Six steps Method

ICAO Workshop on the new version of the Global Air Navigation Plan (GANP)
(Mexico City, Mexico, from 17 to 21 February 2020)
Agenda

• Sixth Edition of the GANP
• Performance Management Process
• Regional Air Navigation Plans-PBIP
PERFORMANCE MANAGEMENT PROCESS

Principles:

• Strong focus on desired/required results
• Reliance on facts and data for decision making
• Collaborative justified decision-making
Six steps Method

• STEP 1: Scope, Context & General Ambitions and expectations
• STEP 2: SWOT Analysis/ set objectives
• STEP 3: Set of targets/ Calculation of needs
• STEP 4: Optimum solution identification
• STEP 5: Optimum solution deployment
• STEP 6: Results assessment
Definition of the performance
the Six Step ICAO Performance Process

Doc 9883 Manual on Global Performance of the Air Navigation System (MGPANS)

1. Define/Review Scope, Context & General Ambitions & Expectations
2. Identify Opportunities, Issues & Set (new) Objectives
3. Quantify Objectives
4. Select Solutions to Exploit Opportunities & Resolve Issues
5. Implement Solutions
6. Assess Achievement of Objectives

ANS modernization: Select and implement the most appropriate ASBU Element(s) for the performance issue(s) at hand

ICAO Doc 9883 Figure I-2-4
STEP 1: SCOPE, CONTEXT AND AMBITIONS

STEP 2: SWOT ANALYSIS/ SET OBJECTIVES

STEP 3: SET TARGETS/ CALCULATION NEEDS

STEP 4: OPTIMUM SOLUTION IDENTIFICATION

STEP 5: OPTIMUM SOLUTION DEPLOYMENT

STEP 6: RESULTS ASSESSMENT
STEP 1: SCOPE, CONTEXT & AMBITIONS

• Context
  – 2019 Global Air Navigation Plan
    • Global Strategic Level: Performance Ambitions
      – Objective
      – ICAO KPAs
      – Design criteria
    • Global Technical Level: Performance Objectives
  – Regional Air Navigation Plan
    • ANP Vol III
    • Specific Performance Objectives based on regional requirements
STEP 1: SCOPE, CONTEXT & AMBITIONs

• Scope
  – National Air Navigation Plan
    • Performance Targets: who, when and where
    • Make clear assumptions on what is “surrounding” it
  – National Development Plan
STEP 2: SWOT Analysis/ set objectives

• Operational analysis (baseline performance)
  – Data collection, process and analyze
  – Monitor current operations
    • KPIs (GANP 2016)
      – Traffic forecast

• SWOT Analysis
  – Strengths, Weaknesses, Opportunities and Threats
    → Performance objectives
STEP 2: SWOT Analysis/ set objectives

• National level
  – National Performance Framework
    • Performance Objective
    • High level SWOT analysis

• Local Level
  – KPIs
    • National Performance Framework
    • Specific
  – Detailed SWOT analysis
STEP 3: TARGETS & NEEDS

- Agree & Prioritize performance objectives
  - Focus area within KPAs
  - Performance objectives
  - Prioritization
STEP 3: TARGETS & NEEDS

- **SMART** Objectives
  - Specific
  - Measurable
  - Achievable
  - Relevant
  - Time-bounded
STEP 3: TARGETS & NEEDS

- **SMART** Objectives
  - **S**pecific
  - **M**easurable
  - **A**chievable
  - **R**elevant
  - **T**ime-bounded

PERFORMANCE INDICATORS → *ICAO KPIs Catalogue*
STEP 3: TARGETS & NEEDS

- **SMART Objectives**
  - **Specific**
  - **Measurable**
  - **Achievable**
  - **Relevant**
  - **Time-bounded**

- PERFORMANCE INDICATORS
  - VALUE = f(baseline)
  - SPEED PROGRESS

- PERFORMANCE TARGETS
  - PERFORMANCE BASELINE
  - PERFORMANCE NEEDS
STEP 4: IDENTIFICATION OPT. SOLUTION

• Make decisions
  – Information available
    • Scope
    • Performance objectives and targets
    • Assessment of SWOT analysis
    • List of solutions (ASBUs)
Plus...

