

WHAT IS THE SESAR DEPLOYMENT PROGRAMME



2. What is the SESAR Deployment Programme?

2.1 The regulatory framework

In line with the overall arrangement of the SESAR Programme (depicted within the previous Chapter) and in accordance with the provision laid down by Regulation (EU) n. 409/2013, the SESAR Deployment Phase started with the adoption of the **Pilot Common Project** by European Commission on June 27th, 2014. The PCP therefore triggered **the need for a unique and widely agreed implementation plan**, illustrating how to get organized to ensure a synchronized, coordinated and timely deployment.

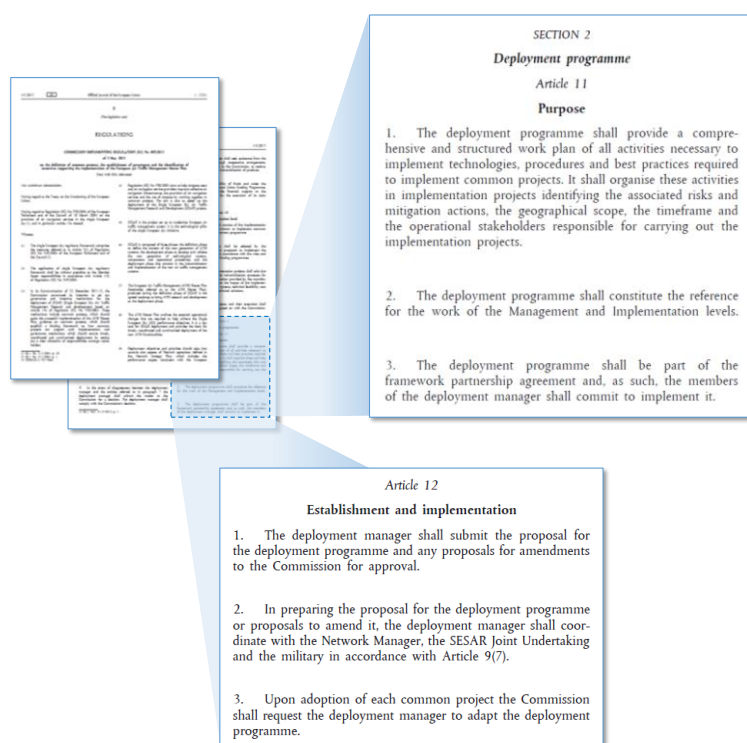


Fig. 6 - Regulation (EU) no. 409/2013 and the SESAR Deployment Programme

This implementation plan is the **SESAR Deployment Programme**, developed by the **SESAR Deployment Manager**, building on the technical contribution of the **SESAR Joint Undertaking**, the **Network Manager** and the **European Defense Agency**, whilst also taking into consideration the outcomes of a wide-ranging consultation of the ATM Community.

More specifically, **Article 11 (1) of Regulation (EU) n. 409/2013** states that the Deployment Programme shall provide *"a comprehensive and structured work plan of all activities necessary to implement technologies, procedures and best practices required to implement common projects"*.

The Programme therefore aims at **organizing local, regional and European-wide implementation activities for both civil and military operational stakeholders** in order to comply with the requirements stated in the Pilot Common Project in the most

performance driven manner, considering the **readiness of the technological elements to be deployed**. The Regulation also outlines the elements that the Deployment Programme shall identify, namely *"all the associated risks and mitigation actions, the geographical scope, the timeframe and the operational stakeholders responsible"*.

In other words, whereas the Pilot Common Project sets out at very high level, **what** has to be implemented, **where** it should be implemented, **which stakeholders** are called to invest to implement and **when** this implementation shall be completed, the **SESAR Deployment Programme** illustrates and details **how** the implementation shall be carried out, supporting a coherent planning and the sound sequencing of the deployment.

As indicated within Article 11 (2) of the Regulation (EU) No 409/2013, the SESAR Deployment Programme shall **indeed represent the reliable "reference for the work"** of all stakeholders involved in the implementation of SESAR.

2.2 The blueprint for Stakeholders' ATM modernization plans

In this perspective, the SESAR Deployment Programme fulfils the role of providing the **blueprint for the investment plans of all operational stakeholders** impacted by the Pilot Common Project Regulation and required to participate in the implementation of its ATM Functionalities.

