

# **SESAR DEPLOYMENT MANAGER**

## Performance Driven Implementation and Financing Mechanisms

Day 2: 09.03.2016, 14:00-15:00 at SESAR EXCHANGE  
THEATRE (#889)  
IFEMA Exhibition Hall, Madrid

# Presentation by

Michel Gorog, Head of Performance and Financial  
Systems, SESAR Deployment Manager

# Presentation Agenda

## Part 1: “Performance driven implementation”

- SDM performance policy
- Context: Regulation (EU) N°716/2014 and supporting CBA
- Performance Analysis Methodology
- Performance and CBA Monitoring

## Part 2: “Financing mechanisms”

- Introduction
- Estimation of investments needs
- Potential financing mechanisms
- Preliminary conclusions



# Performance driven implementation

A SESAR Deployment Manager principle...

Embedded in the DP 2016  
Chapter 4, the performance view of the Deployment Program  
&  
Annex D, Performance Analysis and CBA Methodology

# SDM Performance Policy\*

## 2.2 Performance Policy

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<sup>5</sup> 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 and NM** 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. Provide the **assessment of implementing projects against SES performance targets** namely safety, capacity, environment and cost efficiency as part of the synchronisation effort of the Deployment Program;
5. Provide the **analysis of the costs and expected benefits of the PCP related implementation projects**;
6. Provide **the monitoring and the assessment of impact of implementing projects** on each performance target;
7. Promote the **use of good practices in the field of cost benefit analysis methodologies** and the **adoption of continuous improvement models**;
8. Guarantee that **all involved staff is aware of its role in the achievement of performance driven deployment**;
9. Develop and promote, at management and implementation levels of the SESAR Deployment Governance, a **performance driven culture**.

The "performance view" of the Deployment Programme (chapter 4) further develops the above described performance policy.

Compliance  
Coordination  
Consultation  
Assessment  
Analysis  
Monitoring  
Good practices  
Awareness  
Performance Driven Culture

\*Ref. DP 2015, Chapter 2.2



# CONTEXT (1/2)

## Regulation (EU) No 716/2014

- The deployment of PCP functionalities shall be coordinated due to the potential network performance impact of delayed implementation.
- From a technical perspective the deployment of targeted system and procedural changes shall be synchronised in order to ensure that the performance objectives are met.

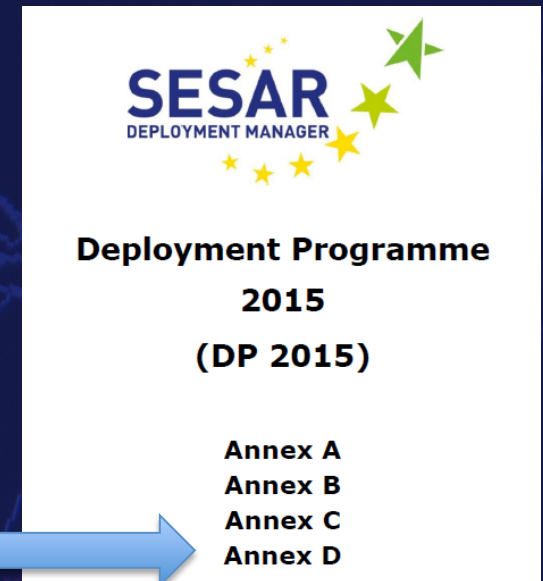
# CONTEXT (2/2)

## Supporting CBA

- **The global cost-benefit analysis on which Pilot Common Project stakeholder endorsement is considered:**
  - AFs in the PCP scope would generate a Net Present Value amounting at 2,4 billion €, with a 10 years payback period
  - Considering an overall cost of 3,8 billion € (2,5 billion €, discounted) undertaken by the involved stakeholders and
  - Overall benefits amounting at 12,1 billion € (4,9 billion €, discounted) over the 2014-2030 time-frame.

