



Annual Activity Report 2013

31 March 2014

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1 Introduction

As a result of the General Agreement with the European Commission signed on 7 December 2009, the SESAR Joint Undertaking (SJU) is requested to draft an Annual Activity Report (AAR) in the format Annexed to the said Agreement.

The report is built on four sections:

1. Performance (Achievement of Objectives comparing achievement versus the Annual Work Plan 2013 (Chapters 2, 3, 5 and 6);
2. Management and internal control systems (Chapters 4 and 7);
3. Reservations and their impact on the declaration of Assurance (Chapter 8);
4. The declaration of Assurance (Chapter 9).

1.1 The SJU

The SJU was established on 27 February 2007 by Council Regulation (EC) 219/2007, as last modified by Council Regulation (EC) 1361/2008 (SJU Regulation).

The mission of the SJU, created under Article 187 of the Treaty on the Functioning of the European Union and co-founded by the European Union and Eurocontrol, the founding members, is to ensure the modernisation of the European air traffic management system by coordinating and concentrating all relevant research and development efforts undertaken by its Members and the related financing.

In particular, the SJU is responsible for the implementation of the European ATM Master Plan and for carrying out specific activities aiming at developing the new generation of air traffic management system capable of ensuring the safety and fluidity of air transport worldwide over the next thirty years.

A substantial part of the benefit of the SESAR Research & Innovation Programme (hereafter the R&I Programme or Programme)¹ lays in the involvement of most of the European ATM stakeholders, complemented by contributions from non-EU key players, for the development of the operational and technical solutions which best meet the objectives set out in the European ATM Master Plan.

The SJU became operational, in the sense of Article 6 of the SJU Regulation, as a result of the European Council resolution of 8 June 2007, in anticipation on the Council resolution on the endorsement of the ATM Master Plan of March 2009. Furthermore, on 7 November 2008, Eurocontrol transferred to the SJU the right to use the SESAR Master Plan, together with the exclusive right to ensure its revision throughout the lifetime of the SJU. In this respect, the SJU Administrative Board adopted the European ATM Master Plan 2012 in October 2012.

Following the launch of the “call for expression of interest to become member of the SJU” by the European Commission on 27 June 2007 and the ensuing negotiations conducted by the Executive Director, the membership process was finalised with the selection of fifteen organisation representing industry and, at large extent, stakeholders of the European ATM. The signing of the Membership

¹ With the current AAR 2013 the SJU will adapt its Communications referring to the SESAR Research and Innovation for the activities performed in the contest of the SJU Partnership in order to distinguish them for the future activities performed in the context of Deployment by the future Deployment Manager.

Agreement, the Agreement with Eurocontrol and the Multilateral Framework Agreement in summer 2009 formalised the rules concerning the participation of a Member to the SJU as well as the contribution and the rules governing the execution of and the commitment to the Programme.

In January 2010 the Administrative Board with its decision ADB 02-2010 approved the launching of the process for the creation of a new category of stakeholders in the Programme: the “Associate Partners of an SJU Member” with the purpose of securing the additional input and added value of critical partners in the ATM research and development activities.

The arrangement between the Member and its Associate Partner(s) are formalised in a “subcontract for research assistance” which includes specific conditions on the maximum amount of work which could be assigned, Intellectual Property Rights and financial aspects. The Associate Partners are not represented in the Administrative Board and have no voting rights.

Two invitations to its Members to propose entities to become “Associate Partners” were launched by the SJU in the spring and autumn of 2010. The Administrative Board at its meetings of 12 July 2010 and 14 December 2010 accepted the proposals for 16 and then an additional 5 Associate Partners of an SJU Member respectively.

In the aforementioned Decision ABD 02-2010, the Administrative Board established also the new category of stakeholders “Associate Partner of the SJU”. In January 2011 the SJU launched an invitation to submit proposals for becoming “Associate partner of the SJU”, specifically addressed to entities belonging to 4 categories: SMEs, Research Organisations, Universities and Institutes of higher education. This resulted in 10 legal groupings consisting of over 40 different entities being awarded across 5 Lots of activities.

In accordance with its founding Regulation, the SJU shall cease to exist on 31 December 2016. However, mid 2012 the European Commission submitted to the Council its proposal to legally extend the SJU up to 31 December 2024 in order to ensure the performance of the R&I Programme 2020 under the Multiannual Financial Framework 2014 – 2020 and more specifically Horizon 2020². The Council on October 10 adopted a position in favour of the extension of the SJU until 2024. The European Parliament and the European Economic Social Committee are expected to provide their respective opinions in due course. It is expected that the legislative process will be completed by the end of June 2014.

Following the resignation in September 2013 of the SJU Executive Director, the Administrative Board, with its decision ADB(D)04-2013 appointed an Executive Director ad interim with a mandate ending in March 2014 in order to ensure the completion of the process for the selection of the new Executive Director as well as the continuity of the SJU operations.

1.2 The SESAR Research & Innovation Programme

As part of the Membership process, work has been allocated to the selected Members on the basis of a Description of Work (DOW 4.0) and on the offers made through the IBAFO³ I and IBAFO II which were finalised on 26 March 2009 and 14 December 2009 respectively. Furthermore, in order to ensure the alignment of the Members’ contributions to the development of the Programme results, during 2011 a resources’ “reallocation” exercise was performed in compliance with the SJU Financial Rules and MFA⁴

² Horizon 2020 - The Framework Programme for Research and Innovation, COM (2011) 808 final

³ IBAFO = Invitation to submit a binding and final offer

⁴ Multilateral Framework Agreement

and within the ceilings established in the MA⁵. The Administrative Board adopted the new reallocated resources as of 1 January 2012.

The identification of “Priority Strategic Business Needs”(see section 3.13) in the European ATM Master Plan 2012, highlighted the need to re-focus the SESAR Programme activities in view of the completion of its overarching objectives.

In this respect, mid 2013, the SJU launched a second Reallocation Process of the Programme resources. In addition, to complement the Programme work, a limited number of key projects were submitted to tender in the context of an IBAFO III. The Reallocation 2013 and IBAFO III processes were performed by the Partnership during 2013 and completed by a decision of the Administrative Board on 12 December 2013. This resulted in the release of resources previously committed to the core Programme to allow the launch of the call for proposals for Large Scale Demonstration activities and the Definition Phase of the RPAS integration in non-segregated airspace (calls launched on 19 December 2013, see sections 4.7.2 and 5.4)

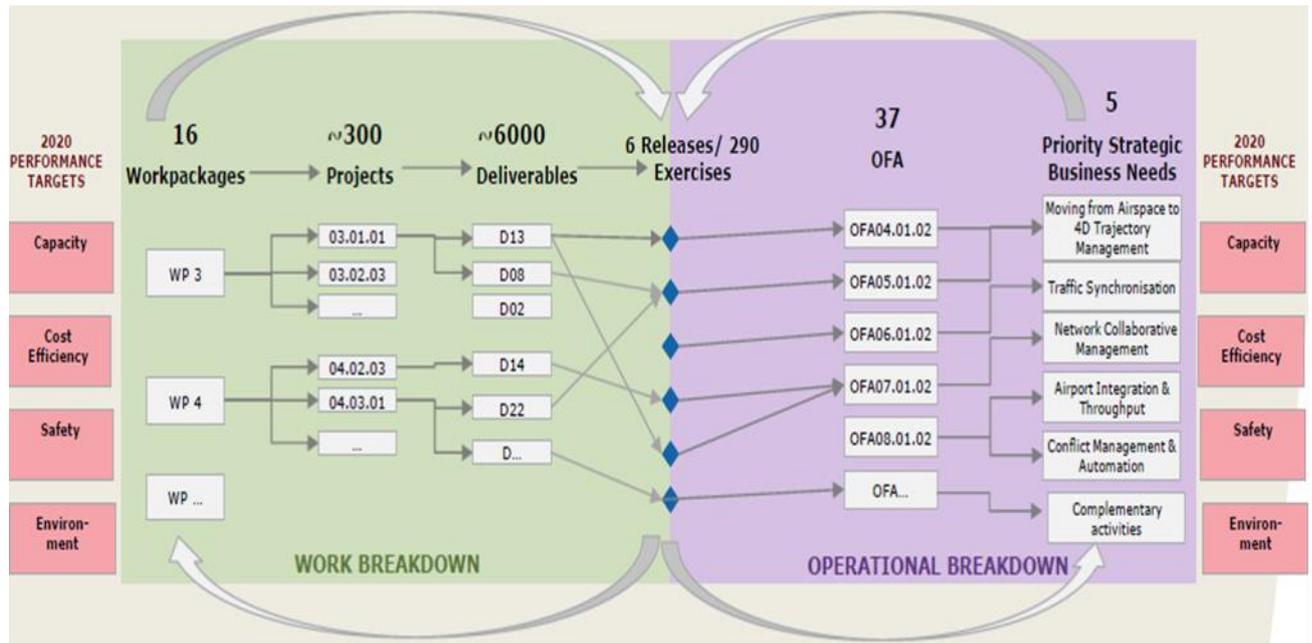
At the end of 2013, considering the results of Reallocation 2013 and IBAFO III⁶, the R&I Programme counts 370 projects organised in Work Packages as follows:

- WPB (Target Concept and Architecture Maintenance),
- WPC (Master Plan Maintenance),
- WP3 (Validation Infrastructure Adaptation Integration),
- WP4 (En-Route Operations),
- WP5 (TMA Operations),
- WP6 (Airport Operations),
- WP7 (Network Operations),
- WP8 (Information Management),
- WP9 (Aircraft),
- WP10 (En-Route & Approach ATC Systems),
- WP11 (Flight Operations and Centre System)
- WP12 (Airport Systems),
- WP13 (Network Information Management System)
- WP14 (SWIM Technical Architecture),
- WP15 (Non Avionic CNS System),
- WP16 (R&D Transversal Areas)
- WPE (Long term and Innovative Research Programme)

The Work Packages structure is set up in a manner to allow the adequate monitoring of the R&D activities performed by the Members. From the strategic point of view, since 2012 the Programme and its deliverables are structured around the concept of Operational Focus Areas targeted to the achievement of the Priority Strategic Business Needs (see section 3.1). The picture below describes the links between the Programme Management view and more strategic approach.

⁵ Membership Agreement

⁶ IBAFO III consists of 12 projects of which 6 are ready for execution; 3 require further elaboration before approval for execution, 2 launched separately under direct management by the SJU, 1 merging into an existing project



(fig. 1)

The Reallocation 2013 and IBAFO III confirmed that the Programme activities are focused to deliver Step 1 and large part of Step 2 of the European ATM Master Plan. All SJU resources are committed to the achievement of the objectives defined in the ongoing Programme for an amount of almost EUR 2.1 billion⁷, by 2016. The Programme financials, including details per Work Package/Member and sources of funding are available in Annexes 1.a and 1.b. Section 3.4 presents the details of scope, objectives and 2013 report for each WP.

1.2.1 Summary of the Projects status

Overall the number of R&D and Management Projects has reached 370 of which 45 belong to WP E Long Term Research, 9 to the WP 11 Flight Operations and Centre System, and 12 are resulting from the IBAFO III. Compared to the Programme situation at the end of 2012, 24 projects were initiated, 48 Projects were merged as result of the Reallocation 2013. The number of projects in execution phase stands now at 282. Only 3 projects, excluding those of IBAFO III, are still to be initiated (see table below).

⁷ IBAFO 3 financials will be available once the procurement process is finalized.

	As of 31.12.2012	As of 31.12.2013	
Total number of Projects in the R&I Programme	336	370	
<i>of which</i>			
Projects initiated	331	355	95,9%
<i>of which cancelled projects</i>	3	3	0,8%
<i>suspended projects</i>	8	15	4,10%
<i>merged into others</i>		48	12,9%
<i>still under initiation</i>	5	4	1,1%
<i>closed projects</i>	3	3	0,8%
Projects in execution phase	312	282	76,2%
Projects to be initiated (excluding WPE)⁸	5	3	0,8%
IBAFO III		12	3,3%

2 2013 objectives: a step forward the 2014 Mid-Term vision

Building on the 2012 results and looking forward at the 2014 vision, the SESAR management established the objectives to be reached in 2014 and the intermediary targets to be achieved by the end of 2013. The planned activities leading to the long term Programme's objectives have been broken down to ensure that the R&I Programme was focused not only on the achievement of its mission but on concrete research and innovation progress, including quick wins.

The 2013 objectives were defined as a percentage progress to be realised within the year, towards the full achievement set for the 2014. However, during 2013 it became clear the need to reprioritise the SJU activities in order to align them with the European ATM Master Plan 2012, the progress on deployment and the Pilot Common Project, the results on the Programme review, etc. which impacted the progress achieved during 2013 as well as requires a revision of the 2014 objectives.

The SJU Vision 2014 is the following:

The SJU partnership has successfully introduced innovations, bringing measurable performance benefits to the worldwide aviation community

The strategic objectives together with an assessment of the achievement at year-end 2013 are:

⁸ It should be noted that 2013 WPE initiated projects are the results of calls launched in 2012 and therefore were not included in the "projects to be initiated" at the end of 2012.

OBJECTIVE DESCRIPTION	SUCCESS MEASUREMENT INDICATORS	Progress achieved by end 2013
<p><i>1. SESAR procedures, technology/tools and airspace design solutions enabled by the Initial 4D capability have demonstrated performance benefits in terms of efficiency, safety, capacity and predictability</i></p> <p>In 2013, activities focused on the evolution on the validation of the 4D trajectory coupled with CTA in mixed traffic environment conditions. Nevertheless, contrary to initial expectations, ATC procedures using 4D capability need further refining for traffic separation and sequencing and the benefits in terms of flight efficiency will be measured in different operating environments. The EXE-04.03-VP-324 performed in the context of Release 3 highlighted positive impact on controller situation awareness and efficiency, together with fuel consumption reduction mainly thanks to the increased use of vertical separation and early descents. The EXE-04.03-VP-463 aimed at validating increased automation in the 4D trajectory negotiations between air and ground as well as the validation of the use of the down-linked EPP in additional tools such as workload and conflict detection/display by analysis of the evolution of the EPP and ground based TP during coupled validation sessions.</p> <p>i4D procedures in mixed traffic environment will be validated in 2014. Additional work will be required to enrich the ground conflict detection systems with the trajectory down linked from the aircraft.</p> <p>Based on an intermediate version of the performance report of Project B5 (Step 1 - Cycle 2 - Deliverable D68), the objective is 30% completed in 2013.</p>	<p><i>Step 1 fuel efficiency target with significant improvements for other KPA's</i></p>	<p><i>AWP 2013 Target 2013 50%</i></p> <p>Actual 30%</p>
<p><i>2. Technological and operational innovations in the airport domain are ready for deployment and SESAR AOP/AOC/NOP integration has demonstrated positive network performance.</i></p>	<p><i>At least 10 Airports demonstrates increased predictability and less delays (MTS)</i></p>	<p><i>AWP 2013 Target 2013 60%</i></p>

OBJECTIVE DESCRIPTION	SUCCESS MEASUREMENT INDICATORS	Progress achieved by end 2013
<p>In release 3, EXE-06.03.01-VP-609 aimed at assessing improved arrival predictability and its propagation to departure predictability as well as at reducing arrival traffic bunching effect. This activity addressed topics such as the connection of the Airport operations Plan with the Network Operations Plan.</p> <p>2013 successfully delivered as well as the Time Based Separation SESAR Solution aiming at keeping the airport capacity when arrival traffic is impacted by strong headwind conditions. Results have been made available through the completion of the Release 2 and are now being used for the necessary standardisation and regulatory activities.</p>		Actual 60%
<p>3. <i>SESAR partners commit to SESAR Project innovative technological / operational results in their medium term investment plans.</i></p> <p>In 2013, the SJU worked on the delivery of “packages” which formalize the end of the planned R&D activities on a given operational procedure or technology. Although still under development and not yet published, the various topics have been identified through Releases 1 and 2 and widely made available. In 2013, the manufacturing industry, ANSPs and Airports, 6 out of the 15 Members, shared plans showing convergence of investments and deployment intention towards technology and procedures reflecting SESAR solutions. Although this is not yet a firm commitment, it shows a solid intention to materialize SESAR development in industrial products and deployment investments.</p> <p>The mid-term investment plans are expected to be part of the deployment activities, outside the remit of the SJU; however the SJU communication on benefits linked to innovations will provide strong incentives for inclusion in mid-term investment plans.</p>	> 5 projects	<p><i>AWP 2013 Target 2013 40%</i></p> <p>Actual 40%</p>

OBJECTIVE DESCRIPTION	SUCCESS MEASUREMENT INDICATORS	Progress achieved by end 2013
<p><i>4. SWIM-based applications contribute to efficient implementation of Airspace Users preferred flight routes and profiles.</i></p> <p>In 2013 the interoperability of flight planning systems supporting the free routing operations is in validation using SWIM profiles.</p> <p>Building on the success of the 2012's edition, the second SESAR SWIM Master Class took place from June to November 2013. More ATM data providers are entered in the game, offering ATM Service or Application development teams a wider scope of data and services to exploit in their SWIM-enabled applications or web-services. The activity brought together 64 international teams actively developing and demonstrating their SWIM-enabled applications. It successfully demonstrated the ability of ATM stakeholders to share their experiences and best practices in implementing the concept of SWIM. In doing so the Master Class has become an important platform through which to build a critical mass of knowledge and excellence about SWIM and to translate the concept into viable solutions.</p> <p>Finally the EXE-04.03-VP-022 of Release 3 partially demonstrated that OLDI (On-Line Data Interchange) mechanism can be replaced with Flight Object to pass information between ACC and support SESAR concept of operations of trajectory management.</p>	<p><i>SWIM benefits demonstrated for Airline Operation Centres-Air Traffic Control services leading to Step 1 improvement of flight predictability</i></p>	<p><i>AWP 2013 Target 2013 30%</i></p> <p>Actual 30%</p>

OBJECTIVE DESCRIPTION	SUCCESS MEASUREMENT INDICATORS	Progress achieved by end 2013
<p>5. <i>The SESAR Controller Working Position prototype demonstrates performance gains through its adaptability to efficiently integrate new functionality.</i></p> <p>In 2013 activities focused on the integration of new functionalities and decision making tools in the human machine interface of the controller working position. In Release 3, EXE-04.08.01-VP-239 validated the usage of enhanced Short Term Conflict Alerts using DAPs (Down linked Aircraft Parameters). Initial results in accordance with ATCOs' feedback confirm that the use of both SFL (Selected Flight Level) and TAR (Track Angle Rate) DAPs provide improvements in the STCA tool (reduction of nuisance alerts and ATCOs' workload, increased ATCOs' trust in the STCA, increased ability to manage traffic).</p>	<p><i>SESAR CWP supports 4D trajectory management and complies with Human Factors requirements; and at least 5 service providers will start investing in CWP new functionalities</i></p>	<p><i>AWP 2013 Target 2013 60%</i></p> <p>Actual 60%</p>
<p>6. <i>SESAR material to support standards has been proposed to the EC, ICAO and Industry Standardisation bodies for development into published standards and policies.</i></p> <p>3 standards (ED-114A, ED-143, update of ED-75) are well advanced and are be proposed.</p> <p>Beside the above, the following standards are in the process of being approved: ED 92, ED 220, ED 221, ED 222, ED 223, ED 224, ED 228, ED 229, ED 230, ED 231.</p> <p>SESAR has provided contributions to all of them directly or through the SJU Members.</p>	<p>> 10 standards proposed</p>	<p><i>AWP 2013 Target 2013 40%</i></p> <p>Actual 40%</p>

OBJECTIVE DESCRIPTION	SUCCESS MEASUREMENT INDICATORS	Progress achieved by end 2013
<p>7. <i>Through the SJU PPP, SESAR Staff have become world leaders in creating a culture of innovation, cooperation and accountability to deliver.</i></p> <p>Achieved</p>	<p><i>Positive result of Stakeholder, Staff & Member Survey (satisfaction rate>75%)</i></p>	<p><i>AWP 2013 Target</i></p> <p><i>Success of SJU participation to CANSO World ATM Congress, ICAO Air Transport Conference and General Assembly</i></p> <p>Actual100%</p>
<p>8. <i>Results from SESAR long term research activities are embedded into the rest of the R&I Programme and prove the effective link between Innovation and R&D.</i></p> <p>In 2013 the SJU has coordinated and participated in:</p> <ul style="list-style-type: none"> - ACARE - Work Package E - Scientific Committee - EC Coordination (Framework Programme) <p>ensuring the link between Innovation and R&D. This work will be continued during 2014, especially in view of the preparation of long term research activities of the Programme 2020</p>	<p><i>On going WPE process of research networks and projects have made a positive impact in other WP's (Three networks fully operating and delivering see section 4.5)</i></p>	<p><i>AWP 2013 Target 2013</i></p> <p><i>On going</i></p> <p>Actual: On going</p>

3 Programme Execution 2013

3.1 Programme Overview: a top down Release definition

Following the indications coming from a Releases effectiveness review, conducted by a group of Programme Committee Members, the Release 3 was defined with a top down approach having as focus the service providers' needs, thus impacting the SESAR priorities.

As the rest of the Programme, Release 3 builds and concentrates resources around the five Priority Strategic Business Needs of the Master Plan:

- Airport Integration and Throughput;
- Conflict Management and Automation;
- Moving from Airspace to 4D Trajectory Management;
- Network Collaborative Management and Dynamic/Capacity Balancing;
- Traffic Synchronisation.

Release 3 was built with the objective to deliver the following main operational improvements:

- **Airport operations management and platform safety**
 - Detection of runway incursion and infringements of restricted areas by aircraft and vehicles and alert to the ATC controllers and vehicle driver.
 - Linking Airport Operations Plan with the Network Operations Plan for a better management of the arrivals.
- **Airborne Operations**
 - Synchronisation of airborne and ground flight profiles through i4D data exchanged through datalink;
 - Enhanced FPL processing based on 4D profiles and aircraft performance provided by AOC
- **ATC Operations**
 - Enhanced Short Term Conflict Alert system using down-linked aircraft parameters.
 - Streaming techniques in the frame of an extended horizon of the arrival manager for multiple airports
- **Network Management**
 - Further development of the Short Term ATFCM Measures

At the end of January 2014, the Projects contributing to the achievement of Release 3 projects are consolidating the results stemming from the validation activities. These results will be reviewed through the usual System Engineering Review 3 early June 2014. Consequently, the information below represents the initial summary of results of Release 3.

3.2 Release 3

Release 3 was construed around 19 validation exercises. 10 exercises were executed (representing a bit less than 70% of the total number of exercises originally planned), 3 will be completed in January 2014, 4 are moved to Release 4, 1 is moved to Release 5 and 1 has been cancelled (see section 3.2.1).

The table below shows how the Priority Strategic Business Needs will be achieved through the operational improvements, grouped into OFAs, resulting from the exercises conducted within the Releases. Actual Operational Improvements in green boxes are those achieved in Releases 1 and 2; the others are those planned/expected for Release 3 and onward. It should be noted that an exercise may contribute also to Operational Improvements which are not included into the Priority Strategic Business Needs.

Priority Business Need	Operational Sub-Package	OFA	R1	R2	R3	R4	R5	R6	
Airport Integration and Throughput	SPC01.01 Weather Resilience	01.01.01 LVPs using GBAS				AO-0505-A			
	SPC01.03 Enhanced Runway Throughput	01.03.01 Enhanced Runway Throughput		AO-0303					
					AUO-0702		AO-0306 AO-0310 AUO-0703		
	SPC01.02 Airport Safety	01.01.02 Pilot Enhanced Vision							
		01.02.01 Airport Safety Nets					AO-0209 AO-0104-A		
		01.02.02 Enhanced Situational Awareness				AO-0201-A	AO-0204		
	SPC04.02 Integrated Surface management	04.02.01 Integrated Surface Management					AO-0205		
								AUO-0603-A	
SPC05.01 Demand and Capacity Balancing Airports	05.01.01 Airport Operations Management		DCB-0304		DCB-0310			AO-0801 AO-0802 AO-0803 AO-0804	
Network Collaborative Management and Dynamic and Capacity Balancing	SPC05.03 Demand and Capacity Balancing En-Route	05.03.06 UDPP				AUO-0101-A AUO-0103		AUO-0102 DCB-0305	
		05.03.03 Dynamic sectorisation and Constraint management		CM-0102-A			CM-0102-B	AOM-0803	
		05.03.04 Enhanced ATFM Processes				CM-0103-A DCB-0308	DCB-0208 CM-0103-B CM-0104-A	CM-0104-B	
		05.03.07 Network Operations Planning 05.03.01 Airspace Management and AFUA					DCB-0103-A	DCB-0103-B	
	SPC03.01 4D Trajectory Management	03.01.03 Free Routing					AOM-0501 AOM-0502		
Traffic Synchronisation	SPC02.01 Enhanced Route Structures	02.01.01 Optimised 2D/3D Routes	AOM-0603	AOM-0601	AOM-0702-A			AOM-0702-B	
	SPC03.02 Airborne Spacing and Separation	OFA03.02.01 ASPA S&M		TS-0102	AOM-0705-A			AOM-0705-B	
						TS-0105-A			
SPC04.01 Traffic Synchronization	04.01.02 Enhanced Arrival & Departure Management in TMA and En Route 04.01.01 Integrated Arrival/Departure Management at Airports				TS-0103 TS-0305-A	TS-0304 TS-0303	TS-0106		
Moving from Airspace to 4D Trajectory Management	SPC03.01 4D Trajectory Management	03.01.01 Trajectory Management Framework		IS-0301			AUO-0302-A AUO-0303-A	AUO-0302-B AUO-0303-B CM-0402	
		03.01.04 Business and Mission Trajectory					AOM-0304-A AUO-0203-A AUO-0204-A	AOM-0304-B AUO-0203-B AUO-0204-B	
		03.01.08 System Interoperability with air and ground data sharing			IS-0302		IS-0303-A	IS-0303-B	
Conflict management and automation	SPC03.03 Ground Based Conflict Management	OFA03.03.01 Ground Based Separation Provision in En Route	CM-0201 CM-0202 CM-0203	CM-0301		CM-0205	CM-0403-A		
		OFA03.03.02 Ground Based Separation Provision in the TMA							
	SPC03.04 Air Safety Nets	OFA03.04.01 Enhanced Ground Based Safety Nets OFA03.04.02 Enhanced ACAS	CM-0811 CM-0803			CM-0802	CM-0808	CM-0807	
Complementary Activities	SPC02.01 Enhanced Route Structures	02.02.04 Approach Procedures with Vertical Guidance	AOM-0605 (LPV Procedures)			AOM-0605 (RNP transition to GLS)	AOM-0605 (RNP transition to ILS)		
	SPC06.03 CWP Airport	06.01.01 CWP Airport				AO-0208-A			
	SPC06.03 Remotely provided Air Traffic Services for aerodromes	06.03.01 Remote Tower			SDM-0201 (Small size airports)	SDM-0201 (Medium airports) SDM-0205			
	ENB02.01 SWIM	ENB02.01.01 SWIM ENB02.01.02 AIM/MET					IS-0901-A MET-0101		

3.2.1 Programme Achievements by Business Needs

3.2.1.1 Priority Strategic Business Need: Airport Integration and Throughput

OFA01.01.01 – LVP using GBAS					
Achievement	Procedures for transiting from RNP environment to GLS (GNSS Landing System) final approach procedure based on GBAS considering in particular pilot's workload, curved path, minimum Radius-to-Fix legs.				V3
Deliverables	OSED, VALR				
Contributing Projects	06.08.05				
Contributing AU(s)	NOVAIR, NetJets				
Exercise	OIs	Validation Technique	Validation Platform	Prototype	Exercise Completed
EXE-06.08.05-VP-166	AO-0505-A AOM-0603	Real Time Simulation	Airbus cockpit simulator	N/A	To be executed on 29/01/14

