ATM Information Digest
July 2016 edition

NCP NSA
Coordination
Platform

ICB
Industry Consultation Body

EGSD Expert Group on the
Social Dimension
of the SES

Introduction

The ATM Information Digest provides ICB, NCP and EGSD members with a quick reference on the main developments within the Single European Sky (SES). The content is organised by the five pillars of SES: Performance and Charging, Safety, Technology, Airports and Human Factors; with the latter pillar contained within the Technology section. The ATM Information Digest is revised quarterly, and this edition is structured as follows:

1. EU Policy

- **Aviation:** A summary of global and EU aviation policy.

- **Air Traffic Management in the EU:** A summary of EU ATM policy.

- **Funding and Financing Modernisation in ATM:** A summary of the funding and financing opportunities within European ATM, including information on the results of the 2015 CEF Call for Proposals.

2. Technology

- **Research Programmes:** An overview of aviation and ATM research, in particular the SESAR programme.

- **SESAR Deployment:** The framework to implement SESAR technologies and concepts, and current status.

- **Interoperability:** An overview of the current status of implementation of interoperability IRs, and related technical issues.

- **Centralised Services:** The status of EUROCONTROL's Centralised Services programme.

- **Human Factors:** An overview of the status of work on human factors within SESAR.

3. Performance and Charging

- **Performance and Charging Scheme:** A summary by reference period, the evolution of the PRB, and future charging mechanisms.

- **Functional Airspace Blocks:** A summary of the status of FABs.

- **Network Functions:** An overview of the nomination of the Network Manager, update of the Network Functions Implementing Rule, network performance and CDM processes.

4. Safety

- **Safety Oversight:** Summary of the safety oversight regulation and EASA Rule Making activity.

- **EASA Basic Regulation:** An overview of the update to the EASA Basic Regulation.

5. Airports

- **European Observatory on airport capacity & quality:** Summary of the work of the airports observatory.

- **Current legislative proposals:** An overview of current airport related legislative proposals within the EU.

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In addition, there are a number of supplementary annexes:

- **Useful Resources:** Provides a list of the latest documents, with their corresponding URLs, providing information on SES policy and performance. It also includes links to access dossiers from Comitology Committees and Commission Expert Groups.

- **Public Consultations:** Provides a list of on-going and planned public consultations related to Air Transport.

- **On-going Legislative Procedures:** Provides a list of on-going legislation related to Air Transport.

- **European Parliament Procedures:** Provides a list of legislation and reports related to Air Transport undergoing procedure in the European Parliament.

- **Status of EASA rule making:** Provides an overview of the status of EASA Rule Making Tasks related to Air Transport.

- **SES Legislation:** Provides a list of all extant legislation relating to SES.

This document references a number of other documents. The blue links are to public documents, and there are also several references to a number of documents that are available on membership portals, for which a username and password will be required.

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1   EU Policy

This section provides an overview of EU policy and legislation, and also provides the link with the wider global aviation community.

This section contains the following topics:

- **Aviation:** Global and EU aviation policy summary.

- **Air Traffic Management:** EU ATM policy summary.

- **Funding and Financing:** Summary of the funding and financing opportunities within European ATM. Updated with information on 2015 CEF Call for Proposal.

Aviation

ICAO Global Aviation Plans

The fourth edition of the ICAO Global Air Navigation Plan (GANP) (2013-2028) was published in 2013 alongside the Aviation System Block Upgrade (ASBU) framework (2013) for harmonising avionics capabilities and the required ATM ground infrastructure. A draft 2016 update to the ICAO GANP (2016-2030) and accompanying ASBU document is now available and will be approved for publication at the 39th ICAO Assembly (27th September – 7th October 2016). Europe is implementing the GANP based on the SES institutional framework and the SESAR programme (see Air Traffic Management in the EU below).

The complementary ICAO Global Aviation Safety Plan (GASP) (2014-2016) is currently being updated for 2017-2019 and will be endorsed during the 39th ICAO Assembly (27th September – 7th October 2016). A significant part of this update will consist of the addition of a global aviation safety roadmap, developed by the Global Aviation Safety Plan Roadmap Group (GASPRG).

EU Transport Policy

The European Commission's 2011 White Paper "Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system" set the direction for EU transport policy.

The Commission performed a mid-term review of the paper in 2015, including a public consultation. A report analysing the responses draws conclusions on three main areas: (i) main challenges for the transport policy, (ii) views on the EU transport policy approach and 2011 White Paper, (iii) areas on which the transport policy should focus.

Flight Path 2050 (Long Term Vision)

The European Commission published its long term vision for Aviation in Europe, Flightpath 2050 in 2011. The report establishes how and where European research priorities should be set to maintain EU growth and worldwide competitiveness, whilst also meeting market needs and environmental challenges. Further information can be found in Research Programmes.

EC Aviation Package

As part of its work programme for 2015, the Commission announced it would examine ways to improve the conditions of the aviation sector by bolstering its competitiveness through the aviation package (number 11).

A 12-week public consultation on the aviation package closed on 10th June 2015, and the Commission has published the results of the public survey and a synopsis report which summarises the contributions from stakeholders to the online consultation.

The Commission's aviation strategy was published on 7th December 2015. It is composed of several documents: a communication, a detailed supporting working document, legislative

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proposal to amend EASA Basic Regulation (see below), and Regulatory Impact Assessments for the changes to the EASA BR and regulation of drones.

The Aviation Strategy lays down the Commission's vision for aviation as a whole in Europe. Three key priorities have been recognised:

1) Tapping into growth markets by improving services, market access and investment opportunities with third countries, whilst guaranteeing a level playing field.

2) Tackling limits to growth in the air and on the ground by reducing capacity constraints and improving efficiency and connectivity.

3) Maintaining high EU safety and security standards by shifting to a risk and performance based mind-set.

In ATM, the Aviation Strategy recognises the importance of SES initiative in improving safety, raising capacity, cutting costs and minimising environmental impact, but concludes that the project is still not delivering. To this end the Commission urges the Council and European Parliament to adopt the SES 2+ proposals.

EU Aviation Agreements

Following the publication of the European Commission's Aviation Strategy, steps are being taken to negotiate EU-level comprehensive aviation agreements with key partner countries:

1) In March 2016, the Council of the European Union authorised the European Commission to open negotiations with China and Japan in view of concluding Bilateral Air Safety Agreements (BASA).

2) In June 2016, the EU member states granted the European Commission the exclusive mandate to negotiate EU-level aviation agreements with four key partners: The United Arab Emirates (UAE), Qatar, Turkey and members of the Association of South East Asian Nations (ASEAN). The primary goal of these agreements is to create new business opportunities, improve market access and ensure fair competition under transparent market conditions.

Existing EU aviation agreements include the following:

- EU-US Air Transport Agreement, (2007), amended by a Protocol.
- Multilateral Agreement on the establishment of a European Common Aviation Area (2006), which is yet to be ratified.
- Agreements with Morocco, Georgia, Jordan, Moldova, and Israel.

An aviation agreement with Ukraine has been negotiated and is expected to be signed in the near future, whilst negotiations are on-going with Lebanon, Tunisia and Azerbaijan.

EASA

Regulation (EC) No 216/2008 (EASA Basic Regulation), published on 19th March 2008 and amended by Regulation (EC) No 1108/2009 in November 2009, established the European Aviation Safety Agency (EASA) and dictates its remit, responsibilities, future implementing regulations, management and funding.

In order to identify the most appropriate way to update the Basic Regulation, an EASA Consultation (A-NPA 2014-12) and a Commission Consultation were open until 15th September 2014.

After consultation with NSAs, EASA produced Opinion 01/2015, European Commission policy initiative on aviation safety and a possible revision of Regulation (EC) No 216/2008, in March 2015. The opinion identifies the most appropriate ways to update (EC) No 216/2008, and highlights areas where significant work is required to defragment the existing regulatory framework. Further details are available in the Safety Section.

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As part of the Aviation Strategy, and taking into account the recommendations provided by EASA, the Commission released a legislative proposal amending the EASA BR. The proposal does not repeal or modify parts of the SES legislation. The proposal:

- Permits the use of delegated powers to adopt Implementing Rules including certification of ANS providers and systems (e.g. conformity assessment), and regulation of drones.
- Strengthens EASA's role in the areas of security.
- Allows EASA to use route charges for certain SES related activities.

The rapporteur for the proposal is Marian-Jean Marinescu. The proposal is undergoing ordinary legislative procedure (co-decision) and a draft report by the TRAN Committee was published in May 2016.

European Aviation Environmental Report 2016

Prepared closely with EASA, the European Environment Agency (EEA) and EUROCONTROL, the Commission published the first European Aviation Environmental Report on 29th January 2016. The report includes key performance indicators on noise, greenhouse gas emissions and air pollution. Among the findings, forecast scenarios for the next 20 years show that with the expected increase in traffic the environmental sustainability of the sector will be increasingly challenged.
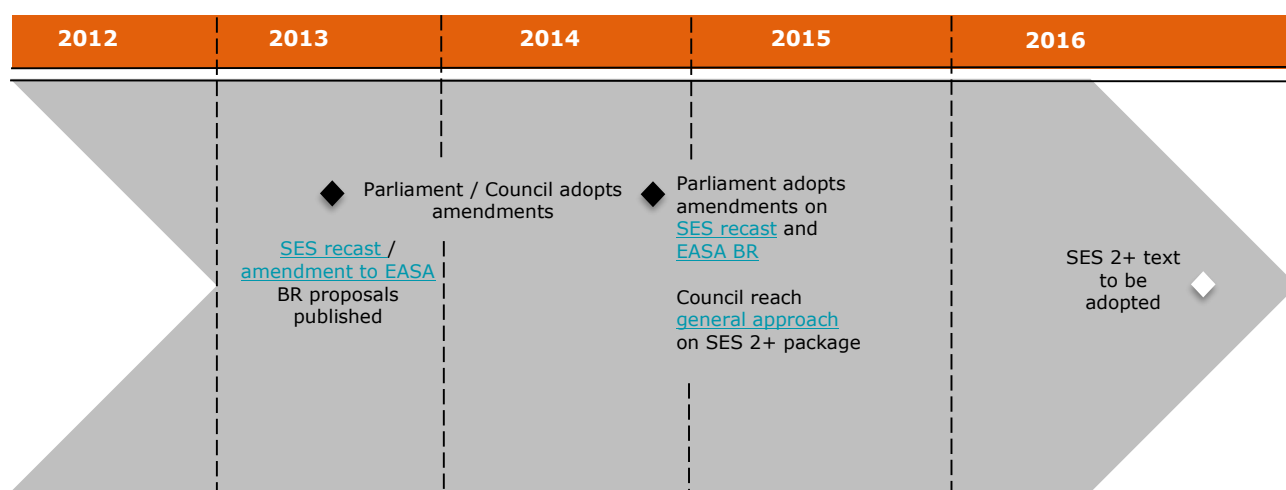
Air Traffic Management in the EU

SES 2+

The SES 2+ legislative proposal comprises a recast of the existing SES Regulations (SES Recast, 2013/0186 (COD)) and an amendment to the EASA Basic Regulation (2013/0187 (COD), see also EASA above). The two legislative proposals are currently undergoing ordinary legislative procedures in the European Parliament and the Council of the European Union. For the European Parliament, the Transport & Tourism (TRAN) Committee is responsible for both legislative processes.

Two 'committees for opinion' have been assigned to the SES recast fiche: The Industry Research and Energy (ITRE) Committee, and the Legal Affairs Committee. The ITRE Committee decided not to provide an opinion.

