# PERFORMANCE APPROACH

SESAR
DEPLOYMENT MANAGER

# 4. Performance Approach

The Pilot Common Project has been adopted by the Commission after positive opinion of the EU Member States and endorsement by the operational stakeholders on the basis of a high-level Cost Benefit Analysis (CBA) that demonstrated an overall benefit[10].

The performance approach of the Deployment Programme aims at coordinating, synchronizing and monitoring the implementation of the PCP against the boundaries of the high-level CBA that has triggered PCP adoption in 2014.

To meet this objective, the performance approach includes:

- An overview of **SDM's role within the SES performance framework**, presented within the following paragraphs;
- An overview of the "**Performance Assessment and CBA Methodology**" that SDM has applied in support to its performance policy and how it builds on and connect with the methodologies used by other SES and SESAR bodies involved into performance, presented within the following paragraphs and in the dedicated Annex**;**
- The presentation of the expected DP contribution to performance, to be included in the yearly updated **DP Planning View**;
- The presentation of the yearly updated **Deployment Programme Cost Benefit Analysis** (CBA) in the **DP Monitoring & Performance View.**

## 4.1 SDM in the SES performance framework

The SDM has been established by the European Commission as a SES instrument to ensure timely, synchronised and coordinated implementation of SESAR through a series of Common Projects. As such, **SDM's performance approach shall comply with SES overall performance framework, use common indicators and methodologies with other SES bodies dealing with performance and build on their expertise and early results.**

SESAR Deployment Manager (SDM), according to its regulatory framework set by Commission Implementing Regulations (EU) No 409/2013 and No 716/2014, **considers the performance driven deployment of the Pilot Common Project and any subsequent Common Project as a priority**.

SDM commitment is focused on a **constant improvement of the methodology** to assess the consistency with and level of contribution to European Union-wide performance targets[11] provided by technological investments. Within the scope of its responsibilities, SDM's performance policy is to:

1. Guarantee **compliance to relevant regulations and adherence to the European ATM Master Plan as reference for operational changes** that are essential enablers to achieve the Single European Sky (SES) performance objectives;
2. Guarantee **full coordination with SJU, PRB, NM and EDA** on performance assessment;
3. Guarantee the **consultation with the implementing partners on performance analysis** before they are published and within the consultation process defined for the Deployment Program;
4. Guarantee the **coordination of performance assessment with Military stakeholders** through EDA;
5. Provide the **assessment of implementing projects against SES performance KPA**, namely safety, capacity, environment and cost efficiency as part of the synchronisation effort of the Deployment Program;
6. Provide the **analysis of the costs and expected benefits of the PCP related implementation projects**;

[10] PCP global cost benefit analysis is available at http://ec.europa.eu/transport/modes/air/sesar/doc/ec-716-2014_article4c_globalcba.pdf

[11] European Union-wide performance targets' means the targets referred to in Article 9 of Commission Implementing Regulation (EU) No 390/2013.

7. Provide **the monitoring and the assessment of impact of implementing projects** on each performance target;
8. Promote the **use of good practices in the field of cost benefit analysis methodologies** and the **adoption of continuous improvement models**;
9. Guarantee that **all involved staff is aware of its role in the achievement of performance driven deployment**;
10. Develop and promote, at management and implementation levels of the SESAR Deployment Governance, a **performance driven culture**.

Since implementation as from 1 January 2012 of the performance scheme, the EU has been operating a formal and explicit performance-driven approach, which includes performance indicators – fit for setting binding regulatory targets on specific stakeholders accountable for delivering measurable performance outcomes. Through a succession of Reference Periods (2012-2014, 2015-2019, …) the performance scheme drives and monitors the final achievement of SES High-level Goals. As explained in the Commission Implementing Decision C(2015) 9057, "a Performance Ambition is considered as an estimation of the contribution of the SESAR project to the Single European Sky (SES) Performance objectives. This estimation shall be confirmed after the validation of the relevant Research, Development and Deployment activities".

SESAR deployment shall fit within this performance scheme: investments, benefits and performance gains drawn from SESAR deployment shall support the achievement of the specific targets of the active Reference Period. **SDM is going to cooperate with the Performance Review Body (PRB) to ensure this compliance, in particular** through the alignment of KPIs used by SDM and PRB allowing to follow the improvements in ATM.