OFA01.02.01 – Airport Safety Nets					
Achievement	Safety improvement by the reduction of collision risk thanks to the early detection and alert to the controllers and to the vehicle drivers of detection of runway, taxiway and apron incursion and infringements of restricted areas by aircraft and vehicles. Integration of Airport safety support tools and enhanced ADSB, with the ATC System supervision.				V3
Deliverables	OSED, SPR, VALR, TS				
Contributing Projects	03.03.02, 03.03.03, 06.03.02, 06.07.01, 06.07.02, 06.09.02, 09.33, 10.07.01, 12.03.01, 12.03.02; 12.03.03, 12.05.02, 12.05.03, 12.05.04, 12.05.07, 15.04.05b				
Contributing AU(s)	None				
Exercise	OIs	Validation Technique	Validation Platform	Prototype	Exercise Completed

EXE-06.03.02-VP-614	AO-0104-A AO-0205 AO-0208-A AUO-0302-A	RTS	AENA HQ Pre-operational IBP-tower segment, Madrid	Improved surveillance for surface management, INDRA, Enhanced Surface Safety Nets, INDRA Enhanced Surface - routing, INDRA Enhance controller tools to manage all aspects of 4D trajectories, INDRA Integrated Tower Working Position, INDRA Performance Based, Monitoring and Decision Support within the HMI, INDRA ATS Enhanced Datalink features for all phase of flight, INDRA	To be executed on 31/01/14
EXE-06.03.02-VP-652	AO-0104-A AO-0208-A	RTS	ENAV IBP Malpensa Airport, Milan	ATS Datalink Operational Improvements, HONEYWELL Safety Nets, SELEX Airport Safety Nets and wind-shear detection and alert for Controllers, SELEX Integrated Tower Working Position (iCWP), SELEX ADS-B Ground Station, SELEX ATS Datalink, SELEX	29/11/2013

OFA01.02.02 – Enhanced Situation Awareness		
Achievement	Operational procedures for the use of the RWSL (RunWay Status Lights) in order to prevent runway incursions. The information on runway usage is directly made available to the vehicle drivers and flight crews through new airfield lights.	V3
Deliverables	OSED, SPR, VALR	
Contributing Projects	06.07.01	

Contributing AU(s)	Air France				
Exercise	OIs	Validation Technique	Validation Platform	Prototype	Exercise Completed
EXE-06.07.01-VP-232	AO-0209	RTS, Shadow Mode, Live Trial	DSNA CDG Legacy system	N/A	Postponed to Release 5

OFA01.03.01 – Runway Occupancy Time Management					
Achievement	Enhanced voice procedure of brake to vacate, taking more benefit from advanced knowledge of the Arrival Runway Occupancy Time and Runway exit, and quantified performance.				V3
Deliverables	OSED, VALR				
Contributing Projects	06.08.02				
Contributing AU(s)	NOVAIR, EMIRATES				
Exercise	OIs	Validation Technique	Validation Platform	Prototype	Exercise Completed
EXE-06.08.02-VP-048	AUO-0702	Live Flight Trials	Emirates A380 aircraft with BTV + other suitably equipped AUs ATC (NATS) at Terminal Control London and ATC at London Heathrow	N/A	31/10/2013

OFA05.01.01 - Airport Operations Management					
Achievement	Operational procedure for managing the Airport based on the Target Time of Arrival through data exchange between the NOP and the local AOP.				V3
Deliverables	OSED, VALR, TS				
Contributing Projects	06.03.01, 06.05.01, 07.03.02, 07.06.01, 07.06.05, 03.03.02, 03.03.03, 12.06.02, 12.06.09				
Contributing AU(s)	Local Palma de Mallorca Aircraft Operators, Air Europa, Air Berlin, Easyjet.				
Exercise	OIs	Validation Technique	Validation Platform	Prototype	Exercise Completed
EXE-06.03.01-VP-609	AO-0801 AO-0803 DCB-0103-A	Live Trials	AENA Airport Platform	AOP (from P12.06.02-D12) and AINS (from P12.06.09-D04)	30/06/2013

3.2.1.2 Priority Strategic Business Need: Network Collaborative Management and Dynamic/Capacity Balancing

OFA05.03.04 - Enhanced ATFCM processes					
Achievement	Management of the workload/complexity reduction based on the optimisation of sector combinations through a statistical approach. Validated process for STAM (operational procedure, roles & responsibilities, tooling supporting co-ordination workflow). Early integration of AOP and NOP by sharing TTA information from NOP to AOP at planning stage.				V3
Deliverables	OSED, SPR, INTEROP, VALR				
Contributing Projects	04.07.01, 10.08.01 07.03.02, 07.06.05, 03.03.02 , 03.03.03, 13.02.03				
Contributing AU(s)	Air Berlin, Air Europa, EasyJet				
Exercise	OIs	Validation Technique	Validation Platform	Prototype	Exercise Completed
EXE-04.07.01-VP-002	CM-0102-A CM-0103-A	Shadow Mode	DSNA Coflight-Based IBP, Toulouse	Complexity Prediction tool - THALES	Postponed to Release 4
EXE-07.03.02-VP-522	DCB-0205	Live Trial	ECTRL ENMVP Brussels or Brétigny	(IFPS + ETFMS prototypes)-ECTL 13.02.03-D81-NATS	Postponed to Release 4
EXE-07.03.02-VP-632	DCB-0103-A	Live Trial	ECTRL ENMVP Brussels or Brétigny	(IFPS + ETFMS prototypes)-ECTL	28/06/2013

3.2.1.3 Priority Strategic Business Need: Traffic Synchronisation

OFA03.02.01 – ASPA S&M					
Achievement	Validation in TMA environment of two additional ASAS Sequencing and Merging manoeuvres as contribution to Traffic Synchronization in TMA : - vector then merge - follow route then merge. Two first manoeuvres (remain behind & merge then remain behind) have been validated in Release 2.				V3
Deliverables	OSED, SPR, INTEROP, VALR				
Contributing Projects	05.06.06, 09.05, 10.03.02, 10.04.04, 03.03.02, 03.03.03.				
Contributing AU(s)	None				
Exercise	OIs	Validation Technique	Validation Platform	Prototype	Exercise Completed
EXE-05.06.06 - VP-199	TS-0105A	RTS	AIRBUS Aircraft Integration Simulator, Toulouse ENAV IBP Rome	AIRBUS ASPA function ATC Support to ASAS sequencing and merging operations, SELEX TBS, SELEX	06/12/2013
EXE-05.06.06 - VP-200	TS-0105A	Flight trial	AIRBUS Flight Test Aircraft, ENAV IBP Rome	AIRBUS ASPA function ASPA S&M, SELEX	Postponed to Release 4

OFA04.01.02 – Enhanced Arrival & Departure Management in TMA and En Route					
Achievement	Extension of arrival management horizon into the en-route phase including the arrival management for multiple airports and the integration of AMAN-dependent Point Merge procedures in a multiple airport TMA.				V3
Deliverables	OSED, VALR				
Contributing Projects	05.03, 05.06.04, 05.07.04				
Contributing AU(s)	IATA				
Exercise	OIs	Validation Technique	Validation Platform	Prototype	Exercise Completed
EXE-05.03-VP-580	TS-0303 TS-0305	RTS	NATS IBP at Southampton	Not Applicable	Another iteration of

	AOM-0603				similar exercise provided sufficiently results leading to the cancellation of this exercise
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OFA04.01.02 Enhanced Arrival & Departure Management in TMA and En Route -					
Achievement	Development of tools assisting the controllers in the application of the i4D concept in particular : - a further refinement of HMI; - increased automation in the 4D trajectory negotiations between air and ground; - enhanced prototypes of a What-if function; - the use of the downlinked EPP in additional tools, e.g. workload and conflict detection/display				V3
Deliverables	OSED, VALR, SPR, INTEROP & TS				
Contributing Projects	04.03, 09.01, 10.07.01, 03.03.02, 03.03.03				
Contributing AU(s)	ELFAA and IATA				
Exercise	Ols	Validation Technique	Validation Platform	Prototype	Exercise Completed
EXE-04.03-VP-324	TS-0103	RTS	ECTRL MUAC	ATS Datalink, INDRA ATS Datalink, ECTRL	08/03/2013
EXE-04.03-VP-463	TS-0103	RTS	AIRBUS Aircraft Integration Simulator, Toulouse ECTRL MUAC	Integrated Airborne i4D simulator II, AIRBUS ATS Datalink, INDRA ATS Datalink, ECTRL	12/12/2013

EXE-04.03-VP-472	TS-0103	Flight trial	AIRBUS Flight Test Aircraft ECTRL MUAC	i4D Test Aircraft, AIRBUS ATS Datalink, INDRA ATS Datalink, ECTRL	Postponed to Release 4 to combine the flight test with Exe 5.6.1-VP-478
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3.2.1.4 Priority Strategic Business Need: Moving from Airspace to 4D Trajectory Management

OFA03.01.08 - System interoperability with air and ground data sharing					
Achievement	Validated procedure for coordination between ATSUs through the utilization of Flight Object information				V3
Deliverables	OSED, VALR, TS & INTEROP				
Contributing Projects	04.03, 03.03.02, 03.03.03, 10.02.05, 14.02.09				
Contributing AU(s)	None				
Exercise	OIs	Validation Technique	Validation Platform	Prototype	Exercise Completed
EXE-04.03-VP-022	AUO-0204-A	Real Time Simulation	DSNA Coflight-Based IBP, Toulouse ECTRL MUAC, Maastricht DFS ENR IBP, Langen	Coflight, SELEX-THALES IOP ITEC, INDRA	22/11/2013

OFA03.01.04 - Business and Mission Trajectory					
Achievement	Enhancement of the current flight plan filing process which includes: <ul style="list-style-type: none"> ▪ Submission by FPL originator of calculated 4D profiles and aircraft performance information (Enhancement of both ADEXP and B2B messaging for Flight Plan input); ▪ Modification of IFPS to integrate 4D profiles and performance information for flight plan validation process. 				V3
Deliverables	OSED, VALR				
Contributing Projects	07.06.02, 11.01.04, 13.01.01, 13.02.01, 03.03.02, 03.03.03				
Contributing AU(s)	Air France, EBAA, EFLAA, LAG				
Exercise	OIs	Validation Technique	Validation Platform	Prototype	Exercise Completed
EXE-07.06.02-VP-616	IS-0301 AUO-0203-A	Shadow mode	ECTL ENMVP, ECTL Brussels Fly4D FOC/WOC, Airbus Toulouse	(IFPS + ETFMS prototypes)-ECTL AOC Flight Planning prototypes -Fly4D (LIDO & SABRE)	To be executed 31/01/14

3.2.1.5 Priority Strategic Business Need: Conflict management and automation

OFA03.04.01 - Enhanced Ground Based Safety Nets					
Achievement	Enhanced STCA performance and operations through the use of Aircraft Derived Data (ADD) subject to quick variations and/or frequent updates (e.g. roll angle / track angle rate during turning manoeuvres, selected flight level to anticipate imminent level changes or imminent level-off of transitioning aircraft).				V3
Deliverables	OSED, SPR, VALR & TS				
Contributing Projects	04.08.01, 03.03.02, 03.03.03, 10.04.03				
Contributing AU(s)	None				
Exercise	OIs	Validation Technique	Validation Platform	Prototype	Exercise Completed
EXE-04.08.01-VP-239	IS-0302	Shadow Mode	ENAV IBP Rome	Enhanced Safety Nets, SELEX	18/10/2013

3.2.1.6 Other Validation Exercises

OFA06.03.01 - Remote Tower					
Achievement	Validated procedures, requirements and technical specifications for provision of Aerodrome Flight Information Service on a single airport from a single remote site.				V3
Deliverables	OSED, VALR, TS				
Contributing Projects	06.09.03, 12.04.07				
Contributing AU(s)	AOPA, EBAA, Wideroe, SAS, TAP				
Exercise	OIs	Validation Technique	Validation Platform	Prototype	Exercise Completed
EXE-06.09.03-VP-058 ^(*)	SDM-0201	Shadow Mode	NORACON IBP SAAB Malmö ATCC	Remote tower- NATMIG	15/03/2013

In total 10 exercises have been completed with 3 additional exercises to be executed in January 2014. Although the final results of Release 3 will be assessed in June 2014, the initial feedback from exercises participants is quite promising. Release 3 can be already assessed as positive insofar it should deliver the following SESAR Solutions:

- Procedures for transiting from RNP environment to GLS final approach based on GBAS;
- Enhanced Short Term Conflict Alert system enriched with downlinked aircraft parameters;
- Optimised enhanced braking information at a pre-selected runway exit coordinated with ground ATC by voice;
- Remote Air Traffic Information Services for a single airport with low density traffic.

In terms of resources consumed, on the basis of available data, it can be estimated that the exercises performed represent 9.3% of the planned programme's resources for the period.

3.3 Release 4 definition

While Release 3 was ongoing, in order to ensure the continuous progress of the Research and Innovation activities, during 2013 Release 4 was defined as from June 2013 with an enhanced Top-Down approach. The Programme Committee and finally the Administrative Board agreed on Release 4 content at the end of 2013, so to ensure the timely launch of activities in 2014.

The definition of Release 4 took into account the ongoing Reallocation 2013 and IBAFO III initial results and was subject to the System Engineering review. In particular, during 2013, the SJU and its Members further enhanced:

- the commitment of the contributing Projects,
- the clarity of the concept and of the operational / technical solution,
- the clarity of the validation exercise scope (expected achievements and validation objectives)
- the relevance of the validation approach (RTS, flight trials) with respect to the target maturity,

- the assurance of resources availability (controllers, platforms, Airspace Users, WP3 support).

Release 4 includes 20 exercises (among which 4 are moved from Release 3) clustered into 13 OFAs (1 Integrated Validation addresses 2 OFAs) and covers 4 Priority Strategic Business Needs out of a total of 5

The type of delivery expected in the 2014 Release 4 is defined as a package of work having completed the V3 and on which a decision for industrialization and subsequent deployment can be made.

The main operational improvements that Release 4 will deliver are:

- **Traffic Synchronisation**
 - Enhanced Arrival Management procedures integrating Airborne Spacing manoeuvres in an i4D+CTA and AMAN Extended Horizon environment;
 - Basic AMAN-DMAN-ASMGCS integration;
 - I4D+CTA operational procedures (for ATCO and Flight Crews) in the TMA environment
 - Extended AMAN horizon operations with cross-border arrival management.
- **Airport Integration & Throughput**
 - Improved low visibility operations thanks to the use of GBAS stations enabling Cat II/III approaches;
- **Network Collaborative Management and Dynamic Capacity Balancing**
 - Enhanced civil-military coordination using real-time airspace status data and the use of Variable Profile Area principle;
 - Further development of the Short Term ATFCM Measures coordination procedures;
 - Enhanced slot swapping procedures between different airlines;
- **Conflict management and automation**
 - Enhanced Medium term Conflict Detection and Resolution tools for the Planner and Tactical Controllers in the En Route;
 - ACAS Resolution Advisory downlinked on the controller working position.
- Furthermore progress will be achieved in **Information management** through:
 - Enhanced pre-flight briefing services based on Digital NOTAM and digital MET data.

It is estimated that around 22% of the R&I Programme planned resources for 2014 will be involved in Release 4, while the remaining resources are focused on applied and pre-industrial research to ensure its reaching the necessary maturity levels in view of the next Releases.

3.4 Programme achievements: results by WPs

As already mentioned, in order to ensure the adequate functioning and supervision of the R&D activities, the Programme is organised in Work Packages (WPs), Sub-Work Packages and Projects (fig.2).

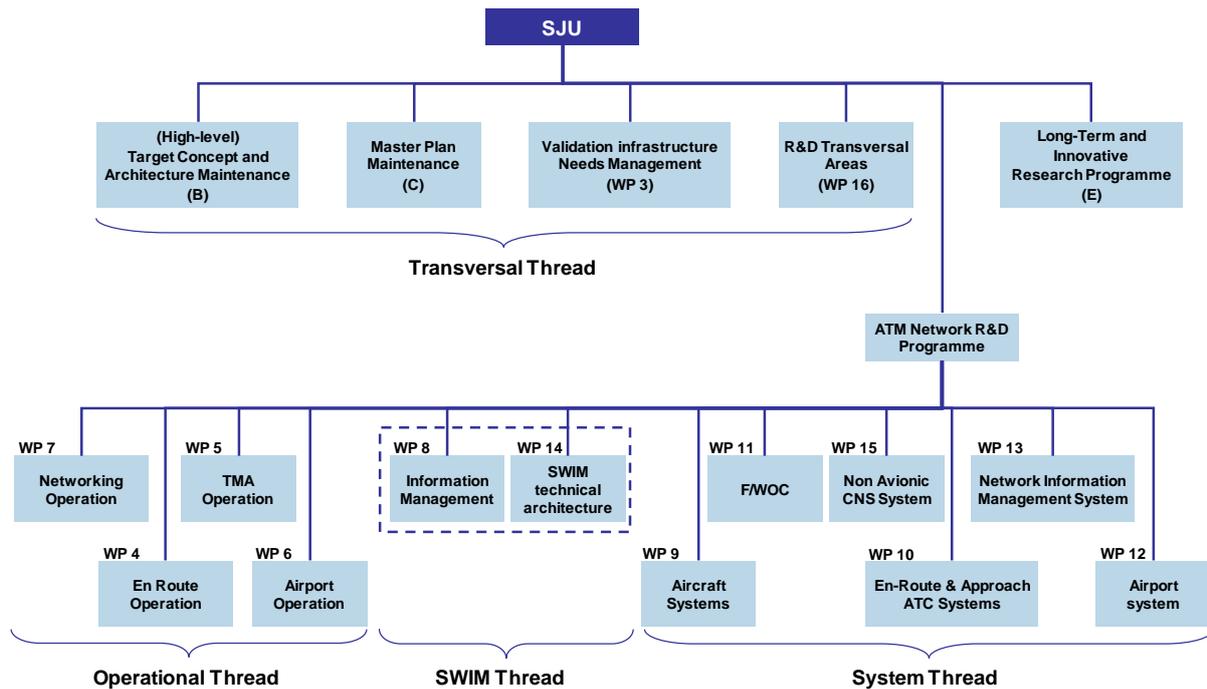


fig.2

In detail, the Programme is split in 4 different threads:

- Operational considerations are addressed under WPs 4, 5, 6 and 7,
- System considerations are addressed under WPs 9, 10, 11, 12, 13 and 15,
- System Wide Information Management considerations are addressed under WPs 8 and 14,
- “Transverse activities”, such as validation infrastructure, development of safety, security, environment and human performance cases, European ATM Master Plan, Target concept and architecture maintenance, are dealt by a number of additional WPs (i.e. B, C, 3, 16).

The figure below (fig.3) refers to the advancement status (actual versus plan) of the WPs as of 31 December 2013. The Programme progress status is regularly monitored at the level of the Programme Control Group and Programme Committee ensuring that assessments are conducted at due time and corrective actions taken.

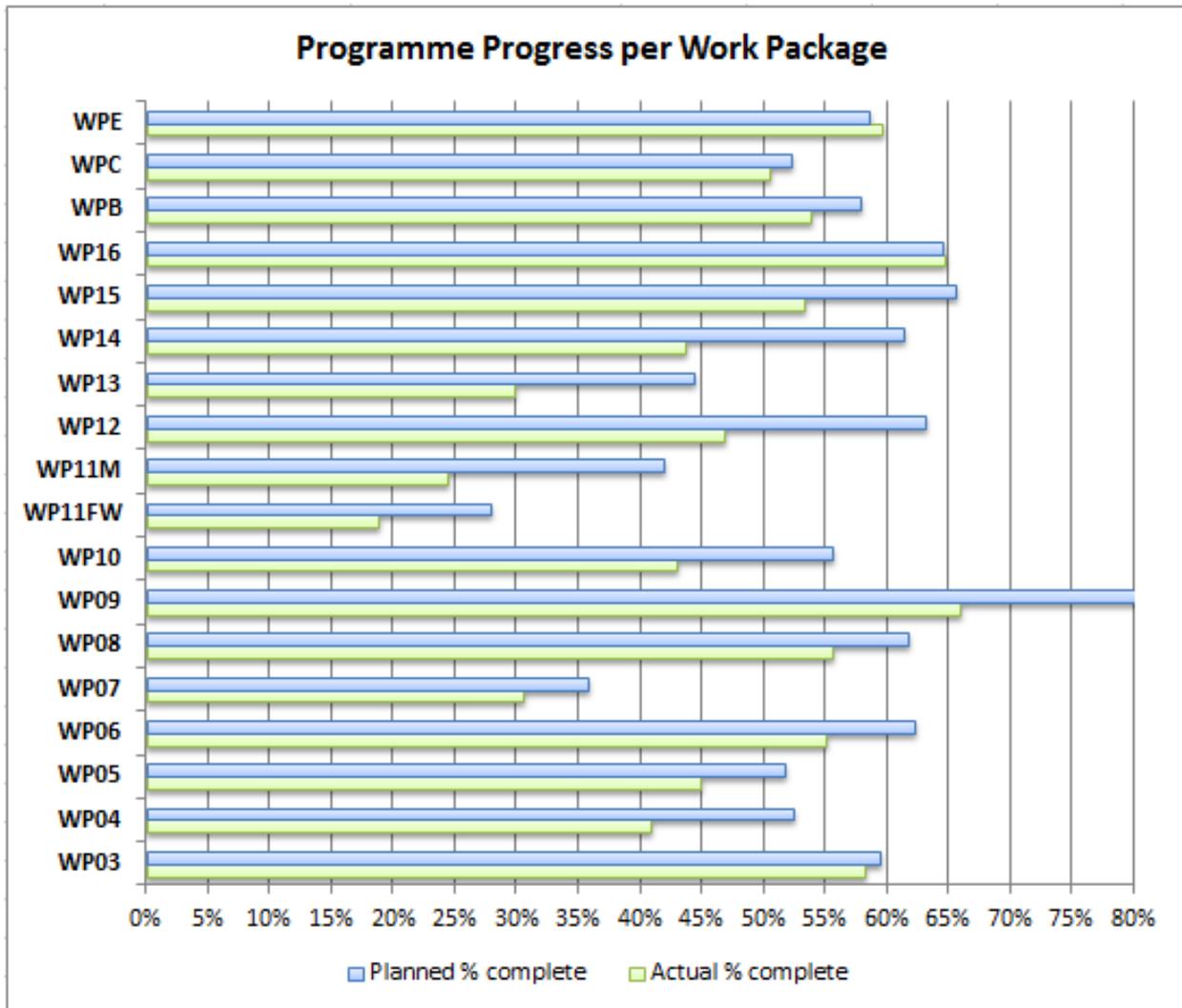


fig.3

The gaps in terms actual complete versus planned are at large extent due to a lower resources availability (see section 4.2). Furthermore, in a number of cases the development of operational requirements and concepts in the context of operational projects required deeper work and analysis compared to the initial expectations, to allow the identification of the most adequate, effective and efficient solutions. As a consequence, it was possible to produce technical specifications only at the completion of the operational work with a cascading effect on the system projects.

In the same context, this created some bottleneck in the development and validation of prototypes, where some industry partners experienced simultaneous demands for prototypes and platforms to support operational validations – in some cases, these platforms were also used to support operational testing (i.e. beyond R&I).

The Reallocation 2013 was put in place exactly to address the re-focusing of the efforts and resources in the areas where weaknesses have been identified.

3.4.1 WP 3 – Validation Infrastructure Adaptation and Integration

Scope

The scope of WP3 is defined by the evolution of required Industry-Based/Pre-Operational Verification and Validation Platforms to include simulation, shadow mode and/or live trials capabilities. Combined with the connection/integration of the necessary test tools, this allows these platforms to be used for verification and validation activities.

WP3 also has the responsibility of SESAR Verification and Validation Infrastructure (V&VI) that includes the set of preparation/analysis tools, Validation and Verification facilities, and test equipment.

Objectives

The objective of WP3 is to support the SESAR Partners and the Operational and Technical Threads to properly define and coordinate the timely evolution and setting up of Verification and Validation Platforms along with the required support to adaptation and integration of the relevant tools and prototypes focusing on V2 and V3 maturity phases.

2013 Report

WP3 continued to take an active part in the collection of information for the V&V Roadmap as well as supporting SJU in the analysis of completeness, correctness and coherency of the V&V data. In the context of Release 3, WP 3 led successfully the System Engineering Review 2 following the validation exercises life cycle. WP03 supported SJU in the definition of the Release R4 exercises and prepared the R4SE32 guidance taking into account the increased exercises complexity.

For validation exercises (either R3 or no-release exercises) requesting support, WP3 has been supporting operational, system and transversal projects at different stages of the validation chain: capturing the V&V needs, supporting the development and/or the adaptation of the Validation Industrial Platforms (IBPs), the V&VI infrastructure and the measurement tools, integrating the prototypes made available by the primary system projects into the IBPs, doing their technical acceptance in order to ensure their readiness for validation exercise execution.

WP3 has established recognised system engineering and information methodology within the programme, the steadily increasing number of projects requesting for WP3 support for their validation activities confirms it.

The activities planned by WP3 were conducted in due time and quality, the planned tasks progress being continuously monitored.

The list of deliverables made available to the SJU for assessment is in Annex 2.

3.4.2 WP 4 – En-Route Operations

Scope

The scope of Work Package (WP) 4 is to provide the operational concept description for the En Route Operations and perform its validation. The term “En Route” includes both ‘continental’ and ‘oceanic’ applications. Also, the applications of 4D, performance-based operations are seen as a cornerstone of future En-route operations.

Objectives

The objectives of WP4 are to:

- Develop, refine and update the En Route concept, based upon the SESAR CONOPS and ensure consistency with other elements of the work programme,
- Define and perform the necessary validation activities including operability, safety & performance assessment at all levels;
- Demonstrate the operational feasibility of the En Route Operations concept in a complete ATM environment (including systems) in order to:
 - Improve the provision of the Separation service through the development of concept using advanced RNP capabilities, full aircraft capabilities in terms of 4D while optimizing the controller work (evaluating the concept of Multi Sector Planners for improve sector productivity);
 - Improve the ground safety nets functionalities considering the proposed operational functionalities such as used of Downlink Aircraft Parameters, or the improved air-ground collaboration;
 - Improve the airborne safety nets in order to reduce false alerts and to consider latest evolutions.

These objectives are being achieved through a portfolio of 16 R&D projects.

2013 Report

One of the major achievements in 2013 is the Roll out of 4 OFAs under WP 04 coordination:

- OFA 03.01.01 Trajectory Management Framework & System Interoperability with air and ground data sharing;
- OFA 03.03.01 Ground Based Separation Provision in En Route;
- OFA 03.04.01 Enhanced Ground Safety Nets;
- OFA 03.04.02 Enhanced ACAS.

With all projects in their execution phases but three (4.7.4-a, 4.7.5 and 4.8.4), 2013 has seen the continuation of the definition of V2 and V3 requirements through the publication and the delivery of OSED and SPR for all En Route functionalities (Operational Improvements).

Several validations (V2 and V3) of these requirements have been performed e.g. Complexity Assessment and Resolution, Controlled Time of Arrival with i4D, Enhanced Ground Safety Nets, Sector Team Operations for Multi Sector Planner, System Interoperability with Air and Ground Data Sharing for ATC to ATC Interoperability. These validation exercises were performed in cooperation with WP10 system mirror projects and some WP9 projects.

Large number of these validation activities was part of the Release 3, where a series of exercises were performed involving NATS iFACTS, Noracom platform and multi-platform interconnection

between MUAC, DSNA and DFS. The initial results of these exercises have been encouraging, with further exercises to take place in 2014.

WP 04 contributed to key SESAR Solutions lidding implementation such as:

- Automated support for Dynamic sectorization, supporting En-Route Capacity improvement;
- Multi-Sector Planner (1 Planner - 2 Tactical) contributing to Cost Effectiveness improvement.

The engagement of the Airspace Users and Staff Association's representatives within projects and validation exercises has been fruitful, with positive feedback from both projects and the representatives concerned.