On the Council side, there was significant activity under the Italian Presidency in the latter half of 2014. The Commission provided a progress report on 1st October 2014 in preparation for the 8th October 2014 Transport Council meeting. A high level conference with ministers and CEOs took place on the 6th and 7th of November 2014, to further discuss details of the SES 2+ proposals. The Council agreed to the general approach on the SES 2+ proposals at the Transport Council meeting on 3rd December 2014. The agreed approach is described in a press release that was published after the meeting.

The SES 2+ package is recognised as a priority in the Trio Programme (January 2016 – June 2017), the agenda drafted jointly by the Presidency Trio of the Netherlands, Slovakia and Malta and which outlines the 18-month work programme of the council. However, progress continues to be dependent on resolving the Gibraltar issue.

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2012	2013	2014	2015	2016

◆ Parliament / Council adopts amendments

SES recast / amendment to EASA BR proposals published

◆ Parliament adopts amendments on SES recast and EASA BR

Council reach general approach on SES 2+ package

SES 2+ text to be adopted ◇

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SES ATM Research

The European ATM Master Plan Edition 3 was approved by the SJU Administrative Board on 15th December 2015. The plan is intended to form the basis of the SESAR 2020 programme as well as identifying potential ATM functionalities for future Common Projects. The newest edition of the ATM Master Plan has been updated to reflect the change in performance requirements and identifies new risks such as cyber-security and RPAS.

The SESAR 2020 programme will operate in the period 2016-2024. The Multi-Annual Work Programme covering the period 2016–2019 was published in September 2015. An amended Annual Work Programme for 2015 has been released integrating relevant SESAR 2020 financial details. Further information is available in Research Programmes.

EU-US Collaboration in ATM Modernisation

The FAA's NextGen (Next Generation Air Transportation System) and the EU's SESAR are the two largest airspace modernisation projects currently under way; the U.S. and EU collaboration aims to harmonise and secure ATM modernisation efforts between these two projects.

The collaborative harmonisation work between the U.S. and the EU has taken place under the Memorandum of Cooperation (MOC) between the United States of America and the European Union on Civil Aviation Research and Development that was signed in March 2011.

NextGen and SESAR published a Joint State of Harmonisation Document in December 2014, providing a high-level summary of the current state of progress toward achieving the necessary level of interoperability between NextGen and SESAR.

SESAR Deployment

The Single Sky Committee (SSC) adopted the Commission Implementing Regulation (CIR) ((EU) No 409/2013) on the governance of SESAR Deployment in May 2013. Subsequently, the Pilot Common Project (PCP) CIR (EU No 716/2014) was adopted on 28th May 2014. The PCP mandates the implementation of 6 ATM Functionalities (AFs) across specified stakeholders.

Responsibility for the management level of the deployment governance is held by the Deployment Manager. The SESAR Deployment Alliance was appointed as the Deployment Manager by the European Commission on 5th December 2014 with the signing of the Framework Partnership Agreement. The Deployment Manager publishes the Deployment Programme indicating where and when the ATM functionalities should be deployed and providing an overview of the current implementation status. A final draft of the Deployment Programme 2016 was published for consultation on 15th July 2016, and further details are available in

SESAR Deployment.

The final version of the Deployment Programme 2016 will serve as the basis of the expected 2016 Call for Proposals for public funding for actions related to Common Projects (see the Funding and Financing Modernisation in ATM section).

Single European Sky Awards

At the World ATM Congress in Madrid on the 8th March 2016, the Commission unveiled the five winners of the first Single European Sky Awards, aimed at rewarding projects that have contributed the most to the achievement of the Union's SES.

The five winners, with links to details of each project, were:

- COOPANS Alliance: an example of the harmonisation of ATM systems, which can be considered the backbone of the SES and which brings significant benefits to the operators and service providers of the entire ATM system.

- Time Based Separation at Heathrow: a concrete example of a coordinated deployment of an innovative solution contributing to SES performance objectives.

- The BOREALIS alliance: Delivering FRA across Northern Europe by 2021: a major contribution to implementing SES and a great example and model of a voluntary coordination amongst national authorities, air navigation providers and many other organisations.

- Remote Tower Services (LFV): a good example of implementation of an innovative SESAR Solution paving the way towards a new era for air traffic control.

- Improvement of the Spanish Air Traffic Management Network performance through an ordered change management process: an example of how the performance of a national ATM system can be strongly improved with regulatory instruments based on SES regulations.

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Funding and Financing Modernisation in ATM

Implementation of the TEN-T

The implementation of the Trans-European Transport Network (TEN-T) is facilitated by Connecting Europe Facility (CEF) funds for the period 2014-2020, and was previously supported through the allocation of TEN-T funds in the period 2007-2013. SESAR is recognised in CEF as a 'horizontal project'.

The Innovation and Networks Executive Agency (INEA)is responsible for managing parts of the Connecting Europe Facility (CEF) and Horizon 2020 programme. INEA also manages the remaining 2007-2013 projects of the TEN-T Programme.

Reports

The Fraunhofer study (summary note) identifies and assesses the wider economic effects which would occur if Europe failed to complete the core TEN-T network by 2030, as required by the TEN-T guidelines.

The Christophersen-Bodewig-Secchi Report (June 2015) is an Action Plan "Making the best use of new financial schemes for European transport infrastructure projects" which identifies and recommends projects along the TEN-T core network corridors which could benefit from financial instruments and schemes within relatively short timeframes.

Connecting Europe Facility (CEF)

CEF is an integrated financial instrument for investing in EU infrastructures in relation to Trans-European Network projects covering transport, energy and telecommunications. The CEF is the common focal point for network-related projects and coordinated funding for the EU financial period (2014-2020). The CEF regulation was published on 20th December 2013.

The total budget of the CEF earmarked for transport related projects between 2014 and 2020 is €26.2 bn, of which €11.3 bn will be transferred from the Cohesion Fund. Approximately €3 bn is allocated for SESAR implementation up to 2020.

Funding from the CEF is limited to a percentage of the overall cost of the project. CEF funding rates of eligible costs are as follows:

- 50% for studies and implementation of infrastructure.
- 50% for ground equipment.
- 20% for airborne equipment.

According to the ATM Master Plan, the target concept for SESAR deployment is expected to require an investment of between €18 bn and €26 bn by 2035. Further information can be found in the

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SESAR Deployment section.

The overall results of the CEF Calls are summarised in Table 1.

The first Multi-Annual Work Programme (Commission Implementing Decision C(2014)1921 and its annex) was adopted on 26 March 2014. The first call for SES funding was launched on 11th September 2014; it allocated up to €300 million for SESAR deployment, of which 80% was to be directed towards the PCP ATM Functionalities. Commission workshops were held on the 9th and 10th October 2014 to provide further information.

The Call for Proposals for Actions under the 2015 Multi-Annual Work Programme closed on 16th February 2016. A proposed list of projects selected to receive CEF funding was published by the Commission on 29th June 2016, and is summarised in Table 2.

A third Call for Proposals for CEF funds is expected to be released in mid-October 2016. Approximately €300 million is expected to be available for SES/SESAR projects.

Call	Indicative ATM Funding Value (pre-decision)	Funding received for PCP Projects	Funding received for non-PCP Projects	Decision
2014	€300 M	€325 M	€50 M	2014 Decision
2015 (General)	€515 M	€473 M (value of funding applied for: €1 076 M)	€123 M (value of funding applied for: €140 M)	Not yet available
2015 (Cohesion)	€300 M	€59 M (value of funding applied for: €112 M)	€39 M (value of funding applied for: €40 M)	Not yet available

*Table 1: Summary of the 2014 and 2015 Calls for Proposals*

	Action Number	Title	Recommended Funding (€)	%
Part A	2015-EU-TM-0193-M	SESAR Deployment Programme implementation 2015 - Cluster 1	105,565,756	40.15%
	2015-EU-TM-0196-M	SESAR Deployment Programme implementation 2015 - Cluster 2	367,150,964	42.73%
	2015-EU-TM-0197-M	SESAR Deployment Programme implementation 2015 - Cluster 3	58,736,517	81.97%
Part B	2015-BE-TM-0040-W	Required Navigation Performance Implementation Toolkit	2,456,000	50.00%
	2015-BE-TM-0234-W	(GC) Deployment of harmonised and interoperable high Performance European Surveillance System	5,409,064	50.00%
	2015-DE-TM-0128-W	Deploying New Radar Technologies (MaRS): Implementation of SES by Improving Performance, Interoperability and Modernizing ATM in Germany	17,937,571	50.00%

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2015-DE-TM-0268-W	Deploying Remote Tower (RTC): Implementation of SES by Improving Performance and Modernizing ATM for Tower Service Provision in Germany	6,087,033	50.00%
2015-EU-TM-0102-W	UK and Italian Airport Consortium Proposal for PBN Instrument Flight Procedure Upgrade	2,404,029	50.00%
2015-EU-TM-0103-W	DK-SE FAB Operational Harmonisation	1,125,105	50.00%
2015-EU-TM-0242-W	(CC) Deployment of harmonised and interoperable high Performance European Surveillance System	690,285	85.00%
2015-EU-TM-0266-W	Synchronised Performance Based Navigation Implementation Cohesion Europe	32,600,708	83.53%
2015-EU-TM-0387-S	Convergence of DSNA and COOPANS ATM Systems step 1B (CODACAS 1B) - General part	2,317,500	50.00%
2015-EU-TM-0388-S	Convergence of DSNA and COOPANS ATM Systems step 1B (CODACAS 1B) - Cohesion part	658,750	85.00%
2015-HR-TM-0023-M	Implementation of the A-SMGCS system at Zagreb International Airport	3,726,145	85.00%
2015-LT-TM-0155-W	Air Traffic Management (ATM) System Deployment	6,672,020	49.24%
2015-LT-TM-0160-W	Advanced Surface Movement Guidance and Control System (A-SMGCS) Modernization	1,255,464	44.52%
2015-LV-TM-0094-W	A-CDM RIGA	965,000	50.00%
2015-NL-TM-0402-W	Civil / Military Co-location at Schiphol	4,966,970	50.00%
2015-PT-TM-0383-W	LIS_iAOP	1,457,034	80.00%
2015-SE-TM-0016-W	Implementation of Functional TWR at Goteborg Landvetter Airport	2,917,500	50.00%
2015-SE-TM-0033-M	Skavsta Access 2.0	2,696,952	50.00%
2015-SE-TM-0097-W	One synchronised ATM system - Contingency ATCC at OS/MM	6,325,000	45.34%
2015-SE-TM-0185-W	FRA High Seas Primary Surveillance Infrastructure	3,099,000	50.00%
2015-SE-TM-0355-M	Expansion of Remote Tower Services	9,123,500	50.00%

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2015-SI-TM-0021-W	Initial Airport Operation Plan	445,369	50.00%
2015-UK-TM-0010-W	New NERL Operational Facilities Phase 1	8,459,250	50.00%
2015-UK-TM-0012-W	Enablers to Support SESAR Deployment	10,757,150	50.00%
2015-UK-TM-0013-W	CNS Rationalisation and Upgrade within the UK	5,615,000	50.00%
2015-UK-TM-0047-S	Design of New NATS Systems to support SESAR Implementation	3,645,350	50.00%
2015-UK-TM-0067-M	PBN Implementation	4,219,747	50.00%
2015-UK-TM-0150-M	8.33kHz Radio Equipage for UK GA Fleet	4,345,773	20.00%
2015-UK-TM-0281-S	Upgrade all UK Military Terminal ATM VHF radios to 8.33 kHz standard supporting the UK Lower Airspace Radar Service (LARS)	2,250,157	50.00%
2015-UK-TM-0356-S	Provision of Short-Term Conflict Alert (STCA) systems at 10 Royal Air Force Terminal ATM facilities located throughout the UK	7,874,793	50.00%