# Performance Analysis Methodology (1/3)

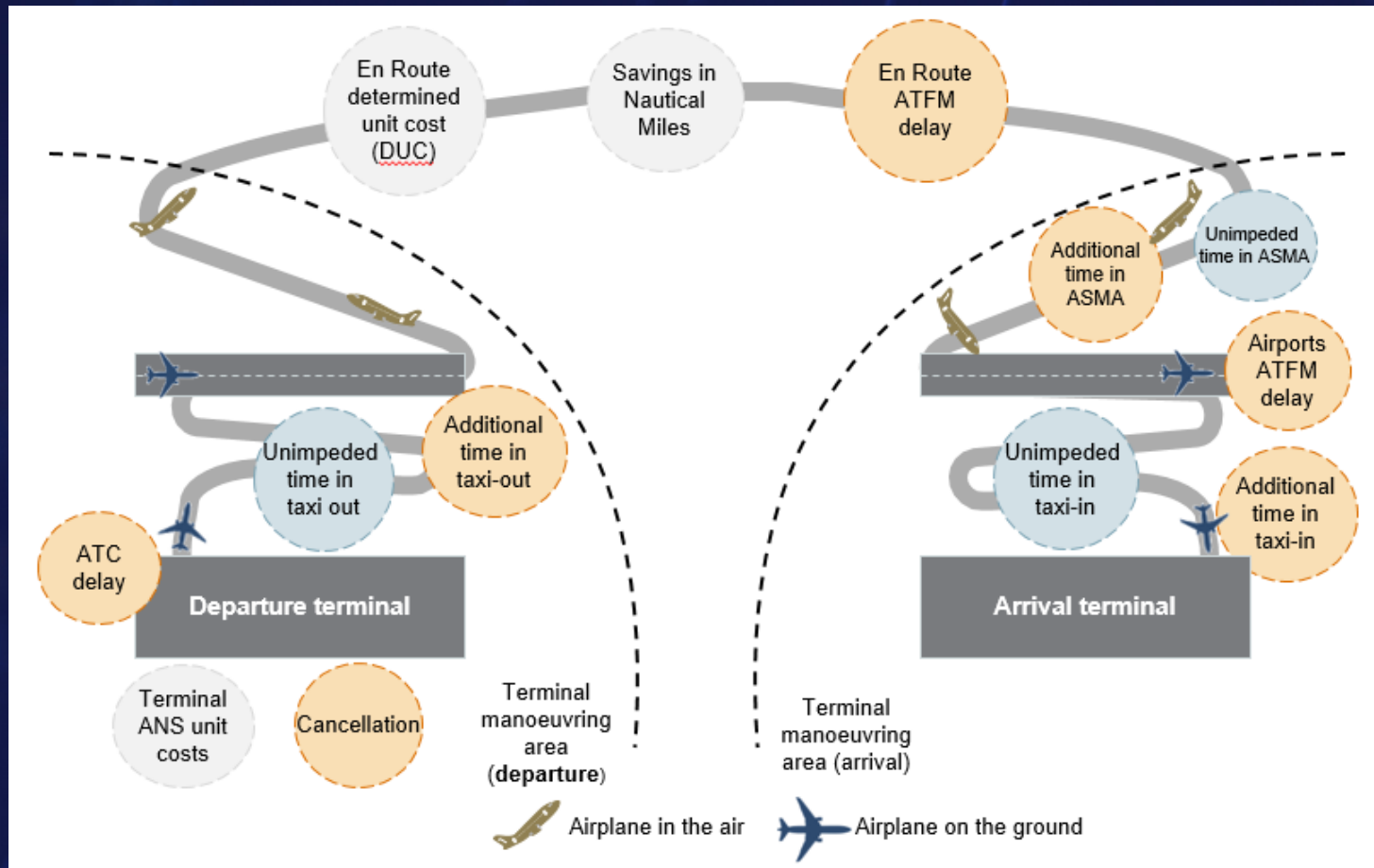
- Performance indicators
- Assessment process
- Costs Benefits Analysis





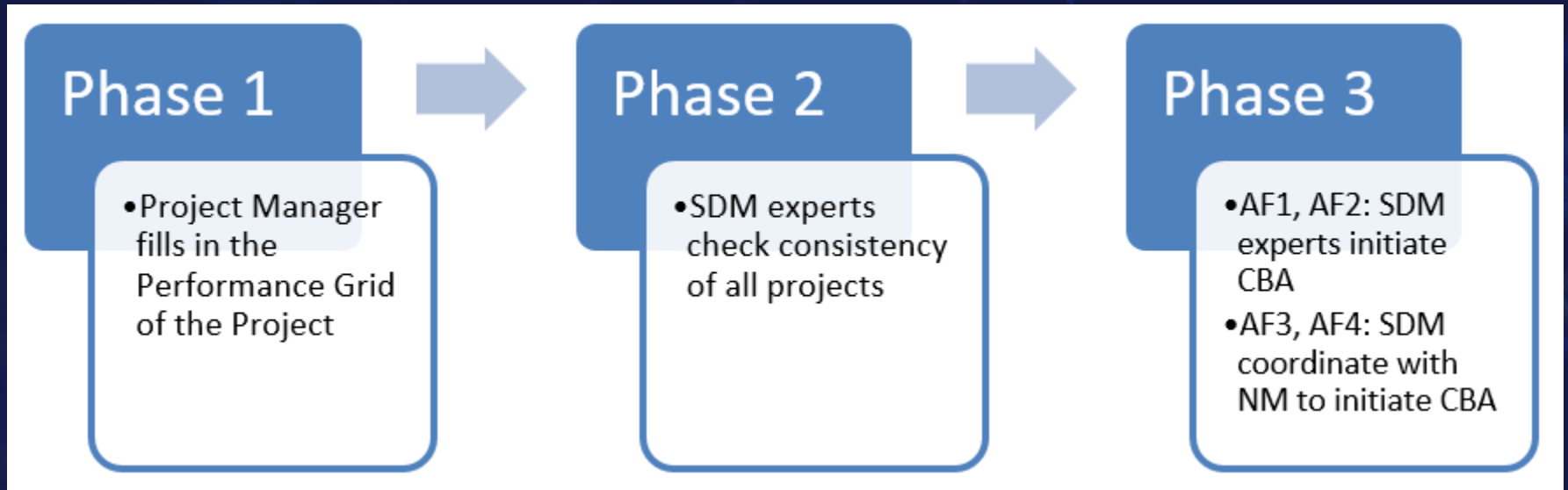
# Performance Analysis Methodology (2/3)