The quality of deliverables submitted by WP4 projects has improved significantly in 2013 with the vast majority having been assessed by the SJU as either Green (no reservation) or Amber (minor clarification or amendment required).

The list deliverables made available to the SJU for assessment is in Annex 2.

3.4.3 WP 5 – TMA Operations

Scope

Work Package 5 manages and performs all Research, Development and Validation activities required to define the TMA ATM Target Concept (i.e. Concept of Operations, System Architecture & enabling technologies). This covers all phases of planning and execution of flights/trajectories and the identification of supporting technical systems/functions necessary for TMA Operations. TMA Operations are considered as those from 'top-of-descent' until landing and from take-off until 'top-of-climb'. Also, the applications of 4D, time-based operations are seen as a cornerstone of future TMA and En-route operations.

Objectives

The objectives of WP5 are to:

- Refine the concept definition at TMA operational context level and for co-ordinating and consolidating the various projects and sub work packages that encompasses Terminal Airspace Operations;
- Define and perform the necessary validation activities including operability, safety & performance assessment at all levels;
- Demonstrate the operational feasibility of the TMA Operations concept in a complete ATM environment (including systems);
- Consider the potential for operational trials and the early introduction of SESAR Concepts in a TMA environment;
- Develop, refine and update the TMA concept, based upon the SESAR CONOPS and ensure consistency with other elements of the work programme;
- Define and perform the necessary validation activities including operability, safety & performance assessment at all levels;
- Demonstrate the operational feasibility of the TMA Operations concept in a complete ATM environment (including systems) in order to:
 - Improve the Traffic Synchronisation service through the development of concept using advanced RNP capabilities, full aircraft capabilities in terms of 4D while optimizing the controller work (evaluating the concept of Multi Sector Planners for improve sector productivity);
 - Improve the Vertical Profile management functionalities considering the RNAV aircraft capabilities;
- Improve the Controller Working Position for both En Route and TMA Operations.

2013 Report

With all projects in their execution phases (except 5.7.3 expected to be restarted in 2014), 2013 has seen the continuation of the definition of V2 and V3 requirements through the publication and the delivery of OSED and SPR for all En Route functionalities (Operational Improvements).

Several validations (V2 and V3) of these requirements as Controlled Time of Arrival with i4D, Extended AMAN Horizon, LPV procedures, ASAS Sequencing & Merging have been performed. These validation exercises were performed in cooperation of WP10 system mirror projects and some WP9 projects.

Several of these validation activities were part of the Release 3, where a series of exercises were performed involving Noracom platform, ENAV platform coupled with airborne platform. The initial results of these exercises have been encouraging, with further exercises to take place in 2014.

The consolidation at OFA level, for example, for common requirements has significantly progressed in 2013, in particular, for the very complex OFA 04.01.02 (Enhanced Arrival and Departure Management).

WP 05 contributed to key SESAR Solutions leading to implementation such as:

- AOC Data increasing Trajectory Prediction Accuracy for Safety benefits;
- P-RNAV procedures in complex TMAs using Point Merge, relieving Capacity Bottlenecks;
- AMAN and Point Merge to improve Predictability;

Consequently 2 projects closed having achieved their full scope of activity with concrete delivery: P 05.05.02 and P 05.07.04.

The engagement of the Airspace Users and Staff Association's representatives within projects and validation exercises has been fruitful, with positive feedback from both projects and the representatives concerned.

The quality of deliverables submitted by WP5 projects has continued to be of a high standard, with the vast majority having been assessed by the SJU as either Green (no reservation) or Amber (minor clarification or amendment required).

The list of deliverables made available to the SJU for assessment is in Annex 2.

3.4.4 WP 6 – Airport Operations

Scope

The Airport Operations Work Package is addressing developments associated with the ‘airside’ elements of airport operations. To ensure effective planning and management, ‘landside’ elements (such as passenger and baggage handling) are also being taken into consideration, but with associated developments being undertaken outside SESAR.

Objectives

The objectives of WP6 are to:

- Develop, refine and update the Airport Operations concept, based upon the SESAR CONOPS and ensure consistency with other elements of the work programme,
- Develop collaborative airport planning, including development of the Airport Operations Plan (AOP) and of the Airport Operations Centre (APOC), as well as improvements to Airport CDM,
- Improve the management of airport surface traffic (which includes aircraft and vehicle traffic) through the definition of safety nets to prevent conflicts and collisions, as well as the better routing, guidance and tactical planning of traffic movements under all weather conditions,
- Improve runway management through enhanced procedures, dynamic separations (including wake vortex) and the definition of associated system operational requirements (both ground and airborne). The focus is on improving runway throughput at all times, whilst preventing runway incursions and reducing queuing,
- Improve the provision of aerodrome control services at remote or small airports through the development of concepts for ‘remote and virtual towers’

These objectives are being achieved through a portfolio of 22 R&D projects.

2013 Report

2013 saw the refinement of the operational concept and some validation activities taking place at V2 and V3 maturity levels in all the areas covered by WP6. Collaboration between projects working on similar topics continued to increase in the Integrated Surface Management and the Airport Operations Management Operational Focus Areas (OFAs) in particular. All the OFAs have now a clear work plan and a Verification and Validation roadmap until the end of the Programme.

In the Low Visibility Procedures (LVPs) using Ground-Based Augmentation System (GBAS) OFA, the concept aiming at optimising approach and landing by using GBAS was brought to a V3 maturity level. A first series of flight tests took place in Frankfurt and Toulouse, demonstrating that CAT II/III approaches are achievable. Further validations are ongoing on this topic in Release 3.

In the Airport Safety Nets OFA, the non-conformance to ATC procedures and instructions detection was successfully validated at a V2 maturity level, proving its contribution to a safety increase on the airport surface and runway. Moreover, the shadow-mode trials performed at Hamburg airport in a Release 2 exercise proved that the procedures and tools for the detection of conflicting ATC clearances are feasible, useable and improve airport safety.

In the Enhanced Runway Throughput OFA, two real-time simulation exercises in Release 2 demonstrated that the time based separation (TBS) minima method of operations for approach and landing is ready for deployment. The exercises showed that TBS contributed to increase the landing rates, even in stronger wind conditions; and allowed a reduction of holding times and stack-entry to

touchdown times. Finally, a Release 3 live trial exercise showed promising initial results in terms of reduction of the runway occupancy time through optimised braking systems.

In the Integrated Arrival/Departure Management at Airports, the coupled AMAN/DMAN concept was refined and brought to a V2 maturity level. The combination of the TBS concept and the AMAN was validated at a V2 maturity level.

In the Integrated Surface Management OFA, several V2 and V3 validations including three Release 2 real-time simulation exercises demonstrated the benefits brought by the surface planning and routing functions of an A-SMGCS supported by data link communications.

In the Airport Operations Management OFA, the concept was matured to a V2 level through the delivery of the first full set of consolidated OFA documents. Moreover, a Release 3 exercise assessed the benefits of improved exchanges between the airport and the Network Manager through Target Time of Arrivals. The initial feedback is very positive.

In the Controller Working Position – Airport OFA, four Release 2 exercises demonstrated the benefits of advanced and integrated HMIs for ATCOs at airports.

In the Remote Tower OFA, a shadow mode Release 2 validation demonstrated that the Single Remote Tower concept is feasible and the level of service provided is equivalent to an Air Traffic Service (ATS) provided from a local tower. In addition, work continued on the concept definition for remote provision of ATS for multiple aerodromes and as a contingency solution.

Some delays have been experienced mainly due to the need to secure synchronisation between operational and system projects which has been achieved through the construction of the OFA plans. However, none of the resulting plan evolutions is creating significant issues in the realisation of the Programme objectives.

The list of deliverables made available to the SJU for assessment is in Annex 2.

3.4.5 WP 7 – Network Operations

Scope

The scope of the Network Operations Work Package covers the evolution of services taking place in the business development and planning phases to prepare and support trajectory-based operations including airspace management, collaborative flight planning and Network Operations Plan (NOP). It encompasses the services included in the execution phase to facilitate trajectory-based operations in case of capacity issues.

Objectives

The objectives of WP 7 are to:

- Develop, refine and update the Network Operations concept, based upon the SESAR CONOPS and ensure consistency with other elements of the work programme;
- Develop the methodologies for airspace management and organisation, including processes for an improved flexible use of airspace, the accommodation of user preferred routes and dynamic airspace configurations;
- Develop the Business/Mission Trajectory management (including the shared business trajectory, used for advanced planning and the required Business trajectory, which is the final and agreed trajectory);
- Further develop the Network Operations Plan (NOP), a dynamic rolling plan providing a detailed overview (past, current and forecast) of the European ATM environment to those concerned;
- Improve Demand Capacity Balancing (DCB) process to ensure that the ATM network is able to meet the demands of all users, taking into account the 4D trajectories, described through Reference Business Trajectories (RBT);
- Define and develop the User Driven Prioritisation Process (UDPP), whereby operators can apply their own priorities during periods of capacity shortfall, based upon a CDM approach.

2013 Report

During 2013, the WP7 and 13 organisation has been further streamlined resulting in a reduction from 25 projects in the original BAFO2, to 7 projects (1 Management and 6 R&D Projects) in the latest BAFO1/2 reallocation. WP7 and 13 are now effectively managed as a single work package, with the R&D projects addressing both operational and system aspects.

WP7 has continued to be proactive in the preparation and execution of SESAR Releases. Compared to 2012, there has been a significant improvement in the timeliness of delivery and the quality of key documents, in particular OSED and Validation Plans. In the first half of 2014, a key challenge will be to freeze the Validation and Verification Roadmap in order to baseline the remaining activities until end 2016.

The main achievements in 2013 include:

- The federating project, Project 07.02, has established a top-down approach on concept development and validation. The Network Detailed Operational Description (DOD) for Step 2 is now at a final stage and future versions will take into account validation results. An initial version of the Step 2 DOD has been delivered.
- In close cooperation with WP06, the Release 3 exercise EXE-07.03.02-VP-632 was conducted as a live trial validating CTOT to TTA and AOP/NOP Integration for Palma arrivals. Moreover, parallel activities in the FAIRSTREAM Demonstration have been taken into account. Important conclusions and recommendations on this CTOT-to TTA work will be described in the validation report due to be published in January 2014.

- Airspace users have expressed a strong interest and have actively participated in the User Driven Prioritisation Process activities. Concerning the short-term concept, work has progressed on Enhanced Slot Swapping and (flight) Departure Reordering. Within the DFLEX Demonstration, the reordering of the flight departure sequence at Paris Charles de Gaulle was demonstrated.
- In close cooperation with 11.01 (FOC), validation activities on the Extended Flight Plan have progressed. These initial activities are addressing improved trajectory predictability and also address issues associated with flight plan rejections.
- Preparatory work for a large scale Short-Term ATFCM Measures (STAM) trial in 2014 has been performed. There has also been preparatory work for AFUA and Digital Briefing validations, which will also take place in 2014.

The list of deliverables made available to the SJU for assessment is in Annex 2.

3.4.6 WP 8 – Information Management

Scope

In order to realise the concept of SWIM (System Wide Information Management) for ATM, which is needed to achieve interoperability and inter-system seamless operations, WP8 primarily defines the ATM Information Reference Model (AIRM) and the Information Service Model (ISRM) to be used by the various ATM services and necessary to develop the SWIM specifications and test platforms.

Objectives

The Objectives of WP 8 are to:

- Describe the performance and operational requirements of ATM wide information sharing;
- Strongly contribute to the definition of the Information View of the European ATM Architectural Framework and the ATM Information Model;
- Develop and document the European ATM Information Reference Model (AIRM);
- Support the standardisation of ATM Information;
- Secure semantic and syntactic interoperability within ATM for Europe and support to an overall global commitment in the same field;
- Be responsible for ensuring the effectiveness and integrity of the functional architecture for Information Management;
- Integrate the ATM world in the information sense, a necessary step towards the realisation of Service Oriented Approach (SoA);
- Produce and document (ATM) Information Service in support to a variety of system WPs or other Industry segments;
- Directly drive the operational requirements for the technical system architecture of Information Management to be developed in the SWIM Work Package (WP 14);
- Validate deliverables from various Operational WPs in order to align, harmonise and structure the different levels of ATM Information Services.

2013 Report

All WP8 projects, except 08.01.11, were in execution mode. Project 08.03.01 has been suspended while WP-B addresses first the need for SWIM supervision at the system level.

WP8 has been in 'steady production mode' in 2013 following the implementation of the SWIM Action Plan, which saw its completion at the end of 2012.

An update of the SWIM Concept of Operations document was produced by project 08.01.01, which was followed by a more detailed and formal specification of the required Information Management functions that are needed for SWIM.

The first version of the SWIM compliance framework that was developed by 08.01.01 a well has been tested in collaboration with WP14 for the 2013 SESAR SWIM Master Class. The development on the SWIM registry has continued in 2013. A prototype Registry has been used to support to 2013 SESAR SWIM Master Class as well.

In general SWP8.1 has been steadily progressing according to plan. Two AIRM releases were delivered providing a baseline vocabulary for the operational projects. The actual and consistent use of this standard vocabulary by those projects remains to be better assured. The AIRM governance has reached a mature level of operations allowing a controlled and traceable evolution of the AIRM.

SWP08.03 has again delivered two releases of the Information Service Reference Model (ISRM 0.6 and 1.0). A main change for the work in SWP 08.03 has been the introduction of the Service Coordination Group under coordination of B.04.03. This group is composed of representatives from the transverse projects of all operational and technical work packages, as well as WP08, WP14, and WP03. It oversees the application of the service development method that was jointly defined by WP-B, WP08 and WP14, and agrees on the major decision points in the service development process. As a result, the so-called fast track initiatives that were previously set-up by WP08, are now being replaced by service development activities (SVAs) under SCG coordination. This change has further assured the buy-in and support of the operational and system projects in the SWIM development.

The progress by WP08 in terms of AIRM and ISRM development remains primarily driven by the extent to which service orientation is picked up and requirements are expressed in the Operational Focus Areas. The trend here remains positive but in various operational and technical areas there is still significant progress to be made. Towards the end of 2013, a special initiative was taken by the SJU to consult with a number of OFAs on the coverage of SWIM in their validation plans for Release 4. This has helped improve the understanding of SWIM in these OFAs and their level of coverage in the upcoming validation activities.

A contract was let halfway through 2013 with one of the Associates to the SJU, the MOSIA consortium, to provide complementary activities mainly in support of WP08 (and somewhat to support WP14 too). This activity will continue till mid-2014 and will end with a contribution of the MOSIA consortium to the SWIM demonstration in May 2014.

The list of deliverables made available to the SJU for assessment is in Annex 2.

3.4.7 WP 9 – Aircraft Systems

Scope

The scope of the Aircraft System Work Package covers the required evolutions of the aircraft platform, in particular to progressively introduce 4D Trajectory management functions in mainline, regional and business aircraft. The work package will address:

- Developing and validating at aircraft level airborne functions identified in the ATM Master Plan;
- Ensuring operational & functional consistency across different airborne segments (Commercial Aircraft, Business Aviation, UAS, etc.);
- Identifying technical solutions for different airborne platform types such as Mainline aircraft, Regional aircraft and Business Jets;
- Ensuring global interoperability and coordination with important external initiatives such as NextGen in the U.S.

Objectives

The objectives of WP9 are to:

- Achieve a greater integration of the aircraft in heart of the performance-based European ATM system allowing an optimum exploitation of the increasing aircraft capabilities;
- Introduce progressively the 4D Trajectory management functions. Initial 4D capabilities will enable,
 - First, the downlink of airborne computed predictions to the ground which could enhance ground trajectory predictions and as such enhance ATM operations to a large extent, one example being to support Arrival Management in establishing a sequence on a merging point, and,
 - Second, the management of improved time constraints contributing to generalise Continuous Descent Approaches from Top to Descent in mid and high density areas.

A further step will allow the full exploitation of 4D Trajectory through ensuring that the aircraft is able to compute and to share reliable gate to gate 4D trajectory predictions with the ground and execute the agreed reference trajectory with possibly imposed times constraints;

- Enhance On-board approach functionalities and validate them to provide improved and all weather operations. This will allow initial CAT II/III GBAS L1 approach for new aircraft, providing rapid benefits under low visibility conditions. A second step will address the implementation of full multi-constellation (GPS, GALILEO) GBAS Cat II/III in the airborne equipment;
- Develop future on-board surveillance systems including dedicated wake encounter and significant weather (e.g. clear air turbulence) avoidance functions to reduce the risk of severe upsets due to atmospheric disturbances;
- Address environmental impact through Advanced Continuous Descent Approach aiming at minimising fuel burning and emissions, and decreasing noise;
- Improve surface movement operations through the introduction of functions to provide guidance on taxi routes to be followed and associated clearances and then alerting on traffic on other kind of safety related aspects;
- Ensure interoperability between civil “Business trajectories” and military “Mission Trajectories” to allow the conformance of military aircraft with new operational concepts and to enable military aircraft to fly with the same performance level than civil aircraft to better exploit airspace resource avoiding restricting part of it for military use only;
- Provide a globally compatible avionics roadmap supporting the ATM Master Plan, to be used as a reference by avionics and airframe manufacturers for development planning, hence minimising the number of transition steps for a better cost efficiency. This roadmap would be associated

with retrofitability and interoperability assessments and an airborne functional architecture where the different airborne sections developed in SESAR are mapped;

- Develop a gradual evolution of ADS-B in airborne functions allowing first an aircraft to establish and maintain time spacing from a target aircraft designated by the Air Traffic Controller (ASAS-Spacing). More advanced functions will be investigated to gradually introduce ASAS Separation concepts with the aim to help controllers in resolving conflicts between aircraft by temporarily delegating to the Pilots the responsibility to do the requested manoeuvre and maintaining separation during that manoeuvre.

In order to support the above evolutions, enhancement and additions to the CNS Technologies are foreseen, including updates to ADS-B, Airport datalink and Flexible communication avionics and improved navigation positioning technologies while addressing the different types of airborne platforms.

2013 Report

In 2013, 26 System Projects were in execution phase and one project started its initiation phase, namely P09.02 Airborne Full 4D Trajectory management & 4D Contract capability. Project 09.40 was suspended due to delays in operational inputs.

As part of the reallocation, some core projects were proposed to be extended (e.g. 09.01 for i4D FMS improvements, 09.33 for FANS related aspects) and some longer term were proposed to be terminated (e.g. 09.06 will be proposed for closure after completion of the V1 activities).

In terms of progress and maturity:

- Three projects are progressing in V3 (P09.01, P09.05 and P09.33) and developing core Step 1 airborne functions. These are used to perform a large number of operational validation activities with several operational projects and partners (i4D with MUAC/NORACON and ASPA with DSNA/ENAV).
 - Two airport related projects (P09.13 and P09.14) have significantly progressed in V2 (operational evaluations with Eurocontrol) and are entering V3 with planned validation activities with DSNA in CDG.
 - Two Technology projects (P09.12 and P09.16) have developed prototypes and have tested them against ground equipment.
- ,
- Project 09.01 Operational evaluations successfully demonstrated the technical feasibility of the i4D concept. A white paper has been submitted to continue validation activities between 2014 and 2016 in order to improve the airborne systems with enhanced ATM functions and anticipate the Very Large Demonstration activities planned for 2016 onwards. Good Europe-US cooperation continues for Standardisation with WG78 Data Communication Baseline 2 standard due March 2014, whilst WG85 4D Navigation in mid-2014;
 - Project 09.05 has developed the ASAS-Spacing function, implemented it in the different avionics and successfully integrated it in an aircraft integration simulator. The airborne simulators have been connected to the ENAV ground platform supporting 05.06.06 exercise #199 which has been executed and produced a number of data which is now under analysis. A white paper has been submitted within the 2013 re-allocation process to extend the project and have a broader look at ADS-B in applications ;
 - Project 09.33 is approaching the end of its original scope. The project has been proposed to be the focal project for the further development of the ATSU prototype and therefore for extension to 2016;
 - Projects 09.09 and 09.10 addressing RNP to xLS will be considered for inclusion within OFA 02.02.04 Approach Procedures with Vertical Guidance;

Projects 09.30 will be merged and included within Project 09.11 ensuring rationalization of Wake Vortex Encounter Prevention activities;

- Project 09.12 GBAS Cat II/III has provided significant contributions to the definition of GBAS – GAST-D and to International standardisation. Good progress is being made within OFA 01.01.01 LVPs using GBAS, including the successful mainline aircraft flight tests conducted and completion of the business aircraft flight tests and data recordings;
- Military Data link accommodation continues to progress. The key period will be the contribution to planned flight trials targeted for 2015 for P09.03. Contributions from P09.20, P09.24 and P15.02.08 are now fully coordinated and flight trials are scheduled for the 2nd quarter 2014;
- ADS-B on higher performance 1090MHz (P09.21) has demonstrated positive benefits and is approaching completion. The decision was taken to move into execution the Mid & Full ADS-B Capability Research P09.22 which will utilise the results from P09.21;
- Continuous Climbing Cruise Project 09.39 has performed additional opportunity studies to assess broader optimization and benefits;
- Flexible Communication Avionics 09.44 demonstrated initial feasibility and benefits. The phase 2 activities to develop prototype elements for verification is progressing
- Project 09.49 has progressed with its activities for Step1 however it is impacted by the lack of adequate sequencing between operational and system thread;
- Other projects have also satisfactorily progressed, producing functional requirements, functional architectures as well as technical studies to validate technical choices or to secure key points.

Most schedules are expected to progress further with the evolution of Operational Focus Areas. The majority of projects are also contributing to standardisation.

Airspace Users supported the projects and the added value was recognised both by project team and by airspace users.

The list of deliverables made available to the SJU for assessment is in Annex 2.

3.4.8 WP 10 - En-Route & Approach ATC Systems

Scope

The scope of this Work Package covers En-Route & TMA ATC System systems' changes, and related technical activities of phases V1-V3 of the development lifecycle reference model (i.e. up to the validation of system performance using pre-industrial prototypes). It addresses system/technical aspects such as functional and technical architecture, technical performance & safety requirements, technical interoperability requirements, associated specifications, models/simulation platforms and prototypes, technical validation and the development of inputs /proposals to technical standards groups.

Objectives

The objectives of WP 10 are:

- ATC system impact analysis of the operational improvements and identification of the induced system requirement to implement the evolution;
- Technical feasibility assessment of the operational changes from an architecture and technology point of view;
- Define, design, specify and validate the En-route & TMA ATC Systems needed to support the SESAR ATM target concept;
- Prototype development for system and operational validation

2013 Report

WP 10 contributed to key SESAR Solutions leading to implementation such as:

- Automated support for Dynamic sectorization, supporting En-Route Capacity improvement;
- Multi-Sector Planner (1P-2T) contributing to Cost Effectiveness improvement;
- AOC Data increasing Trajectory Prediction Accuracy for Safety benefits;
- P-RNAV procedures in complex TMAs using Point Merge, relieving Capacity Bottlenecks;
- AMAN and Point Merge to improve Predictability;

With all projects in their execution phases (except 10.02.03, 10.03.03, 14.04.03), 2013 has seen the continuation of the definition of V2 and V3 requirements through the publication and the delivery of Technical Architecture Document (TAD) and Technical Specification (TS) for all En Route and TMA functionalities (Enablers).

Several validations (V2 and V3) of these requirements have been performed in WP 4 or WP5. WP 10 contributed to these validations with Technical system development such as advanced AMAN tool, Complexity tools, evolutions to Controller Working Position (CWP).

One project (10.05.01) concluded its activities after accomplishment of its full scope with the delivery of ATC System support to operational improvements to implement the Variable Profile Areas (VPA) to support Advanced Flexible Use of Airspace (AFUA).

The quality of deliverables submitted by WP10 projects has continued to be of a high standard, with the vast majority having been assessed by the SJU as either Green (no reservation) or Amber (minor clarification or amendment required).

The incorporation of SWIM into the activities of WP10 has improved and there is now effective coordination with WP8 and WP14 through the development and implementation of SWIM based services for ATC to ATC IOP and AMAN/DMAN coupling.

The list of deliverables made available to the SJU for assessment is in Annex 2.

3.4.9 WP 11.01 - Flight Operations Centre

Scope

The scope of 11.01 covers Flight Operations Centres and Wing Operations Centres. The work covers concept development, validation, system development and verification; since 11.01 it is both an operational and a system work package.

Objectives

The objective of WP11.01 is to provide the system definition and contribution to operational validations for a generic FOPC/WOC that meets the user needs operating in the SESAR target ATM network.

2013 Report FOC/WOC

During 2013, 11.01 consolidated its role as a federating project for Flight Operations Centre (FOC) and Wing Operations Centre (WOC) aspects. It has progressed concept development and validation activities related to Extended Flight Plan, UDPP, AFUA and OAT Flight Plan aspects. As highlighted at the October Gate, the most effective contribution of 11.01 to other areas of the Programme needs to be clarified, and this is the topic of ongoing actions. There will be a further re-planning of 11.01 activities in early 2014.

As agreed at the December 2012 Gate, WP11.01 has been re-planned in early 2013 in order to ensure a better alignment with the rest of SESAR, notably with regards to the Steps and the OFAs.

The main achievements for 2013 include:

- DODs and OSEDs for FOC (Flight Operations Centre) and WOC (Wing Operations Centre) have been published. 11.01 continue to perform a strong federating role. A key concern relates to the definition of the role of the FOC/WOC in the different Step's concepts, in particular with regards to the execution of the Business trajectory. Reaching a consensus with B4.2 will be a key challenge for 2014. A strong involvement of airspace users continues to be a key part of 11.01's approach.
- In close cooperation with WP07, 11.01 have actively participated in the validation of the Extended Flight Plan. This concept provides an opportunity for significant benefits related to trajectory predictability and a reduction in flight plan rejections.
- In close cooperation with WP07, 11.01 is actively working in the UDPP activity notably with regards to the Step 2 concept.
- The concept development and validation activities for the WOC are at an advanced stage, notably with regards to AFUA, OAT flight plan and mission planning systems.
- As part of its realignment with the rest of the Programme, 11.01 is assessing opportunities to perform activities relating to Free Routing, AFUA (civil part in coordination with military), AIM and SWIM.

The list of deliverables made available to the SJU for assessment is in Annex 2.

3.4.10 WP 11.02 – Meteorological Information Services

Scope

The scope of the standalone Work Package, 11.02, covers: promoting current and future MET capabilities with the aim of gathering robust and detailed requirements for MET data and services; the design and development of MET infrastructure (including MET prototypes and the 4DWxCube) to support validation.

Objectives

WP11.02 addresses the requirements for meteorology within the SESAR Programme, in particular in relation to the impact meteorology will have on 4D trajectory based systems of the future, and in managing predictability in an efficient way.

2013 Report

During 2013, 11.02 consolidated its role as a Federating project for Meteorological (MET) aspects. Initiatives have been undertaken to increase programme awareness on MET capabilities. The lack of tangible opportunities to link future MET capabilities with ATM operational improvements is a major concern. Further to the October Gate, a number of actions are ongoing in order to improve the situation as:

- 11.02 is actively performing the role of MET Federating Project. A Detailed Operational Description (DOD) and Technical Architecture Document (TAD) have been delivered for MET. These documents provide a framework for MET activities in the Programme.;
- 11.02 held a second MET awareness workshop in May 2013 at the UK Met Office, Exeter in May 2013. The advantages arising from improved adverse weather monitoring and probability forecasting were highlighted.
- Based on a thorough review of Programme documentation, detailed MET requirements have been defined in the form of OSEDs, SPRs and INTEROPs.
- In preparation for the 2014 V&V Roadmap exercise, 11.02 has actively sought opportunities to link MET capabilities with ATM operational improvements. In particular, the improved integration of MET information in ATM decision making is a key aim.

The list of deliverables made available to the SJU for assessment is in Annex 2.