Table 2: Results of 2015 CEF Call

The timeline for the award of CEF funds is indicated in the timeline below.
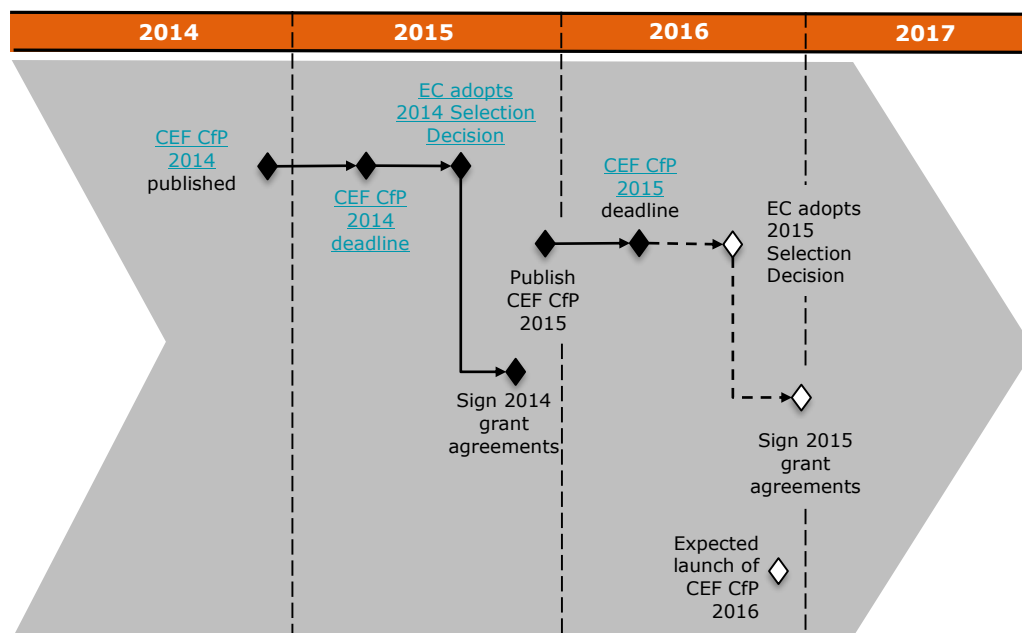
European Fund for Strategic Investment

On 13th January 2015, the Commission published a legislative proposal to establish the EFSI, aiming to mobilise funding for projects of at least €315 bn to help promote growth and employment in the period 2015-2017. On 24th June 2015, the European Parliament and Council of the European Union adopted the EFSI Regulation.

To establish the EFSI, public funds (€16 bn from the EU and €5 bn from the EIB) will be used to guarantee private investors. Project bonds will be issued to generate a multiplier effect to reach €315 bn. The EU plans to raise the guarantee by reallocating funds within its financial framework. As a consequence, the CEF envelope for grants has been reduced, decreasing the funds available to ATM by €0.5 bn.

EIB

The European Investment Bank (EIB) has a range of standard financial products available to support SESAR deployment, a list of these is on the membership portal.

It is possible to accumulate CEF funding and EIB loans, up to a limit of 70% of the total project cost. For Cohesion States, this rises to 90%.

On 13th January 2016, the EIB and the SESAR Deployment Manager (SDM) signed a Memorandum of Understanding (MoU) formalising the way in which the parties will work together. Their aim is to ensure a range of financial instruments and mechanisms are available to industry stakeholders to support the implementation and the sustainable financing and of the SESAR Deployment Programme.

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2   Technology

This section provides an overview of developments in European ATM technology, covering the following topics:

- **Research Programmes:** An overview of aviation and ATM research, in particular the SESAR programme.

- **SESAR Deployment:** The framework to implement SESAR technologies and concepts, and current status;

- **Interoperability:** An overview of the current status of implementation of interoperability IRs, and related technical issues;

- **Centralised Services:** The status of EUROCONTROL's Centralised Services programme.

- **Human factors:** An overview of the status of work on human factors within SESAR.

Research Programmes

ACARE

In response to the Flightpath 2050 vision, ACARE (Advisory Council for Aviation Research and Innovation in Europe) updated and produced a new Strategic Research and Innovation Agenda (SRIA) during 2012, alongside the establishment of new research programmes including Horizon 2020 (see below). SRIA provides a guide to the future direction of public and private research, and sets policy principles towards the achievement of Flightpath 2050.

Horizon 2020

H2020 is the largest EU Research and Innovation programme with almost €80 billion of funding available over seven years (2014 to 2020). It is the financial instrument implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's global competitiveness.

H2020 brings together all existing Union research and innovation funding, including the Framework Programme for Research, the innovation related activities of the Competitiveness and Innovation Framework Programme and the European Institute of Innovation and Technology (EIT).

The Horizon 2020 Framework Programme for Research and Innovation (2014–2020) was formally adopted by EC 2013/743 on the 11th December 2013 following earlier approval in the EP Plenary on 21st November 2013.

SESAR 1

SESAR Releases

The SJU has released the results of the validation exercises for Release 3 (2013) and Release 4 (2014). The validation process identified 11 fully mature solutions which have been put forward for industrialisation subsequent deployment. Release 5 awaits validation.

SESAR showcase event

Projects under the first round of SESAR (SESAR 1) are due to be complete by 31st December 2016. With SESAR activities coming to a close, the SJU organised an event on 14th – 16th June 2016 to showcase the achievements of SESAR 1.

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SESAR 2020

On 16th June 2014, the Council of Ministers of the European Union adopted Regulation (EU) No 721/2014 amending Regulation (EC) No 219/2007, extending the legal existence of the SESAR Joint Undertaking from 31st December 2016 to 31st December 2024. The amendment also entrusted the SJU with €585 million from the Horizon 2020 Framework Programme (Regulation (EU) 1291/2013) to execute and deliver the SESAR R&I Programme 2020.

The SESAR 2020 Programme is based on the ATM Master Plan and is split into three main research phases:

1) Exploratory Research (€85 million from Horizon 2020).

2) Industrial Research and Validation (€1.2 billion).

3) Very Large Scale Demonstrations (VLDs) (€300 million).

The total funding for Phase 2 and Phase 3 comprises €500 million each from Horizon 2020 (H2020), EUROCONTROL and industry members to reach a combined total of €1.5 billion.

Call for SESAR Membership and SESAR 2020 Work Programme

As part of the extension of the SJU to 2024, a new SESAR Partnership was launched on 9th July 2014. On 9th March 2016, the SJU announced the 19 Members that will participate in SESAR 2020 industrial research, validation and demonstration activities. SESAR 1 members Airbus, DFS, DSNA, Enaire, ENAV, Finmeccanica, Frequentis, Honeywell, Indra, NATMIG, NATS, SEAC and Thales will continue to contribute to SESAR 2020. They are joined by new members COOPANS, AT-One consortium, B4 consortium, Dassault Aviation and skyguide.

The SESAR 2020 programme will operate in the period 2016–2024 (commencing Q3 2016). The Multi-Annual Work Programme covering the period 2016–2019 was published in September 2015. An amended Annual Work Programme for 2015 has been released integrating relevant SESAR 2020 financial details.

SESAR 2020 Call for Proposals 2015 (Wave 1)

Calls for Proposals (CfP) for SESAR 2020 Projects will be released in two waves:

1) Wave 1 (2016–2019).

2) Wave 2 (2019–2021).

The Wave 1 CfPs was published by the SJU on 22nd October 2015. The Call covers industrial research (IR), validation and preparation for Very Large Scale Demonstration (VLDs) activities covering the period 2016-2019. This call for proposals brings the results from the SESAR Programme 1, requiring further research, as well as new research content aligned with the European ATM Master Plan together in a coordinated programme of activities performed across 28 closely connected actions.

The Wave 1 call covers 28 projects with a budget of €260.1 million which have been disseminated and grouped across 3 Work Areas as given below. The indicative budgets for each topic can be found in the Amended Annual Work Programme 2015. Note that the Call is restricted to the pre-qualified 'Candidate Members' of the SJU in accordance with SJU Regulation 219/2007, amended by 721/2014.

- Work Area A – SESAR 2020 Transversal Activities (budget: €16.8 million)
- Work Area B – Industrial Research and Validation Activities (budget: €201.3 million)
- Work Area C – Very Large Scale Demonstration Activities (budget: €42.0 million)

The deadline for the submission of proposals has now passed. Wave 1 projects are forecasted to start in Q3 2016 following an agreed ramp up in planning. Effective synchronisation will enable resources to be allocated to SESAR 2020 projects as SESAR 1 projects come to a close.

The second Call for Proposals – Wave 2, when published in due course, will cover the period 2019-2021. The overall estimated budget for the IR and VLD activities of SESAR 2020 (Wave 1 and Wave 2) is €398 million.
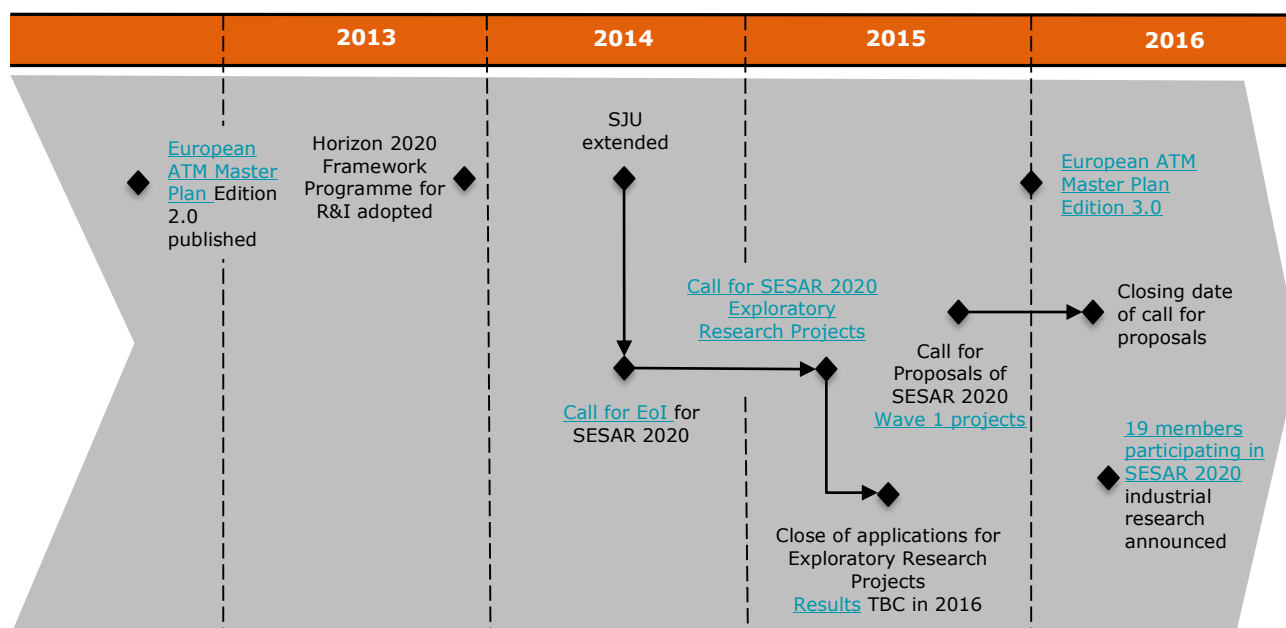
SESAR 2020 Exploratory Research

The objective of the SESAR 2020 Exploratory Research Programme is to address where possible the known yet unsolved problems across the ATM Research domain, taking on board these new or continuous challenges using traditional methods or new techniques, or transferring the results of past research and applying it to new applications and/or novel technologies in search of innovative and ground breaking results.

On the 25th March 2015, the SJU published the first Call for Proposals for SESAR 2020 Exploratory Research (ER) projects under the umbrella of the Horizon 2020 Research Framework Programme.