Through the Deployment Programme, all ATM Stakeholders are provided with a common reference to support the **optimization and synchronization of their investments** within the scope of the Pilot Common Project. More specifically, the Programme flags **implementation activities** to be performed, identifies the **optimum timing** for such implementation and supports the definition of the most suitable approach in order to **achieve the objectives set forth in the Regulation**.



Fig. 7 – The role of the SESAR Deployment Programme

In addition, considering the co-funding support to Common Projects implementation available through the CEF Framework, the **SESAR Deployment Programme** also represents the **main reference document to specify the priorities of CEF Transport Calls for Proposals** for the priority SES / SESAR / CP.

Finally, the Programme is also a **reporting tool** at disposal of the EU Institutions and States together with their related Agencies and as Authorities, as well as all involved stakeholders to monitor the **status of PCP implementation** across Europe, allowing also the **identification of those activities** that still need to be performed to steer deployment and ensure the achievement of the expected performance benefits.

2.3 SESAR Deployment Programme and complementary functional views

The latest developments in the Single European Sky environment – and especially the evolutions stemming from the SESAR as a whole – are continuously **transforming and re-shaping the European ATM infrastructure**, its main features and its operational setting.

In this evolving picture, the **need for a common stable reference work plan** able to consistently steer the PCP Implementation across the years shall be **complemented with the adequate flexibility to ensure a constant alignment with the necessary living PCP and future CPs optimum deployment scenario**; this flexibility is highly needed, in order to make sure that all operational stakeholders can adapt their investments and their implementation activities on the basis of the most updated strategic developments, to be identified on a yearly basis.

These double requirements led to the definition of the **tailored structure of the Deployment Programme** to allow stakeholders to access to data and information that is **most relevant to their area of interest**.

The **SESAR Deployment Programme** is developed in order to provide all necessary information to operational stakeholders impacted by the Pilot Common Project and involved in its deployment: it includes a **summary of all activities to be undertaken**, their **scope** and **timeframe**, its **geographical scope**, as well as information on associated **Risks and Mitigation Actions**.

The **SESAR Deployment Programme is stable by nature**. It represents the translation into technical and operational terms of the business view identified within the PCP, which requires **updates only as a result of the review of the Pilot Common Project**, or after the **adoption of a new Common Project**. In this perspective, Article 12 (3) of Regulation (EU) no. 409/2013 explicitly states that “*Upon adoption of each common project the Commission shall request the Deployment Manager to adapt the Deployment Programme*”.

The **SESAR Deployment Programme** is **further complemented by specialized functional views**, which – on the basis of yearly updates and a periodical consultation process involving all relevant operational stakeholders – **plan and report on specific topics** and subjects, ensuring the availability of the most up-to-date information to the benefit of the ATM Community. In particular, the **SESAR Deployment Programme** works as a stable host structure to which evolving specialized views connect:

- The **DP Planning View**, a more detailed planning tool to Operational Stakeholders involved in the deployment of PCP Regulation, clearly defining the scope of the implementation activities, as well as the suggested approach to be followed in the implementation of the technological elements associated to the ATM Functionalities listed in Reg. (EU) n. 716/2014;
- The **DP Monitoring View – Full PCP**, a constantly evolving reporting instrument to illustrate the status of implementation of the Pilot Common Project across its geographical scope, to keep track of the deployment progress on a yearly basis, and to identify those implementation activities that still need to be undertaken (i.e. implementation gaps);
- The **DP Monitoring and Performance View / SESAR FPA**, which reports on the progress of CEF-funded and SDM-coordinated Implementation Projects; this document provides a wide-ranging outlook on the progress and achievements, also referring to the performance benefits enabled by the Implementation Projects (IPs) and including the associated Cost Benefit Analysis. Finally, it features the registry of all risks associated to SDM-coordinated Implementation Projects, and supports the identification of the most appropriate Mitigation Actions.