3.4.11 WP 12 - Airport Systems

Scope

The scope of the Airport Systems Work Package encompasses all Research & Development activities to define, design, specify and validate the airport systems needed to support the SESAR ATM target concept. It also addresses system/technical aspects such as functional and technical architecture, technical performance & safety requirements, technical interoperability requirements, associated specifications, models/simulation platforms and prototypes, technical validation and the development of inputs/proposals to technical standards groups.

WP 12 is undertaking technical developments and verification and support to validation, providing the ground-based system support to the new concepts, procedures and practices described by WP 6.

Objectives

The objectives of WP 12 are to:

- Support collaborative airport planning, including decision support and sequencing tools, meteorological observation and forecasting systems;
- Improve airport surface management, including advanced surveillance techniques, ground-based safety nets, ground-based routing and guidance systems as well as sequencing tools (e.g. SMAN and integrated AMAN/DMAN);
- Define and develop new runway management tools and systems supporting the dynamic application of wake vortex separations (i.e. wake vortex detection and prediction systems);
- Improve safety through the definition and development of ground-based safety nets, with a priority upon detecting runway incursions and preventing collisions;
- Define and develop the technical systems associated with the 'remote and virtual' towers, which will include appropriate surveillance systems.

All of these developments will be brought together so that they support the controller in his tasks by the prototyping of an advanced controller working position, through which a set of core HMI principles will be established.

These objectives are being achieved through a portfolio of 27 R&D projects.

2013 Report

The coordination with WP 6 projects is now fully effective with the roll out of all the Operational Focus Areas in the Airport Domain. Some significant adjustments to the projects' schedules were made to ensure that the WP 12 projects are fed with the operational requirements developed by WP 6 and that they support the validations managed by the operational projects.

Prototypes were specified, developed and verified to successfully support the V2 and V3 validations performed in WP 6, in particular in Releases 2 and 3. Those prototypes include:

- Non-conformance and conflicting clearance monitoring and alerting tools;
- Wake vortex detection/prediction tools;
- Arrival manager;
- Departure manager;
- A-SMGCS planning, routing and guidance tools;
- Airport operations plan;
- Advanced airport controller working positions;
- Remote tower

The list of deliverables made available to the SJU for assessment is in Annex 2.

3.4.12 WP 13 – Network Information Management System (NIMS)

Scope

The scope of the Network Information Management System Work Package covers the System and Technical R&D tasks related to the Network Information Management System (NIMS), the Advanced Airspace Management System (AAMS) and the Aeronautical Information management System (AIMS). It addresses the NIMS system-level definition and architecture concentrating on interoperability with other systems, further decomposes it into sub-systems from logical down to physical layers. It addresses the impact of new roles & responsibilities on local/sub-regional/regional systems considering the mapping of system functions on the various local/sub-regional/regional systems (namely NIMS, AOC, Airport, en-route/approach ATC).

The WP will then undertake the NIMS sub-systems definition and verification, addressing interoperability and connection between sub-systems and coordinate the management of common components between sub-systems.

Objectives

The objectives of WP 13 are to:

- Coordinate and map capabilities (services) on sub-systems and on their components;
- Define and develop network planning sub-system (Airspace Design, Capacity planning, ASM & ATFM scenario management and demand data management) which all aim at building and refining incrementally the NOP;
- Define and develop Aeronautical Information Management sub-system in relation to aeronautical, terrain, airport and aircraft data and in particular addressing the evolution of current European AIS Database studying the implementation at network level of the basic services and of added value services (e.g. flight briefing service);
- Define and develop Network Operations & monitoring sub-system related to Network operations and monitoring, in particular addressing the evolution of current IFPS (Initial/integrated Flight Plan) and ETFMS (Tactical Flow Management) sub-systems which all aim at executing & monitoring the NOP.

The WP will also define and verify the technical supervision of the NIMS necessary for maintaining the quality of service (e.g. in case of failures).

2013 Report

Please refer to the WP07 description for information on the restructuring of WP7 and 13, and the main operational activities supported by WP13. In addition, the main achievements for WP13 in are indicated below. During the early part of 2014, it will be essential to ensure that the operational and system work is closely aligned in the new WP/13 organisation.

The main achievements for 2013 include:

- A NIMS Technical Architecture Document (TAD) showing the main architecture evolutions for Step 1 has been published. The preparatory activities for a V2 validation platform are at an advanced stage, the availability of which should reduce dependency on the CFMU based platform which is also supporting operational releases.
- For the Flight Object, A first verification of the integration of NM systems into the FOS Network was performed. This integration was tested using a number of prototypes in NM and in MUAC.

Further verification activities are planned for 2014. Prototype development in support of the Extended Flight Plan has been performed.

- Prototypes were developed to support the CTOT to TTA trials for arrivals at Palma, and to support UDPP validations. There has also been preparatory work for the AFUA trials in 2014.
- Project 13.02.02 (AIM Sub-system definition) has performed operational and system work relating to Digital NOTAM and Integrated Digital Briefing. A V2 exercise addressing a NOTAM officer use case for Digital NOTAMS was performed. An integrated digital briefing validation is planned for 2014.

The list of deliverables made available to the SJU for assessment is in Annex 2.

3.4.13 WP 14 - SWIM technical architecture

Scope

The SWIM technical architecture Work Package is the follow-up in the context of SESAR of the SWIM-SUIT European Commission FP6 project. It uses as an input the SWIM-SUIT deliverables and adapts them and/or further develops them to cope with the SESAR Work Programme components.

Objectives

The primary objectives of WP14 are to define and validate the infrastructure solution for SWIM addressing the requirement received from WP8. The SWIM technical architecture work package has to interface with all other System WPs (9-15), while using the results of the European Commission's SWIM-SUIT project to develop an architectural description, technological options and system solutions. WP14 will also provide adequate support for SWIM exploitation to the other System WPs in order to ensure that system WPs will develop appropriate interfaces with SWIM.

In details to:

- Define and validate the infrastructure solution for SWIM addressing the requirement received from Information Management (WP8). The SWIM WP will have to interface with all other System WPs (9-15);
- Further develop the 'Intranet for ATM concept' by:
 - Performing an assessment of the Information Management needs of the SESAR CONOPS, as scoped by WP 8, to define the SWIM technical services that will be required,
 - Using the SWIM-SUIT results, to translate the results of the assessment into an architectural description, technological options and system solutions;
- Develop SWIM test platforms to support the operational and technical aspects of the SWIM validation and to provide regularly demonstrations;
- Provide adequate support for SWIM exploitation to the other System WPs in order to ensure that system WPs will develop appropriate interface with SWIM (via its IOP-middleware) and avoid system WPs assessing their impact on SWIM.

2013 Report

One project (14.01.01) had already been successfully closed out in 2011. In addition project 14.01.02 has not been producing output in 2013 as it was agreed that the remaining activity is no longer required. The project is waiting to be closed. Project 14.02.03 was suspended during 2013 as a result of the decision to have WP-B first investigate the need for supervision the system of systems level. Project 14.02.01 started its activity at the beginning of 2013.

Since the middle of 2012, the active projects in WP14 have worked in synchronised mode on two iterations (2.0 and 2.1) of the SWIM Technical Infrastructure design, specifications and prototyping. Projects 14.01.03 and 14.01.04 delivered the second iteration of the architecture (TAD), the SWIM Profiles and the requirements specifications (TS) for Step 2 SWIM Technical Infrastructure. In parallel, project 14.02.02 continued its Security Risk Analysis (SRA) for the SWIM TI as input for the next iteration of Step 2 developments.

Project 14.04 achieved a major success early in 2013 with the successful execution of three live SWIM demonstrations at the World ATM Congress in Madrid in front of some 200 delegates from around the globe. Over the summer of 2013 a second successful 'SESAR SWIM Master Class' was organised. This second edition saw more services that could be used, and more services and applications being developed by some 55 teams from around the world. The Registry prototype from

WP08 provided an important contribution by hosting all the service and application information for the development teams and by supporting the service development workflow and governance.

The list of deliverables made available to the SJU for assessment is in Annex 2.

3.4.14 WP 15 – Non Avionic CNS System

Scope

The Non Avionic CNS System Work Package addresses CNS technologies development and validation also considering their compatibility with the Military and General Aviation user needs. It identifies and defines the future mobile datalink systems to serve communication and surveillance services, the ground SWIM backbone system. It addresses the best combination of GNSS and non-GNSS Navigation technologies to support Performance Based Navigation and precision approach requirements. It proceeds to the optimisation of the ground Surveillance infrastructure, the evolution of the Ground surveillance station to introduce ADS-B information as well as the development of Airport weather information services.

Objectives

The objectives of WP15 are to:

- Address subjects concerning Spectrum Management for using the spectrum in the most efficient manner and for promoting CNS spectrum allocation at ITU allowing the future CNS SESAR Concept enablers to operate properly as well as undertaking the appropriate actions to minimise the impact on aeronautical spectrum from non aeronautical systems;
- Define the future Mobile communication system supporting the SESAR Concept, capable to provide to all the types of users the required functions and quality of service, and to support Air/Ground and Air/Air services. It will be composed of a new ground-station-based system associated to complementary systems (a satellite communication system in close cooperation with and benefiting from a related activity at the European Space Agency, a an aircraft communication system at the airport AeroMACS and a new terrestrial (continental) datalink e.g. LDACS). This set of systems will constitute the mobile part of the SWIM backbone. Interconnection of military aircraft through their specific datalink is also addressed. Enhancement of the Ground/Ground communications PENS infrastructure will also be progressed in order that it becomes the ground SWIM backbone;
- Define from a sub-system perspective, the best combination of GNSS and non-GNSS Navigation technologies to support Performance Based Navigation and precision approach requirements in a roadmap perspective as well as to enable transition from current terminal and en route operations (with a mixture of B-RNAV, P-RNAV and conventional) to a total PBN environment. In addition the refinement and validation of GNSS based precision approaches, in line with the evolution of the SESAR ATM capability levels will be performed based in a first step on GBAS Cat II/III GPS L1 and in a further step on GBAS Multi GNSS (GPS + Galileo) Cat II/III allowing rationalisation of the infrastructure and optimisation of the runway capacity under low visibility conditions;
- Consider the rationalisation of conventional terrestrial navigation aids;
- Proceed with enhancements to the ground Surveillance systems and introduction of new Surveillance systems and services (e.g. WAM, ADS-B applications beyond initial operational capabilities). Considering these enhancements and new means, the surveillance infrastructure will be rationalised by considering decommissioning legacy technologies (e.g. SSR) thus decreasing operating costs while balancing the necessary non-cooperative requirements in TMA and for military purposes;
- Decrease delays due to weather, prevent accidents, and help to improve long-term airport operation, relevant sensors matching airport category needs for detecting weather and weather related hazards as well as the integration of their complementary characteristics will be realised.

2013 Report

In 2013, most of the projects have been under execution modes (15 projects). Two projects have now been completed (P15.02.10 and P15.04.03) and are awaiting formal closure. Projects 15.02.04 and 15.03.07 went into execution phase. Four new projects were agreed through the BAFO 3 process of which the CNS Federating Project P15.01.07 – “CNS System of System Definition” and two Surveillance Projects P15.04.02 – “Integrated Surveillance Sensor Technology” and P15.04.06 – “Improved 1090 MHz ADS-B Ground Station capability & Security” will start execution in January 2014. Project P15.02.05 – “I4D Trajectory Exchange using SATCOM IRIS precursor” will start a shortened initiation phase at the same time.

In 2013,

- Future Communication System (15.02.04) with a focus on the system elements moved into execution in April 2013. A separate VDL2 study call was launched in 2013 and will be evaluated in January 2014. The technology work (currently LDACS) will still need to be addressed as a separate issue;
- Future Mobile Satellite Communication (15.02.06) was impacted by the ministerial decision in Dec 2012. The proposed future work will be subject of a change request in the 2nd quarter of 2014 in the context of the ESA plans for ANTARES and the Precursor SATCOM developments;
- Airport Surface Data link (15.02.07) is progressing in coordination with P09.16. The project is extended until the end of 2014 (as part of the 2013 re-allocation process) due to the number of prototypes being reduced from 3 to 2 and the activities re-allocated between the remaining members;
- Good progress continues with the three projects (15.03.01/02/04) working together on Navigation Infrastructure definition and optimisation. Phase 1 work addressing the period 2012 to 2020 has been completed. Phase 2 work addressing the consolidation of Phase 1 and the period 2020+ has been planned and coordinated. Work will commence in January 2014 further to the 2013 re-allocation process;
- GBAS Cat II/III based on GPS (15.03.06). Prototype installations at Frankfurt and Toulouse and successful initial flight tests. Validation exercises are planned with P09.12 within Release 4;
- GBAS Cat II/III project (15.03.07) is now in execution;
- ACAS monitoring activity (15.4.3) has developed the ACAS monitoring System prototype and the project is now awaiting the closure process;
- Surveillance ground station for ADS-B integration projects (15.4.5a and b) have now integrated the 2nd iteration of the Ground prototype in the respective platforms (within 15.4.5b) and its verification;
- Project 15.04.09 was split into 3 elements. The final Project 15.04.09c on Weather Sensing Technologies is progressing in coordination with 11.02 and participating to OFA 05.01.01 Airport Operations Management;
- Other projects have also satisfactorily progressed, producing functional requirements, functional architectures as well as technical studies to validate technical choices or to secure key points;

Most of the projects progressed according to their original schedule. The large majority (12) of the projects reviewed during Gates and most of them passed successfully this step. One project was suffering from resource commitment from Members. Significant deliverables have been accepted by the SJU. The 2013 re-allocation process will however lead to a number of scope and schedule changes in 2014.

Due to the maturity of the CNS projects in WP15, most of the projects have contributed significantly to CNS standardisation activities within the ICAO framework or within industry standards bodies such as EUROCAE.

Airspace Users supported the projects and the added value was recognised both by project team and by airspace users.

The list of deliverables made available to the SJU for assessment is in Annex 2.

3.4.15 WP 16 – R&D Transversal Areas

Scope

The scope of the R&D Transversal Areas Work Package covers the improvements needed to adapt the Transversal Area (TA) (safety, security, environment, human performance and CBA/business Case) management system practices to SESAR as well as towards an integrated management system. WP16 also provides support and coordination for the consistent and coherent application of the already existing as well as newly developed TA-related practices to SESAR operational and system Work Packages.

Objectives

The Objectives of WP16 are to:

- TA R&D: Pro-actively provide SESAR projects with the best TA-related practices, guidelines, tools, methods, models and techniques (TA Reference Material),
- TA Support & Coordination Function (Safety, Security, Environment, HP): Ensure coordination & consistent approach of TA aspects and application of TA practices throughout SESAR Development Phase, including a contribution to validation acceptance for TA aspects, as well as coaching to support production of evidence on the acceptability of Operational Focus Areas (OFA) from a TA perspective,
- Manage the SESAR Cases per TA and TA assessment processes to identify and mitigate TA-related issues in projects.

2013 report

All projects are in execution phase except one not yet initiated (cancelled).

The plans of SWP 16.6 projects have been redefined to support the Work Programme TA assessment needs (focusing on TA assessment at OFA level). More specifically, 16.6.X projects have focused their activities to support primary projects (WP4-15) performing their Transversal Area assessment (safety, human performance, cost and benefits and security and environment when relevant). WP16 has extensively supported and provided coaching to WP4-15 projects for conducting their TA assessments.

16.6 Sub Work Package has chaired the System Engineering Review 3 for Release 2 and has initiated its preparation by contributing to the definition of the various roles and responsibilities as well as the criteria to run this review. WP16 has also contributed to the System Engineering Review 1 for Release 4 and to the system Engineering Review 2 for Release 3.

SWP16.6 (safety and cost/benefit) has supported the Pilot Common Project proposal delivered by the SJU to the EC.

16.6.6 (CBA) has supported the interim update of the ATM Master Plan (Business View) taking into account the outcome of Sherpa team.

Some Transversal Areas (Environment, Security, Human Performance) have updated their first version of methodologies (Reference Material) to develop Transversal Areas (TA) and Business Cases (BC). This update was due to either lessons learned from the application of the Reference Material or to integrate some improved/additional guidance material developed by 16.1.X to 16.5.X projects. SWP16.6 has also supported the process to submit SESAR deliverables for review by National Authorities and EASA.

Some mature deliverables have been produced by the 16.1.X to 16.5.X projects:

- 16.1.2 resilience: The focus of Resilience Engineering is on attempting to understand all outcomes (positive and negative) and to use that to understand everyday performance. The purpose of resilience guidance is to provide a complementary approach to classical safety assessments (traditionally focused on negative outcomes) with a focus on work-as-done, and understanding everyday performance. This guidance material has been initially applied to i4D+CTA.
- 16.1.3 Dynamic Risk Modelling : 16.1.3 has developed techniques for Dynamic Risk Modelling (DRM) which aim at demonstrating the need for and potential added value of DRM in the safety assessment of new developments. The main deliverable is a DRM guideline that helps safety practitioners to decide whether DRM modelling is called for, and how to conduct the assessment. The project has identified a set of DRM methods which more or less suit SESAR needs. The added value of DRM will be demonstrated in 2014 by its application to a SESAR test case (conflicting ATC clearance – land vs. line up) using TOPAZ.
- 16.2.X – Security projects have produced an updated Security Risk Assessment Framework and Methodology;
- 16.3.X - Environment projects have developed the first version of a web-based Environment Reference Material toolset (IMPACT) that allow all SESAR projects to assess their environmental impact (noise for the first version, fuel-emission for the second in 2014). Some updated environment metrics also have been developed to suit SESAR's needs.
- 16.4.X & 16.5.X – Human Performance projects have produced an updated Human Performance assessment methodology and HP case argument (16.4.1) for E-OCVM V1 to V3 phases that includes guidelines for Addressing HP Automation Issues (16.5.1), generic SESAR Information Presentation Guide for Controller Working Position (16.5.3) and Selection, Training and Staffing guidance (16.4.3).

16.2.X projects have been merged into 16.6.2 and 16.3.X projects into 16.6.3 as an outcome of the BAFO I&II re-allocation process.

All other 16.1.X, 16.4.X and 16.5.X projects will be closed at the latest by Mid-2014.

The list of deliverables made available to the SJU for assessment is in Annex 2.

3.4.16 WP E – Long Term and Innovative Research Programme

WPE Scope

Long term/innovative research addresses knowledge creation and breakthrough technologies/concept elements beyond the current SESAR vision in the main stream of SESAR work programme; it has been launched in the framework of WP E to complement advanced research in aeronautics.

WP E encourages the ATM research that explores novel, unconventional areas involving new technologies, concepts or ideas. It stimulates long-term research thinking, creativity and innovation to help develop the scientific knowledge aimed at extending the SESAR vision and to complement existing SESAR activities, thus assuring the continuity in implementations beyond the existing horizons (both in time and scope).

WPE Objectives

The objectives of WPE are to establish Research Networks, PhDs and a portfolio of Research Projects to explore several topics (concept element and/or technology) extending the SESAR vision without any predefined time frame.

SESAR Long Term and Innovative research themes were further refined in 2013, taking feedback from work performed to date, the evolving research goals in ACARE and then defined with the advice of the Scientific Committee. These research themes now include:

- Towards higher levels of Automation in ATM;
- Mastering complex systems safely;
- System Architecture & System Design;
- Information Management, Uncertainty & Optimisation
- Enabling Change in ATM

The research themes have been used to establish the work in WPE to date, consisting of two Research Networks 19 PhDs and 40 Research Projects (details can be found on the SJU website).

The Research Networks, through involvement of a wide range of universities, research centres and industries, offer a structured way to build competence and capability that will not only continue to serve the needs of the ATM sector in the long term but will also be valuable for other sectors. They also select and manage the PhD activities in their area of competence.

Research Projects are selected by the SJU and assigned to a Research Network that provides ongoing scientific support.

Following the second call for projects, issued in 2013, the total amount of the indicative budget made available to WP-E has now been committed.

WPE 2013 Report on Research Networks

In order to provide a sound repository of knowledge, two Research Networks have been active in the Automation and Complexity fields since 2011. They organise specific targeted activities such as annual conferences, summer schools and other dissemination events. In addition they have each developed and maintained a state-of-the-art position paper for their respective themes. Finally, they continue to oversee a PhD research portfolio and provide support to related WP E projects. At the end of 2013 there are two research networks (i.e. HALA and ComplexWorld) and one small

research network built from a project and focussed on legal matters (ALIAS). In 2013 the networks performed the following activities:

- HALA network: updated the Position Paper, organised the Summer School, submitted a number of scientific papers;
- ComplexWorld network: transformed their position paper into a Wiki, organized 5 thematic workshops on uncertainty, resilience, network modelling, data science and non-classical metrics in ATM, two scientific publications and one book proposal in preparation.

WPE 2013 Report on PhDs

Twenty PhD students continued to work in ATM research in 2013 under WPE funding with the support and guidance of the two Research Networks

- HALA network oversees 13 PhDs
- ComplexWorld network oversees 6 PhDs and in 2013 launched a call for a new PhD student in the network, taking this number to 7.

WPE 2013 Report on Projects

During 2013, 17 of the 18 projects from the first (2010) call were closed out with a full assessment of their research results. 22 new projects arising from the second (2012) call were successfully kicked off. WPE projects pass through a final technical review gate which is organised by the project and Eurocontrol then assessed by the SJU ATM Team. The review is followed by a close-out meeting to capture the work and identify next steps. A small number of projects are being considered for a short extension of activities in order to deliver additional high-value results from an established team and research environment. All results are owned by the SJU in order to selectively trigger further work in later phases of research and development or to add to the body of knowledge on the subject for future research activities.

During 2013, 17 projects closed-out and delivered their final results.

The list of deliverables made available to the SJU for assessment is in Annex 2.

3.4.17 WP B – Target Concept and Architecture Maintenance

Scope

The scope of the Target Concept and Architecture Maintenance Work Package covers the maintenance and refinement of the high-level ATM Performance Target and Architecture including the Concept of Operations (CONOPS). It defines and ensures the consistency of the ATM architecture for all SESAR WPs. WPB will also conduct a performance analysis of the ATM Target Concept throughout SESAR development phase.

Objectives

The role of WPB was revisited and PC13 agreed on the following updated objectives:

1. To develop proposals for ATM-related content in the following main areas:
 - performance framework;
 - high level business model;
 - high level concept of operations;
 - high level architecture of ATM technical systems; and
 - architecture principles.
2. To identify inconsistencies of the content with the top down approach of the programme and to propose mitigating actions by:
 - preparing, contributing to and performing SE Reviews for the Releases;
 - using, to the relevant level and detail, Enterprise Architecture as a tool; and
 - applying SESAR strategies in the evolution of European ATM.
3. To focus on content produced by the federating projects.
4. To support the SJU in managing the release approach as laid down in the “SEMP Application Guidelines”.

WP B is in charge of developing, where requested by the SJU, further guidance to support the application of the SESAR strategies. The guidance material produced will be used to support developments by operational, system and SWIM projects.

2013 report

Dataset (DS) 10 & 11 of the Integrated Roadmap have been developed under the leadership of B.1 (together with C.1) to support the Work Programme R&D activities (e.g. Release 4 definition) but also the ATM-Master Plan level 3 update (ESSIP). The adapted process to maintain and update the Integrated Roadmap has been successfully applied leading to process around 400 Change Requests per DS.

WP B has supported the SESAR Releases; Release 4 SE Review 1 has been prepared and chaired by B.1.

An approach has been developed by B.4.1 for an European ATM Architecture. This approach has been applied to Step1. The EATMA V3 webportal provides a user-friendly access to modelling artefacts based on DS11 produced by B.4.1 (performance), B.4.2 (high-level operational scenarios), operational federating projects and OFA (OFA and detailed operational aspects), B.4.3 (inter system-architecture), system federating projects (intra system architecture) and WP8 (services).

B.4.1 has also updated the performance framework as well as Step1 validation targets to take into account the Integrated Roadmap DS 10 with the involvement of Airspace Users. B.4.1 has produced an initial set of validation targets for step2.

B.4.2 has produced an updated version of the Step 1 CONOPS and a first version of the Step2 CONOPS. Some operational issues have been progressed with the support of ANSPs, airport operators and Airspace Users e.g. trajectory framework, Free Routing.

The Service Coordination Group (SCG), chaired by B.4.3, has been set-up to ensure coordination and decision-making support between the SESAR Partners projects involved in a service design and development. The SCG members are operational and system federating projects, the SWIM federating projects, WP03, B.04.01 and B.04.02 and SCG Observers MIL, WP C and WP16. The SCG focuses on services identified to support the operational requirements in the SESAR Development Phase through information exchanges between operational activities. Services are derived top down from Information Exchange Requirements (IERS).

An updated version of the SESAR technical architecture for step1 has been delivered. Some activities have been conducted to define some ATC architectural elements that would be defined using a service –based interface. System Enablers clean-up based on architecture oriented criteria has been initiated (completed for SWIM, ATC and A/C, on-going for CNS, Airport and Network).

B.5 has conducted a campaign to collect performance expectations at OFA level in order to deliver an initial step1 performance assessment view. This step1 performance assessment report will be updated yearly with actual results coming from release exercises. This step1 performance assessment report does not yet include gap analysis due to the need to mature performance assessment results.

WPB (mainly B.4.1 and B.4.2) is contributing and supporting the consultation on the level of ambition of step2 aiming at ensuring appropriate consultation on the initial content of the Step 2 CONOPS and in particular on its link with the SESAR Step 2 performance objectives.

The list of deliverables made available to the SJU for assessment is in Annex 2.

3.4.18 WP C – Master Plan Maintenance

Scope

The scope of the Master Plan Maintenance Work Package is to administrate the up-to-date maintenance of the European ATM Master Plan to monitor the progress of development and of implementation. It also maintains the standard and regulatory roadmaps.

Objectives

The Objectives of WP C are to:

- Maintain Master Plan information up to date and monitor the progress of development and of implementation of the Master Plan by reference to the baseline (including supporting the Integrated Roadmap Maintenance process),
- Administrate the overall process to keep the Master Plan up-to-date, and propose amendments to the SJU Administrative Board,
- Include a renewed process that delivers the Single European Sky Deployment plan and provides input for development of local/regional performance based implementation plans and targets;
- Monitor and report on the achievement of these local/regional plans and derive the impact on system wide performance too,
- Maintain the overall standards and regulatory roadmap from the capture of needs to the definition, development and validation of standards and rules, including the roadmap for regulatory enablers.

2013 report

C.01 played a significant role in supporting the maintenance of the Integrated Roadmap (website update, Change Request management process & tool) for DS10 & 11.

The SJU ADB has decided that the next update of the ATM Master Plan will be not early than Mid-2015 (submission to SJU ADB for approval). Therefore WPC has prepared a plan that identifies the various inputs (processes and data) and contributors. This plan includes the need to prepare and test the processes that will be needed for the ATM Master Plan Edition 2015 campaign. It currently assumes that the ATM content will be based on DS13 (October 2014).

WPC has supported the Pilot Common Project (PCP) campaign especially to identify the link with ESSIP objectives, operational environments where the ATM Functionalities could be deployed, the incentives that would be necessary to secure their successful deployment and the needs for standardisation and regulatory material.

C.02 produced the ESSIP report for 2012 and the ESSIP plan for 2013.

C.02 has prepared an updated methodology to define Deployment Package/Deployment Scenario on the basis of the lessons learned from the ATM Master Plan Edition 2012 campaign and the Pilot Common Project.

C.03 has produced an update of the standardisation and regulatory roadmaps. C.03 has initiated some early Regulatory Impact Assessments (Air/Ground Data Sharing and i4D/CTA; DLS II; Airport safety nets; SWIM framework) as well as some standardisation cases (TBS; A-SMGCS; AMAN extended horizon and multiple airports; iSWIM; Information security).

The list of deliverables made available to the SJU for assessment is in Annex 2.