SESAR 2020 ER has an overall budget of €85 million, but under this first call, €20.6 million is available to co-finance research projects on eleven research topics within two areas: ATM Excellent Science and Outreach, and ATM Applications-Oriented Research.

The closing date for applications was 25th June 2015. Applicants have been officially notified of the outcome, and results are expected to be publicly announced shortly.

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SESAR Deployment

SESAR deployment governance is at three levels, as described in this section:

1) **Policy level:** led by the Commission, the policy level oversees SESAR deployment and ensures it is aligned with the SES regulatory framework;

2) **Management level**: led by the Deployment Manager, the management level develops, maintains and implements the Deployment Programme, and manages the implementation level;

3) **Implementation level**: consists of individual implementation projects to implement the Deployment Programme.

Policy level

The Commission has established the policy level of the deployment governance, for which it is directly responsible.

Pilot Common Project

The Single Sky Committee (SSC) adopted the Commission Implementing Regulation (CIR) ([(EU) No 409/2013](#)) on the governance of SESAR Deployment in May 2013. The CIR defines [4 key instruments](#) needed for SESAR deployment within the SES framework: common projects, deployment programme, governance mechanism, and targeted incentives.

Subsequently, the Pilot Common Project (PCP) CIR ([EU No 716/2014](#)) was published on 28th May 2014. The PCP mandates the implementation of 6 ATM Functionalities (AFs) across specified stakeholders. A review of the PCP is due to be carried out at the end of 2016 or 2017.

A [status report](#) on the progress of SESAR deployment was completed by Imperial College London and released in May 2016 on a request from the European Parliament's Committee on Transport and Tourism (TRAN). It was found that PCP implementation is currently on track, however there are delays anticipated for the PCP pre-requisites. The SDM is looking at ways to accelerate their deployment to remain on track, and the costs of these delays are yet to be determined.

Future Common Projects

The Commission will launch proceedings for the definition of the second Common Project in 2016 based on reports from the Deployment Manager and from SESAR JU.

Management level

Deployment Manager

Responsibility for the management level of the deployment governance is held by the Deployment Manager. The [SESAR Deployment Alliance](#) was appointed as the Deployment Manager by the European Commission on [5th December 2014](#) with the signing of the Framework Partnership Agreement.

The Deployment Manager's coordination tasks will be funded through a levy on CEF grants, which are managed by [INEA.](#)

On 10th March 2015, the SJU and the Deployment Manager signed a [Memorandum of Understanding](#), providing a platform for future cooperation for the smooth and timely deployment of the SESAR solutions. On 30th June 2015, the EDA and the Deployment Manager also signed a [Memorandum of Understanding](#), with the purpose of establishing efficient cooperation and mutual support between civil and military stakeholders with regards to SESAR Deployment.

Following a [Call for Expression of Interest](#) is looking to set up MoUs with manufacturers to facilitate the industrialisation processes for PCP SESAR solutions, whilst ensuring the timely

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availability of standards and products according to the Deployment Programme. 20 ATM-related manufacturers expressed their willingness to co-operate with the SDM.

Deployment Programme

The Deployment Programme sets out a plan to implement all elements of the Pilot Common Project, and updates the Deployment Programme yearly. On 6th May 2016, the Deployment Manager released an intermediate draft of the Deployment Programme 2016 to its stakeholder consultation platform. This version includes a monitoring view providing an overview of the current implementation status of the PCP within Europe. In addition, the results of a family re-assessment has introduced three additional families to the DP. Comments were due by 27th May 2016.

The intermediate draft contains all implementation projects submitted in the 2015 CEF call. The final version of the Deployment Programme 2016 (released to for consultation at policy level) includes only the projects which are awarded funding, and identify subsequent PCP deployment gaps. This 'gap analysis' will then serve as the basis of the expected 2016 CEF Call (see Funding and Financing Modernisation in ATM section).

The final version is intended for release on 30th September 2016.

Implementation level

Implementation Projects: 2014 Call for Proposals for Public Funding

The Deployment Manager submitted three applications, containing 110 projects to the value of €836 million (€409 million CEF funds), to the 2014 CEF Call for Proposals.

Although an indicative €240 million was available, overall €325 million was awarded to PCP SESAR Deployment activities. Further details on the outcome of the 2014 calls may be found in the Funding and Financing Modernisation in ATM section.

Implementation Projects: 2015 Call for Proposals for Public Funding

The Deployment Manager coordinated applications for projects related to PCP implementation under the 2015 Call for Proposals which was released on 5th November 2016 (see Funding and Financing Modernisation in ATM section).

Proposals for three clusters of projects were submitted under both the general and the cohesion envelope, covering 223 implementation projects, for a total potential investment of €2.4 billion.

- Under the General envelope, €515 million was available for ATM related projects (indicatively 80% was set aside for PCP implementation projects). The Deployment Manager applied for more than €1 billion of funds, and was allocated €473 in the proposed selection decision.

- Under the Cohesion envelope, €300 million was available for ATM related projects (indicatively 80% was set aside for PCP implementation projects). Although €112 million of funding was applied for, €59 million has been allocated in the proposed selection decision.

Although the final set of Implementation Projects allocated funding is not yet available, the list of submitted projects is available in Annex A of the 2016 Deployment Programme Intermediate Draft.

Implementation Projects 2016

On 10th June 2016, the SESAR Deployment Manager launched a Call for Indication of Interest to participate in the expected 2015 CEF Call. The call closes on 13th September 2016.

Interoperability

This section outlines interoperability issues relating to the development and deployment of technologies, including standardisation and technical regulation activities undertaken in relation to SES and SESAR.

Implementing Rules

The Commission is currently working to resolve a number of issues with existing implementing rules, including ADQ, SPI, VCS and DLS.

Aeronautical Data Quality (ADQ) IR

The ADQ IR was amended in September 2014 by Regulation (EU) No 1029/2014. The Commission will launch EU Pilots due to Member States stating they are unable to comply.

The SSC/58 paper provides an update on the current status of compliance with data quality requirements. This can be found on the membership portal.

An NPA on AIS/AIM was published on 28th April 2016 and a Thematic workshop was held in February 2016 with another due shortly. The objective is to have an Opinion in Q1 2017. This work will ultimately result in the repeal of the ADQ IR and the incorporation of AIS/AIM requirements into the Common Requirements.

Surveillance Performance and Interoperability IR

Step one of the Commission's two-step approach for revision of the SPI IR was completed in September 2014 with the publication of Regulation (EU) No 1028/2014. The deadlines for forward fit and retro fit were delayed to 8th June 2016 and 7th June 2020 respectively.

Step two will comprise more significant changes, following a detailed review for the scope and impact. The SJU published its preliminary options paper for the evolution of the SPI IR in January 2015, setting out 6 potential regulatory options which fed into a stakeholder workshop on 21st April 2015. The workshop concluded that the benefits of any preferred option for evolution need careful impact assessment. The paper, and output of the workshop, can be found on the membership portal.

EASA Rule Making Task RMT.0679 was launched in 2015 to revise the mandate delivering results including the necessary cost-benefit analysis. An output is expected in late 2017/early 2018. Further details may be found in the EASA Rule Making section.

At the Ad-Hoc SSC on the 2nd June 2016, Regulation (EU) No 1207/2011 was amended. These amendments placed a deadline of 1st January 2019 for the Member States to provide lists of aircraft that cannot be appropriately equipped as well as information detailing the need for granting exemptions, and a deadline of 2020 for the aircraft to be appropriately equipped.

In addition, further concerns were raised in 2015 regarding the compliance of ADS-B or Mode-S transponders with the SPI Regulation, resulting in many operators failing to meeting their obligations (either in terms of requirements or implementation date). The issues and EASA recommendations are available on the membership portal in agenda item 9.12 from SSC/55.

The Commission is hosting a workshop on Compliance Issues with Regulation No 1207/2011 (SPI) on 14th July 2016 to present the draft EASA Report on the subject collecting input from stakeholders to review proposed amendments to the Regulation.

VCS IR

The Commission held a workshop on VCS 2 IR on the 27th January 2015 to assess the current implementation of the regulation. The workshop concluded that there had been generally good progress, although General Aviation stakeholders voiced concerns about cost burden. The bulk of work is scheduled for 2018, and therefore a robust approach to deployment management is

required. The NM Radio Frequency Function could be well suited to this. Full details of the workshop can be found on the membership portal.

In light of the workshop conclusions, the Commission engaged the NM to take an active and central role in coordinating and steering the implementation of VCS, including the handling of exemptions (civil and state aircraft). A detailed list of tasks in support of VCS implementation is available on the membership portal.

VCS implementation progress is to be reported on a regular basis to the SSC and NMB, to ensure that both opportunities and risks are addressed timely.

At SSC/60 the NM provided a progress report on its Radio Frequency Function services. The NM is tasked by the Commission to coordinate the introduction of 8.33 kHz below FL195, and it was noted that in light of a severely congested spectrum, the NM managed to meet 100% of the frequency demands in 2015. In addition, the implementation of the 8.33 kHz below FL195 is expected to bring additional capacity for the NM to continue to meet demand in the future. The progress report, and other SSC/60 material is available on the membership portal.

Data Link Services IR

The SSC provided a positive opinion on the draft Implementing Regulation amending (EC) 29/2009. Regulation (EU) 2015/310 was published on 26th February 2015. The ground implementation deadline is now 5th February 2018, whilst the airborne implementation deadline is 5th February 2020.

A Data Link Steering Group has been established comprising the Commission, EUROCONTROL, EASA, SJU and the SDM, to evaluate results of the capacity study and the ELSA VDL 2 study and to determine the next steps.

The ELSA consortium was due to release the results of its study "VDL2 measurement, analysis and simulation campaign" in June 2016 to the Commission, prior to (anticipated) publication in Q3 2016. The results will support the Commission to launch Step 2 of the two-step regulatory approach.

In parallel, the Deployment Manager has been tasked to collect information from stakeholders on deployment plans and status, and to develop a DLS deployment plan for integration into the Deployment Programme on the basis of the results of the SJU study.

Finally, a discussion paper on the need for European ATM communication infrastructure strategy was circulated at SSC/59, presenting the need to develop a European ATM Communication Strategy. The paper summarises existing communications roadmaps, and status of current and past activities and is available on the membership portal.

Conformity Assessment

Under SES 2+, the process of demonstrating compliance with the Essential Requirements of the interoperability Regulation is to be moved from the SES legislation to the EASA Basic Regulation. Whereas this process (Conformity Assessment) has been supported by EUROCONTROL to date, EASA will take the lead in the future.

An RMT on the future of Conformity Assessment was scheduled to start in 2016, however it is now suspended due to the delay in implementing SES 2+.