## Performance indicators



# Performance Analysis Methodology (3/3)

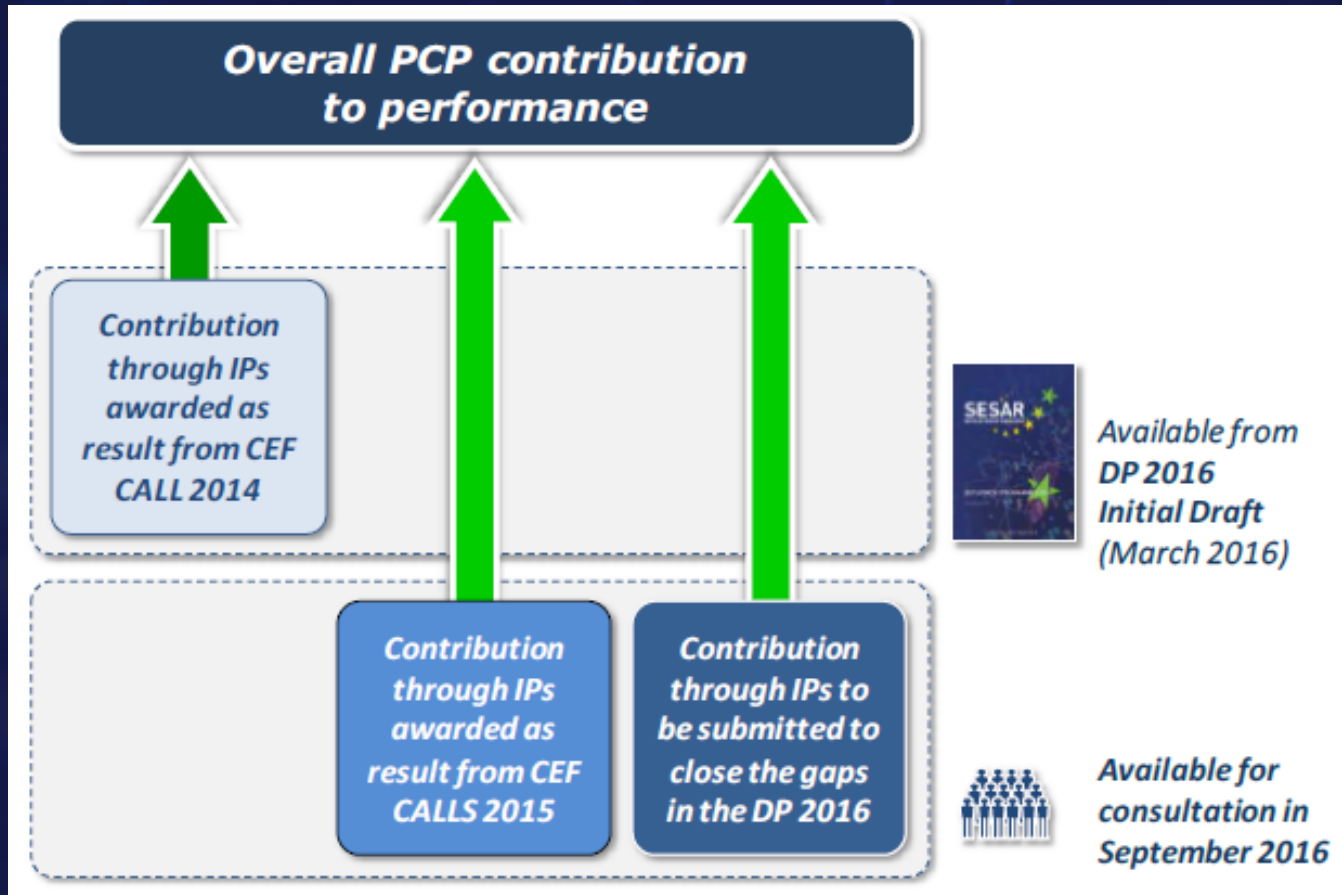
## Identifying Benefits



Phase 3 would include:

- Performance analysis
- CBA consolidation

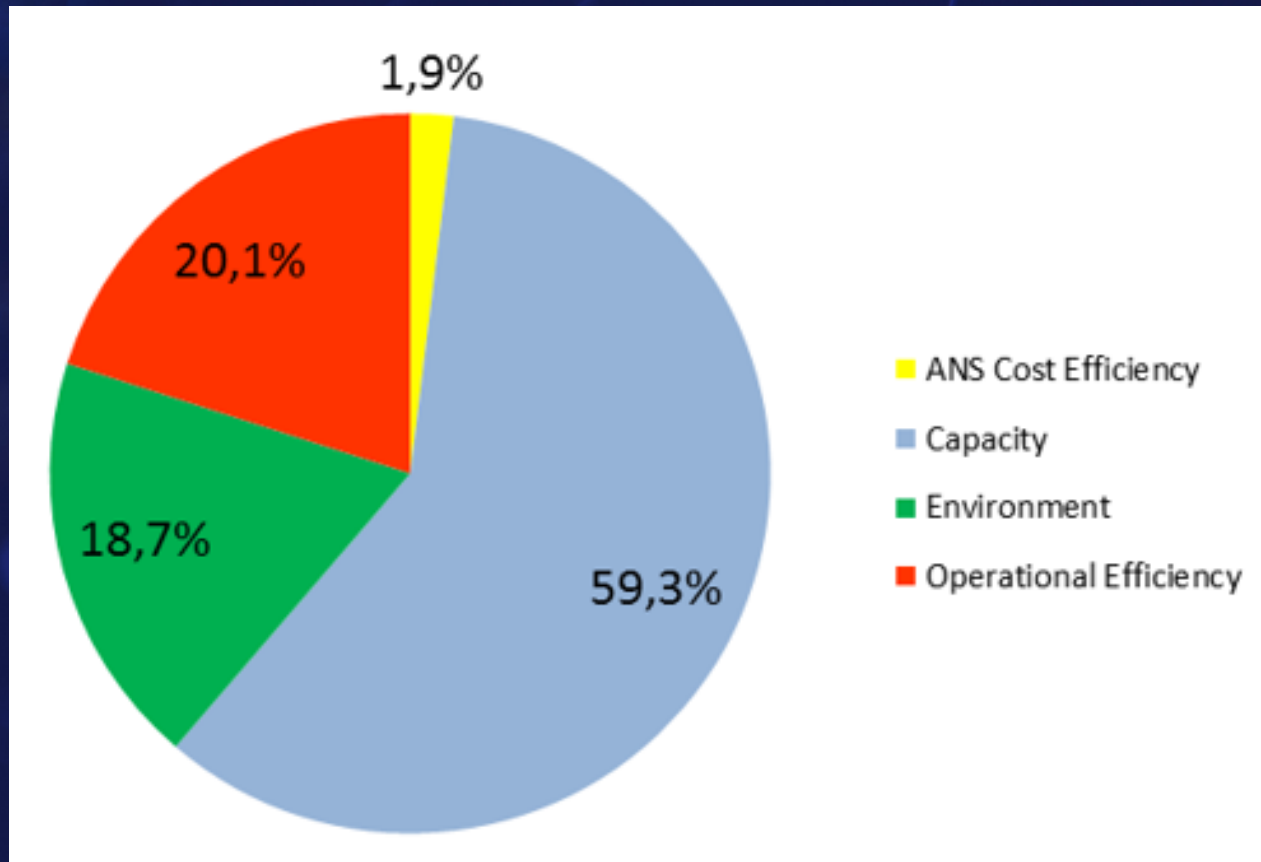
# Performance & CBA Monitoring (1/7)





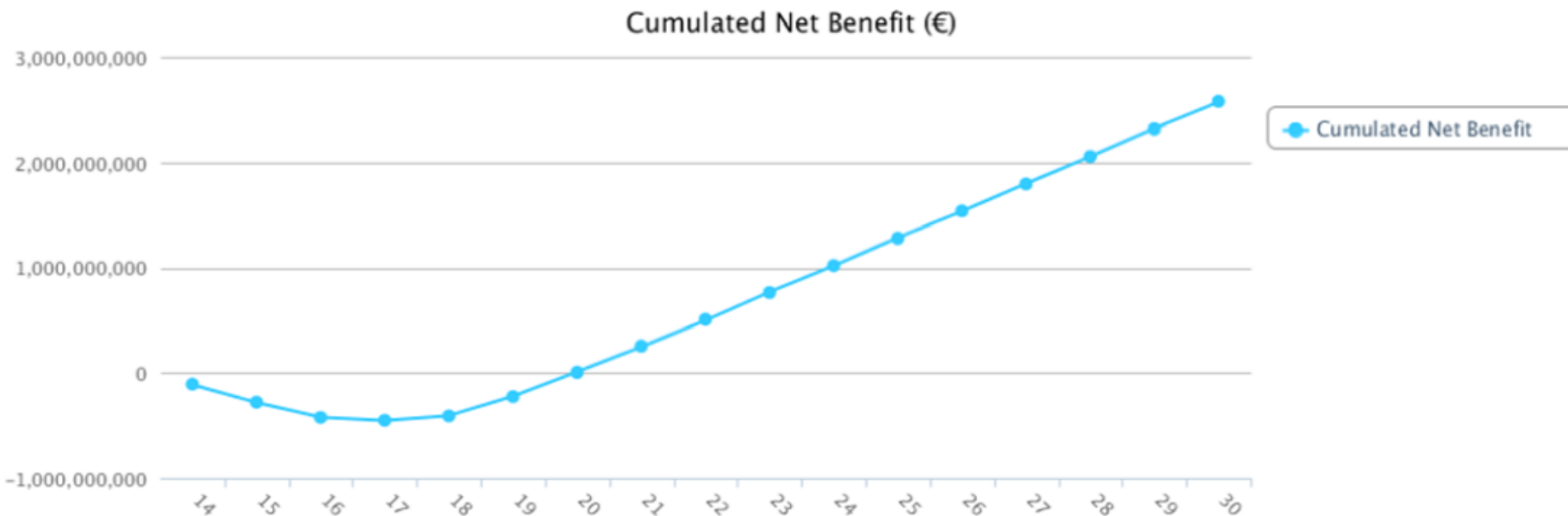
# Performance & CBA Monitoring (2/7)