- Associated Safety Assessment
- Associated Human Factors Assessment
- Associated Environmental Impact Assessment
- Associated Cost-benefits analysis
Safety assessment guidance
GANP & GASP TECHNICAL ALIGNMENT

**PRE-IMPLEMENTATION**

- Scope, Context & General Ambitions and expectations (11 KPAs & KPIs)
- SWOT Analysis/ set objectives
- Set of targets/ Calculation of needs including checklist (BBBs)
- Identification of optimum solution (ASBUs)

**POST-IMPLEMENTATION**

- Optimum solution → management of change through SSP and relevant SMSs
- Safety performance indicators/targets (SPIs/SPTs)
- Safety risk assessment
- Mitigation strategy if needed

**National Air Navigation Plan**

**National Aviation Safety Plan**

- Results assessment (11 KPAs)
- Safety performance monitoring
- Safety oversight
Environmental impact assessment guidance
Cost-Benefits Analysis guidance

Box 1 PPP Definitions

PPPs are aimed at increasing the efficiency of infrastructure projects by means of a long-term collaboration between the public sector and private business. A holistic approach which extends over the entire lifecycle is important here.

Source: German PPP Task Force, German Transport, Construction and Housing Ministry (Bundesministerium für Verkehr, Bauern und Wohnen)

The term public-private partnership (‘PPP’) is not defined at Community level. In general, the term refers to forms of

‘Public-Private Partnership’ is a generic term for the relationships formed between the public and private sector for the delivery of infrastructure projects.

Source: John Lang plc

Fig. 1: Typical technology adoption lifecycle and suggested tipping point

Source: Everett Rogers, Diffusion of Innovations (5th edition), WGI analysis

Fig. 2 Application of incentives

Best use of public money and industry’s financing capability

Enable stakeholders to deploy early

Address last mover advantage

Achieve timely & synchronized deployment

CEA

Business Case

EIA

CBA

Figure 1 – Relationship between business case, CBA, CEA and EIA
STEP 4: IDENTIFICATION OPT. SOLUTION

• Make decisions
  – Information available
    • Scope
    • Performance objectives and targets
    • Assessment of SWOT analysis
    • List of solutions (ASBUs)
    • Safety Assessment, HP Assessment, CBA and Environment Impact Assessment
  – Single optimum solution or a roadmap of optimum solutions
STEP 5: DEPLOYMENT OF THE SOLUTION

• Execution phase
  – Planning
  – Implementation
    • National mechanism for tracking the implementation of the elements
  – Benefits
STEP 6: ASSESSMENT OF RESULTS

- Continuously assess performance
- Monitor progress of implementation
- Review actually achieved performance
  - Update performance gaps

→ +(Step 1&2)=

PERFORMANCE MONITORING AND REVIEW
STEP 6: ASSESSMENT OF RESULTS

• Tasks in the PMR:
  – Data collection
  – Data publication
  – Data analysis
  – Formulation of conclusions; and
  – Formulation of recommendations.
1. Define/Review Scope, Context & General Ambitions & Expectations

2. Identify Opportunities, Issues & Set (new) Objectives

3. Quantify Objectives

4. Select Solutions to Exploit Opportunities & Resolve Issues

5. Implement Solutions

6. Assess Achievement of Objectives

(Re)establish context, assumptions and political (high level) ambitions; (re)define boundaries in terms of KPIs and Focus Areas; (re)agree scope limitations in various dimensions

Collect facts and performance data; find current boundaries of performance envelopes; conduct SWOT analysis; prioritize SWOTs; respond by adopting (qualitative) performance objectives and contributing sub-objectives (at lower Focus Area levels)

Define suitable indicators for the performance objectives; optionally set targets at various aggregation levels; ensure consistency between aggregation levels; choose transition path from baseline to target performance; establish supporting measures (eg incentives, penalties, alert thresholds)

Monitor and review resulting performance; extract lessons learned; identify success stories as well as reasons for not meeting targets or a lack of progress; initiate next iteration of the process

Stakeholders implement agreed change within required time scales and at the required level of magnitude

Identify the processes and services that are capable of controlling indicator values (local differences possible); identify the Stakeholders in charge of managing these processes and services (local differences possible); initiate change in function of the performance objectives

ANS modernization:
Select and implement the most appropriate ASBU Element(s) for the performance issue(s) at hand

ICAO Doc 9883 Figure I-2-4
A holistic approach from research and development to deployment and operations based on stakeholders' operational needs and a global network approach to ensure harmonized and synchronized implementation delivering performance benefits.
ICAOS’S support
THANK YOU!