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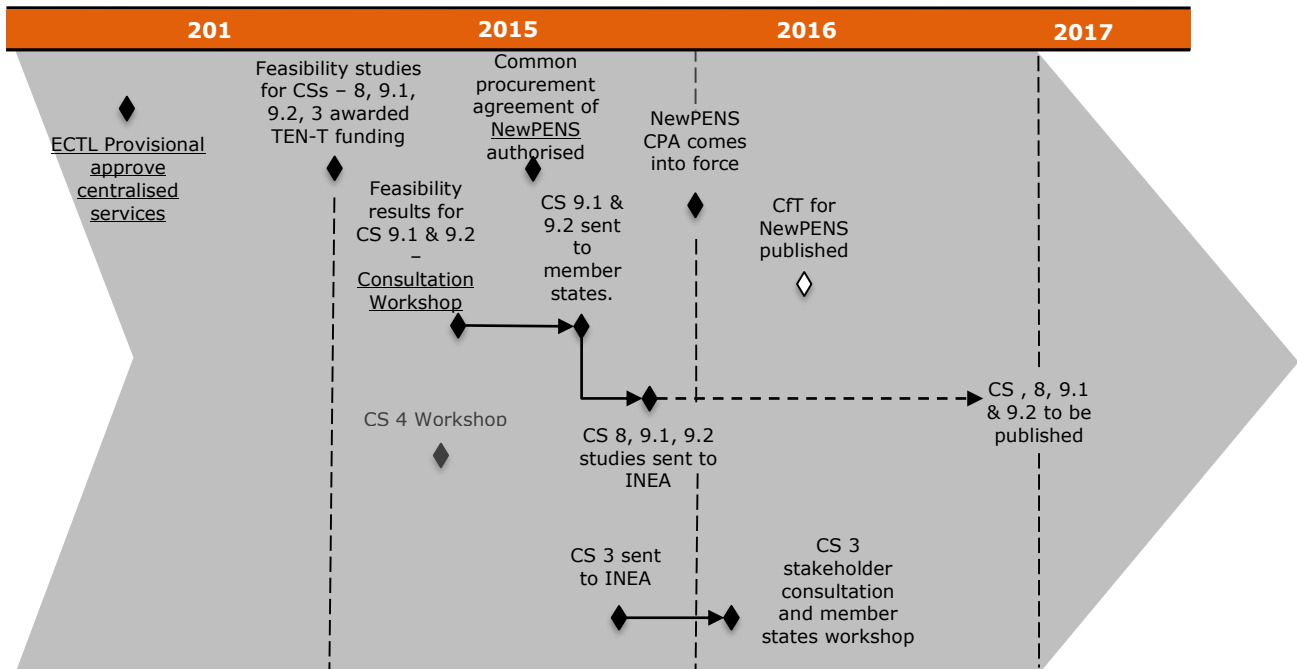Safety

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Centralised Services

Overview

EUROCONTROL has defined a Centralised Service (CS) as "an ANS service or ATM function exercised at pan-European and central network level for harmonisation and cost-efficiency purposes". V2.0 of EUROCONTROL's proposal to the European Commission was published on 25th March 2013. Table 3 provides an overview of the 18 Centralised Services. EUROCONTROL held several workshops on the initiative.

In accordance with Directive 14/83 of the EUROCONTROL Permanent Commission (3rd February 2014), Calls for Tenders for CS 1, 4, 5, 6, and 7 are being released in a staggered manner (refer to the timeline below) while CS 2, 3, 8 and 9, where the maturity is not as well established, will initially proceed with feasibility studies. CS 3, 6-4, 7-2, 8, 9-1 and 9-2 are co-financed by the European Union through the 2013 TEN-T multi-annual work programme. The CS 3, 8, 9-1 and 9-2 Feasibility Studies are completed and have been provided to INEA and the EUROCONTROL Member States.

To date EUROCONTROL has released 11 CfTs, with the remaining ones planned in the first half of 2016. The bids related to 10 of the 11 CfTs are currently being evaluated. Negotiations on 2 CS have started in view of contract signature.

There will be several key decision points where the CBAs will be updated, according to the nature of each CS. For this phase, governance will be the EUROCONTROL decision bodies.

The Council of the European Union has adopted a ruling on the EUROCONTROL Centralised Services, requiring Member States to take a position within the EUROCONTROL Permanent Commission to postpone a decision on Centralised Services until there is sufficient evidence. This approach is a consequence of the Union not being admitted in the Permanent Commission, such that the Council decision is meant to be implemented by the Member States that participate in the Permanent Commission acting jointly in the interest of the Union. In particular, the Decision mandates coordination with SESAR and EASA in EAGDCS.

| 201 | 2015 | 2016 | 2017 |

ECTL Provisional approve centralised services

Feasibility studies for CSs – 8, 9.1, 9.2, 3 awarded TEN-T funding

Feasibility results for CS 9.1 & 9.2 – Consultation Workshop

Common procurement agreement of NewPENS authorised

CS 9.1 & 9.2 sent to member states.

NewPENS CPA comes into force

CfT for NewPENS published

CS , 8, 9.1 & 9.2 to be published

CS 4 Workshop

CS 8, 9.1, 9.2 studies sent to INEA

CS 3 sent to INEA

CS 3 stakeholder consultation and member states workshop

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Centralised Service	Status
CS1: Flight Plan and Airport Slot Consistency Service (FAS) *Checking consistency of flight plans against airport slots*	CfT published
CS2: 4D Trajectory Flight Profile Calculation for Planning Purposes Service (4DPP) *Central reference 4D trajectory profile in the pre-planning phase*	Subject to feasibility study (external)
CS3: European Tracker Service (ETKR) *Providing an ECAC-wide surveillance picture*	Feasibility study published
CS4: Advanced Flexible Use of Airspace Support Service (AFUAS) *Civil-military airspace management decision making processes*	CfT published
CS5: European ATM Information Management Services (EAIMS) *A reference source of consolidated European ATM context information*	CfT published
CS6: Common Network Resources (CNR) Managing scarce resources on a unified basis	
CS6-1: Transponder Code Function (CNR/TCF) *Improving the management of the Transponder Code Function*	CfT expected
CS6-2: Mode S Interrogator Code Allocation (CNR/MICA) *Coordinating the allocation of interrogator codes to Mode S interrogation*	CfT published
CS6-3: Radio Frequency Function (CNR/RFF) *The SAFIRE and Monitoring services providing all CNS systems with frequencies that are not interfered*	CfT published
CS6-4: European Messaging Directory Service (CNR/EMDS) *Providing coherent routing tables for the ATM messaging*	CfT published
CS6-5: European IPS Repository (CNR/EIPR) *Providing a unique repository of all network addresses*	CfT published
CS6-6: Security Certificate Service (CNR/SCS) *Delivering security keys to get access to the EUR ATM network*	CfT published
CS6-7: Operation and Coordination of Network Security (CNR/OCNS) *Monitoring and managing security of the ATM network*	CfT published
CS7: Network Infrastructure Performance monitoring and analysis Service (NIPS) Safe function and anomaly resolution of CNS infrastructure	
CS7-1: Performance monitoring of Data-link communication, Surveillance avionics, TCAS and RVSM (NIPS/CNS-PERF) *Insuring that CNS aircraft and ground systems are interoperable and that the right level of performance is achieved*	CfT published
CS7-2: Performance of 1030/1090 RF bands (NIPS/SUR-RF) *Providing a consistent and updated view of the 1030/1090 RF band usage*	CfT published
CS7-3: Monitoring and prediction of Satellite Navigation (NIPS/SAT-NAV) *Centrally operating reliable predictions of the GPS RAIM*	CfT published
NewPENS *Ground communication needs for future data exchange*	CS8 Feasibility Study published
CS9: Data Communication Service (DCS) *Air-ground communication service to support consolidation of DLS*	Feasibility Studies published
CS9-1: Telecommunication Infrastructure (DCS/TELE-INFRA) *Transporting A/G ATS datalink information between mobile and ground users*	
CS9-2: CPDLC, CM, ADS-C SERVER (DCS/CCA-SERVER) *Reducing the number of servers in the European States and the associated operating costs*	

Table 3: Overview of the 18 Centralised Services

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Human Factors

Human Performance in SESAR

The SESAR programme has considered Human Performance (HP) as one of four research and innovation transversal solutions in a dedicated Work Package (WP 16) besides the areas of safety, security, and environment. Projects related to HP were tasked to produce reference guidance material (including a repository) that supports operational and technical projects to account for human factors along the project lifecycle. The guidance includes methodologies to assess human performance, tools and methods as well as best practices related to automation or information presentation.

Achievements

A joint methodology to perform Human Performance Assessments has been developed – an essential step to overcome previous segregated analyses on individual stakeholder level. This methodology helps to federate airborne and ground partners and establishes a Human Performance Assessment related to an ATM concept from a wider perspective. It is strongly connected with validation.

The guidance and the process facilitates that Human Performance can be practically integrated in a project. Resulting analyses and conclusions help to mature the solution since knowledge is commonly built and shared among the stakeholders.

SESAR 2020

By now, the methodology is widely applied and will serve as state-of-the art reference to assess human performance in SESAR projects with a major impact on the human. This methodology is part of the guidance being issued to SESAR 2020 projects.

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3 Performance and Charging

This section provides an overview of the performance pillar, covering the following topics:

- **Performance and Charging Schemes:** A summary by reference period, the evolution of the PRB, and future charging mechanisms;

- **Functional Airspace Blocks:** A summary of the status of FABs;

- **Network Management:** An overview of the nomination of the Network Manager, update of the Network Function s Implementing Rule, network performance and CDM processes.

Performance and Charging Scheme

The SES Performance and Charging Scheme is organised around fixed five-year Reference Periods (RPs) for which legally binding performance targets are set at the EU, FAB and national level.

EUROCONTROL is currently the European Commission's designated Performance Review Body (PRB) of SES until the end of 2016 (Commission Implementing Decision 2014/672/EU).

Reference Period 2 (2015 – 2019)

Targets

The Performance Scheme ((EU) No 390/2013) and Charging Scheme ((EU) No 391/2013) Regulations for RP2 (2015–2019) were adopted in May 2013. An ad-hoc meeting of the SSC on 4th February 2014 adopted EU-wide targets for RP2.

On 2nd March 2015, the Commission adopted two Decisions:
- Decision (EU) 2015/348 listed those plans that were consistent with the national or FAB-level plans.

- Decision (EU) 2015/347 listed those plans that were inconsistent with the national or FAB-level plans.

Member States with non-compliant targets submitted revised performance plans by 2nd July 2015. At SSC/60, on 24th-25th February 2016, the SSC gave a positive opinion on a Decision assessing certain revised targets.

Draft decisions tabled for vote at SSC/61 laid out corrective measures for Member States of Blue Med FAB and FAB EC in the areas of capacity and cost-efficiency:

- Members of Blue Med FAB (specifically, Cyprus, Italy, Greece and Malta) were required to adjust their performance targets in the area of capacity.
- Members of FABEC (specifically Belgium, Luxembourg, France, Germany and the Netherlands) were required to adjust their performance targets in the area of cost-efficiency.
- Switzerland, as with the other members of FABEC, were required to adjust their performance targets in the area of cost-efficiency.

The two Decisions received no opinion of the SSC. The Decisions will now be submitted to the Appeals Committee. If the Appeals Committee also gives no opinion, the Commission has the right to adopt the Decisions.

On 30th November 2015, the PRB delivered and published its advice to the Commission on the Union-wide cost efficiency targets for terminal ANS. The Commission is continuing to assess the advice with the intention of proposing an approach and a draft Decision, if applicable. The PRB's report takes into account the results of a public stakeholder consultation on the PRB's approach, issues and target options, and a public PRB stakeholder workshop.

The PRB also assisted the Commission in assessing the Network Performance Plan, which can be viewed by members on the portal, which contains performance targets for all key performance areas and for all indicators, consistent with the Union-wide performance targets for the entire reference period. The Commission is in a position to approve a final version of the Plan and will adopt a Decision in due course.

RP2 unit rates

Decision (EU) 2015/670 on the consistency of the 2015 unit rates with the Union-wide targets for 20 Member States was adopted by the Commission after presentation to the Appeals Committee in February 2015, and the decision on non-compliance of 2015 unit rates of Austria, Belgium, France, Germany, Italy, Luxembourg, the Netherlands, the Slovak Republic and Switzerland was postponed to a later date.

On 18th March 2016, having also assessed the 2016 unit rates, the Commission announced that the unit rates for Belgium-Luxembourg, France, Germany, the Netherlands and Switzerland were non-compliant, with the Performance and Charging scheme, for both 2015 and 2016, this was detailed in Decision (EU) 2016/420 and 2016/419 respectively. The unit rates of the other states were found to be compliant for both 2015 (after some adjustments) and 2016.

The non-compliant Member States were required to recalculate their unit rates for 2015 and to carry over any difference, due to the temporary application of the unit rates, to the calculations of the unit rates for 2016. They were also required to resubmit 2016 unit rates.