**Another key player in the SES performance framework is the Network Manager (NM).** Since 2011, with a specific consolidated local and network perspective, the NM has been forecasting, planning, monitoring and reporting to help deliver the performance targets of the Single European Sky. Since its establishment in December 2014, SDM has been closely cooperating with NM with the objective to build on NM's wide experience, tools and findings and to ensure consistency with the Network Strategy Plan (NSP), Network Operations Plan (NOP) and European Route Network Improvement Plan (ERNIP).

Finally, the Global Cost-Benefit Analysis that SJU has delivered back to 2013 in support to PCP's adoption sets the overall frame for SDM's action in the field of performance.

This document is referred to as the **"Reference and supporting material (EC) No 716/2014 article 5(C) Global cost-benefit analysis"**. With regards to the PCP CBA, the SESAR Deployment Manager shall pursue several objectives:

1) **Monitoring that CBA's boundaries are met:** SDM shall monitor that PCP is implemented within the boundaries of the CBA and that, in particular, the targets assumed in the CBA for the 5 sensitivity drivers are met[12];
2) **Addressing discrepancies behind the overall positive result of the CBA:** whilst the PCP CBA shows an overall benefit of 2,4 billion € (Net Present Value) over the period 2014-2030, it highlights some issues on which **SDM shall be vigilant**, such as:
    - AF5 and AF6 where CBA at AF level is negative;
    - AF1, AF2, AF3, AF4 where the different investments and benefits are not necessary having similar ramp-up periods or payback timings;
3) **Gathering actual costs[13] and updated expected benefits data** of all on-going implementation projects in relation with PCP in order to continuously monitor their expected contribution to performance during execution. Moreover, these data could be used to update PCP CBA at the occasion of a PCP review.

[12] Air Traffic Growth, Fuel and CO2 savings, Delay Cost Savings, reduction of costs for the ATM service provision, PCP investments costs ground and airborne

[13] Cost information is only available of CEF funded IP projects (FPA)

4) **For any completed project, monitoring the switch to operation and the actual contribution to performance.** The actual contribution to performance shall be compared with the declared/expected contribution to performance set when initiating the project and monitored during the execution of the project. Comparisons results will be used to adjust expected contributions to performance for other implementation projects as well as for earlier benefits assessment in the R&D phase. These data would be of importance for SESAR2020 and the update of performance characteristics of SESAR (PCP) solutions, which would improve the R&D figures by 'closing the loop'.

## 4.2 Performance Assessment and CBA Methodology

SDM's performance assessment and CBA methodology is the **cornerstone of SDM's performance policy**. It bridges between technological investments required to achieve new ATM functionalities required through the PCP Regulation and ATM performance improvement. It contributes to ensure that **all benefits expected from the whole PCP implementation will materialize** whilst not exceeding the estimated cost. It is an essential tool in monitoring PCP implementation, assessing and monitoring cost and benefits of implementation projects submitted or not by operational stakeholders but also assessing the impact of "missing implementation projects", i.e. implementation projects not submitted timely and identifying solutions to recover such situations and get the whole PCP implemented.

The performance assessment and CBA methodology describes the different steps taken to set the baseline against which performance will then be monitored during DP execution. **Detailed methodology is annexed to the SESAR Deployment Programme**. In particular, the performance assessment and CBA methodology assumes that co-funding is awarded by INEA and reflected by the operational stakeholders in their investment plans in accordance with relevant regulations, in particular the Implementing Regulations on CEF - (EU) Reg. n.1316/2013, on the Charging Scheme – (EU) Reg. n. 391/2013 – and on the Performance Scheme, (EU) Reg. n. 390/2013.

In particular, the Annex includes:

- Performance indicators and their corresponding CBA metrics that allow quantifying benefits;
- A detailed "consistency check" table between the Performance Indicators used by the SDM, the KPIs of the SES II Performance scheme and the KPIs of the ATM Master Plan. The three sets of indicators are coordinated between SDM, SJU and the PRB;
- Detailed explanation of the top-down approach and the bottom-up approach in the measuring of the expected benefits;
- Detailed explanation of the cost effectiveness analysis performed before submission.