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# INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY

**AFI PLAN SSP PROJECT LAUNCHING MEETING AND WORKSHOP**

**16 – 17 January 2024**

# **Agenda Item 6**

## **SSP Implementation Plan Reflecting Project Management Principles**

**Dr. Itেকে Ifeanyi**

**General Manager, Air operator Certification and Surveillance, Nigeria Civil Aviation Authority**

## Module Objective

The objective of this Module is to provide an overview of applying project management principles to manage an SSP implementation plan.

# Contents

- Develop a clear Project scope to effectively manage stakeholder expectations and ensures that all of the project's elements are aligned with the objectives.
- Develop Plan and Schedule as critical components of successful time, resources and cost management.
- Identify Stakeholders and introduce communication matrix for a manageable stakeholder engagement process.
- Estimate Time, Cost and build Budget to have a clear understanding on project constraints.
- Identify Risk management strategies.

## What is Project Planning Process ?

→ A big part of project management is planning out your project in detail.

The purpose of planning is to define:

- **what** has to be achieved (objectives) by the project
- **when** it is to be achieved,
- **who** will be involved,
- **what** information will be communicated and,
- **how** the achievement of objectives will be measured.



## Selection of a Project

- ➔ It is useful to refer back to the Annex 19 SARPs
- ➔ Projects may be identified using the SSP Gap Analysis, Maturity Assessment Tool or SSP Protocol Questions
- ➔ Select a Project that will address a missing element of the SSP

### **3.3.4 Hazard identification and safety risk assessment**

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3.3.4.1 States shall establish and maintain a process to identify hazards from collected safety data.

3.3.4.2 States shall develop and maintain a process that ensures the assessment of safety risks associated with identified hazards.

### **3.3.5 Management of safety risks**

3.3.5.1 States shall establish mechanisms for the resolution of safety issues in accordance with section 8 in Appendix 1.



3.3.5.2 Recommendation.— States should develop and maintain a process to manage safety risks.

## ICAO PROTOCOL QUESTIONS

1. How does the State determine the conditions under which it will take actions based on safety performance? (GEN 12)
2. What mechanisms does the State have in place to monitor safety performance? (GEN 11)
3. How does the State select its safety performance indicators (SPIs)? (GEN 10)
4. To what extent has the State determined the key State-level risks in its operating environment? (GEN 08)

Prioritisation	
Important (High to low)	Feasible (high to low)
<b>To what extent has the State determined the key State-level risks in its operating environment? (GEN 08)</b>	How does the State select its safety performance indicators (SPIs)? (GEN 10)
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## Step 1: Project Scope

1. To what extent has the State determined the key State-level risks in its operating environment? (GEN 08)
2. What is the Scope of this Project?

## SCOPE

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Title	Objective	Inputs to Task	Process	Outputs of exercise
Determine the key State-level safety risks in the aviation operating environment	There is a safety risk management mechanism in the State	<p>Mechanisms for</p> <ol style="list-style-type: none"> <li>1. Collection &amp; processing of safety data &amp; safety information</li> <li>2. Hazard identification (existing, new or emerging)</li> <li>3. Assessment of Risks</li> <li>4. Feeding in safety risks identified by air operators/service provider</li> <li>5. Prioritisation of risks using a safety risk matrix and tolerability scheme</li> <li>6. Safety risk management including a safety risk matrix and tolerability scheme</li> <li>7. Assessing the effectiveness of actions taken</li> </ol>	<ol style="list-style-type: none"> <li>1. Review Inputs, are they agreed?</li> <li>2. Using identified project and determines what should be included and not.</li> <li>3. Populate missing components in the Project Scope slide (if needed).</li> </ol>	<ol style="list-style-type: none"> <li>1. Comprehensive Project Scope for selected project is defined and understood by every participant.</li> </ol>

## **Project boundaries**

### Within scope (what is included in the project)

The project will be confined to the determination of State safety level risks in the State Aviation operating environment.

### Out of scope (what is excluded from the project)

- Training personnel to analyse the risk.
- IT infrastructure (software)
- Implementation
- SSP implementation training (assessment of SSP – ICS)

## Project deliverables

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### Tangible items produced by the project.

- ICAO Assessment
- Documentation detailing mechanisms in place
- Data analysis outcomes
- Risk reports
- Working systems including personnel to analyse the data

### **Success criteria**

#### How you determine that the project deliverables have been completed successfully

- a mechanism in place to ensure that safety risks identified by air operators/service providers are raised at the State level, feeding the SSP and its risk picture
- safety risk matrix and tolerability scheme x
- hazard identification mechanism Project assumptions
- mechanism in place to identify, evaluate and monitor emerging issues

## Assumptions

**Information that is not known at the time. Assumptions: Things that are assumed to be true but may not be true is termed as assumptions.**

- Data availability (SDCPS)
- Availability of support staff (technical personnel in other areas – not SSP)
- Time will be allocated to complete the project.
- Working tools will be available (IT/Software)

### **Project constraints**

- Limitations on the team's options, limits on time, schedule, resources, cost, scope
- Approval processes
- Change management
- Availability of resources (Time constraints, Financials, project leadership, competencies/training)
- Multi projects running at the same time (conflicting priorities)
- Management of priorities
- Projects alignment