Monitoring

The PRB annual RP2 monitoring report covering 2015 (expected in Q4 2016) will describe the performance achieved by FABs, EU Member States, Norway, Switzerland and the Network Manager (NM) in the four Key Performance Areas (KPAs) of Safety, Environment, Capacity and Cost-efficiency. This report will be based on monitoring reports submitted by the NSAs and the Network Manager, subject to the provisions of the Performance and Charging Regulations. It will also present the Union-wide view of performance achieved in 2015 compared to the relevant targets.

Preparations for Reference Period 3 (2020 – 2024)

To inform the drafting of the Performance and Charging Schemes for RP3, the Commission is performing an ex-post evaluation of RP1 (contracted to Ecorys). As part of this, a 12 week online public consultation will be organised period in addition to further consultations with key aviation stakeholders to gather additional information and opinions on performance improvements made during RP1.

In addition, a white paper tabled at SSC/61 (available on the membership portal) introduced the objectives for RP3 by discussing the network issues as they stand today along with a summary of evidence when seen from a PRB perspective. The paper highlighted some key areas of concern, which in the PRB's opinion will need to be addressed, and suggested 16 performance objectives for RP3. The next step will be a discussion with the wider community on the performance objectives, with a view to providing options for delivery and target developments in Autumn 2016. These will be based on 2015 monitoring results and assessment of risks. Stakeholder feedback on the paper is open until 31st August 2016.

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The timeline to develop the RP2 Performance and Charging Scheme Regulations is indicated below.
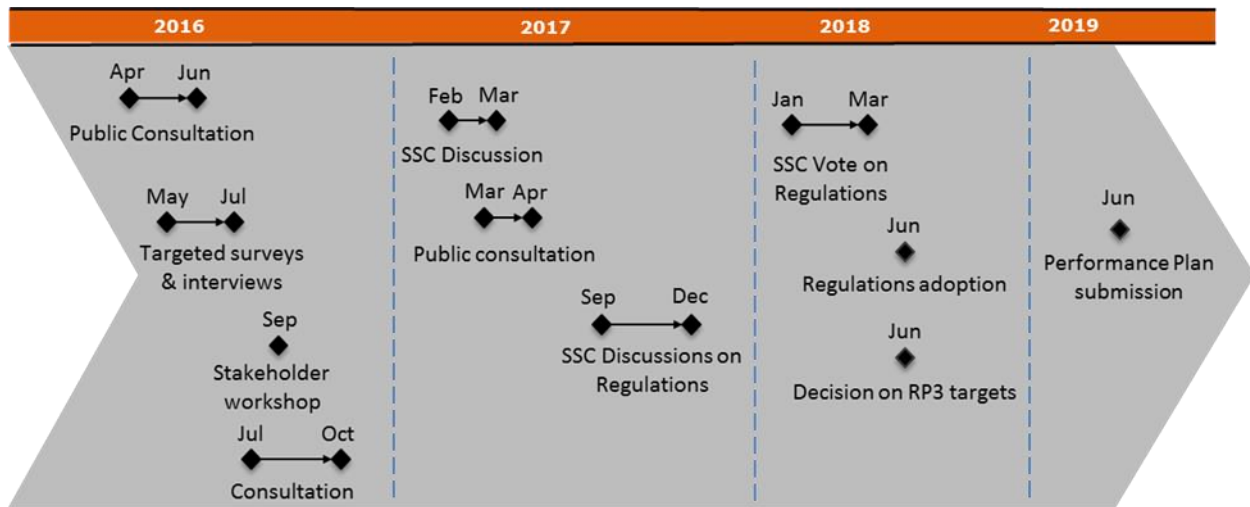
Future charging mechanisms

The European Commission published a study report exploring various mechanisms for modulating charges to achieve better flight efficiency and reducing flight delays. The study aims to further develop a set of guidelines and recommendations by investigating the current charging framework, and further developing the charging policy underpinning the common charging scheme for ANS in the EU.

Future of the PRB

At SSC/61 a draft Commission Implementing Decision to set up an independent group of experts designated as the PRB was discussed. The Commission is now developing an amended draft Decision which will undergo written procedure following a final round of comments.

Once the Decision is adopted, the Commission plans to issue a call for interest for PRB members. Members will be selected by the Commission. The appointment of members to the new PRB is planned to take place in September 2016.

Technical support to the PRB

Furthermore, from 2017 onwards, the technical support, currently provided by the PRU, will be organised in a manner to ensure the PRB is independent from services and entities regulated under the Performance and Charging schemes. The PRB support function will form part of a broader support team under the supervision of the Commission.

The Commission will work on setting-up the support team,to be in place by September 2017 at the latest. EUROCONTROL will provide support in the intermediate time under current arrangements. This is explained in full in Item 3.3 of the adhoc SSC, which took place on 2nd June, and can be found on the membership portal.

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Functional Airspace Blocks

Functional Airspace Blocks (FABs) were defined in Regulation (EC) No. 1070/2009 amending Regulation (EC) No. 549/2004 and were to be established before 4th December 2012.

As described in Table 4, there are nine FABs.

FAB	Members
Baltic FAB	Lithuania Poland
Blue Med FAB	Cyprus Greece Italy Malta Albania (observer) Egypt (observer) Tunisia (observer) Lebanon (observer) Jordan (observer)
DANUBE FAB	Bulgaria Romania
Denmark Sweden FAB	Denmark Sweden
FAB CE	Austria Bosnia and Herzegovina Croatia Czech Republic Hungary Slovak Republic Slovenia
FAB EC	Belgium France Germany Luxembourg Netherlands Switzerland
NEFAB	Estonia Finland Latvia Norway
SW FAB	Portugal Spain
UK-Ireland FAB	Ireland United Kingdom

Table 4: Summary of FABs and FAB members

The formal establishment of FABs was monitored by the Commission. Following establishment, the Commission evaluated each of the FABs, and initiated formal infringement proceedings against seven of the nine FABs (Baltic FAB, Blue Med FAB, DANUBE FAB, FAB CE, FAB EC, SW FAB, UK-Ireland FAB) by sending Letters of Formal Notice in April 2014 and July 2014.

The FAB EC Member States received a reasoned opinion in July 2015, in which the Commission requested States to notify of measures taken to accelerate FAB EC implementation.

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Network Management

Regulatory context

The Network Functions Implementing Regulation (NF IR) (EU) No 677/2011 was adopted on 7th July 2011, laying down detailed rules for the implementation of ATM network functions.

Commission Decision C(2011)4130 designated EUROCONTROL as the Network Manager until 31st December 2019 (ie the end of RP2) to perform the network functions under the condition defined in the NF IR.

Update of Network Functions IR

The Commission is currently in the process of updating the regulation using a two-step approach.

The first-step review resulted in an amendment to the Network Functions IR (EU) No 970/2014 which was approved and published in September 2014, and focussed largely on short term amendments.

The Commission is now focused on a more in-depth second-stage of the review. In support of this, the Commission has performed a targeted audit of the governance and financing of the NM; results are expected to be published in July 2016. The audit will serve as the basis for the identification of future requirements of the NM and future nomination of the NM for RP3 and beyond.

Network Manager audit

The Commission has performed a targeted audit of the financing of the NM to clarify the cost base and get best performance of the NM. The report was published in July 2016.

The Commission has invited the NM and Eurocontrol to submit an action plan for corrective measures by September 23rd 2016, to be implemented by January 1st 2017. The audit will serve as the basis for the identification of future requirements of the NM and future nomination of the NM.

Summary of Network Performance

- In 2016, the European traffic is expected to reach record levels. Growth is averaging 2.2%, and by the end of the year, traffic is expected to reach ten million flights.

- The delay target is heavily impacted by industrial actions, and given the number of disruption and ATC industrial actions, the delay target is unlikely to be met by the end of 2016. The NM will provide data on delays and flight inefficiencies as well as proposals to minimise the impact on overflights to the European Commission.

- Flight efficiency shows good progress, and the KEA target is expected to be met in 2016. The KEA target was met in 2015, but the presence of crisis areas (and the impact on route choices) continues to impact the KEP target.

- The NM provides the Radio Frequency Function services, and has maintained good performance by meeting 100% of frequency demands. The NM is now playing an active role to coordinate 8.33 kHz channel spacing. In addition, the NM is contributing to the development of the Aviation Spectrum Vision and Strategy, and European Aviation Common Position, to address the issue of available aviation spectrum.

Future prospects for 2016 and beyond are also summarised below:

- The NM is cooperating with ANSPs/FABs to achieve the RP2 capacity targets. Forecast average annual traffic growth of 2.2% means that ANSPs must deliver capacities committed to in the Network Operations Plan.

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- The NM is addressing the three main areas of concern in the European network: Performance in Brest ACC and other French ACCs, which has improved following the deployment of a new technical system and a flexible approach to opening sectors; Cyprus, here the corporatisation of ANS provision is entering the final phase of negotiations; and Greece where the NM is supporting a 5 point action plan covering short and medium term actions within the Greek ACC and BlueMed FAB.

- The NM will recalculate ATFM delay data for use in the performance scheme for 2016, and if required for 2015 to remove the REA message impact.

- Consultations at expert level are being held on new strategic ideas to improve network capacity. Ideas include extensive cross border sectorisation during low traffic periods, to enable greater ATCO availability during peak traffic, promoting charging based on actual trajectory, flexible rostering, and a more effective ATM data interchange between the network and the operational stakeholders.

- As traffic from outside Europe is expected to grow to reach 25% of overall traffic in Europe by 2021, the NM has been working at the operational level to accommodate the growth, by linking with data for flight plans, actual departure times, accurate estimates at European boundaries, and better 4D trajectories within Europe.

Cooperative Decision Making Processes

The initial cooperative decision making processes for the network functions, Network CDM, was initially approved in June 2012, following a positive opinion of the SSC. A first update took place in 2014, again with a positive opinion from the SSC (in SSC 55).

At SSC 61 the SSC were invited to give a positive opinion on the revised Network CDM, which have already been approved by the NMB on 12th April 2016, subject to SSC approval. This can be found on the membership portal

The key changes to these CDM processes included provisions for "Cooperative Arrangements with Third Countries ANSPs", a simplification of the Network CDM processes for European Route Network Design (ERNIP) and the Radio Frequency Function.

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4   Safety

This section provides an overview of the safety pillar, covering the following topics:

- **Safety Oversight:** A summary of the safety oversight regulation and EASA Rule Making activity.

- **EASA Basic Regulation:** An overview of the update to the EASA Basic Regulation.

Note that a full overview of EASA's Rule Making Programme is provided in the EASA Rule Making section.

Safety Oversight

Commission Implementing Regulation (EU) No 1034/2011 on safety oversight in air traffic management and air navigation services was adopted on 18th October 2011, amending Commission Regulation (EU) No 691/2010.

The Regulation 'establishes requirements to be applied to the exercise of the safety oversight function by competent authorities concerning air navigation services, air traffic flow management (ATFM), airspace management (ASM) for general air traffic and other network functions'.

On 16th December 2014, EASA published Opinion 03/2014, Requirements for service providers and the oversight thereof, including a draft Regulation proposing to repeal Regulation (EC) No 482/2008 and Implementing Regulations (EU) No 1034/2011 and (EU) No 1035/2011, and amending Regulation (EU) No 677/2011 along with providing draft AMC and GM. IRs 1034/2011 and 1035/2011 (ANS Common Requirements) are proposed to be amalgamated into a single rule. The draft Regulation is currently submitted for vote by written procedure.