3.5 Main expenditure related to output

In 2013 the SJU paid to the Members and for other operational activities (Title 3) the amount of EUR 91.6 million, including EUR 0.2 million of pre-financing against, a comparable amount of EUR 99.2 million in 2012. The co-financing relates to the eligible costs for the deliverables and work-in-progress reported by the Members in the Interim Financial Statements 2012 and accepted by the SJU in 2013. Considering that ramp up phase is now over, the Programme is now progressing with stabilised efforts and resources usage (see section 4.2) so that a similar amounts requested for co-financing are expected in the coming years.

The acquisition of goods and services has gone through the procurement process according to the SJU Financial Rules ensuring fair competition among the potential suppliers and efficient use of the SJU funds

Staff expenditure amounted to EUR 5.6 million with an increase of EUR 0.4 million due to the fact that the SJU reached almost full staff as per Staff Establishment Plan at the beginning of the year.

In accordance with Article 15 of the SJU Financial Rules and in order to ensure the most adequate cash management in view of 2014 expenditure, the SJU received cash contribution from the EU for an amount of EUR 77.5 million. The cash contribution from Eurocontrol amounted to EUR 7.7 million. The resources received were fully employed to provide the co-financing to the Members; the total amount of payments exceeded the total revenues so that total cash balance at the end of the year was reduced from EUR 15.9 million to EUR 5.5 million, out of which EUR 3.2 million will be absorbed by commitments not yet paid. The remaining cash, EUR 2.3 million is insufficient to ensure the continuity of operations during the first months of 2014 with the consequent effect of delaying the payment of two Members' IFS. In order to mitigate the impact the SJU will introduce at the beginning of 2014 a payment request to the EU.

The resources made available by the SJU Members, the budget provided by FP7 and TEN-T, the cash contribution from Eurocontrol, were used in accordance with the SJU Financial Rules and, consequently, in line with the principles of the European Union Programmes providing the funds. With particular regard to the estimated eligible costs of the Programme, the provisions of Title 9 of the SJU Financial Rules, derived from FP7 and TEN-T funding systems, were applied.

With regard to the use of TEN-T and FP7 funds they have been allocated to the different activities and WPs considering their availability in terms of commitments and payments.

Provisional Annual Accounts 2013– Budget Accounting – Budget Outturn

<i>all figures in EUR</i>	2013	2012
<u>REVENUE RECEIVED FOR THE YEAR</u>		
Contribution from the European Union	77.535.515	69.713.000
Contribution from Eurocontrol	7.681.057	33.253.619
Contributions from other Members	4.246.362	4.507.943
Other sources of contribution and revenue	182.298	57.054
TOTAL REVENUE (1)	89.645.232	107.531.616
<u>TOTAL PAYMENTS MADE FOR THE YEAR</u>		
Staff Expenditure	(5.630.436)	(5.165.051)
Administrative Expenditure	(2.723.917)	(2.847.453)
Operating Expenditure	(91.608.651)	(99.249.582)
TOTAL EXPENDITURE (2)	(99.963.004)	(107.262.086)
<i>BUDGET SURPLUS of the year (3)=(1)-(2)</i>	<i>(10.317.772)</i>	<i>269.530</i>
Total Budget Surplus previous year (4)	15.840.788	15.571.258
<i>NEW TOTAL BUDGET SURPLUS (5)=(3)+(4)</i>	<i>5.523.016</i>	<i>15.840.788</i>
<u>COMMITMENTS STILL TO BE PAID (6)</u> <i>(Carry Forwards from year Title 1&2 only)</i>	<i>(3.191.886)</i>	<i>(3.395.394)</i>
TOTAL BUDGET OUTTURN (7)=(5)+(6)	2.331.130	12.445.394

Provisional Annual Accounts 2013– Budget Accounting - Revenues

<i>all figures in EUR</i>	1	2	3=2/1	4	5	6=5/4	7	8
<u>Type of revenue</u>	<u>Commitment appropriations</u>	<u>Actual Revenues established</u>	<u>% of budget</u>	<u>Payment appropriations</u>	<u>Actual Revenues received</u>	<u>% of budget</u>	<u>Outstanding (from 2013 only)</u>	<u>Outstanding (Total)</u>
Contribution from the European Union	59.881.720	59.881.720	100,0%	77.535.515	77.535.515	100,0%	59.881.720	355.199.485
Contribution from Eurocontrol	6.390.000	6.337.415	99,2%	7.681.000	7.681.057	100,0%		22.210.028
Contributions from other Members	4.246.361	4.246.362	100,0%	4.246.361	4.246.362	100,0%		
Other sources of contribution and revenue	5.739.856	5.711.369	99,5%	100.000	182.299	182,3%	486	486
Budget surplus previous year	7.964.671	7.964.671	100,0%	15.840.788	15.840.788			
TOTAL REVENUE	84.222.608	84.141.537	99,9%	105.403.664	105.486.020	100,1%	59.882.206	377.409.999

Provisional Annual Accounts 2013– Budget Accounting – Expenditure

<i>all figures in EUR</i>	1	2	3=2/1	4	5	6 = 4 + 5	7	8=7/6	9	10
<u>Type of expenditure</u>	<u>Commitment approp.</u>	<u>Commitments</u>	<u>% of budget</u>	<u>Payment appropriations</u>			<u>Payments</u>		<u>Commitments still to be paid</u>	<u>Commitments still to be paid</u>
				<u>BDG 2013</u>	<u>from 2012*</u>	<u>Total</u>		<u>% of budget</u>	<u>(2013 Carry Forwards only)</u>	<u>(Total)</u>
Staff Expenditure	5.770.000	5.578.146	96,7%	5.770.000	132.613	5.902.613	5.630.436	95,4%	1.341.096	1.344.356
Administrative Expenditure	3.141.233	3.086.733	98,3%	3.141.233		3.141.233	2.723.917	86,7%	1.850.791	1.890.177
Operating Expenditure	55.401.752	55.401.752	100,0%	96.492.431		96.492.431	91.608.651	94,9%	53.209.893	351.234.578
1. Studies/Development conducted by the SJU	55.401.752	55.401.752		22.010.834		22.010.834	21.757.088	98,8%	53.209.893	98.819.206
2. Studies/Development conducted by Eurocontrol										
3. Studies/Development conducted by other Members	0	0		74.481.597		74.481.597	69.851.563	93,8%		252.415.372
TOTAL EXPENDITURE	64.312.985	64.066.631	99,6%	105.403.664		105.536.277	99.963.004	94,7%	56.401.780	354.469.110
TOTAL REVENUE		84.141.537					105.486.020			
BUDGET SURPLUS		20.074.906					5.523.016			

* only amounts needed in 2013

Provisional Annual Accounts 2013 – Budget Accounting

In-Kind Contribution (*Annexe I of the Budget in accordance with the SJU Financial Rules*)

<i>all figures in EUR</i>	1	2	3=2/1
<u>Type of revenue</u>	<u>Commitment appropriations</u>	<u>Actual Revenues established</u>	<u>% of budget</u>
Contribution from the European Union	0	0	
Contribution from Eurocontrol to be recognized	75.500.000	64.882.000	85,9%
Contributions from other Members to be recognized	0	0	
Other sources of contribution and revenue	0	0	
Budget surplus previous year	0	0	
TOTAL REVENUE	75.500.000	64.882.000	85,9%

Provisional Annual Accounts 2013

Expenses In-Kind (*Annexe I of the Budget in accordance with the SJU Financial Rules*)

<i>all figures in EUR</i>	1	2	3=2/1
<u>Type of expenditure</u>	<u>Commitment appropriations (Final budget)</u>	<u>Actual Commitments</u>	<u>% of budget</u>
Staff Expenditure	0	0	
Administrative Expenditure*	0		
Operating Expenditure	75.500.000	64.882.000	85,9%
1. Studies/Development conducted by the SJU**	0		
2. Studies/Development conducted by Eurocontrol**	75.500.000	64.882.000	85,9%
3. Studies/Development conducted by other Members	0	0	
TOTAL EXPENDITURE	75.500.000	64.882.000	85,9%
TOTAL REVENUE		64.882.000	
BUDGET SURPLUS		0	

4 Programme management 2013 achievements

4.1 Programme Management framework evolution

The Programme Committee recommendations of 2012 were taken into consideration leading to the publication of an updated Programme Management Plan (PMP). The resulting top-down approach enables SESAR partners to continue delivering results that are aligned with the European ATM Master Plan objectives. It also allows focusing the Programme on the Strategic Priorities Business Needs.

4.2 Projects' Scheduling

The first Projects' schedules were elaborated and delivered to the SJU during the Initiation Phase. These schedules are, on the one hand, used to monitor the progress of the Projects in terms of timeliness, contractual obligations, coherence, and, on the other hand, regularly updated to ensure that the most recent developments are taken into account.

The figures (fig.4 and 5) below show the evolution of the percentage of completion of the Programme over the 2013 period.

The first relates to Work Packages 4 to 15 hosting the core of the R&D activities.

The positive trend recorded along 2012 is confirmed as shown in the figure below. The percentage of completion versus plan has now stabilised at 80% and can be explained by various factors:

- increasing level of maturity of programme management and of the partnership in general;
- better alignment of projects with programme objectives;
- overall positive "tension" created by the Release approach.

According to industry standards and, taking into account the R&D nature of the work done, this can be considered as an extremely good progress indicator.

The trend of data of the last six quarters (Q2 2012 to Q3 2013) shows a Programme completion of 4% per quarter on average. This leads to an actual % complete around 46% for the Q3 2013 compared to a planned percentage of 57%.

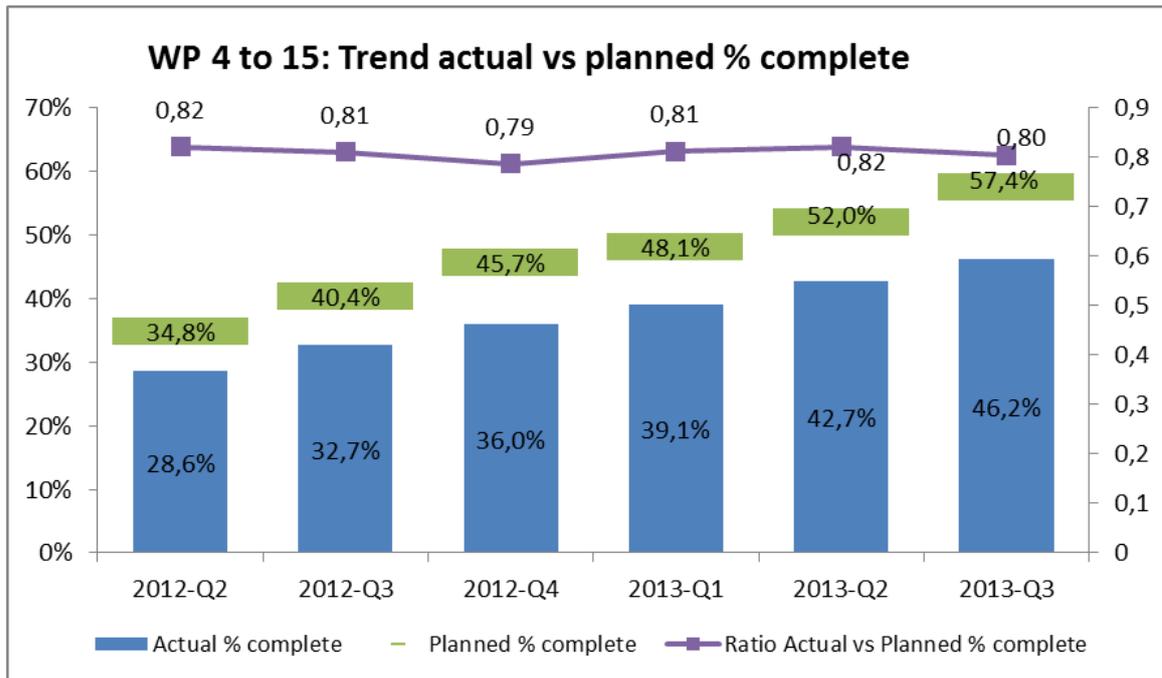


Fig.4

The second relates to transversal activities dealing with the integration of the various components as well as the top down approach. The very positive results already achieved by the end of 2012 have been further improved along the 2013 year as the percentage of plan achieved reached 96 % in Q3 2013 compared with the 84% of Q3 2012.

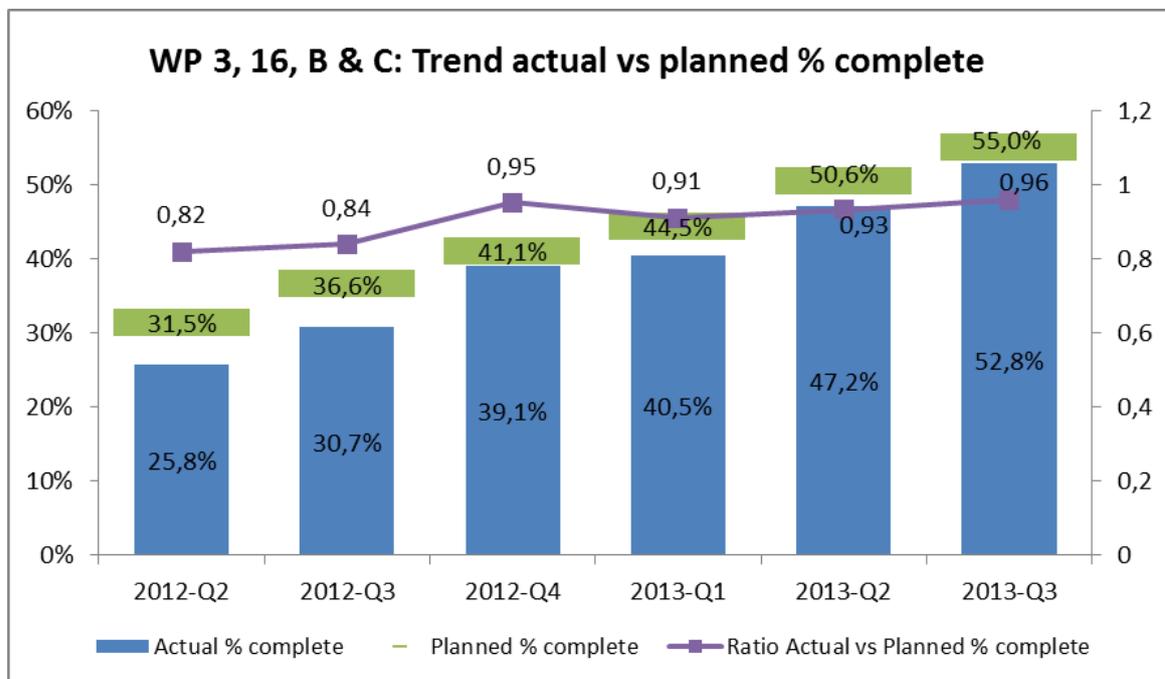


Fig.5

In terms of resource consumptions (FTE), (fig.6) the available data (2013-Q3) show an overall under consumption in the order of 20% compared to the planning. This is coherent with the results in terms of percentage of plan achieved reported above. The decrease in respect of the Q3 2013 is mainly due to summer break which consistently marks the lowest consumption of resources.

In addition, the activity of resources re-allocation focused on increasing the resources on priority projects adequately supporting the Priority Business needs as decided by the SESAR Members. Consequently a further catch up of the actual activity results versus plan is expected to be achieved as results of this re-allocation exercise.

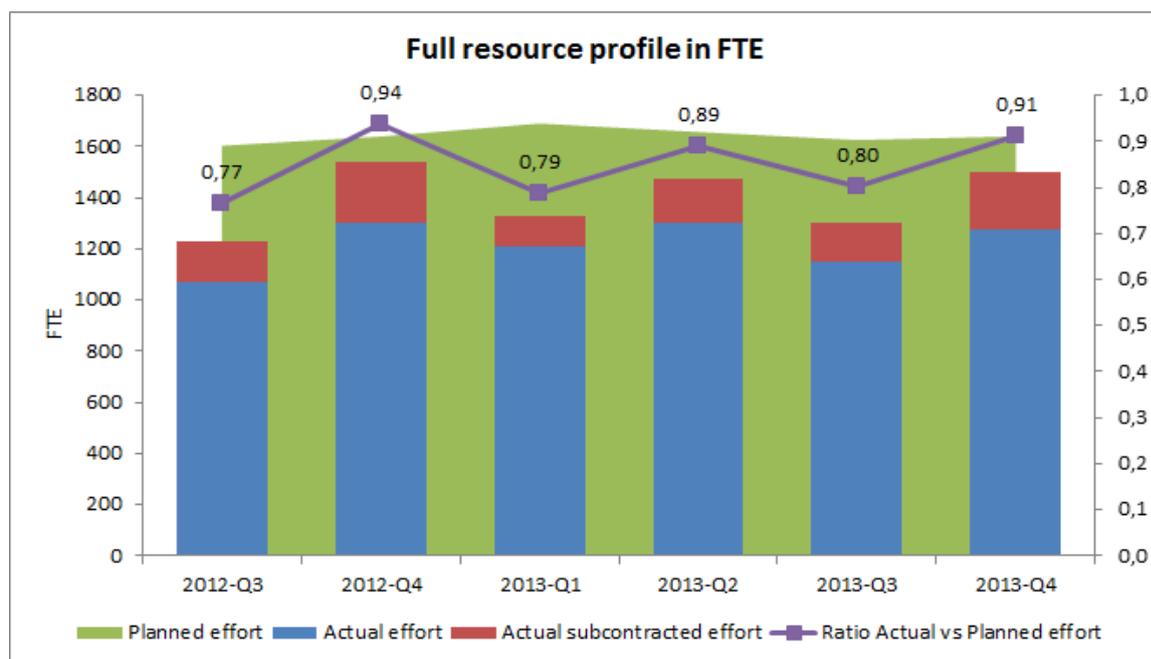


Fig.6

A similar positive trend can be reported in terms of deliverables submission. Around 70% of the deliverables have been submitted to SJU on time.

Looking ahead, it is expected that the Programme will deliver the expected output with more focused resources.

4.3 Programme Risk Management

The Risk Management approach followed by the SJU is inspired by the SJU Regulation – Council Regulation (EC) 219/2007, Article 1.5 – where it is established that the SJU is responsible for the execution of the ATM Master Plan; thus risk management is crucial to the successful execution of the ATM Master Plan.

In 2013, the participation of SJU management in the identification and assessment of the main Programme risks has been further strengthened, with an objective to reinforce the shared understanding

of the main risks at the Programme and SJU levels, and their criticality. Besides this, the follow-up of the WP and Projects risks ('bottom-up'), issues and opportunities has overall been in continuation with the previous years.

In respect of the main risks, workshops have been organised on a quarterly basis aiming at validating the list of Programme risks and their criticality. Risks related to the wide scope of the Programme (including Deployment), R&D risks, and those pertaining to corporate processes have been considered. The process went through:

- Reviewing the list of risks,
- Reviewing the coherence with bottom-up assessment,
- Identifying and assessing additional risks related to the R&D activities,

The review resulted in a list of **29 Programme and SJU risks, of which 11 are considered "top risks"** due to their current criticality level (high or very high).

The information on these risks has been reviewed by the SJU at different levels, with the final endorsement of the directors.

Overall the implementation of the mitigations actions in 2012 and 2013 resulted in a decrease of criticality of some risks and stabilisation and control of others.

The distribution of risks per level of criticality is outlined in the following picture:

Criticality level (taking into account both likelihood and severity)	Distribution of risks per level of criticality	Main trend compared to last year	
Very high criticality	2	=	Top 11 risks
High criticality	9	=	
Medium criticality	16	-	
Low criticality	2	=	
Closed	2	+	

The full Risk Management report was presented to the ADB meeting in December 2013.

4.4 Quality Management

The quality management system is part of the Programme Management Plan (3rd edition) issued in April 2013.

In line with the approach identified as result of the experience on the progress of the Projects and the quality of their deliverables, the Programme Management Plan formalized the approach to assess the

quality of around 40% of deliverables in a given year. The other 60% of deliverables, flagged below as “No reservation (P)”, are assessed by the internal project quality management processes themselves and through cross-assessments. This approach is monitored and, where necessary, it would be adapted to ensure that the overall Programme quality delivers the defined results.

During 2013, 915 deliverables were handed over to the SJU, 445 were assessed with “No reservation (P)”, 299 have been formally assessed by the SJU with the following distribution

- 6 are critically deficient
- 17 with majors reservations
- 35 with reservations requiring clarifications to be managed
- 241 without reservations

The remaining 171 will be managed in January/February 2014 (due to the 60 days period, the deliverables are not assessed immediately).

The graph below (fig.7) shows the status of assessment decisions cumulative (including previous years) up to December 2013 relating to all deliverables. Based on the figure below, extrapolating the results of the SJU direct assessment of the deliverables to the full population, it appears that almost 82% of the Programme deliverables is without reservations, 12% require clarifications and the remaining 6% is with major reservations or, in an extremely low number of cases, critically deficient.

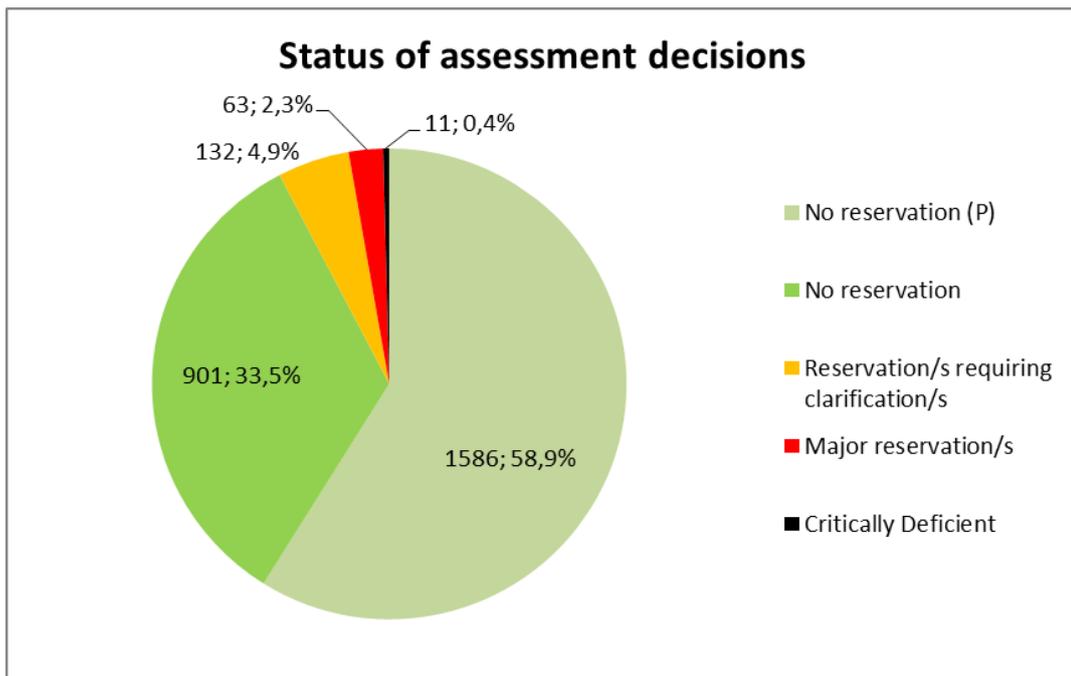


Fig.7

This assessment of deliverables is based on the evidence provided by the Projects on the implementation of the internal quality controls prior to the submission of the deliverable to the SJU. The assessment made by the SJU itself leads to a common defined assessment status:

- Green: no reservations;
- Amber: reservation requiring clarification and/or rework;
- Red: reservation due to issues observed entailing critical risks for project execution with as consequence that the deliverable will not be disseminated through the Programme for future re-

use. Additionally, the identified issues require major action(s) by the Project team, leading to significant changes to the Project plan such as partial or global tasks redefinition, suspension or cancellation to be decided at the next Project Control Gate.

- **Black:** the deliverable does not fulfil standard expectations and require major action(s) by the Project team, leading to significant changes to the Project plan such as partial or global tasks redefinition, suspension or cancellation to be decided at the next Project Control Gate. This also results in the non-eligibility of the cost associated with the deliverable.

Furthermore the SJU conducts on a yearly basis a Project Control Gate. The assessment of the Project performance at the Control Gate results as well in a status provided by the SJU:

- **Green:** the Project is under control and objectives to date have been achieved,
- **Amber:** during the Control Gate, significant issues have been identified which pose a significant threat to a successful outcome of the Project or Projects and its / their deliverables. The project has to implement a corrective action plan. The Programme Manager monitors the completion and impact of the corrective actions taken.
- **Red:** during the Control Gate, gross deficiencies have been identified with the Project’s management and control and/or the technical quality and direction. It results in to the SJU taking action to either reorient drastically or close the project.

The overall quality of the Programme results is a combination of the Project Control Gate and deliverables. In fact, different scenario may result from the assessment of a Gate – for example Green – with some deliverable being Black. At the same time, the fact that a Gate is Amber or Red does not imply that the quality of deliverables is poor.

The following figure (fig 8) shows the gate outcomes per quarter in 2013; it should be noted however that the data relating to 2013 Q4 are preliminary and not completed as a significant number of Gates reports held in December are not yet available. It can be seen that no major changes occurred in term quality and effectiveness of the projects results albeit a slight increase of the percentage of green projects can be envisaged when comparing 2013 Q4 and 2012 Q4.

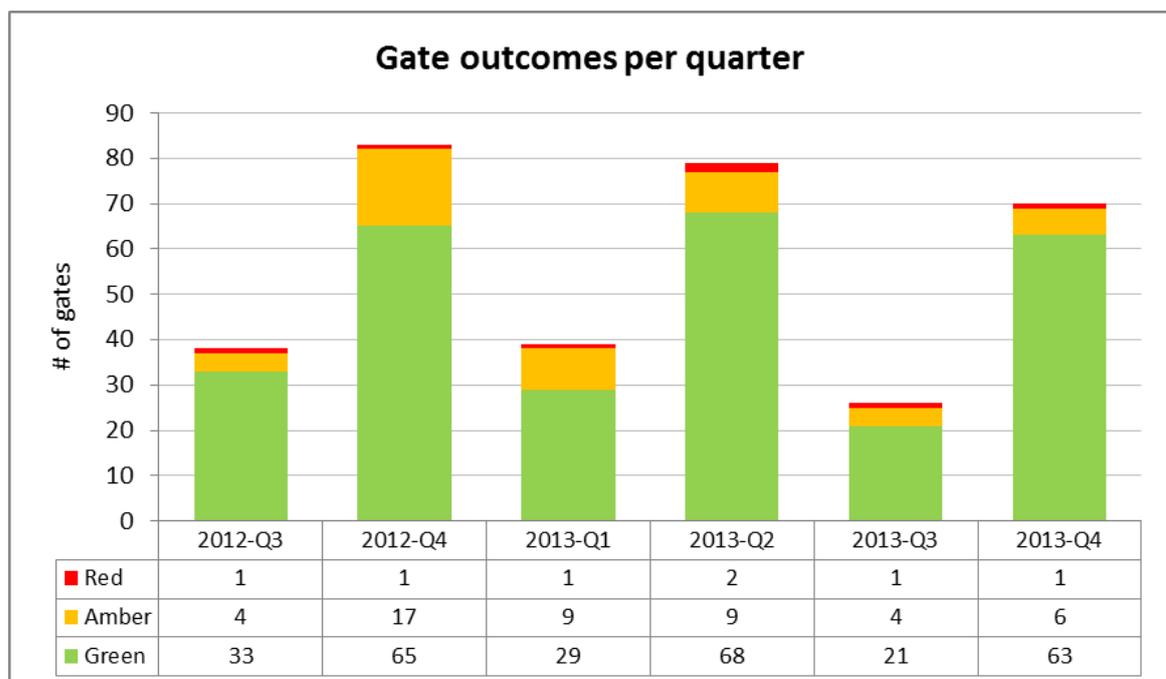


Fig.8

4.5 Programme Management System (PMS)

The SJU has continued to develop and enhance the IT applications and adapt them to the way the Programme is executed. The Programme Management System is composed of the following three components:

- A collaboration component that ensures that all Members and partners in the programme can work together and exchange information within the partnership (Extranet);
- A central repository that collects and consolidates all information necessary to successfully run the programme by monitoring and controlling progress, quality, costs and risks (SIR Info Repository);
- A central schedule management system that enables to consolidate individual project plans and inter-project related dependencies and consolidate the information at programme and release level (PMS).