## Step 2: Work Break Down Structure

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Title	Objective	Inputs to Task	Process	Outputs of exercise
Determine the key State-level safety risks in the aviation operating environment	There is a safety risk management mechanism in SA CAA	Mechanisms for <ol style="list-style-type: none"> <li>1. Collection &amp; processing of safety data &amp; safety information</li> <li>2. Hazard identification (existing, new or emerging)</li> <li>3. Assessment of Risks</li> <li>4. Feeding in safety risks identified by air operators/service provider</li> <li>5. Prioritisation of risks using a safety risk matrix and tolerability scheme</li> <li>6. Safety risk management including a safety risk matrix and tolerability scheme</li> <li>7. Assessing the effectiveness of actions taken</li> </ol>	<ol style="list-style-type: none"> <li>1. Review Inputs, are they agreed?</li> <li>2. Using identified project go to every section of the Step 1 mural slide and clarify what should be included and not.</li> <li>3. Populate missing components in the Project Scope slide (if needed).</li> </ol>	<ol style="list-style-type: none"> <li>1. Comprehensive Project Scope for selected project is defined and understood by every participant.</li> </ol>

## HIGH LEVEL TASKS

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1. Create a full time Analyst role
2. Establish a Safety Action Group including representatives of each discipline
3. Analysis tools for data analysis
4. Draft Procedures for Hazard Identification & Risk Assessment
  - a) Survey international data
  - b) MORs
  - c) Voluntary Reports
  - d) Accident & Incident Investigation Reports
  - e) Audit reports
  - f) Ramp Inspections
5. Workshops with industry on risk profiles
6. Development of SPIs

## NEXT LEVEL TASKS

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### 1. Create a full time Analyst role

- ✓ Determine whether CAA will sacrifice a position or add it
- ✓ Determine where position will exist in structure
- ✓ Line manager write a rationale for additional position
- ✓ Draft job profile
- ✓ Gain approval
- ✓ Recruitment
- ✓ Training

## NEXT LEVEL TASKS

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### 2. Establish a Safety Action Group including representatives of each discipline

- ✓ Construct proposal for SAG and submit to Executives/Management
- ✓ Drafts TORs for SAG including periodicity
- ✓ Determine and appoint Chair of SAG (manager, neutral/ safety related position)
- ✓ Determine and nominate SAG members (Inspector level)
- ✓ Brief SAG members to attend prepared with main industry risk priorities

## NEXT LEVEL TASKS

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### 3. Survey available analysis tools for data analysis

- ✓ Analyst tasked to survey tools including benchmarking

## NEXT LEVEL TASKS

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### 4. Draft Procedures for Hazard identification and risk assessment

- ✓ Task analyst to draft procedures and consult SSP team, AIG, SAG members
- ✓ Review for consistency with Safety Oversight Policy (if no policy exists, draft Policy)
- ✓ Circulate for comment and evolve to approval

## NEXT LEVEL TASKS

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### 4. Draft Procedures for Hazard identification and risk assessment

- ✓ Task analyst to draft procedures and consult SSP team, AIG, SAG members
- ✓ Review for consistency with Safety Oversight Policy (if no policy exists, draft Policy)
- ✓ Circulate for comment and evolve to approval

## NEXT LEVEL TASKS

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### 5. Workshops with internal stakeholders on risk profiles

- ✓ Organise workshops / briefings with internal stakeholders
- ✓ Sector risk profiles developed by RBO team with industry
- ✓ Industry risk profiles developed by RBO team (confidential to organisation)

## NEXT LEVEL TASKS

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### 6. Develop SPIs

- ✓ Determine safety objectives
- ✓ Identify highest risks using international and MOR data
- ✓ Identify main contributors to the highest risks and objectives
- ✓ Assess whether relevant data is available or needs to be collected
- ✓ Draft SPI dashboard for SAG and the SSP IT approval
- ✓ Regular submission of SPIs to SSP Committee
- ✓ Communication of safety priorities to staff and industry

## NEXT LEVEL TASKS

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## NEXT LEVEL TASKS

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## Step 3: Stakeholder Management

- Identify relevant stakeholders involved in achieving the project objectives and deliverables
- Document stakeholders' roles against key deliverables using the RACI matrix (responsible, accountable, consulted or informed)
- Develop a stakeholder communication matrix to manage achievement objectives and deliverables.

## RACI matrix

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TASKS	Safety Team	SM	Executive	Tech Depts	
Analyst role	C	R	A		
Establish SAG	C	A	R		
Analysis Survey	R, A	C			
Draft Procedures	R	R	A	C	
Internal Workshops	R, A			C	
SPI development	R	R	A	C	

## Step 4: Estimate Time & Cost And Build Budget

1. Think about what it will take to complete this task/deliverable (***Equipment, Labour, Materials, Software, Political assets, Training, Fees, etc***). Use those groups when You identify resources.
2. Think about building-in 10 to 15% tolerance in Your estimate to address potential risks
3. Estimate wisely, Do not over inflate your cost

Deliverables Or Tasks (WBS)	Resources/Activities required	Time Estimate	Cost Estimate
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## Step 4: Estimate Time & Cost And Build Budget

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Deliverables Or Tasks (WBS)	Resources/Activities required	Time Estimate	Cost Estimate

## Step 5: Develop Project Schedule

JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE
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ANALYST

FORM SAG

SURVEY TOOLS

DRAFT PROCEDURES

DEFINING SPIS

WORKSHOPS

CONSIDER RESOURCES  
BEFORE SCHEDULING

## Step 6: Project Risk Management

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RISK	TRIGGER	SEVERITY	PROBABILITY	MITIGATION
Pandemic causing low aviation activity reduce CAA revenue	Pandemic	5	5	CAA aware of SSP priority
Tech difficult to achieve data integration	Technology issues	4	5	May be able to better exploit existing systems
Skewed risk picture	Technology Reporting trends	5	4	Validation of data



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Thank You!