Update to EASA Basic Regulation

After consultation with NSAs, EASA produced Opinion 01/2015, European Commission policy initiative on aviation safety and a possible revision of Regulation (EC) No 216/2008, in March 2015. The Opinion 'supports a European Commission policy initiative whose aim is to improve the performance of the European Union (EU) aviation system'. As such, it 'identifies the most appropriate ways to update Regulation (EC) No 216/2008 (the EASA Basic Regulation) in order to make it best respond to changes in the aviation environment and subsequent challenges to its safety'.

The Opinion includes a proposal for NSAs to be able to delegate some of their oversight procedures to EASA (or other organisations) if they lack resources and expertise, and suggests that Member States have the option of delegating oversight of state (not including military) aircraft to EASA on a voluntary basis.

Also included are suggestions to further expand the scope of EASA's safety oversight to cover new areas, such as Airport Ground Handling, Remotely Piloted Air Systems (RPAS), and security.

5   Airports

This section provides an overview of the airports pillar, covering the following topics:

- **European Observatory on airport capacity & quality:** A summary of the work of the airports observatory.

- **Current legislative proposals:** An overview of current airport related legislative proposals within the EU.

European Observatory on airport capacity & quality

The European Observatory on airport capacity & quality was established to assist the Commission in addressing challenges of airport capacity & quality facing EU airports and to facilitate an exchange of experiences and best practices. The Observatory has 43 members, comprised of 15 organisations and 28 national administrations. The most recent Plenary meeting took place on 27th May 2015, and the work of the following three Task Forces is summarised in this section:

- Economic and social impact of unaccommodated demand.

- Delays to air transport in Europe – methods of measuring, reporting & analysing.

- Learning from national strategies on airport capacity.

Economic and social impact of unaccommodated demand

This Task Force was established to estimate the economic cost (in terms of GDP and employment) of not being able to accommodate additional demand by 2035, as forecasted by EUROCONTROL in its Challenges of Growth Report. The task force also explored the environmental variables affecting capacity of the EU airports set to face congestion.

The Task Force's report on the "Economic impact of unaccommodated demand and environmental variables influencing airport capacity" was presented to the 8th Plenary in May 2015. The key results are presented in Table 5 below.

Impact	InterVISTAS Approach[1]	Oxford Economics/IATA Approach[2]
Lost Potential Direct Impact	€11.8bn / 173,000 jobs	€19.3bn / 306,000 jobs
Lost Potential Indirect & Induced Impact	€16.4bn / 261,000 jobs	€33bn / 513,000 jobs
Subtotal of Economic Footprint	€28.2bn / 434,000 jobs	52.3bn / 818,000 jobs
Foregone catalytic impacts and economy-wide productivity	€44.1bn	€86.3bn
Lost Potential Tourism Impact	N/A	€24bn / 485,000 jobs
Negative Economic Welfare Impact	N/A	€5.4bn - €13.6bn

Table 5: Economic & Social Impact study - key results

The taskforce recognised the potential of environmental regulations to moderate the economic impact of the aviation sector, and noted that managing the environmental impacts is one of the keys to secure the industry's ability to grow. The report made several recommendations which could be addressed through future European Commission initiatives, including an assessment of

[1] In 2013 prices

[2] In 2012 prices

the effects of environmental restrictions on airport capacity and an assessment of studies on the links between the environment and health.

Delays to air transport in Europe – methods of measuring, reporting & analysing

This task force was charged with assessing any gaps in understanding the sources of airport delays in Europe, in order to achieve a coherent picture of delays, including ground based delay.

The task force's report was presented to the 8th Plenary on 27th May 2015. It concluded current mechanisms for capturing delay data (including the EUROCONTROL Central Office for Delay Analysis, CODA) have served the industry well and should continue to do so, but that there is scope for improvement. The specific recommendations were:

- To ensure that the need for and quality requirements of delay recording & reporting are widely understood and that collection is improved through automation, better guidance material and the application of a 'no blame' culture.

- To refine the current IATA delay codes and associated Performance Indicators to ensure they remain fit for purpose.

- To attempt to capture the costs of delays, in order to cover the perspectives of a wider range of stakeholders.

Learning from national strategies on airport capacity

This task force was tasked to develop learning from national, regional and local strategies on airport capacity, in order to respond to the problem that the proposed expansion of airports globally would not be sufficient to satisfy the demand for flights across the world.

The task force's report was presented to the 8th Plenary on 27th May 2015, and identified several points which were significant to tackle airport capacity, notably:

- Airports should be more fully integrated into the overall European Aviation network.
- Stakeholders should be encouraged to make best use of existing infrastructure (including both primary and secondary/regional airports).
- Authorities should look for opportunities to spread the benefits of competition to generate economic and social benefits.
- The need to share best practice guidance on national and local airport planning.
- EU funding should be targeted at bottlenecks, and further research on the impact of charges, levies and taxes linked to aviation should be performed.

Current legislative proposals

There is one legislative proposal related to airports undergoing co-decision within the European Parliament and Council of the European Union:

- Amendments to the Common rules for the allocation of slots at EU airports (recast) were agreed in European Parliament plenary on 11th December 2012. The proposal is now awaiting 1st reading in Council, and budgetary conciliation convocation.

In addition, the following legislative proposals have been withdrawn:

- Ground handling services at Union airports and repeal of Council Directive 96/67/EC - (7th March 2015: procedure lapsed / withdrawn).

- Proposal for a Directive of the European Parliament and of the Council on aviation security charges - (7th March 2015: procedure lapsed / withdrawn).

6 Annexes

Useful Resources

Strategy Documents

European ATM Master Plan Edition 2015	December 2015
ICAO Global Air Navigation Plan (2013-2028)- Edition 4	2013
Network Strategy Plan 2015 to 2019	March 2015
Network Operational Concept 2019	March 2015
European Network Operations Plan 2015 to 2019	June 2015

ATM Performance and Benchmarking

CANSO Global ANS Performance Report 2015	December 2015
Annual Network Operations Report 2015	May 2016
Network Operations Report – May 2016	Latest: May 2016
CODA 2015 Annual Digest	May 2015
Monthly CODA Reports	Latest: May 2016

PRB and PRC Publications

PRB Performance Dashboard	Monthly Updates
PRC PRR 2015	June 2016
PRC ACE 2014	June 2016
PRB RP2 Union-wide Targets Final Report	September 2013
PRB Annual Monitoring Report 2014	October 2015
U.S./Europe comparison of ATM Operational Performance 2013	June 2014
U.S/Europe comparison of ANS cost-efficiency trends 2002-2011	November 2013

Safety

Global Aviation Safety Plan (2014-2016)	2013
European Aviation Safety Plan (EASA) 2014-2017	May 2014
EASA Annual Safety Review 2014	October 2015
SRC Annual Safety Report 2014	December 2015

Traffic Forecasts

STATFOR Industry Monitor	Latest: June 2016
STATFOR Seven-Year Forecast 2016 to 2022	February 2016
STATFOR 20-year Forecast 2012 to 2035	June 2013
STATFOR Very Long Term Forecast 2013 to 2050	June 2013

SES Compliance

EPRS Briefing on Single European Sky status	April 2015
ESSIP Report 2014	June 2015
ESSIP Plan 2015 Edition	July 2015
LSSIP State Reports	July 2014
Report on SES Implementation 2013	December 2014

SESAR JU and SESAR Deployment

SESAR 2020 Multi-Annual Work Programme	September 2015
SESAR 2015 Annual Work Programme	October 2015
Annual Activity Report 2014	April 2015
Annual Report 2014	June 2015
Deployment Programme 2015	November 2015

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NextGen-SESAR: State of Harmonisation	December 2014
SESAR Release 5	2016
SESAR Release 4	2015
SESAR Release 3	2014
SESAR Release 2	2013
SESAR Release 1	2012
Other documents	
ECA: The Future of Flying in a Single European Sky	2015
List of EUROCAE ATM-related WGs	

Table 6: Useful Resources

Comitology Committees

- Single Sky Committee (SSC)
- Committee for the application of common safety rules in the field of civil aviation (EASA Committee)
- Connecting Europe Facility Coordination Committee

To access SSC dossiers (agendas and summary minutes) follow this link and these instructions:

1. In the top box select 'Search for Dossiers'
2. In the bottom box ('Committee/Basic legal act') select 'Committee'
3. Under service responsible, select 'Mobility and Transport' and press 'Search'
4. Scroll down and select the Committee
5. (Optional - specify any further details in the 'Dossier' box)
6. Click the 'Search' button

SSC working papers are made available via the membership platform.

Commission Expert Groups

European Observatory on Airport Capacity & Quality
Documents from the group are available in the additional information tab.

Objective: to advise the Commission on the implementation of the action plan for airport capacity, efficiency and safety in Europe and on any matter relating to airport policy, notably airport capacity.

Expert Group on Social Dialogue
Agendas and summary minutes are available in the additional information tab.

Objective: to advise the Commission with respect to the implementation and development of the single European sky regarding all measures having significant social implications.

European ATM Standards Coordination Group
European ATM Standardisation Rolling Development Plan available on the RDP tab.

Objective: to coordinate all relevant standardisation activities.

Public Consultations

This section provides links to relevant public consultations.

1. European Commission	
Ex-post Evaluation of the Single European Sky Performance and Charging Schemes	Consultation period: 7/06/2016 – 4/09/2016
2. Performance Review Body	
No open consultations	
3. European Aviation Safety Agency (ATM relevance only)	
Notices of Proposed Amendments	
Proposed Special Condition RPAS Flight Control System	Deadline for comments: 21/07/2016
4. EUROCAE	
Ice and Rain Minimum Qualification Standards for Pitot and Pitot-Static Probes	Consultation period: 03/07/2015 – 14/08/2015
MOPS for Traffic Alert and Collision Avoidance System II (TCAS II) Hybrid Surveillance	Consultation period: 29/07/2015 – 04/09/2015

Table 7: Public Consultations

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On-going Legislation

Single Sky Committee

1. Recently approved Commission Implementing Regulations and Decisions	
None	
2. Proposals awaiting decision	
SERA Part C (Amending CIR 923/2012)	Received a positive opinion at SSC/60
Common Requirements and Safety Oversight (Amending Regulation (EU) No 1034/2011 and Regulation (EU) No 1035/2011)	No opinion was received at SSC/60, no opinion. Next steps are under consideration, including the option of launching a vote in written procedure.
CID on PRB	Amended draft Decision due to undergo written procedure
CID on revised performance targets	No opinion at SSC/61
Surveillance Performance and Interoperability (Amending CIR No 1207/2011)	Proposed text available
Interoperability (Amending (EU) No 1033/2006 and repealing (EU) No 428/2013)	Out for Member State comment, vote expected at SSC/62
3. Expected Proposals	
PBN IR	Further information in EASA Rule Making section
Part-DAT	

Table 8: On-going Legislation

European Parliament Procedures

Proposals awaiting first reading by EP		
None		

Proposals adopted by EP in first reading and awaiting Council position		
Implementation of Single European Sky (Recast)	COM(2013) 0410 2013/0186 (COD)	Debate in Council on 03/12/2014
Aerodromes, air traffic management and air navigation services: simplifying and clarifying the legal framework	COM(2013) 0409 2013/0187 (COD)	Text adopted by Parliament on 12/03/2014
Groundhandling services at Union airports and repeal of Council Directive 96/67/EC	COM(2011) 0824 2011/0397 (COD)	Proposal withdrawn by Commission on 07/03/2015
Common rules for the allocation of slots at EU airports (recast)	COM(2011) 0827 2011/0391 (COD)	Text adopted by Parliament on 12/12/2012
Proposal for a Directive of the European Parliament and of the council on aviation security charges	COM(2009) 0217 2009/0063 (COD)	Proposal withdrawn by Commission 07/03/2015

Recently adopted acts		
None		

Parliament Own Initiative reports		
Safe use of remotely piloted aircraft systems (RPAS) in the field of civil aviation	2014/2243(INI)	Text adopted by parliament 29/10/2015
Implementation of the 2011 White Paper on Transport	2015/2005(INI)	Text adopted by parliament 09/09/2015

Table 9: European Parliament Procedures

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Status of EASA Rulemaking Activities

Overview

This section summarises the status of the EASA Rulemaking activities on ATM.