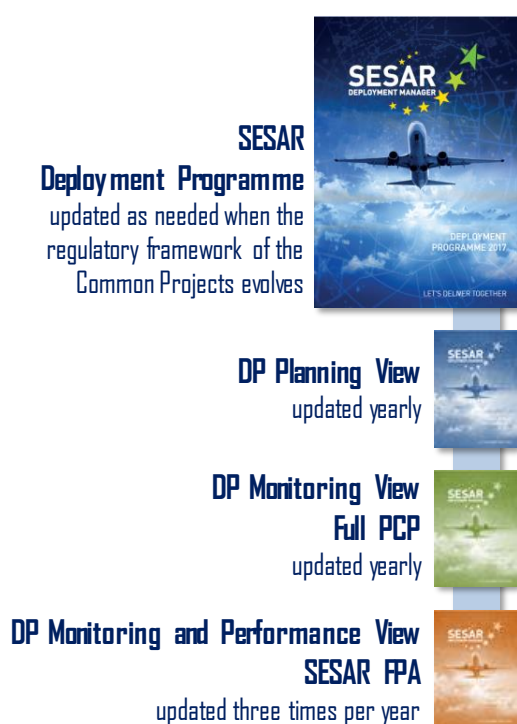


Fig. 8 - The lifecycle of the SESAR Deployment Programme and of its complementary functional views

The presented views – which are **tightly linked with this document** and represent a **further breakdown** of its content – require a **periodical update**. That is to maintain their **alignment with the European ATM scenario** and to include the latest information (for instance, in terms of newly available documents and guidance material).

In this perspective, the **DP Planning View** and the **DP Monitoring View / Full PCP** will be updated on a yearly basis, whilst the **DP Monitoring and Performance View / SESAR FPA** – which demands for a tighter monitoring on the progress of the CEF-funded Implementation Projects – will be issued three times per year.

More specifically, the update of the **DP Planning View** is essential to provide stakeholders with a common reference which clearly identifies **those activities to be urgently undertaken**, on the basis of the latest strategic developments registered within the ATM scenario, whilst also encompassing the latest information on available standards and/or any other supporting document. On the other hand, the **DP Monitoring View Full PCP** has to be considered as a truly *living document*, as it aims at reporting the **progresses achieved by stakeholders from all EU Member States** and to timely identify any potential delay which might hinder the **achievement of the overall performance benefits**.

Finally, the **DP Monitoring and Performance View SESAR FPA** builds on the continuous provision of data by Stakeholders participating in the CEF-funded Implementation Projects and on the monitoring activities performed by SDM, thus allowing for the **constant tracking of the implementation successes**.

2.4 The buy-in of ATM Community through consultation

In order to ensure the full **commitment of the ATM community** to implement the Pilot Common Project, the SESAR Deployment Programme is the result of a **wide-ranging and thorough consultation process**, involving all impacted categories of **operational and non-operational stakeholders**, so as to make sure that the document takes into duly consideration their standpoints and perspectives.

The engagement mechanisms established by the SESAR Deployment Manager fall into **two different but closely inter-related fields**:

- The **cooperation and coordination initiatives with other relevant SES bodies and non-operational stakeholders**;
- The **direct involvement of operational stakeholders** in the elaboration and maintenance of the Programme and its views.



Fig. 9 - Main fields of Stakeholders' consultation

Cooperation with the relevant SES bodies and non-operational stakeholders

With regard to the first area, Article 9(7) and 12(2) of Regulation (EU) no. 409/2013 establishes that the **elaboration of the SESAR Deployment Programme and its maintenance** shall be “*coordinated with the Network Manager, the SESAR Joint Undertaking and the military*”, in order to exploit their specific expertise on specific topics, so as to:

- Carefully address the **PCP-related deployment aspects** deemed to impact on the European network infrastructure and on its airspace organization, as well as to ensure coherence with the **Network Strategy Plan** and the **Network Operations Plan**;
- Ensure the alignment of the Programme with the ATM Master Plan, as well as guarantee adequate continuity between the different **ATM innovation lifecycle phases**, with specific regard to the **progress made in the industrialization phase** and their **impact on deployment activities**;
- Foster the coordination between civil and military stakeholders to synchronize implementation, in order to **avoid any adverse impact on national and collective defense capabilities**.