During 2013, EUR 0.3 million were invested in improvements and maintenance of the Programme Management System. The current system, based on a SharePoint 2007 platform was examined to understand the needs in terms of upgrade to a more recent version in order to reduce the level of customizations and smooth certain processes.

The SJU participated to the initial tests performed by the Commission's DG Research in view of the roll out of the software underpinning the management of Horizon 2020 resources in the context of the SESAR Research & Innovation Programme 2020.

4.6 Associate Partners of the SJU

The category "Associate Partner of the SJU" was created to answer the need to complement and complete the expertise brought by the SJU Members to the SESAR Programme in specific ATM fields and from the specific categories of SMEs, research Organisations, Universities and Institutes of higher education.

Ten entities, assigned to 5 Lots (two for each lot) were appointed. The first framework partnership contract was signed in August 2011 with others following in 2012.

The lots awarded are as follows:

- Lot 1: Information Management;
- Lot 2: Network & Airport Collaboration;
- Lot 4: Airborne & CNS Systems;
- Lot 5: Modelling Support to Validation;
- Lot 6: UAV/UAS integration in SESAR.

The Lot 3 was not awarded as no proposals were received and there is no plan at the moment to re-launch.

The award of work to the Associates is a progressive activity closely coupled to the needs of the Programme as well as of the SJU itself. During 2014 it is expected to continue the engagement of the Associates in activities across the programme and on specific tasks for the SJU. Five Specific Agreements were awarded during 2013 with one further finalised in 2013 and expected to be awarded during January 2014; the for Key performance Area dependencies across Lots 1 & 2 failed to secure an adequate

response. Thus 6 Specific Agreements have been settled across all Lots to date and others expected during 2014. Specific awards and activities during 2013 across the lots are detailed in the next sub-sections.

Lot1 – Information Management

Support to Project 6.8.4 linked to project 6.9.3, was initiated during 2013 and covers the scope of Remote Tower Control, Remote and Virtual Towers over the period to the end of 2015.

The work includes contribution on Single Remote Tower, in particular the view out of the window replaced by video image and the view out of the window replaced and supported by additional sensors. Beyond the Single Remote Tower the work extends to the Multiple Remote Tower capability, the concept for Master-CWP and Supporting Planning Tool.

Support to Workpackage 8 AIRM and ISRM was launched in 2013 and includes a series of activities with the following objectives:

- Ensure a standard's based approach in SESAR for the management of temporality in the AIRM and ISRM, based on existing global initiatives (i.e. OGC's Temporality Model).
- Improve the management of geometries in AIRM to cope with 3D requirements based on global standards i.e. ISO19107.
- Analyse and prototype the requirements for a runtime geospatial registry service.
- Propose and prototype an automated trace between service interface definitions and the AIRM.
- Improve the AIRM Code Lists quality and propose a new approach to manage it.
- Contribute to the current SWIM Prototyping Platform by defining and prototyping geospatial and temporal related ISRM entity services exploiting in particular OGC standards.

The activities will be contributing to already existing SESAR projects

Support to Project 16.1.3 was launched in 2013 to support Dynamic Risk Modelling activities across the SESAR programme. Dynamic Risk Modelling (DRM) is referred to as the class of risk modelling techniques that explicitly represent the dynamic performance of the elements in the operation (people, equipment, procedures, and environment) and their time-dependent interactions. DRM allows a consideration of what can happen in a scenario in terms of possible combinations and permutations of events as they unfold through time.

SESAR develops techniques for Dynamic Risk Modelling in Project 16.1.3 that contribute to improve the risk picture by accounting for dynamic interactions. Project 16.1.3 builds on the results of a survey and assessment of the DRM applied in safety-critical industries and requires support from the Associates of the SJU to produce DRM guidelines including a test case application.

The objectives of the work under this Specific Agreement are:

- To implement into software code of the DCPN-based model and risk decomposition for the test case of "Landing vs. Line up related to WA3 Conflicting ATC clearances", as input to Step 8 (Run Monte Carlo simulations) of the "DRM Initial guidelines"
- To develop a systematic test plan of the software implementation
- To test the software implementation according to the systematic test plan

- To elaborate Step 7 software results to P16.01.03
- To support integration of Step 7 and use the software code as part of executing Step 8 (Run Monte Carlo simulations)

Lot2 – Network and Airport Collaboration

While no work was initiated on this area during 2013 there are plans to activate this Lot during 2014.

Lot4 – Airborne and CNS Systems

Support to project 15.3.7 was initiated during 2013 and is related to the definition and validation of a MC/MF GBAS system and ground station and will continue into 2015. The scope includes “Preliminary Research Studies” covering the period 2013 to end 2014 in order to fill the gaps currently not filled by the existing SJU project members of 15.3.7.

The selected Associated Partner is making satellite navigation experts available to the 15.3.7 Project to diversify the GBAS expertise already present. Thus, together with the researchers already allocated by SJU partners a broader knowledge base is available to tackle the GBAS MC/MF key issues (enlargement of expertise baseline).

This more academic oriented support is able to help industry and ANSP partners to define and develop MC/MF GBAS inherent trade-offs to help ensure manufacturer independent solutions. Moreover, the selected Associate Partner will provide specific expertise on GNSS environment, in particular on ionosphere characterization, multipath and interferences mitigation means.

Lot5 – Modelling Support to Validation

Support to project 7.3.2 was initiated during 2013 and will support this project related to Operational Focus Area validation of SESAR Network Management. Project 7.3.1 is now integrated in Project 7.3.2, and addresses the pre-operational validation of integrated AOM and DCB concept elements.

From the concept lifecycle model (E-OCVM) point of view, its scope fits into V3 (Integration). Validation activities cover both operability and performance assessment. The scope of this work is mainly related to the validation activities to be carried out in Step1. Three different exercises, through live trials, have been run in 2013, in different locations through over Europe.

Support has been provided mainly relating to the following points:

- Experimental plans definition: refinement of the validation objectives, definition of the scenarios, experimental design knowledge
- Preparation and conduction of the exercises: support during the preparation of the exercises, collecting of the qualitative and quantitative data during the experiments (e.g. observations, debriefings, questionnaires)
- Analysis of the results: support to the analysis of the different sets of data (qualitative and quantitative), supplemented potentially by other modelling or study.

Lot6 – UAV/UAS Integration in SESAR

Since completion of ICONUS in September 2012 no further work was initiated on this area during 2013.

By the end of 2013 EUR 10 million have been committed for the Specific Agreements across all lots.

4.7 Demonstration activities

4.7.1 SESAR demonstration activities and AIRE

Following the 2012 call for tender on green flight trials and technological demonstration activities, there were 18 SESAR Demonstration activities on-going during 2013 across Europe and the North Atlantic, co-financed by the SJU. Overall projects performed as planned with minor delays linked with technical difficulties and will all end in 2014 with final results ready by year end.

Preliminary results demonstrate that on more than 5000 commercial flights, involving over 20 air operators, significant performance gains can be achieved on flights within Europe, as well as flights between Europe and North America, Latin America or Africa. These performance gains cover a wide range of key performance areas, including better customer satisfaction (through smoother flights and punctuality), environmental efficiency, air navigation service provision productivity, safety and capacity.

The following table describes in summary some of the project achievements by end of 2013.

Summary of Large Demonstration Activities 2013 accomplishments

Project Name	Partners	Location	Main project achievements in 2013
FAIR STREAM	DSNA DFS Skyguide Air France Lufthansa SWISS Airbus Prosky	FABEC area	The flight trials design, description of the scenarios and the procedures for non-regulated flights are completed. First and the second round of flight trials executed.
Dflex	Air France Aéroports de Paris Airbus Prosky/Metron DSNA EUROCONTROL FedEx	Paris	First step of the pre-industrialisation of the UDPP (User Driven Prioritisation Process) for departures at Paris CDG was executed using the upgraded PDS (Pre Departure Sequence) system.

Project Name	Partners	Location	Main project achievements in 2013
NewBridge	LFV Airbus Prosky Boeing Research & Technology Europe EANS EGIS AVIA Estonian Air EUROCONTROL GosNIAS TF NLR Novair RCF SAS Swedavia	Sweden Estonia	Project completed the definition of the concept of operations and the definition of the functional baseline. First physical installation of the cables were done on Malmo Aviation Aircraft.
FRAMAK	DFS DLH EUROCONTROL	Germany Belgium Luxembourg The Netherlands	Project performed first User Preferred Route Demonstration flight between Frankfurt and Stockholm. The implementation of performance assessment algorithm is on-going for FR-CAP-01. First UPR demonstration flight is executed between EDDF-ESSA and EDDF-ESSA-EDDF.
NASCIO	Pildo Labs Aeroports de Catalunya LPR CAT Helicopters CAA SK ONDA DHMI BULATSA	Switzerland Poland Slovakia Morrocco Turkey Bulgaria	Procedure design of the trials is being implemented. On board equipment is covered in the safety assessment. Trainings – for the ATC is planned, it will be given by AENA.
TOPMET	Thales Air Systems Thales Avionics EUMETNET EIG DSNA Brussels Airlines	Belgium	The System architecture definition is completed. Development and system verification is on-going and planned to be completed in December. Mainly the system will give an alert to the pilot to change the route according to the MET data.

Project Name	Partners	Location	Main project achievements in 2013
TOPFLIGHT	NATS British Airways Plc NAV Canada	Gander & Shandwick Oceanic London	Phase 1 trials are completed and result analysis are started to be prepared. Preparation for phase 2 oceanic metering trials are started. In phase 1 only 1 flight executed per time in phase two many flight trails are planned to be executed at a time. Third phase is under discussion.
A.F.D: ATC Full DataLink	ENAV SELEX SITA NATS Airbus Prosky Air France Boeing Easyjet Airline	London Roma Milano	The experimental phase is completed. AFD platform, SITA PENS network and Airbus cockpit simulator are performed. Shared virtual sky infrastructure is completely usable for AFD experimental purposes. Design ENAV ATCOs AFD training is completed.
ICATS : Interoperability Cross-Atlantic Trials	INDRA AENA NAV Portugal Lockheed Martin Air Europa CRIDA	Santa Maria & New York Oceanic Portugal Spain	The Operational Concept, and the Flight Object Interoperability have been defined. In addition the I-SWIM Flight Object Interface, Technical Specifications and Verification Plan and verification procedures have been produced.

Short summary of Demonstration Activities status – AIRE III 2013 accomplishments

Project Name	Partners	Location	Main project achievements in 2013
AMBER	AirBaltic Quovadis LGS	Latvia	A detailed design of the RNP AR procedures was completed in June 2013; and A320 Simulator testing and Q400 simulator sections were carried out. First flight conducted on an Air Baltic Q400 on 14 August 2013, and the flight trials campaign started in September 2013.
Canarias	Quovadis AENA Easyjet Thomas Cook Air Berlin	Spain (Canarias Islands)	The procedure design; charts procedure coding; and validation of the procedures in Airbus Simulators have been completed as well as the ATC training and Flight Operation Safety Assessments. The demonstration flights are expected to start in earlier 2014.

Project Name	Partners	Location	Main project achievements in 2013
REACT-Plus	Pildo Labs Hungarocontrol Wizzair	Hungary	Implementation of CDA/CCD enablers (use of the merge strip tool) and start of flights trials during the 1 st Quarter 2013; Start of the flight data processing and assessment.
OPTA-IN	INECO AENA Air Europa CRIDA INDRA	Spain (Balneares Island)	The Tool adaptation and installation plan and Training have been carried out - flight demonstration campaign is planned for next year from January to March included.
WE-FREE	Air France ENAV SkyGuide DSNA Air France Regional Brit Air Alitalia	France Italy Switzerland	The Route design was developed and preliminary safety assessments conducted by ANSP and Airlines, Live Trials happened during two weekends.
ENGAGE Phase II	Nav Canada Air France	Canada (Oceanic) UK (oceanic)	The Flight trials commenced on October 2012; April 11 saw the first occurrence of five ENGAGE flights in one day. (3 westbound, 2 eastbound) and April 12 saw the first occurrence of six ENGAGE flights in one day. (5 westbound, 1 eastbound). There have been no safety concerns or incidents.
SATISFIED	INECO AENA Air Europa Iberia SENASA	Canarias Sal Recife Dakar	20 successful flights have been conducted and the collection of the FOQA and FP data from Iberia has started. The Environment Impact Assessment methodology including modelling and video script started being drafted.
SMART	NAV Portugal Air Europa Air France Iberia TAP SATA ADACEL INECO NOVABASE FAA	Portugal New York Oceanic	Deployment of the SMART development infrastructure, including monitoring. The SMART subsystems code was completed and validated in the SATL Test and Development system in the Santa Maria ACC and the system has been integrated in the SATL operational system.
MAGGO	NAV Portugal TAP SATA ADACEL	Portugal (Lisbon and St Maria)	Start of the requirements details collection to deploy on the SATL the flight data record enhancements to collect data; Technical systems deployed including ADS-B system; Development of the "CONOPS for the application of separation minima in Santa Maria OACC" document, endorsed, in the ICAO NAT ATMG42.

During 2013 cooperation continued with the FAA and the Coordination Plan 5.1 has been updated to reflect the current activities. The FAA participated in the projects workshop organised in November 2013.

Projects have been quite active in communicating their results and the SJU has featured three projects during 2013. Furthermore an internal workshop assembling representatives of all the 18 projects was held in Lisbon at the end of November. More than 40 experts attended, representing 60+ organisations and the FAA. The workshop main objective was for participants to share and review preliminary results. The event was hosted by NAV Portugal.

In addition, following the adoption of the Reallocation 2013/IBAFO III results by the Board in December, the SJU has launched the last call for proposals for Large Scale Demonstration activities under the current Programme, on 19 December 2013. The answer to the call is expected by April 2014 and the activities to be performed in the period July 2014 – December 2016. The total amount dedicate to the call is of EUR 30 million. Large Scale Demonstration activities should focus on bridging towards deployment in particular with regard to the Pilot Common Project ATM Features, demonstrations in the context of airports and SESAR Going Global.

4.7.2 RPAS Demonstrations

The European Remotely Piloted Air Systems Steering Group (ERSG), established by the European Commission in 2012, recognised a need to identify, plan, coordinate, and subsequently monitor the activities necessary to achieve the safe integration of RPAS into a non-segregated ATM environment. Given that the full integration of RPAS into the European ATM System is vital and that the mission of SESAR is to create the new generation of ATM systems and operations, RPAS need to be incorporated into future SESAR solutions.

Against this background, in February 2013, the SESAR Joint Undertaking launched a call for proposals in order to select and co-finance a series of projects offering SESAR integrated RPAS demonstration activities. The purpose of this call was to select a number of projects or activities, including integrated pre-operational flight trials activities, which aim to:

- Demonstrate how to integrate RPAS into non segregated airspace in a multi-aircraft flight environment, with the purpose of exploring the feasibility of integration within the wider aviation community by 2016;
- Focus on concrete results filling the operational and technical gaps identified for RPAS integration into non-segregated airspace; and
- Capitalise on the SESAR delivery approach by providing synergies, risk and opportunities, with the overall Programme.

As a result of the call, 9 out of 22 RPAS Demonstration Projects were selected, with a co-financing of EUR 4.2 million. The selected Demonstration Projects represent 38 different partners from 8 different countries: Czech Republic, France, Germany, Italy, Malta, The Netherlands, Spain and United Kingdom. Each project includes an ANSP and Air Operators and will be carried out within the European Union and/or within EUROCONTROL's member states.

The RPAS Demonstration Projects will incorporate existing SESAR R&D and will also cover some of SESAR's focus areas, such as Airborne Spacing and Separation, Integrated Controller Working Position, Surface

Planning and Routing, and Business and Mission Trajectory. Various types and sizes of RPAS, such as rotary wing, motor gliders, and light observation aircraft both civil and military, will be involved in the Demonstration Projects, which are expected to take place between the third quarter of 2013 and first quarter of 2015.

The following projects were selected:

1. AIRICA - ATM Innovative RPAS Integration for Coastguard Applications	
Coordinated by: Nationaal Lucht-en Ruimtevaartlaboratorium (NLR)	Consortium Members: Netherlands Coastguards Glasmann Systems GmbH Royal Netherlands Air Force Command (RNLAf)
2. ARIADNA - Activities on RPAS Integration Assistance and Demonstration for operations in Non-segregated Airspace	
Coordinated by: Indra Sistemas S.A.	Consortium Members: Aeropuertos Españoles y Navegación Aérea (AENA) Centro de Referencia de Investigación, Desarrollo e Innovación ATM (CRIDA) Andalusian Foundation for Aerospace Development (FADA)FADA
3. CLAIRE - Civil Airspace Integration of RPAS in Europe	
Coordinated by: THALES UK Limited	Consortium Members: NLR NATS (En Route) Plc
4. DEMORPAS – Demonstration Activities for Integration of RPAS in SESAR	
Coordinated by: Ingeniería de Sistemas para la Defensa de España (ISDEFE)	Consortium Members: AENA Instituto Nacional de Técnica Aeroespacial (INTA) Centro de Referencia de Investigación, Desarrollo e Innovación ATM, A.I.E (CRIDA) Fundación Andaluza para el Desarrollo Aeroespacial Aeroespaciales (FADA-CATEC)
5. INSURE - RPAS Integration into non-segregated ATM	
Coordinated by: IDS Ingeniería Dei Sistemi S.p.A.	Consortium Members: Sistemi Dinamici S.p.A. Air Navigation Services of the Czech Republic
6. MedALE - Mediterranean ATM Live Exercise	
Coordinated by:	Consortium Members:

Alenia Aermacchi S.p.A	Selex ES ENAV NIMBUS THALES ALENIA Space Italia
7. ODREA – Operational Demonstration of RPAS in European Airspace	
Coordinated by: Rockwell Collins France (RCF)	Consortium Members: Direction Générale de l'Aviation Civile represented by Direction des Services de la Navigation Aérienne (DSNA) Ecole Nationale de l'Aviation Civile (ENAC) SAGEM Défense Sécurité
8. RAID – RPAS ATM Integration Demonstration	
Coordinated by: Centro Italiano Ricerche Aerospaziali ScpA (C.I.R.A. ScpA)	Consortium Members: Deep Blue SRL Nextant S.p.A Nimbus SRL University of Malta (VoM) Malta Air Traffic Services (MATS)
9. TEMPAERIS - Testing Emergency Procedures in Approach and En Route Integration Simulation	
Coordinated by: DSNA	Consortium Members: Airbus ProSky Cassidian SAS STERIA Ecole Nationale de l'Aviation Civile (ENAC)

The RPAS Demonstration Activities constitute a first step towards a more systematic approach in view of the performance of the R&D activities leading to the integration of RPAS in non segregated airspace (see section 5.4).

5 Programme specific activities in 2013

5.1 European ATM Master Plan

The European ATM Master Plan identifies the performance needs of the future ATM system and provides primarily the operational, technological, standardisation and regulatory sequence that will contribute to the achievement of the performance needs.

The European ATM Master Plan, whose initial version was produced during the Definition Phase, was handed over to the SESAR JU, who is responsible since for its maintenance and execution, after having been endorsed by the EU Council of Transport Ministers on 30 March 2009. The Master Plan was reviewed in 2012 and adopted by the SJU Board in October 2012.

The European ATM Master Plan 2012 outlines the essential operational and technological changes that are required to contribute to achieving the SES performance objectives, making the Master Plan a key tool in the context of SESAR deployment and providing the basis for timely and coordinated deployment of efficient technologies and procedures.

In collaboration with its Members, the SJU worked on the revision of the Business View Section as required by the Board.

During 2013, the European ATM Master Plan/Level 3 (Implementation view) has been updated — through the European Single Sky Implementation (ESSIP) update process.

The ESSIP Plan – edition 2013 has been developed following a gap analysis against the full set of operational improvements defined in the Deployment baseline of the European ATM Master Plan.

The ESSIP process and instruments are recognised as the basis for implementation planning, monitoring and reporting mechanisms. The ESSIP Plan – Edition 2013 also contains several objectives considered essential prerequisites for the successful implementation of the Pilot Common Project (see section 5.2.1)

5.2 Support to the EC

5.2.1 Contribution to preparing the deployment phase and the Pilot Common Project

In 2012, the European Commission requested the SJU to prepare a proposal on the content of the first common project, the Pilot Common Project (PCP), including the methodology to move from the implementation view in the ATM Master Plan to a business view.

The PCP was intended to contain the first set of ATM functionalities (AFs) that, having completed their research, development and validation cycle through the work of the SJU, have demonstrated their readiness for deployment and their capability to produce benefits in particular if they are deployed in synchronisation. The mandate issued by the European Commission to the SJU on 3 August 2012 specified that the PCP should be based on one or several essential operational changes identified in level 1 of the European ATM Master Plan, whose need and maturity were demonstrated taking into account the:

- Technological and economical maturity for implementation stemming in particular from SESAR JU development results;
- Significant contribution to performance;
- Added value, compared to “business as usual” through synchronisation.

The SESAR JU used its consultation and cooperation mechanisms ensuring the involvement of the relevant stakeholders, including the military, the Network manager, the Performance Review Board and

Eurocontrol's Directorate Single Sky. Airspace users have also been associated in the elaboration of the Costs Benefits Analysis.

The SESAR JU's proposal, which was delivered on 6 May 2013, comprised a package of 6 candidate AFs to form the PCP:

AF1 - Extended AMAN and PBN in high density TMAs, to improve the precision of approach trajectory as well as to facilitate traffic sequencing at earlier stage, thus allowing to reduce fuel consumption and environmental impact in descent/arrival phases;

AF2 - Airport Integration and Throughput, to improve runway safety and throughput, ensuring benefits in terms of fuel consumption and delay reduction as well as airport and airspace capacity;

AF3 - Flexible Airspace Management and Free Route, to enable a more efficient use of airspace, thus providing significant benefits linked to fuel consumption and delay reduction;

AF4 - Network Collaborative Management, to improve the quality and the timeliness of the network information shared by all ATM stakeholders, thus ensuring significant benefits in terms of ANS productivity gains and delay cost savings;

AF5 - iSWIM: ground-ground integration and aeronautical data management & sharing, which consists of a set of services that are delivered and consumed through an IP-based network by SWIM enabled systems, enabling significant benefits in terms of ANS productivity;

AF6 - Initial Trajectory Information Sharing: air-ground integration towards i4D with enhanced Flight Data Processing performances, to improve predictability of aircraft trajectory for the benefit of airspace users, Network Manager and ANSPs implying less tactical interventions and improved de-confliction situation. This would have a positive impact on ANS productivity, fuel saving and delay variability.

As result of the Release 1 and 2, a first set of operational and technical material has been delivered answering to the some PCP content expectations in the area of Airport and TMA operations:

- Enhanced Terminal Airspace for RNP-based operations : P-RNAV procedures to improve the TMA organisation (use best practices PRNAV and FUA) and the route network using RNP1; and to enhance the TMA with curved and segmented P-RNAV approaches.
- Time Based Separation for Final approach: Time Based Separation (TBS) procedures improve the landing rate on airports with strong headwind conditions compared to the Distance Based Separation (DBS) procedures.

The remaining PCP technical and/or operational changes will be further validated as part of the Release 4 and release 5.

An additional mandate was later issued, on 18 March 2013, to ask the SJU to also assess the potential impact on the 6 AFs of the 9 potential "Centralised services" proposed by Eurocontrol. In fact, the development of these services requires a specific approach to the deployment of ATM systems and their constituents. The SESAR JU was asked to identify and assess the interdependencies between the potential AFs in the PCP and the Centralised Services.

The PCP establishes an obligation for all EU civil and military operational stakeholders, such as air navigation service providers, airport operators and airspace users, to deploy specific ATM functionalities in an identified region and within a determined timeframe. It also applies to other bodies such as the

Network Manger, the SESAR JU, EASA, European Standardisation Organisations, Eurocae, etc. for their respective areas of competence.

During the last month of the year, the SJU supported the Commission to launch the consultation process which should terminate with the adoption of the Implementing Regulations on the Pilot Common Project during the first half of 2014. Through the incoming SESAR Solutions, the SJU is paving the way for the next Common Project(s).

The SJU has continued working closely and provided the necessary technical support to the Commission to ensure the preparation of the Deployment Phase.

5.2.2 Preparation for SJU's extension

In order to prepare for the extension of the SJU beyond 2016, the SJU has provided to the European Commission the necessary data, information, reports and overall evidence of the activities achieved and to be performed to build solid bases for the decision making process on the SJU extension. In particular the SJU supported the preparation of the proposal adopted by the European Commission on 10 July 2013 to extend the legal existence of the SJU until 2024, considering that the last years after 2020 will be mostly dedicated to the finalization of the R&I Programme 2020 and the winding up activities. The Council of Transport Ministers in October 2013 adopted a position in favour of the extension of the SJU until 2024, which shall be completed now by the opinion of the European Parliament and of the European Economic Social Committee. It is expected that the legislative process will be completed by the end of April 2014.

5.3 Long Term and Innovative Research beyond WPE

Coordination of SJU funded Long Term and Innovative Research is covered within WPE (see section 3.4.16). This section covers the research coordination activities going beyond the SJU programme and reaching out to other research and research coordination activities.

5.3.1 Advisory Council for Aviation Research & Innovation in Europe (ACARE)

One research coordination activity beyond WE is the SJU contribution to ACARE, where the SJU co-leads and contributes to ACARE Working Group 1, on 'meeting societal & market needs' as well as supporting the coordination across all areas of the Strategic Research & innovation Agenda (SRIA). In this context, priority research areas were identified to support the EC in preparation of their forthcoming Horizon 2020 call and preparations were put in place to begin supporting the maintenance of the SRIA over the coming period.

Further work within ACARE included reviewing and agreeing to an updated organisation structure for ACARE that better reflects the needs of ACARE and of European research. The SJU throughout the year supported the ACARE General Assembly, Steering Group (now the Strategy & Integration Board), Working Group 1 and the Monitoring Group (now the Implementation Review Group) where resources allowed.

Beyond ACARE but representing them, the SJU and Munich Airport, through their Working Group 1 leadership remit were tasked by the EC to join and contribute to a joint Transport Platform activity on Infrastructure. This work successfully delivered to the EC a roadmap for infrastructure research coordinated across the five transport platforms (Air, Road, Rail, Water & Construction) and built a shared picture using inputs from, and not duplicating, the respective Strategic Research and Innovation Agendas from each transport area.

5.3.2 SESAR Innovation Days

The third annual SESAR Innovation Days event in 2013 moved the centre of SESAR Research networking to KTH Royal Institute for technology in Stockholm, Sweden. This event enables the dissemination of SESAR Innovative Research results to students, universities, researchers, Research organisations and industries and facilitates interactions with the wider ATM research community and industry representatives. The event welcomed over 180 participants and during two and a half days projects and papers were presented, results of research were discussed and debated, thus providing a collaborative learning experience essential for all students and researchers alike to keep pushing for innovation and breakthrough ideas. Specific topics during the event included:

- Enabling Change
- Complex Systems
- Airports, Resilience
- Trajectory Management
- Network Management
- Human Factors and Safety,

In addition there were special focus sessions on:

- Remotely Piloted Air Systems (RPAS), and
- Delivering innovation from a Remote Tower perspective

Integral to the SESAR Innovation Days is the SESAR Young Scientist Award, a prize recognising outstanding talent and potential contribution from young scientist to any SESAR activity; the work 'Commercial Aircraft Trajectory Optimization based on Multiphase Mixed Integer Optimal Control' was awarded particularly for its innovative modelling and interdisciplinary solution approach to the trajectory modelling problem, as well as a strong engagement with European Research Centres and with the USA.