The EASA 5-year Rulemaking Programme 2016-2020 provides an overview of the expected rules and deliverables and was officially adopted by ED Decision 2015/236/ED on 11th December 2015.

The new Programme contains anticipated rulemaking tasks deemed necessary to support the deployment of the functionalities originating from the SESAR programme implementation of the regulatory needs, which in turn arise from SESAR deployment. The Programme has been reassessed to ensure it meets the needs of the objectives of the PCP Commission IR (EU) No 409/2013, which defines common projects, explains how they shall be governed and identifies incentives for their deployment. Close cooperation was also undertaken with the SESAR Deployment Manager to contribute to the first Deployment Programme (DP V1). Further assessments of the need for regulations will be undertaken and will be reflected in future updates of the Rulemaking Programme.

On 16th March 2015, EASA published its proposals for the future of the aviation regulatory system, including a possible revision of (EU) No 216/2008 (the EASA Basic Regulation). Further information can be found in the EU Policy section.

ATM / ANS rulemaking deliverables

An overview of the latest progress of EASA's ATM/ANS rulemaking activities is provided below.

- **ATCO licensing (RMT.0153, RMT.0154):** The new ATCO licensing Regulation (EU) No 2015/340 is applicable from 30th June 2015. The corresponding AMC/GM has also been published (Decision 2015/010/R and ED Decision 2015/015/R). To support application, Easy Access Rules for ATCO, including the ATCO IR and AMC/GM, has been published and will be updated after each substantial change.

- **SERA (RMT.0609, RMT.0610):** Commission proposal based on EASA Opinion 04/2014 to amend Regulation (EU) No 923/2012 (SERA Part C) received a positive opinion at SSC/60. To facilitate its implementation, the Agency has published NPA 2015-14 (AMC/GM) to SERA Part C Regulation. Comments closed 14th March 2016.

- **Part-DAT (ToR RMT.0593/RMT.0594):** This activity includes also the former ADQ-2 mandate. Opinion 02/2015 was published on 16th March 2015 and included inputs from public consultation (NPA 2014-20). The measures proposed in this Opinion have been integrated into an amendment of the draft Regulation which was proposed through Opinion 03/2014 (see above), and also into the draft Regulation which amends Regulation (EU) No 965/2012. A Decision containing the related AMC/GM was anticipated to be published by Q2 2016, following alignment with the IRs once the proposal is adopted by the Commission. However, at the time of writing, no Decision has yet been published.

- **PBN IR (ToR RMT.0639):** NPA 2015-01 was published on 19th January 2015. A workshop on implementing PBN in the European ATM Network was held on 9th March 2015. The inclusion of the PBN provisions in the Airspace Usage Requirements regulation will require a re-structuring of the AUR regulation and of its current Part-ACAS.

  The responses to the comments received on the NPA are being finalised, with corresponding amendments to the proposed text. Originally expected for Q2 2015, an Opinion involving a CRD is currently envisaged to be published concurrently and delivered to the European Commission during Q3 2016.

  Furthermore, additional NPAs which provide the enablers for PBN implementation stemming from PCP CIR will be issued, such as airworthiness measures in CS-ACNS.

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- **Revision of operational approval criteria for performance-based navigation (PBN) (ToR RMT.0256):** Opinion 03/2015 including draft Regulations was published on 31st March 2015. Decision 2016/008/R, amending the AMC and GM to Part-FCL and Part-ARA of Commission Regulation (EU) No 1178/2011 and the AMC and GM to Part-ORO and Part-ARO of Commission Regulation (EU) No 965/2012, was published on 2nd May 2016, following adoption of related IRs by the Commission.

- **Technical Requirements for Remote Tower Operations (ToR RMT.0624):** NPA 2015-04 closed for consultation on 4th May 2015. A Comment-Response Document along with ED Decisions (ED Decision 2015/014/R and ED Decision 2015/015/R) were published on 3rd July 2015, including Guidance Material (GM). EASA is currently preparing the next steps, including possible adoption of industry standards (when available) and extending the concept to busier environments and more complex models of operation.

- **Introduction of a regulatory framework for the operation of drones (RMT.0230)**: A-NPA 2015-10 consultation resulted in Opinion of a technical nature on introduction of a regulatory framework for the operation of unmanned aircraft on 18 December 2015. No draft legal text is proposed beyond that by the Aviation Strategy.

- **Assessment of changes to functional systems by service providers in ATM/ANS and the oversight of these changes by competent authorities**: The result from the publication of NPA 2014-13 has been integrated in Opinion 03/2014 published on 16th December 2014. The Commission also published a draft Regulation as an annex to this Opinion. The Agency is now aligning the draft AMC/GM with the Implementing Rule. EASA has held various meetings with the expert stakeholders' representatives to amend the AMC and GM materials, as necessary. An ED Decision on the AMC/GM was expected to be published in Q2/2016 once the IR is adopted by the Commission, but has yet to be published at the time of writing.

- **Revision of surveillance performance and interoperability (SPI) (ToR RMT.0679):** Several implementation issues with the SPI IR (EU No 1207/2011) has led the EC to propose a revision of the SPI IR. The ToRs for the rulemaking task were published on 18th March 2016, with an NPA due to be published in Q2/2017 and an Agency Decision expected in 2019.

- **Technical requirements and operational procedures for Aeronautical Information Services (AIS) and Aeronautical Information Management (AIM) (ToR RMT.0477/RMT.0478):** Essentially addressing the transposition of ICAO Annex 15 and notably including aeronautical data quality requirements, as currently covered in Regulation (EU) 73/2010 (SES ADQ1). NPA 2016-02 was published on 27th April 2016, with comments required by 31st August 2016. An opinion is due to be published in Q1/2017, with a decision to following in Q4/2017.

- **Requirements for ATS** transposing the relevant provisions of ICAO Annex 10 Volume II, Annex 11 and relevant provisions of Doc 4444 and Doc 7030 EUR **(RMT.0464/0468, ToR RMT.0464)** and **technical requirements and operation procedures for airspace design (ASD), including procedures design (ToR RMT.0445, RMT.0446).** Subject NPAs were postponed and were due to be issued for consultation in Q2 2016, considering the interdependencies associated with the pending adoption of Commission proposals on 'Common Requirements and oversight' and 'SERA Part-C'. At the time of writing, these NPAs have not yet been issued.

- **Airworthiness review process (ToR RMT.0521, .0522):** NPA 2015-17 was published on 5th November 2015 and is open to comment until 5th February 2016. An opinion is expected to be published in Q1 2017.

- ED Decision 2014/035/R and CRD to NPA 2014-8 proposing AMC/GM on the safety performance indicators for RP2 were published on 16th December 2014. The Agency issued an ED Decision 2015/028/R on 17th December 2015 that addresses a regulatory coordination issue related to changes to the risk analysis tool (RAT) guidance. The ED

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Decision amends the AMC/GM of ED Decision 2014/035/R to avoid inconsistencies that may prevent stakeholders from meeting the agreed targets of the performance scheme.

- **Evidence-based and competency-based training (ToR RMT.0599):** Recognising that traditional training processes do not guarantee that pilots are competently trained, EASA have initiated a RMT addressing the initial and recurrent training of flight crew at the European level. NPAs are due to be published for consultation with Member States in 2017/Q4 (EBT only) and 2019/Q1, and decisions are expected to be published in 2018/Q4 (EBT only) and 2020/Q4.

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SES Legislation

Existing Rules and Regulations

Framework Regulation (EC) 549/2004, amended by (EC) 1070/2009
Performance Scheme Regulation (EU) 390/2013 (RP2)
Service Provision Regulation (EC) 550/2004, amended by (EC) 1070/2009
Common Charging Scheme Regulation (EU) 1794/2006, amended by (EU) 1191/2010 (RP1); (EU) 391/2013 (RP2)
Software Safety Assurance System (EC) 482/2008
FAB Information (EU) 176/2011
Network Management Functions (EU) 677/2011
Airspace Regulation (EC) 551/2004, amended by (EC) 1070/2009
ATFM Regulation (EU) 255/2010
FUA Regulation (EC) 2150/2005
Airspace Harmonisation (EC) 730/2006
Standardised European Rules of the Air (EU) 923/2012
Interoperability Regulation (EC) 552/2004, amended by (EC) 1070/2009
COTR Regulation (EC) 1032/2006, amended by (EC) 30/2009
IFPL Regulation (EC) 1033/2006, amended by (EU) 929/2010
FMTP Regulation (EC) 633/2007, amended by (EU) 283/2011
DLS Implementing Rule (EC) 29/2009, amended by (EU) 2015/310
Mode S Interrogator Regulation (EC) 262/2009
ADQ Regulation (EU) 73/2010, amended by (EU) No 1029/2014
ACID Implementing Rule (EU) 1206/2011
SPI Implementing Rule (EU) 1207/2011, amended by (EU) No 1028/2014
VCS-2 Regulation (EU) 1079/2012 repealing VCS Regulation (EC) 1265/2007, amended by (EU) No 657/2013
EASA ATM Rules
EASA Basic Regulation (EC) 216/2008, amended by (EC) No 690/2009
Common Requirements (EU) 1035/2011, repealing (EU) 2096/2005 and (EC) 668/2008, amended by (EU) No 923/2012
Safety Oversight (EU) 1034/2011, repealing (EC) 1315/2007
ATCO Licence (EU) 2015/340, repealing (EU) 805/2011, repealing Directive 2006/23/EC
SESAR
SESAR JU Regulation (EC) 219/2007, amended by (EU) No 721/2014
Common Projects Regulation (EC) 409/2013
PCP supporting implementation of the EATM Master Plan (EU) No 716/2014

Table 10: Existing Rules and Regulations

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Community Specifications

Developed by ESOs	
Airport Collaborative Decision Making (A-CDM)	EN 303 212 V1.1.1
Advanced Surface Movement Guidance and Control System (A-SMGCS)	EN 303 213-1 V1.3.1
	EN 303 213-2 V1.3.1
	EN 303 213-3 V1.1.1
	EN 303 213-4-1 / EN 303 213-4-2 V1.1.1
	EN 303 213-5 / EN 303 213-6 published under R&TTE Directive
Data Link Services (DLS)	EN 303 214 V1.2.1
Developed by EUROCONTROL	
Flight Message Transfer Protocol (FMTP)	Spec-0100 Ed. 2.0
Initial Flight Plan System (IFPL)	Spec-0101 Ed. 1.1
ATS Data Exchange Presentation (ADEXP)	Spec-0107 Ed. 3.1
Flexible User of Airspace (FUA)	Spec-0112 Ed. 1.1
Air-Traffic Services Message Handling System (AMHS)	Spec-0136 Ed. 2.0
On-Line Data Interchange (OLDI)	Spec-0106 Ed. 4.2
Published as Technical Specifications	
FDP Interoperability (ATC-ATC)	CEN TS 16071
Software Assurance Levels (SWAL)	CEN TS 16501
On-going Community Specifications	
GBAS Cat I	Suspended (mandated to CEN)
APV-BaroVNAV	Suspended (mandated to CEN)
APV-SBAS (LPV)	Suspended (mandated to CEN)
Aerodrome Mapping Data	Suspended (M/510, mandated to CEN)

Table 11: Community Specifications

A number of additional Community Specifications were mandated to the ESOs by the Commission (M/524) in May 2013.

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NCP NSA
Coordination
Platform

ICB
Industry Consultation Body

EGSD Expert Group on the
Social Dimension
of the SES