7A — Update USOAP corrective action plan items<input type="checkbox"/> 7B — Complete and submit the self-assessment checklist based on USOAP CMA priority PQs<input type="checkbox"/> 7C — Complete and submit the State aviation activity questionnaire (SAAQ)<input type="checkbox"/> 7D — Complete and submit the compliance checklists (CCs) on electronic filing of differences (EFOD) system<input type="checkbox"/> 7E — Update documents and records, as required, in a timely manner |
| <i>References</i> | <ul style="list-style-type: none">— Doc 9735, <i>Universal Safety Oversight Audit Programme Continuous Monitoring Manual</i>, sections 2.8, 2.14 and 2.15— iSTARS— USOAP CMA Computer-based Training— USOAP CMA Online Framework (log-in required)— USOAP CMA Workshops |



Layout of SEIs in Roadmap

- All SEIs presented in standardized “roadmap template” format
- Covers following points
 - **SEI** - Description of specific safety enhancement initiative
 - **Stakeholder** - Entity to which SEI is addressed
 - **Actions** - Description of tasks required for implementation of SEI
 - **References** - Documents and tools to assist stakeholders
 - in implementing SEIs and associated actions



OPS Roadmap

- OPS roadmap addresses ops safety risks
- Based on HRCs identified in GASP
 - contains specific SEIs to address each of 5 HRCs
 - States, regions and industry should use OPS roadmap
 - to assist them in developing plan to mitigate risks associated with HRCs
- Unlike ORG, OPS roadmap is not divided into components or steps
 - SEIs can be accomplished in parallel





Layout of SEIs in OPS Roadmap

| Safety Enhancement Initiative | Mitigate contributing factors to CFIT accidents and incidents |
|-------------------------------|---|
| Stakeholder | Regions |
| Actions | <ol style="list-style-type: none"> 1. Implement the following CFIT safety actions: <ol style="list-style-type: none"> a. Support the adoption of TAWS in accordance with Annex 6 b. Promote the wider use of TAWS beyond the requirements of Annex 6 c. Promote the adherence to TAWS warning procedures d. Promote greater awareness of approach risks e. Promote the implementation of CDFA f. Promote the implementation of MSAW systems g. Promote the timeliness of updates and accuracy of eIQD h. Promote the use of global positioning system (GPS)-derived position data to feed TAWS 2. Validate the effectiveness of the SEIs presented in this roadmap in the region using data provided by States and industry (apply safety management methodologies) 3. Identify additional contributing factors, for example: <ol style="list-style-type: none"> a. Flight in adverse environmental conditions b. Approach design and documentation c. Phraseology used (standard vs non-standard) d. Pilot fatigue and disorientation 4. Develop and implement further SEIs to mitigate the risk of the identified contributing factors, if any, for CFIT 5. Conduct continuous evaluation of the performance of the SEIs |
| References | <ul style="list-style-type: none"> — Annex 6, Operation of Aircraft — ICAO Safety Report — RASGs — Commercial Aviation Safety Team Safety enhancements for CFIT — IATA CFIT — IATA Safety Report — Flight Safety Foundation ALAR Toolkit — Skybrary — EUROCONTROL |



SEIs in OPS Roadmap

- SEIs are considered global safety enhancements, applicable to all States and regions
 - should be implemented to mitigate risks linked to HRCs
 - deemed of global concern
 - not an exhaustive list
- ORG roadmap is not substitute for SRM activities
 - that need to be conducted as part of SSP & SMS





SEIs in OPS Roadmap (2)

- Stakeholders should conduct analysis of data and reports
 - to validate effectiveness of implemented SEIs
- SSP and SMS should be implemented
 - to develop data collection & analysis capabilities
 - then derive contributing factors through data analysis
 - refer to SEIs in the ORG roadmap
- Roadmap gives specific examples of potential contributing factors
 - not exhaustive
 - may not be applicable to all stakeholders or operational environments





SEIs in OPS Roadmap (3)

- Based on analysis, may need to develop and implement further SEIs
 - to mitigate any additional risks
- Stakeholders should assess effectiveness of SEIs
 - may refine them in response to changes that introduce new hazards
- SEIs related to State's ops safety risks should be included in NASP



Points to Remember

- Roadmap is action plan to assist in achieving GASP goals
- Provides structured, common frame of reference
- Use roadmap as basis for NASP
- ORG portion for SSO & SSP
- OPS for HRCs, supporting SM approach



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