## Projects in SGA 2014



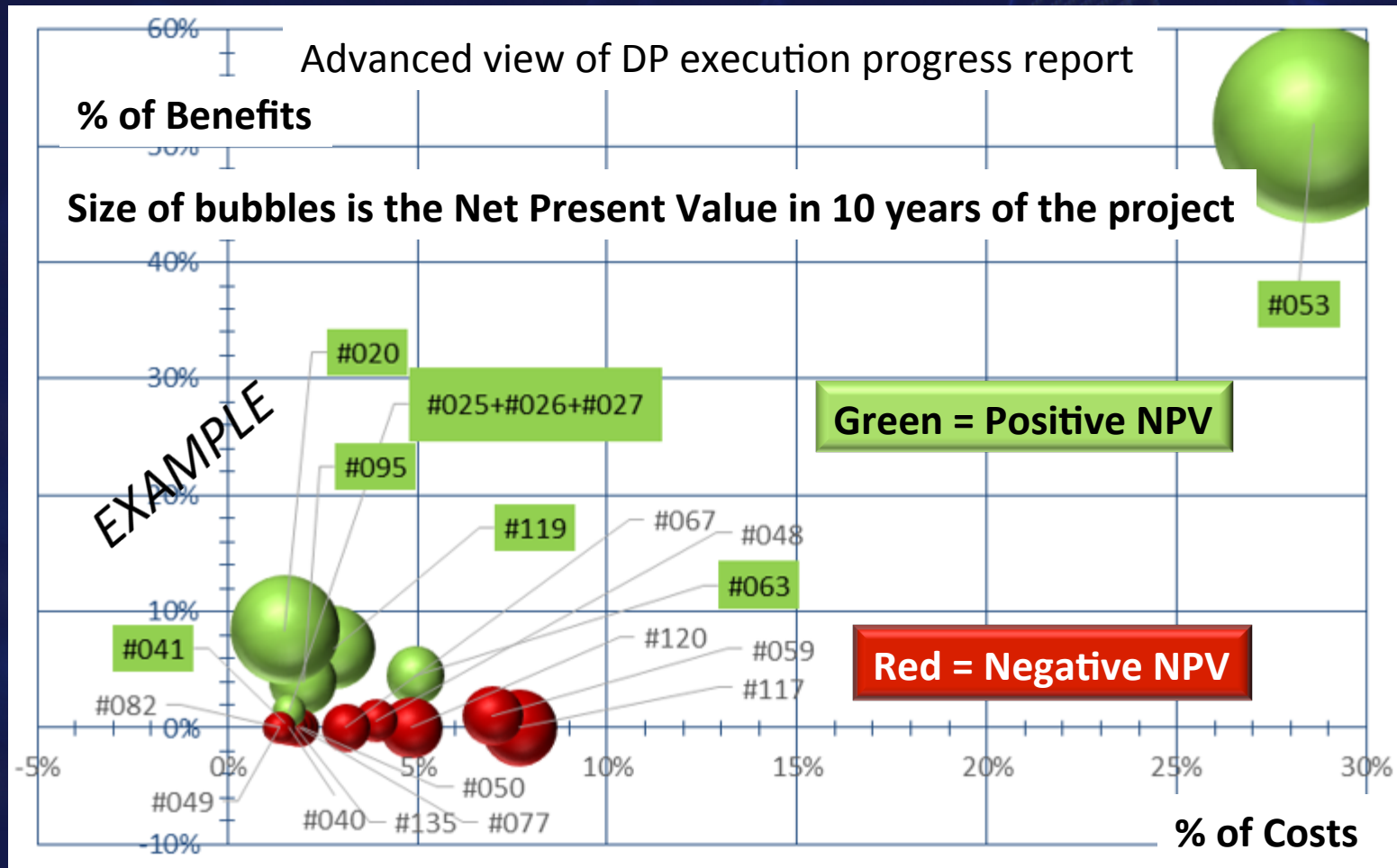
# Performance & CBA Monitoring (3/7)