5.3.3 SJU Scientific Committee

During 2013 the renewed SJU Scientific Committee met on three occasions for one and a half days each to allow for awareness gathering by the new members as well as the provision of specific advice to the SJU.

The objective of the SJU Scientific Committee (SC) is to provide advice to the Executive Director on specific topics.

The scope of the SC is to:

- a. Address technical & organisational challenges and scientific findings of the programme;
- b. Promote appropriate level of innovation;
- c. Recommend the means of developing participation of scientific community;
- d. Provide specific advice and recommendations;
- e. Provide advice on directions for long term and innovative research areas;

- f. Provide opinions on any scientific matter concerning SJU activities.

For WPE, the Committee has a steering role in providing scientific advice on the content, the results and the management aspects. In particular the involvement of academics will be given a strong focus to foster cross-fertilisation between ATM and other domains.

5.3.4 European Commission

Specific Coordination meetings with both DG-MOVE and DG-RTD representative took place during 2013 in order to ensure the identification and pro-active management of dependencies between SESAR and FP6/7 projects. Furthermore, the planning leading towards the EC H2020 programme call was important for the SJU to establish the correct relationship between its future programme (SESAR 2020) scope and the EC research funding in ATM and related areas.

5.3.5 Research Associations

The SJU participated in communication events, presentations, meetings and extended discussions with a range of other organisations performing coordination activities across Aviation. These organisations include ASD, EASN, ASDA & EREA.

5.4 RPAS

As already mentioned, the European RPAS (Remotely Piloted Aircraft Systems) Roadmap, handed over by RPAS stakeholders to the European Commission on 20 June 2013, paves the way for the safe integration of RPAS into the non-segregated ATM environments in Europe from 2016. To achieve a broad and swift integration of all sizes of unmanned systems, the roadmap enhances the coordination between the numerous actors and the different activities involved (Regulatory, R & D and others measures).

With the agreement of its Board, the SJU launched the pre-notice for the study on the Definition Phase of RPAS, to be performed in the next 18 months by the successful tenderer. The results of the Definition Phase and of the Demonstration Activities will feed the R&D to be performed in the context of the R&I Programme 2020. The overall budget dedicated to the Definition Phase amounts to EUR 3 million.

5.5 Military

Military Engagement Plan for SESAR (MEPS):

Initiated in mid-2011, the Military Engagement Plan for SESAR (MEPS) has reached by end of the year a contribution of 81 military experts (10 % pilots, 20% air defence experts, 30% ATM experts, 40% engineers) from ten countries (DE, UK, FR, ES, BE, PT, SW, FI, IT and NL) for an assessed initial need of 112 projects. During 2013, channelled to the SJU through Eurocontrol, the MEPS enabled the participation of national military in all relevant aspects of the Programme, via a structured organisation including the creation of specific panels to gather a large number of military inputs in specific technical and operational domains.

EDA/SJU arrangement:

While the SJU and European Defence Agency (EDA) have already engaged since the beginning of 2011 in a close dialogue and informal talks, the SJU has established in 2012 a more formal arrangement with EDA to ensure the adequate military input on matters related to military aspects in the Programme.

According to this arrangement, EDA coordinates the commitment and the input of its participating Member States and the Military international organisations, in particular NATO, as well as relevant political level(s) to “buy in” the results of the Programme.

In addition and in the context of the ATM Master Plan Business View Review and of the PCP (see previous section), in 2013 the EDA was requested by the SJU to ensure the adequate provision of the military input. With particular regard to the Military costs for the Business View Review, there is still work to be performed at the date of this report and conclusive results are expected towards 2014.

NATO’s Involvement in SESAR:

Under the control of SJU Executive Director, of EDA Chief Executive and of NATO Assistant Secretary General, a roadmap initiated in 2012 defines at technical level effective modalities of interaction between SJU, NATO and EDA, to achieve a common understanding of the challenges associated with SESAR as regards NATO interests and identifying possible matches between NATO expertise and SJU on-going activities through substantial information sharing.

The focus is on areas of common interest such as primarily Business Trajectory versus Mission Trajectory, NATO Air C2 system interoperability with SWIM, NATO network enabled capabilities.

Follow-on meetings took place on a regular basis to investigate conceptual thinking and provide necessary and timely technical input from NATO, taking into account the calendar associated to SESAR implementation.

The Member States and the Military international organisations (such as EUMS, MAB...) are kept informed on a regular basis via reports, as well as the SES/SESAR Military Implementation Forum and other appropriate fora.

The exchange SJU-EDA-NATO continued at senior level and more operational level during 2013.

5.6 Professional Staff Associations

The involvement of the Professional Staff Associations has been assured through the renewal by Eurocontrol on behalf of the SJU of 5 framework contracts, one for each of the following Associations: IFATCA, ECA, IFATSEA, ETF, and ATCEUC.

These framework contracts have now been extended until the end of programme on 31/12/2016.

During 2013, 4 quarterly meetings took place according to the framework contract to ensure coordination among the work orders allocated to each of the Professional staff associations.

The full integration of staff associations’ representatives into the Programme at different levels is in place and a pool of 90 cross-nationality licensed and operational ATCO’s, Pilots and ATSEP’s have formed an

International Validation Team, IVT. The IVT participated in several validation activities during 2013 bringing good operational experience and value to the performance and exercise outcomes.

The IVT has an agreed staff association's focal point for the planning and reporting of the IVT to the SJU and the respective quarterly meeting follow up. In 2013, the SJU also contracted a second expert to facilitate the IVT work.

5.7 National Authorities

The SJU has continued to be active in the relevant forum in which Regulatory Authorities coordinate and take decisions, such as:

- The Single Sky Committee,
- The EASA ATM Thematic Advisory Group
- The Eurocontrol Safety Regulation Commission,

The SJU has also maintained during 2013 close relations with the National Supervisory Authorities through the National Supervisory Authorities Coordination Platform, under the umbrella of the Single Sky Committee. Recently, this Platform has created a specific Working Group on SESAR, which started in December 2013 to coordinate the comments of the NSAs regarding the Pilot Common Project proposal.

As a result of the call for proposals to Civil and Military National Authorities published in June 2012, a new Memorandum of Understanding started to be in operation in January 2013 up to December 2016. On the grounds of this MoUs, 17 National Authorities from 13 States provide more than 80 experts to support the SJU until the end of 2016. Among the selected Authorities there are several National Supervisory Authorities, Civil Aviation Authorities, two Military Authorities and one Aviation Security Authority. The States represented through this call are Belgium, France, Germany, Ireland, Italy, Malta, The Netherlands, Poland, Portugal, Romania, Spain, Turkey and The UK. During 2013 also Ukraine joined the group of National Authorities cooperating with SESAR, through an expert working arrangement.

During 2013, 3 Quarterly Meetings, 1 Familiarization Workshop, and 2 Ad-Hoc Meetings, covering the topics of the Safety Reference Material and the GBAS CAT II/III, took place with the Authorities.

The results of the reviews performed by the Authorities and of their participation in validation exercises have been integrated during 2013 in the assessment of the SESAR deliverables. They have also been used for the elaboration of the Regulatory Overview of the SESAR solutions.

Finally, in November 2013 the second SESAR Workshop on Regulatory Activities took place, gathering more than 50 experts from 28 National Authorities, EASA, Eurocontrol and the EC. During this workshop, the interest of the Authorities in ensuring an adequate bridging between development and deployment was underlined.

5.8 Cyber Security

In order to ensure a coherent and consistent approach for the Programme on the matter of Cyber Security, a SJU Security committee was established in 2012 under the chairmanship of the Executive Director to interview a panel of Cyber security dedicated industry partners, international organisations and think tanks in order to explore best practices and recommendations. The Security committee has

established its first report in the first quarter of 2013, which was released to the Administrative Board in June 2013.

Technical solutions to the Cyber threat exist and are already implemented in the Programme since the Definition phase. The Cyber Security Committee evaluated the measures already taken and how to strengthen and align the security policy defined in SESAR with policies already existing in other organisations and solutions provided by the industry. Its recommendation was to perform a study with the purpose of:

- Assessing security threat and vulnerability;
- Suggesting a target SWIM Security framework, including basic requirements for liability/accountability, structure/architecture and management system, and;
- Providing solutions for later prototyping, verification and validation of SWIM security.

Thereby, a call for tenders was published in October 2013 with the aim to perform a study on “SESAR Strategy and Management framework study for Information Cyber-Security” taking into consideration the experience of various industry domains and leading edge consultancy, as well as the cyber-security strategy of the European Union. The outcomes would be applied to support next developments of the SESAR Work Programme, in particular on SWIM and will constitute the ground of a cyber-security strategy aiming at adequately managing information cyber-security aspects in the new ATM systems.

5.9 SESAR Performance Partnership (SPP)

During 2013 the primary focus of the SPP was concentrated on supporting the SJU Executive Director in its decision making process related the ATM Master Plan Business View follow-up activities and the Pilot Common Project mandate. During the PCP elaboration time, the number of SPP meetings was doubled and complemented by monthly briefing session to provide the maximum level of transparency to the broader stakeholder community on those two critical work streams. In the second half of 2013, the SPP resumed normal operations and focused its attention to cross-checking R&D developments vs PCP objectives as well as the level of ambition of the Step 2 Concept of Operations.

5.10 Coordination with FABs

There are validations activities in the SESAR work programme that involve ANSP cross border operations and as such therefore target the FAB operations organisation. Apart from these specific FAB centred coordination's, the main activities relating to FAB's are going through the ANSP members of the SJU who would bring the specific relevant operational and technical details of the SESAR work programme results to their respective FAB activities as well as the FAB Members themselves bringing operational information into the relevant operational projects in the Programme.

5.11 Civil Airspace Users

In addition to their key role in the Administrative Board and the SPP (see separate section) and PCP, more than 220 contribution managers and experts covered under the Airspace Users (AUs) Framework contract are heavily involved in approximately 100 different Projects across the programme (and their involvement continues to grow). They provide not only valuable expertise, but in-depth knowledge and hindsight

gained through their wide area of expertise upon which not only the projects but the programme rely and directly benefit from.

Due to the high level of demand requested by the projects, the number of AU experts has steadily risen throughout the year. During the year 2013 approximately 2500 man/days of effort was provided by the Airspace User community at both a technical and strategic level (excluding SESAR Demonstration Activities).

Due to their strength of involvement and knowledge across the Programme an AU Manager was nominated this year. This AU Manager represents on behalf of all AU's under the framework contract the AU Community and acts as their representative in key Programme level decision meetings.

6 Coordination with other Programmes and Organisation

6.1 FAA/ Next Gen

During 2013, the priority co-ordination activities (described in Coordination Plans) were worked according to the agreed scope which further integrated with the SESAR work programme tasks.

Within the frame of the Annex 1 of the Memorandum of Cooperation with the USA addressing interoperability between SESAR and NextGen, the Coordination committee (co-chaired between the SJU and the FAA) met twice to follow up on the work agreed in the active Coordination Plans. The Coordination Committee reported to the outcomes to High Level Committee in March 2013.

The CCOM have during 2013 created a more issue based approach to the management of the MoC allowing priorities to play a more significant role to increase efficiency across the MoC domains. The CCOM also agreed to develop a "State of Harmonisation Document" to be delivered to the High Level Committee of the Annex 1 SESAR-NextGen during the first half of 2014.

This environment allowed for a content focus in the Coordination Plans resulting in a better understanding on key interoperability issues and in resolving actions to achieve a synchronised planning both in the SESAR and the NextGen programmes. A couple of areas are worth mentioning as successful achievements during 2013:

- CP1.6 continued the success from 2012 with coordination of working papers and positions leading to the endorsement of the ICAO Global Air Navigation Plan, GANP at the ICAO General Assembly 38;
- CP2 Information Management agreed the SWIM Concept to be used as a baseline for the new ICAO SWIM Panel;
- CP3 entailed issues on harmonising positions around 4D trajectory information data for exchange (FIXM) that still needs to be resolved but significant steps forward have been made particularly on the timing of standards development. This matter has a dependency with CP 5 on global SWIM demonstrations that will be further looked at in 2014;
- CP4.2 agreed a joint Avionics roadmap;
- CP 4.5 resulted in an agreement on the data communication services standards being developed in EUROCAE WG78 and RTCA SC214 after a number of years of unsuccessful coordination;
- CP 5 (collaborative projects) was centred on demonstration activities and the SJU successfully coordinated participation of the US in a number of SESAR demonstration activities as well as on

agreeing on Global Demonstration activities for the period 2014 – 2015 to be developed further during 2014.

To achieve a better focus on where SESAR and NextGen need to be interoperable and in order to avoid a possible duplication of work, a handshake procedure was agreed between Eurocontrol – FAA MoC Action plans and the EU-US MoC Annex 1 - SESAR NextGen Coordination Plans. In short, this means that all SESAR related activities falls under Annex 1 Coordination Plans and other more day-to-day operational and technical issues of coordination activities under the Eurocontrol – FAA Action plans.

In June 2013 an event was held in Washington DC to raise the profile of the SJU activities and to spread the message that the SJU is moving forward in Europe. The event saw the involvement of several SJU Members and a conspicuous participation of the US audience.

6.2 Clean Sky

Coordination with Clean Sky continues to focus on specific areas of common interest with the start of project level discussion and alignment; these are:

- WP16 (SESAR Gate to gate aircraft operation improvement for fuel and environmental savings, environment metrics and modelling and the Clean Sky Technology Evaluator work),
- WP9 (Aircraft Systems in support of SESAR Trajectory based Operations and Clean Sky Trajectories for Green Operations),

During 2013, an ATM operations focused workshop was held, where the SJU and its Members presented a number of operational concepts and results. The workshop scope included discussion on the following topics of common interest:

- Performance Based Navigation
- Vertical Profile in the TMA
- Ground & Airborne Capabilities to Implement Sequence
- ASPA-IM Sequencing & Merging

This exchange of operations information was effective and the relatively high level discussions in this meeting did not immediately identify any overlap or mismatch between CS activities and the R&I Programme.

At the conclusion of the workshop further actions were put in place to ensure that CleanSky provides its relevant deliverables describing MCDP, TEMO and A-IGS technologies and it was agreed that the representatives of both Joint Undertakings would evaluate the outcome of this meeting before defining next steps.

The SJU followed up the remark made by the European Court of Auditors in the report on the Annual Accounts for the financial year 2012⁹ as regards the exchange of data and results as well as the coordination between the two Joint Undertakings. In view of the preparation of CleaSky2 the SJU has been proactive to foster improved cooperation between the respective Programmes. Specific follow-up on this will be activated during 2014.

⁹ European Court of Auditors' Report on the Annual Accounts of the SESAR Joint Undertaking for the financial year 2012 <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2013:369:0049:0056:EN:PDF>

6.3 7th Framework Programme projects

Regular formal and informal coordination meetings between the SJU, DG MOVE and DG RTD representatives continued to take place during 2013.

No additional projects were identified as having a direct link to active SESAR projects although in the latter calls it became increasingly important to minimise the risk of overlapping scopes and to reduce potential difficulties through close dialogue with the EC evaluators by clarifying the work of the SJU.

Coordination on H2020 calls will be the focus during 2014.

6.4 EUROCAE

The Memorandum of Cooperation between EUROCAE and the SJU signed in 2013 has been put into operation during 2013. In particular, care has been taken to establish mechanisms for the SJU to support through its partners the standardization work of EUROCAE in those activities which are relevant for the SESAR Work Program.

The EUROCAE Technical Work Program has included during 2013 several standardization needs with origin in the R&I Programme. In particular, the coordination between the SJU and EUROCAE has been especially close regarding the identification of the standardization needs for the Pilot Common Project.

The SJU has actively worked with EUROCAE in systematizing and streamlining the processes for the production of standardization material.

6.5 ICAO

The SJU continued during 2013 to take on a key role of the European coordination (EC, Eurocontrol, EASA, ECAC and EUROCAE) for the ICAO General Assembly 38 (A/38) in which the ICAO Global Air Navigation Plan (GANP) was endorsed. The SJU invested in the contribution to the three working papers presented as European contribution which addressed these key topics with a direct consequence to the ability of the Programme to support the developments from ICAO towards global interoperability.

As the priorities of ICAO directly links with SESAR and NextGen, the coupling with the EU-US MoC SESAR/NextGen coordination planning has played a very important and successful role in achieving common positions towards ICAO.

While the overall alignment of the ICAO ASBUs and the Master Plan was achieved, still work has to be performed to reach the necessary level of detail. The SJU has identified key areas where the SESAR Development Phase needs the support of standards and ICAO provisions. These areas have been coordinated with the FAA under the EU-US MoC Coordination Plans and will be further worked on in 2014 with the aim of having SESAR and NextGen coordinated priorities for the most efficient support in the developments of standards and ICAO provisions as a result of the endorsed GANP.

6.6 EASA

The large amount of detailed recommendations from EASA have been considered both in the execution of SESAR projects and in the elaboration of the SESAR solutions.

During 2013, the SJU and EASA have significantly increased their interaction under the umbrella of the Letter of Agreement signed in 2010. In 2013, 3 quarterly meetings with EASA and 4 ad hoc meetings took place. The ad hoc meetings were on Safety Reference Material, on GBAS CAT II/III and there were 2 specific ad hoc meetings on the Pilot Common Project review. Additionally, some specific coordination has taken place regarding Data Communications.

The collaboration with EASA resulted in some recommendations to be considered by the SJU in its work, in particular in the preparation of the SESAR Solutions.

Finally, during 2013, the EASA Rulemaking Plan has been adapted to include SESAR regulatory needs, such as a SWIM regulatory framework, or some elements of the Remote Control Towers operations.

6.7 ESA

In the context of WP 15 (SatCom datalink & navigation) and the previous OPTMI and SAT-OPTIMI initiatives, there are both technical and financial (SatCom operating costs) reasons to maintain an ongoing relationship with the European Space Agency (ESA).

The European ATM Master Plan clearly identifies the need for space-based positioning for navigation and communication services in support of time-based and trajectory-based operations. This is in addition to supporting improved operations into less well equipped airports or with vehicles differently equipped and therefore this work is applicable to a wide range of airspace users and facilities.

The SJU and ESA, through the Iris programme, continue to have a productive working arrangement where ESA staff actively participates in SJU Projects relevant to them, and SJU staff and Project participants meet to exchange relevant information. The SJU also continued to participate directly to the Joint Iris Advisory Committee (JIAC) and also the Iris Expert Group. This contribution is to maintain the technical coordination between ESA, SJU and other stakeholders as the options for meeting the SESAR Data-link requirements using Satellite Communication in support of 4D trajectory operations develop.

During 2013 an approach to using commercial space assets to support SESAR operations has matured such that a new initiative, the Iris Precursor or Iris 2017 has been tabled by Inmarsat and others. This has led to a dedicated programme being constructed and supported by ESA with the SJU support; the SJU, through its BAFO III process, has launched a complementary project to fully explore the operational and technical viability as well as service continuity and Airspace User cost of this approach, including using it to be able to support the initial 4D operations in oceanic and remote areas as well as providing backup to the existing continental VDL2 datalink environment.

6.8 External relations

The SJU provides an important contribution in the context of the European Commission external relations framework. The SJU is liaising with DG MOVE to find the best practical means of technical cooperation in relation to ATM and SESAR.

The SJU has also been carrying out SESAR workshops in third countries, mostly as awareness exercises or joint ventures technical fora at the request of the third state, and supported by DG MOVE.

The Memorandum of Cooperation between the SESAR JU and CAAS Singapore signed in November 2012 has had most progress in coordination towards the ICAO process of endorsing the ICAO Air Navigation Plan, GANP at the ICAO GA/38 and in some of the areas of necessary global coordination around SWIM and ATM information data definition and exchange.

Furthermore, good relations continued to develop with the Gulf States, China, Australia (secondment of expert 2012/2013), Ukraine, Israel, Turkey and States in the African COMESA region.

7 Governance Management and internal control system

During 2013, the Administrative Board met 4 times providing governance and steering the activity of the SJU. Decisions were taken and guidelines given to ensure the implementation of the Programme and exercise overall control over its execution. Furthermore the Board discussed the SJU extension, the R&I Programme 2020 and its calendar, the role of the SJU to support the European Commission in the preparation of the deployment of the Programme results, the appointment of the new Executive Director.

In this respect, following the resignation of the Executive Director, the Board discussed on how to proceed to ensure leadership continuity during the vacancy period until the appointment of the new Executive Director. It was decided to appoint an Executive Director ad interim who started his office on the 1st September until the appointment of the new Executive Director.

7.1 Programme Management and Risk Management

In April 2013 the SJU released the “Programme Management Plan (PMP) version 3, which updates the previous edition by including the outcome of the work conducted by a PC member’s group (Tiger Team) in early 2012. In particular are integrated into the document the concept and the ensuing identification of Priority Strategic Business Needs as well as measures decided to improve efficiency of the programme management framework. The System Engineering principles are clarified and the full Programme lifecycle is presented.

The PMP shows how the Programme is organised and how the various R&D projects are conducted. The Programme is managed following the principles of transparency, timely and comprehensive communication, efficient reporting and escalating procedures which ensure participation and collaboration between Members and the SJU at different levels. Coordination and management of the R&D activities and related roles and responsibilities are positioned at the level of Operational Focus Area (OFA) to reflect the Programme operational structure (see fig.1)

The Members contribute to the Programme decision making process through the Programme Committee and at a more operational level through the Program Control Group, which met bimonthly in 2013.

The complexity of the Programme calls for a management structure which provides the Project Manager with some flexibility in the development of the projects and enables steering and control mechanisms to ensure overall coherence. To this end, the internal reorganisation introduced in January 2012, aiming at simplifying and increasing effectiveness of the management structure through the creation of two Deputy

Executive Directors responsible for the Programme developments and Administrative and Financial matters respectively proved effective.

The SJU's Risk Management activities have been conducted in line with the Policy approved by the Executive Director with the decision ED 64 on March 25th 2010. The 2013 Risk Management Report has been endorsed by the Administrative Board as part of the Annual Work Plan 2014 on 12 December 2013. The key elements of the report are presented in section 4.3

7.2 The Internal Control System

The Internal Control System sets out the minimum requirements for the internal control activities, its six building blocks are fully integrated into the SJU control system in line with the system in place at the European Commission.

- **Mission and Values.**

The mission of the SJU is clearly stated in Article 5.1 of the SJU Regulation.

The Annual Work Plan 2014 builds around the following medium term vision *“by 2014 - The SJU partnership has successfully introduced innovations, bringing measurable performance benefits to the worldwide aviation community”*. The vision has been detailed in medium term strategic objectives to be achieved by the end of 2014 which constitute a stepping stones towards the achievement of the SJU Mission at the end of the Programme.

A set of ethical values are well rooted and positively determine SJU staff behaviours and set the tone at the top of the SJU.

In house training are organised for new staff members on ethics and integrity or staff members are requested to attend the EU Commission trainings on the subject. In addition, all new staff is trained on the full scope of operations and activities of the SJU and Programme, to build a common understanding of the objectives to be achieved and the overall control and management framework. The last internal induction programme for newcomers was launched in December 2013.

- **Human Resources**

The SJU is an EU body and therefore its staff is subject to the EU Staff Regulations.

The SJU relies on a solid and experienced staff; in addition the SJU Management continuously assesses the HR needs and priorities, to match the available competencies with the developments of the Programme. The possibilities for mobility within the SJU are limited considering the staffing numbers (39 FTEs) and the fact that most of the positions require highly specialised competencies and built up experience in the technical fields.

In 2013, the SJU introduced to the Administrative Board the Multi-annual Staff Policy Plan 2014-2016 which shows the level of resources in terms of staff planned for the period aiming at providing the optimal balance between the provision of the needed resources and cost efficiency. Taking into consideration the evolution of the approach to Conflict of Interest within the SJU, in place since the establishment of the organization, the number of position of staff seconded to the SJU from its Members has been reduced to key few positions. In this respect, specific measures are put in place.

The SJU prepared also for the implementation as of 1st January 2014 of the New Staff Regulation of Officials and Other Servant of the EU.

Performance assessment is now a consolidated process involving each staff member on yearly basis and it is a key element for staff career progression. The assessment focuses also on the need for training as an integral part of the staff development as clearly stated in the “Learning and Development Policy”.

The SJU Staff Committee ensures smooth running of the SJU and contributes to the improvement of staff working conditions and general living conditions.

- **Planning and Risk Management Processes**

The AWP 2014 and the mid-term vision 2014 were presented to the Administrative Board and approved at its meeting of 12 December 2013 after having been submitted to one month Board Members’ consultation process. The document identifies short term objectives contributing to the achievement of the medium term strategic objectives and overall of the European ATM Master Plan 2012. The progress of each Project is continuously monitored during the year with a full formal check at the Control Gates, where actual results are compared with the planned as defined in the Project Initiation Report (PIR) and its amendments and remedial actions are identified if necessary. Some indicators as the resources consumed, the deliverables handed over, schedule respect, allow the SJU management to obtain a good picture of the progress made towards the plan (see section 4).

With regard to risk management, section 4.3 provides detailed information on the integration of risk management in the functioning of the SJU as overall its Programme.

- **Operations and control activities**

The operational structure of the SJU, the Programme and Operations Directorate, consist of two main sectors - ATM and Programme – and two additional thematic positions, regulatory affairs and environment.

The Deputy Executive Director Operations and Programme is deputized by the Chief Technology and Innovation as necessary. The Programme Sector is subdivided in the Programme Managers Sector and the Programme Support Office, partially consisting of staff provided by Eurocontrol as part of their contribution in-kind.

The combination of the ATM – content – and Programme Management supports effective and efficient decision making.

The Operations and Programme Directorate is supported in the achievement of its activities by the Administration and Finance Directorate. The latter is in charge of the corporate functioning of the organization, the compliance with the SJU Rules and effective implementation of the internal control and management systems. Measures to ensure continuity of operations and segregation of functions are in place and effectively monitored. In addition, the Directorate monitors designed, implemented and monitors on a continuous basis the economy, efficiency and effectiveness of the SJU and its Programme.

In this respect, financial circuits are consistently applied ensuring segregation of duties as required by the SJU Financial Rules.

In accordance with the Financial Rules, the SJU follows the four eyes principle ensuring that, before a transaction is authorised, all aspects (both operational and financial) have been verified by a staff member other than the one who initiated the operation. The verification aims at ensuring compliance with rules and sound financial management and supports decision by the authorising officer. An Exception Register keeps record of transactions which did not respect in full the provisions of the SJU Financial Rules and related procedures; reasons and actions to prevent future occurrence are reported.

Besides the ex-ante control, the SJU performs ex post controls, through its Projects Audit Sector with the support of an external audit firm.

The SJU's audit strategy aims at providing reasonable assurance on the legality and regularity and sound financial management of the organisation's operating expenditure. During the year 2013, 17 audits have been planned and executed in five Selected Members and 15 of those audits have been finalised. The remaining 2 are expected to be finalised by early 2014 (see table below).

R&I Programme	Planned Cumulative Period (2009-2016)	Achieved Cumulative Period (2009-2013)	Planned in 2013	Achieved in 2013
Number of closed audits	38	33	19	16
Representative audits	34	30	17	15
Audits Risk-based	3	3	1	1
Performance audit	1	0	1	0
Total amount audited (SJU share in €)	-	18.169.179	-	11.426.634

The total amounts of Costs declared in the Interim financial Statements 2011 (IFS 2011) by all 15 Members (excluding Eurocontrol) of the SJU amounted to EUR 151.1 million.

The audits performed in 2013 complete the first cycle of audits in all 15 Members as described in the SJU Ex-Post Audit Strategy (as approved by the ADB-15-2010 and replaced by the ADB-15-2013). Based on the methodology described in the SJU Ex-post audit strategy, the CBFs concerning the 5 Members that were selected and audited for the IFS 2009 and IFS 2010, have been excluded from the sample, because it is considered that after the audit, errors have been corrected, recommendations have been implemented and therefore the IFSs should be free from systematic errors and material misstatements. Nevertheless, these same entities maybe subject to follow-up audits to provide assurance on the effective implementation of any remedial action and/or recommendation.