Taking into account the pivotal role of the SESAR Deployment Programme in the ATM context, SDM has activated all **required cooperation streams**, also expanding the coordination effort by **involving other critical organizations and Agencies in the process**, including:

- **EASA** and the main **Standardization bodies**, which ensure the integration in the Programme of the **most updated references, specifications, standards and supporting Regulations**, to steer a harmonized and safe deployment of the PCP;
- the **National Supervisory Agencies**, to ensure that the progress in the PCP deployment are appropriately **acknowledged in the National Performance Plans**;
- the **Manufacturing Industry**, to ensure the **alignment between the outcomes of the industrialization phase** and the optimum planning identified in the Programme, seeking their cooperation to ensure the timely development of the appropriate standards and marketing of the required hardware and software;
- the **staff associations**, to ensure that human factors, competency and change management issues are duly taken into account in the **SESAR Deployment Programme**.

The engagement of European operational stakeholders

In order to complement its own expertise and the inputs stemming from other SES bodies with operational inputs and insights from the ATM field, SDM set up and currently manages a dedicated **Stakeholders' Consultation Platform (SCP)**, opened to all European ATM operational stakeholders impacted by the Common Projects' deployment and/or benefiting from their implementation. In order to keep the SCP within a manageable size and to ensure smooth consultation campaigns, the participation of stakeholders is organized at **groupings' level** and/or at **Functional Airspace Blocks (FAB) level**.

The purpose of such Platform is to seek **stakeholders' point of view on the SESAR Deployment Programme** and on the update of its **evolving views**, through the elaboration of specific **opinions on proposals** made by the SESAR Deployment Manager, consisting into a **set of recommendations**. The final goal of such recommendations is to **improve and expand stakeholders' buy-in on the Programme** and on its periodic updates.

Taking into account the wide scope of the Programme, as well as the span of its technical content, the Stakeholders' Consultation Platform is composed by **Thematic Sub-Groups** – which are responsible for targeted discussion and analysis on specific aspects – and by a **Steering Group** at its main level, which issues the **opinions and recommendations** to the SESAR Deployment Manager.

2.5 Tracking the progress in implementing PCP

Considering the SESAR Deployment Manager responsibility to *"implement the Commission's Decisions and monitor their implementation by the implementation level"* - as stated by Article 9 of Reg. 409/2013, the **SESAR Deployment Programme** aims at providing a **common reference to operational stakeholders on the status of PCP implementation** and at identifying all **implementation activities that still need to be undertaken** in order to achieve its full deployment.

A clear, reliable and constantly **evolving picture of the current status of PCP implementation** throughout Europe is built and provided to European Commission, to other SES bodies and to operational stakeholders, through the yearly updates of the **DP Monitoring View – Full PCP**.

In particular, the picture built in the **Programme** provides different views, allowing to report on the **status of the implementation of PCP-related technological elements** within a dedicated Member State or within one of the 25 PCP-listed airports. In addition, **specific information are provided also at stakeholder level**, keeping track of their involvement in the deployment activities.

Such comprehensive outlook is a valuable tool to **guide future investments and activities** by the stakeholders, as well as to **identify potential delays and issues to be mitigated** and to **avoid significant gaps in the Programme's implementation**, thus supporting performance expectations. The elaboration of such **detailed monitoring picture** and the **identification of the most urgent activities** still to be undertaken relies on the **strict cooperation amongst the SESAR Deployment Manager and the operational stakeholders**, as well as on the **support of the Network Manager** and of the **European Defence Agency**.

Such cooperation has resulted in a **wide-ranging Monitoring Exercise**, performed on a yearly basis, aiming at providing an **up-to-date picture of the implementation of the Programme**. By integrating inputs and feedback coming from all stakeholder categories involved in the deployment of the Programme, the Exercise supports the identification of **what has still to be implemented, where and by whom** (i.e. the existing implementation *gaps*). It is worth underlying that the Exercise is organized to involve and directly engage:

- **ground stakeholders**, organized and clustered on a geographical scope-basis;
- **Airspace Users**, organized on a fleet-centric approach, for those elements whose deployment requires their direct involvement, with specific reference to the PCP-related airborne capabilities, as well as the flight-planning capabilities.

The dedicated yearly **SDM Monitoring Exercise** directly involves operational stakeholders, gathering information and data through *ad-hoc* templates and surveys **aiming at detailing the current status of**

implementation, identifying those Families which have already been implemented, those whose deployment is in progress and/or planned, as well as those whose implementation is still to be planned (also specifying the expected date of completion, when available). The update of **such snapshot on the status of implementation** is provided within the yearly releases of the **DP Monitoring View – Full PCP**.