## Projects in SGA 2014



# Performance & CBA Monitoring (4/7)

## Top 20 Projects in SGA 2014





## Performance & CBA Monitoring (5/7)

# Conclusions on Projects in SGA 2014

- 20 largest projects represent 80% of total SGA 2014 investment
- Largest one is about 30% of total investment with the expectation to bring up to 52% of all benefits from SGA 2014
- Criticality of AF3 in terms of cost and benefit of the whole PCP implementation

# Performance & CBA Monitoring (6/7)

## Conclusions on Projects in SGA 2014

- Regarding the Net Present Value of the implementation projects in the SGA 2014, 66% present a negative NPV, including 33% with no benefit at all:
  - 22% AF5 SWIM projects, negative NPV considered as normal;
  - 25% are prerequisites to or phase 1 of a future implementation projects to which most of the expected benefits will be allocated (fragmentation of the implementation);
  - 12% are Safety net, so increasing safety but without monetization of such benefit;
  - 7% of the projects with negative NPV appears to be questionable. Similar projects should be submitted and awarded with specific care in the future.



# Performance & CBA Monitoring (7/7)

## **Final check on deployed projects**

- Monitoring of the targets (the expected benefits) through the next Execution Progress Report of the DP
- Actions forecast to:
  - Validate assumptions, data comparison
  - Real life crosschecks on finalized work packages
  - Publish performance monitoring



# Presentation Agenda

## Part 1: “Performance driven implementation”

- SDM performance policy
- Context: Regulation (EU) N°716/2014 and supporting CBA
- Performance Analysis Methodology
- Performance and CBA Monitoring

## Part 2: “Financing mechanisms”

- Introduction
- Estimation of investments needs
- Potential financing mechanisms
- Preliminary conclusions

# Introduction (1/3)

- The SDM has delivered a baseline report on Financing Mechanisms to EC in September 2015
- The SDM is preparing a Financing Mechanisms report to support EC's decisions to activate some and further facilitate PCP implementation
  - Outline distributed in January
  - Initial draft in March
  - After due consultation, delivery to EC by September

# Introduction (2/3)

- Regulation (EU) No 409/2013: in its responsibilities at management level, the SDM shall identify the most appropriate financing mechanisms combining public and private funding.
- The EC has identified a 500 M€ envelop for SESAR Deployment Financing Mechanisms under the CEF (debt or equity framework).



# Introduction (3/3)

- SDM approach
  - Assessing investment needs
  - Identifying financing mechanisms

# Assessing Investment Needs (1/2)

- Ground investments needs  
(*estimation by SDM subject to consultation*)

AF	Investment committed	Other investments needed on top
	CEF Call 2014	Gaps DP2015
	Tot. Capex [M€]	Tot. Capex [M€]
<b>1</b>	56	110
<b>2</b>	138	440
<b>3 and 4</b>	267	1,100 – 4,000
<b>5</b>	167	300
<b>6</b>	-	420
<b>Totals</b>	629	2,370 – 5,270

# Assessing Investment Needs (2/2)

- Airborne investments needs  
*(estimation by SDM subject to consultation)*

AF	Estimated Value [M €]
AF 1	170 – 230
AF 6	630 – 700

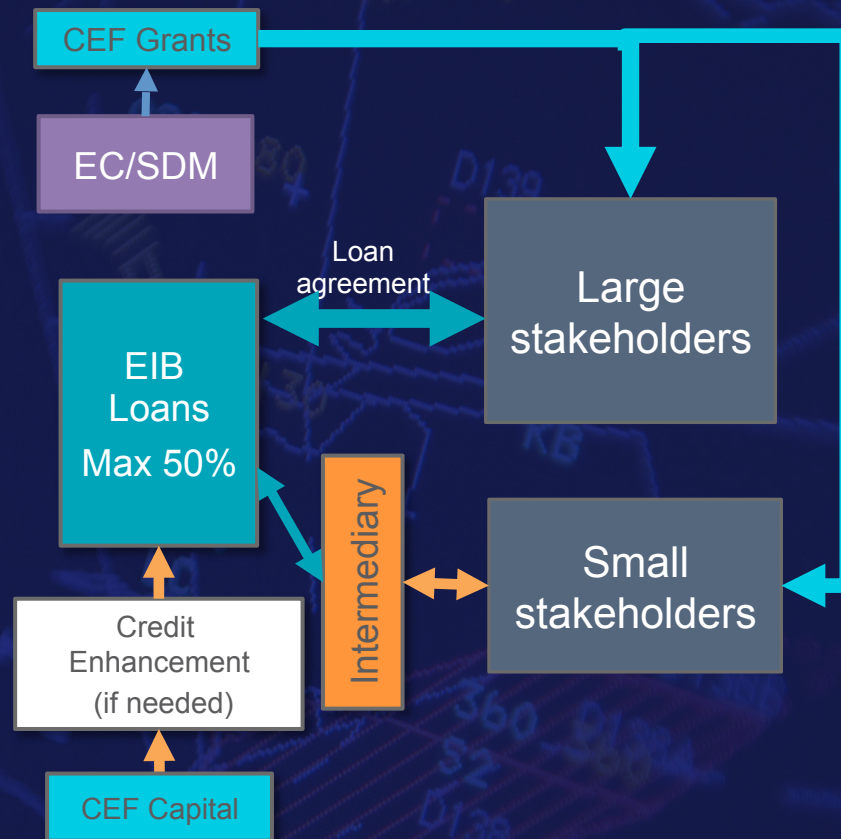
We mean here the identified needs for the Airspace Users which are linked to the PCP:

- AF1: Aircraft equipment to improve efficiency
- AF6: CPDLC ATN B1 and ATN B2



# Financing Mechanisms (1/4)

- A baseline and three options under study

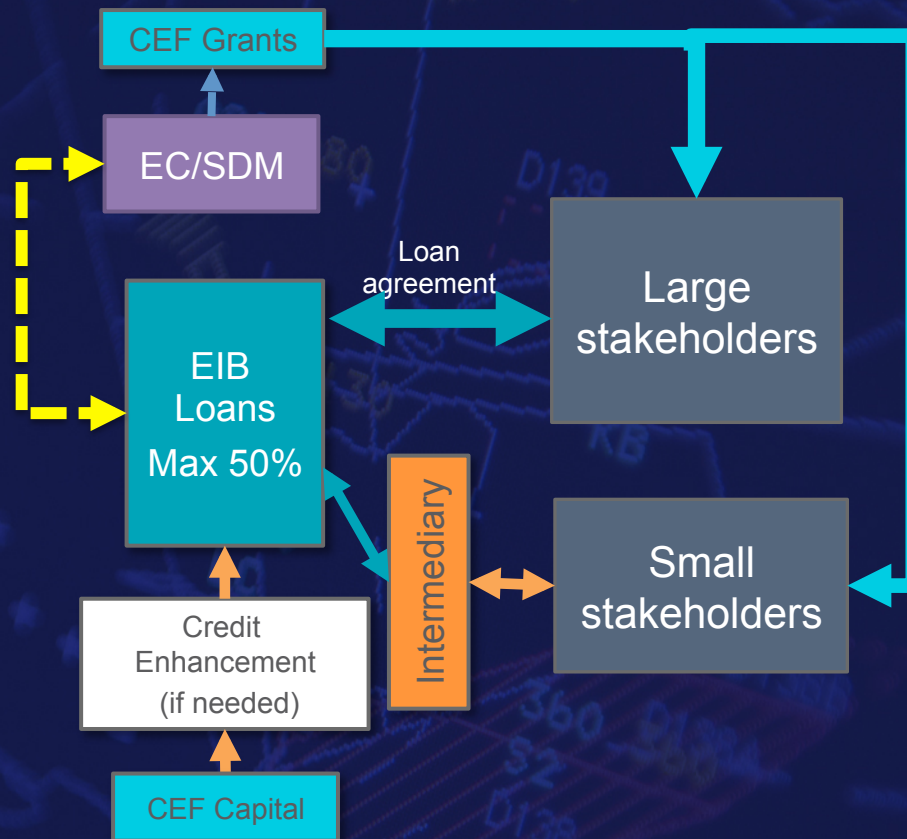


Loan agreement are available for interested stakeholders

# Financing Mechanisms (2/4)

## Grant/Loan Coordination Scheme

Agree on the funding/  
finance eligible  
business case

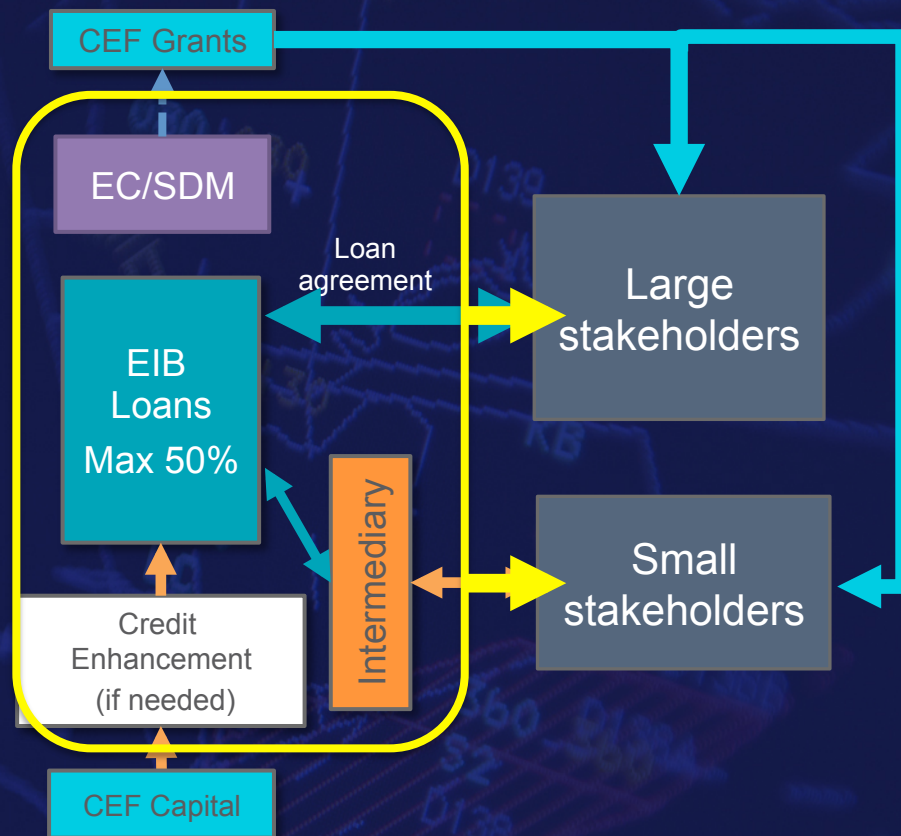


# Financing Mechanisms (3/4)

## Integrated funding Scheme

Leadership of the overall financing operations to the beneficiaries

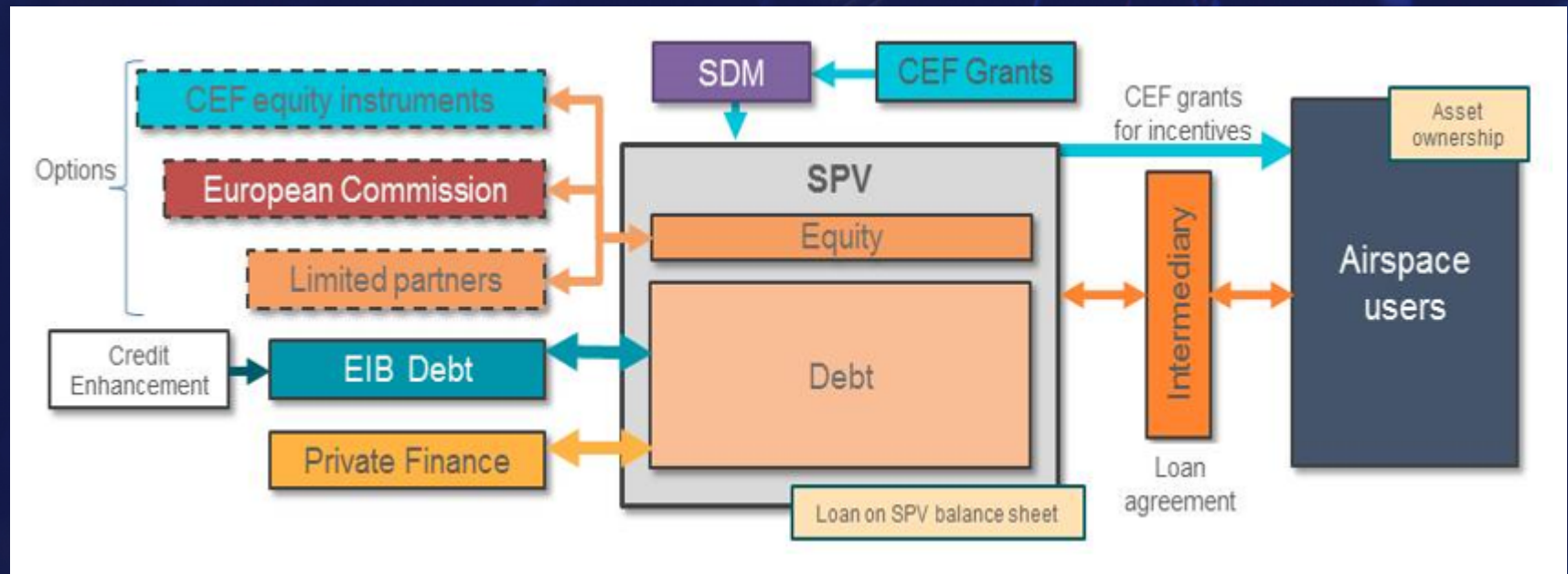
- Single Point of Contact





# Financing Mechanisms (4/4)

## Special Purpose Vehicle



# Preliminary conclusions

*Subject to further consultation*

- Financial mechanisms to come in addition to funding mechanisms (grants), not in replacement
- Loans
  - Low interest a priori
  - To be re-assessed by main investors (ANSPs in the case of PCP) as soon as loan conditions will be known
- Avionic fund
  - Promising mechanism, still to be refined
  - Not enough airborne investment in PCP to justify the establishment of such a fund
  - To be re-assessed in the light of a PCP followed by CP2 which could require more airborne investments

# Thank you very much!

For questions, please contact:  
[consultationplatform@sesardeploymentmanager.eu](mailto:consultationplatform@sesardeploymentmanager.eu)