For the statistical selection of 2012 IFSs only the 5 remaining Members have been included in the sample. The Interim Financial Statements received by the 5 remaining Members – EUR 32.5 million– were examined at the level of Projects; 51 CBFs selected representing EUR 15.5 million (i.e. 39% of the IFSs of the 5 Selected Members and 8,1% of total costs accepted for the 15 Members).

Based on 45 cost statements for which the audit is completed (88% of a sample of 51), the results of the finalised audits indicate a representative error rate of 8.67% and a residual error rate of 6.96%. This year's annual error appears to be higher than the previous years because of the incidental high error of one audited Member stemming from the fact that the audits suggest errors strictly affecting the audited

period that in the long run (if the audits were taking place at the end of the project) would not appear as such. (e.g unpaid subcontracting costs which were paid a few months after the audit).

Where systematic errors are detected, audited Members are requested to take immediate actions to correct them and implement recommendations made by the auditors in the audit reports. The errors found mainly concerned the incorrect inclusion of various items in labour costs. The amounts to be recovered from the Members were identified and adjusted in the calculation of the co-financing to be paid in front of the IFS 2012, by year end 2013. Follow-up audits are also planned to verify that errors are corrected and recommendations are taken on board.

As the first cycle of audits is now complete and given the multiannual nature of the Programme which is considered to be closed per Member at the last deliverable accepted within the Programme (i.e. in 2016), the cumulative error rate of the three previous years gives the global and representative view of the error on the entire population of the SJU. For this calculation the following factors are taken into account: (1) in accordance with an excessively prudent approach, provisional results for 4 not yet finalised audits are included in the calculation (2) the method is based on the assumptions that representative errors are corrected and recovered, therefore the costs claimed of a Member the periods subsequent of an audit are assumed to be free from error and material misstatements (3) residual error is assumed to be affecting all the non-audited cost claims of previous and subsequent un-audited periods.

Based on a total amount of costs claimed of EUR 247.5 million, of which 100 cost statements were audited representing all 15 Members amounting to EUR 20.2 million of (i.e. 8%), there is a representative error of 5.47% and a residual error of 0.73%.

The following table presents an overview of the implementation of the audits which resulted in an adjustment at cost level in favour of the SJU. The adjustments of €180.354 are mainly recovered through recovery orders issued or offsetting against subsequent payments. The recoveries of the 5 remaining audits are currently on-going.

Audit closing year	Results from external audits		Adjustments in contradictory procedure		Adjustments implemented		
	Number of participations	Adjustments at cost level (in favour of SJU)	Number	Value	Number	Value	Value - Co-financing 50%
2011	5	-22.167,06	0	0	5	-23.710,78	-11.855,39
2012	10	-46.505,75	0	0	10	-33.900,50	-16.950,25
2013	15	-303.097,25	0	0	15	-303.097,30	-151.548,65
Total	30	-371.770,06	0	0	30	-360.708,58	-180.354,29

From the ITC point of view, services are provided by Eurocontrol and the European Commission within the context of the Agreement and SLAs signed with them. The same standards followed by Eurocontrol are applied to the SJU applications and data. Following the successful transfer of the ITC environment to a

hosting facility, the SJU reduced its ITC running costs, increased security and mobility, ensuring continuity of operations, especially in case of disaster recovery. To this end, the SJU has in place a draft business continuity plan identifying key functions, staff and procedures necessary for the continuation of activities even in case of major disruption to the SJU infrastructure. An agreement has been signed with Eurocontrol whereas office spaces and IT support would be provided if needed.

- **Information and Financial Reporting**

Communication

Effective communication is crucial to the success of SESAR and therefore, the SESAR JU implements a communication strategy through a multi-annual Communication Plan. The strategy is based on a two pronged approach: (1) internal communication targeting the staff of the SJU, as well as and the staff of SJU members; (2) external communication targeting all stakeholders and citizens who may have an interest in the Programme. In 2013, SESAR JU's Communications Sector continued to engage with its communication counterparts at the Member and Associate Partner organisations in order to further distribute key messages on SESAR at both an internal and external level.

In 2013, the main focus for Communications was the promotion of the European ATM Master Plan, SESAR Releases and, in particular, the result of the Release 2 validation exercises. This promotion was carried out through different communication tools: the 2012 Edition of the European ATM Master Plan brochure, a simplified factsheet and press release, an interactive map available on the SESAR website to present the SESAR releases and the results of the validation exercises, a brochure explaining what will be done as part of Release 3 and another detailing the results of Release 2, as well as other generic communication tools, such as the SESAR magazine, eNews and the SESAR website.

In April 2013, the SESAR Joint Undertaking participated in the World ATM Congress, in Madrid, the largest ATM exhibition worldwide. The theme of the SJU's participation "From Innovation to Solution", provided the backdrop for SESAR and its guests to present the progress achieved by the programme so far. During the course of the three day Congress, SESAR hosted a Forum and three workshops, whereby 650 attendees were privy to SESAR's concrete deliverables to date, as well as the upcoming actions designed to reach the objective of developing a modernised air traffic management system for Europe. The SESAR Forum is the yearly information appointment for all stakeholders looking for some detailed updates. This year, the SESAR Forum raised high interest among the ATM community and over 200 attendees followed the high-level presentations. The highlight of SESAR's participation at the World ATM Congress 2013 was a live demonstration of the SESAR SWIM Concept. The demonstrations involved 10 different ATM organisations interconnecting 31 instances and successfully exchanging information on airspace, flights, airports and weather. They proved the benefits of SWIM and how its maturing prototypes are closer to deployment in the near future.

Building on the success of the 2012 edition, the second SWIM Master Class was launched in June 2013. The second edition of the SESAR SWIM Master Class welcomed 64 teams worldwide ranging from software development companies to universities, actively demonstrating their SWIM-enabled applications. The 2013 edition attracted an increased number of ATM service providers, thus offering development teams a wider scope of data and services to exploit in their SWIM-enabled applications or web services. As part of this initiative no less than 39 proposals for services and applications were submitted.

International cooperation and the interoperability of SESAR solutions are paramount for the Programme development and future deployment. In this regard, in June 2013, the SJU, in partnership with the EU Delegation to the United States, held a highly successful one-day conference in Washington DC. The event

attracted a high-level audience of 90 people, including representatives of the US and EU Governments, ICAO, and industry from both sides of the Atlantic. The conference was the key event of the EU Delegation to the United States' EU rendez-vous series, which strengthens the enduring relationship between the United States, the European Union, and the EU's Member States through candid and vibrant debates about the critical issues facing the transatlantic relationship today.

In order to promote and celebrate scientific excellence, SESAR held its third SESAR Innovation Days in Stockholm Sweden. The event welcomed 175 participants who joined three productive days of discussing scientific research progress and results through presentations, information exchange, workshops and self-discovery. The 2013 SESAR Young Scientist Award was awarded to the work on 'Commercial Aircraft Trajectory Optimization based on Multiphase Mixed Integer Optimal Control' for its innovative modelling and interdisciplinary solution approach to the trajectory modelling problem, as well as strong engagement with European Research Centres and with the USA.

In 2013, the SJU public website, attracted some 149,500 visitors (average of 12,458 per month) compared to 147,000 visitors (average of 12,250 visitors per month) in 2012. The dedicated mini-site for ATC Global was also updated; regular, informative eNewsletters to external audiences (a distribution list of +/- 21,000 contacts) using optimised mail templates were sent out.

In addition, the SJU's 2012 Annual Report was published and distributed to all major SJU stakeholders.

Financial Reporting and Information

The SJU internal reporting system covering Budget and Finance has proved its effectiveness providing the management and the Executive Director with follow-up of the Programme and its Financial and Human Resources related aspects. The ABAC/SAP provides support for financial transactions and accounting, aligning the SJU to the standard of the European Commission.

The financial reporting is based on the annual Interim Financial Statements per Member, which includes the detail of the eligible costs incurred by a Member broken down by Projects identifying costs related to accepted deliverables and work in progress. This report, accompanied by the certificate on the interim financial statements is the basis of the financial assessment which upon coherence check with the operational reports leads to the granting of the co-financing. An internal control aims at identifying significant divergences between actual and planned costs both at total and category levels and clarifications are requested to the Members. The efforts to further improve the approval process, made it possible to receive by the end of year all Members' 2012 Financial Reports which were for co-financing ensuring an efficient use of the SJU's financial resources so that no idle cash was left after payments. The criteria to identify eligible costs are clearly defined in the MFA (Schedule 2 – Financial Provisions) whereas the methodology followed for the assessment reflects the four eyes principle with Initiation and Verification for both the operational and financial aspects.

The ABAC/SAP system constitutes the financial management system of the SJU. In order to ensure consistency with the operational data received from the Members on a quarterly basis and in the context of IFS, the Finance and Budget Sector perform regular extensive reconciliation which provides additional assurance on the data and their quality.

- **Evaluation and audit**

Following the recommendation of the European Court of Auditors, the Administrative Board adopted decision ADB(d) 11-2010 of 19 October 2010 where it took note of the role of the Internal Auditor of the

European Commission as Internal Auditor of the SJU in accordance with Article 185 (3) of the General Financial Regulation. In addition, the Executive Director has established the Internal Audit Capability to complement the work of the Internal Auditor.

The European Court of Auditors is the external auditor of the SJU.

In addition, in order to increase the level of assurance on the Programme activities, the SJU established a Project Audit Sector (see above) to perform ex-post controls and audits. The SJU Ex-Post Project Audit Strategy was adopted by the Administrative Board on 31 December 2010 and amended on 12 December 2013 to meet the requirement of the Court of Auditors to increase the audited population.

Conflict of interest

The European Parliament in its decision of May 10, 2012 on the discharge in respect of the implementation of the budget of the SESAR Joint Undertaking called on all Joint Undertakings to inform the discharge authority on the verification mechanisms which exist in their respective structures to enable a proper management and prevention of conflicts of interest.

The SJU has verification mechanisms in place to enable a proper management and prevention of conflicts of interest. The management of conflict of interest is defined in Article 6 of Council Regulation 219/2007.

The Administrative Board adopted a first decision to concretely implement the conflict of interest measures already on 21 February 2008, well before the membership agreements with the industrial partners were established and signed. The decision was further reviewed and detailed on 1 December 2008 and recently on 29 March 2012. In particular, the following measures have been adopted and are implemented:

- members of the SJU and/or the Administrative Board are not allowed to participate in any of the steps of the procurement or grants procedures and cannot have access to any documentation in this respect;
- mandatory signature of a declaration on conflict of interest by each participant before each meeting of the Administrative Board, recruitment board, procurement/grant board, or any other similar body or committee within the SJU;
- exclusion of any participant who declares or is considered to be in a potential conflict of interest from the relevant meeting;
- mandatory signature by staff, under any contractual form, of a declaration of commitment and conflict of interest upon their appointment as well as an annual declaration of interests;
- mandatory training on ethics and integrity for all staff members
- mandatory signature by experts or consultants under any contractual form upon their appointment of a declaration of independence, commitment, confidentiality and conflict of interest;
- a binding Code of Conduct addressed to Administrative Board Members in addition to the Code of conduct already existing for the SJU Staff.

The HR sector makes sure that each new appointed individual signs this declaration. These declarations are reviewed by the Deputy Executive Director Administration & Finance and the Data Protection Officer with the objective to eventually bring to the most appropriate level of attention potential issues so that the necessary actions can be undertaken. All declarations are stored in the safe-deposit of the HR sector.

Additionally, all individuals with a staff contract with the SJU (temporary agents, contractual agents, ENDS and Members' secondees) have to sign once per year an 'Annual declaration of interests'. The HR sector

initiates this procedure by means of a yearly email and guarantees signature by every person. In this email, all persons working for the SJU are asked to fill in the annual declaration of interest and to return it completed and signed in a closed envelope addressed to the attention of the HR sector.

Furthermore, the SJU sustains 2 other types of declarations:

- Declaration of commitment and confidentiality: to be signed by all participants in the SESAR Joint Undertaking's bodies and working groups upon their appointment.
- Declaration of conflict of interest¹⁰: to be signed by all participants of the SESAR Joint Undertaking's meetings (including Administrative Board Members) before each meeting.

As already mentioned, at its meeting on 3 July 2012, the Administrative Board further reinforced the conflict of interest measures adopting a code of conduct for the Administrative Board Members and new templates for the declarations which contribute to increase the awareness of their signatories.

8 Criteria for Annual declaration of Assurance

8.1 Building blocks towards reasonable assurance of the Executive Director (AOD) for the legality and regularity of underlying transactions

In 2013 the programme operations were well advanced with almost all the projects being in the execution phase; the volume and the value of the transactions analysed, assessed and processed by the SJU increased significantly requiring well tested and formalised financial circuits to support operational activities. In order to ensure the proper functioning of the SJU, goods and services were acquired applying the SJU Financial Rules and vacant positions filled in accordance with the Provision of the Implementing Rules of the Staff Regulation.

8.2 Assessment by management

In order to ensure the sound financial management, legality and regularity of the underlying transactions, all transactions are submitted to the four eyes principle in the preparation phase as well as in the deliverable acceptance/payment phase. The ex-ante control function is exercised at operational level, to verify the work performed during the initiation of the transaction to ensure that the required results are achieved, and at financial level to verify the application of the rules.

The extensive ex-ante controls allowed for avoidance of material errors and formal errors, detected at different level of the authorization process (initiation, verification, authorization and payment). The Accounting Officer performs a final control on each payment made, finally verifying that the authorization process has been complied with and no issues highlighted in the acceptance of the deliverables.

The SJU has established an "exceptions' register" to manage and monitor possible exceptions to rules, and all exceptions are submitted to the AO with a justification for endorsement. Exceptions recorded during the year are not material in value.

Although substantial progress has been achieved, the SJU's staff is committed to continue its efforts to reach the highest standards for management and control systems.

¹⁰ Annexe II of Decision ADB(D) 10-2008

8.3 Results from independents audits during the reporting

SJU Internal Auditor

In June 2011, a detailed risk assessment exercise for the SJU was carried out by the Internal Audit Service of the Commission in close collaboration with the SJU Internal Audit Capability. The results of the risk assessment were then used to establish the 'Coordinated IAS Strategic Audit Plan for 2012-2014', which was formally endorsed by the Administrative Board on 17 November 2011.

In accordance with this Strategic Audit Plan, the Internal Audit Service of the European Commission performed in 2013 a limited review on Grant Management/procedure for the closing of projects at the SJU. The objective of the engagement was to provide an independent assessment of the adequate design of the internal control system with regard to closing of individual projects. The limited review pointed out the following areas to be further developed to strengthen the process before the expected wave of project closures:

- the objectives and documentation of the process,
- the review of Final Projects Reports and
- the document management in the closure process.

The recommendations were accepted by the SJU and the action plan related to these recommendations was transferred to the internal Audit Service of the European Commission in November 2013.

Furthermore, the Internal Audit Service of the European Commission performed in end 2012 an Information Technology (IT) risk assessment to provide the Joint Undertaking with an overview of its key IT risk exposures. This IT risk assessment was not an audit and therefore this report does not contain an IAS opinion and assurance on design and implementation of internal controls, nor formal recommendations. Nevertheless, in 2013 the SJU has followed up the remarks made by the IAS.

SJU Internal Audit Capability

In accordance with the Internal Audit Capability charter, the IAC submits to the Administrative Board an annual activity report setting out, inter alia, the number and type of internal audits conducted, the recommendations made and the action taken on these recommendations.

The IAC activity in 2013 will be reported to the Board at its meeting in June 2014.

In summary, the following reports were submitted to the Executive Director and/or the Board in 2013:

- Audit report on Human Resources / Recruitment (to be delivered in January 2014). The objective was to assess whether in the SJU's clear staff selection procedure are in place covering all the key steps of the recruitment life cycle and are aligned with the SJU recruitment legal and procedural framework and other decisions of the SJU Administrative Board and/or of the Executive Director.
- Report on the Validation of ABAC Workflow authorisations 2013. The objective was to ensure alignment of the user's authorisations granted via ABAC Workflow Security to the regulatory requirements.
- Audit Report on Procurement / Contract management. The scope of the audit encompassed a review of proceedings once the contract (resulting from procurement) has been awarded and signed by both parties. The auditor concluded that the internal control system in place provides

reasonable assurance regarding the achievement of the objectives set up for contract management at the SJU.

Furthermore the IAC performed consulting services (advisory and management-requested activities, the nature and scope of which are agreed with the Executive Director) which are intended to add value and improve the SJU's governance, risk management, and control processes without the internal auditor assuming management responsibility.

IAC attended Auditnet meeting and the IAS conference in Brussels.

Permanent Audit Panel

In order to ensure the co-ordination of the work of the different SJU auditors, the Administrative Board of the SJU established in 2008 an Audit Panel. The Audit Panel is constituted by:

- the SJU Internal Audit Capability,
- the SJU Director Administration and Finance
- representatives of DG MOVE External Audit Unit,
- representatives of DG MOVE Internal Audit Capability,
- representatives of the Internal Auditor of Eurocontrol,
- representatives of the Audit Board of Eurocontrol,
- representatives of the Internal Audit Service of the European Commission,
- representatives of the European Court of Auditors.

The main functions of the Permanent Audit Panel are:

- To promote effective communication between the Administrative Board, the Executive Director and the auditors of the Joint Undertaking;
- To ensure effective coordination of the audit work to be carried out in order to avoid duplication, insofar as permitted under the respective mandate of the auditors of the Joint Undertaking;
- To analyse specific audit issues that may arise and to harmonise positions in order to reach a common approach, insofar as permitted under the respective mandate of the auditors of the Joint Undertaking;
- To provide the Administrative Board and the Executive Director of the SJU with advice on financial, control and risk matters.

The Permanent Audit Panel met on four occasions in 2013 to co-ordinate audit matters.

European Court of Auditors

The European Court of Auditors audits the SJU on an annual basis, in particular the annual accounts and assesses the respect of the principle of sound financial management, legality and regularity of the underlying transactions.

According to the ECA's opinion, the SJU annual accounts 2012, present fairly, in all material respects, its financial position as of 31 December 2012 and the results of its operations and its cash flows for the year end. Furthermore the transactions underlying the annual accounts for the financial year ended 31 December 2012 are legal and regular in all material respects.

Other audit activities

Validation of ABAC Processes

In February 2012, the Accounting Officer subcontracted the validation of ABAC procedures to the external audit cabinet Ernst and Young. The work has been performed in line with the guidance material made available by DG BUDG (Guidelines for the validation of the accounting systems in the traditional agencies). At the beginning of 2014 the Accounting Officer, considering that no change occurred to the SJU systems, confirms the validation of 2012.

8.4 Reservations and their impact on the declaration of assurance to be reviewed

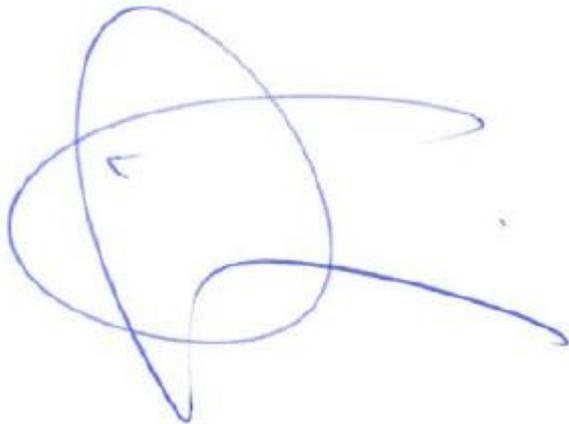
No reservations are made.

9 Declaration of Assurance

I, the undersigned, Claude Chêne, Executive Director ad Interim of the SESAR Joint Undertaking, in my capacity as authorising officer

- Declare** that the information contained in this report gives a true and fair view,
State that I have reasonable assurance that the resources assigned to the activities described in this report have been used for their intended purpose and in accordance with the principles of sound financial management, and that the control procedures put in place give the necessary guarantees concerning the legality and regularity of the underlying transactions. This reasonable assurance is based on my own judgement and on the information at my disposal, such as the results of the self-assessment, ex-post controls, the work of the SJU Internal Auditor and the lessons learnt from the report of the European Court of Auditors for years prior to the year of this declaration.
Confirm that I am not aware of anything not reported here which could harm the interests of the SJU.

Brussels, 31 March 2014



Claude Chêne
Executive Director ad Interim

10 Glossary

4 D	4 Dimensions
ABAC	Accrual Based Accounting
ACAS	Airborne Collision Avoidance System
A-CCD	Advanced Continuous Climb Departure
A-CDA	Advanced Continuous Descent Approach
ADS-B	Automatic Dependence Surveillance-Broadcast
ADS-C	Automatic Dependence Surveillance-Contract
ADEXP	ATS Data Exchange Presentation
AeroMacs	Aeronautical Mobile Airport Communications System
AFUA/ASM	Advanced Flexible Use Airspace/Airspace Management
AMAN	Arrival Manager
AOC	Airlines Operational Communication
AOP	Airport Operation Plan
ASAS	Airborne Separation Assistance System
ASPA	Airborne Spacing
ATM	Air Traffic Management
ATSA ITP	Air Traffic Situation Awareness- In-Trail Procedure
AU	Civil airspace users
CCD	Continuous Climb Departure
CDA	Continuous Descent Approach
CDM	Collaborative Decision Making
CNS	Communication, Navigation, Surveillance
CTA	Controlled Time Arrival
DCB	Demand and Capacity Balancing
DCMAC Euroc.	Directorate Civil Military ATM Coordination
DMAN	Departure Manager
EPP	Extended Projected Profile
GBAS	Ground Based Augmentation System
GNSS	Global Navigation Satellite System
HMI	Human Machine Interface
I 4D	Initial 4 Dimensions
CWP	Controller Working Position
IOP	Inter Operability
LVP	Low Visibility Procedure
MSP	Multi Sector Planning
NOP	Network Operation Plan
OAT	Operational Air Traffic
P-RNAV	Precision Area Navigation
RNP	Required Navigation Performance
RPAS	Remotely Piloted Aircraft System
RTS	Real Time Simulation
STAM	Short Term ATFCM Measures
S&M	Sequencing & Merging

SBT/RBT	Shared Business Trajectory/Reference Business Trajectory
STCA	Short Term Conflict Alert
SWIM	System Wide Information Management
TMA	Terminal Manoeuvring Area
TTA	Target Time Arrival
UDPP	User Driven Prioritisation Process

11 List of Annexes

Annexe Ia – Programme Resources 2016 – amounts engaged at 31 December 2013

Annexe Ib – Programme Financials

Annexe II – Deliverables 2013

Annexe III – Extract of the Provisional Annual Accounts 2013 – Annual General Accounts

PROGRAMME RESOURCES 2008 -2016 (amounts engaged at 31.12.2013)

EUR million	European Union	Eurocontrol	Industry		Total
			SJU Other Members	Others *	
In Kind Contributions	0,0	505,2	1.112,6	251,6	1.869,4
Co-financing					
WPs <i>B, 3,4,5,6,8,9,10,12,14,15 + C,7,13,16</i>	501,1	55,0	(556,1)		0,0
WP11 + WP E	0,0	43,0	0,0		
Demonstration Activities	50,0	0,0	0,0		
Other activities (AIRE, Optimi, SatOptimi, Associates of the SJU, RPAS definition phase, other studies)	42,9	0,0	0,0	(135,9)	0,0
Total Co-financing	594,0	98,0	(556,1)	(135,9)	0,0
Other Cash Contributions					
Ectrl Early Projects	0,0	7,0	0,0		7,0
AUs, NSAs, Mil, Staff	5,0	25,0	0,0		30,0
Industrial Support	66,0	0,0	0,0		66,0
Running Costs of the SJU	35,0	35,0	27,8		97,8
Total Other Cash Contributions	106,0	67,0	27,8	0,0	200,8
TOTAL	700,0	670,2	584,3	115,7	2.070,2
			700,0		

* This estimated amount includes the activities realized by other Industrial and Research entities, which are not Members of the SJU and are co-financed between 50% and 100% taking into account their correspondence to eligibility criteria. The In-Kind activities realized by these entities are not accounted for in the SJU Annual Accounts.

WP	Member	Realloc 2013 + BAFO III		co-financing part only			activities realized			
		In-Kind	Max Co-financing	Commitments 2008 - 2013	Co-fin paid 2008 - 2013	Pre-fin at 31.12.2013	IFS 2008 - 2012 in kind	estimated IFS 2013 in kind	estimated IFS 2008 -2013 in kind	
03.	aena	6,7	3,4	3,3	0,9	0,9	1,7	0,4	2,1	
	dfs	2,9	1,5	1,9	0,7	0,5	1,4	0,6	2,0	
	dsna	1,3	0,6	1,0	0,2	0,3	0,6	0,1	0,7	
	enav	9,6	4,8	4,9	2,4	1,1	4,8	1,8	6,6	
	nats	5,3	2,6	1,7	0,2	0,4	0,5	0,6	1,0	
	noracon	6,6	3,3	2,6	1,5	0,3	3,0	0,7	3,7	
	seac									
	frequentis									
	indra	6,5	3,2	1,9	0,4	0,5	0,9	2,3	3,2	
	natmig									
	selex	4,7	2,3	1,7	0,9	0,5	1,8	0,8	2,6	
	thales	12,7	6,4	4,3	2,1	1,2	4,1	1,0	5,2	
	airbus	5,5	2,8	1,8	1,2	0,4	2,4	1,4	3,8	
	alenia	2,2	1,1	0,7	0,3	0,1	0,5	0,2	0,7	
	honeywell									
	Sub Total		64,1	32,0	25,9	10,7	6,1	21,7	9,8	31,5
		eurocontrol	19,8					6,4	3,4	9,8
	Total	83,9					28,1	13,2	41,3	
04.	aena	7,1	3,6	3,6	1,6	0,6	3,3	1,0	4,3	
	dfs	14,1	7,0	4,9	3,0	0,7	5,9	2,3	8,3	
	dsna	29,5	14,7	9,2	3,6	2,3	12,4	5,3	17,8	
	enav	10,4	5,2	3,3	1,5	0,8	3,0	0,8	3,8	
	nats	14,3	7,2	6,6	2,6	1,4	5,2	1,1	6,3	
	noracon	0,3	0,1	1,1	0,1		0,3		0,3	
	seac									
	frequentis									
	indra	1,8	0,9	0,6	0,3	0,2	0,6	0,2	0,8	
	natmig									
	selex	1,3	0,7	0,9	0,5	0,2	0,9	0,3	1,2	
	thales	5,7	2,9	2,7	1,1	0,8	2,2	1,0	3,1	
	airbus	5,4	2,7	2,8	0,8	0,7	1,6	0,5	2,1	
	alenia	2,2	1,1	0,7	0,3	0,1	0,5	0,1	0,7	
	honeywell	1,2	0,6	0,6	0,3	0,2	0,6	0,2	0,8	
	Sub Total		93,4	46,7	36,9	15,6	8,2	36,4	12,8	49,2
		eurocontrol	29,7					11,3	3,6	14,9
	Total	123,0					47,7	16,4	64,1	
05.	aena	15,4	7,7	6,7	3,1	0,9	6,1	1,2	7,4	
	dfs	7,2	3,6	2,3	0,7	0,2	1,3	1,8	3,1	
	dsna	9,2	4,6	2,7	0,9	0,4	3,0	2,0	5,0	
	enav	16,3	8,1	6,2	3,9	1,0	7,9	2,2	10,1	
	nats	23,1	11,5	10,3	3,2	1,5	6,4	3,4	9,8	
	noracon	13,5	6,7	5,4	2,3	0,6	4,6	2,9	7,6	
	seac									
	frequentis	1,5	0,7	0,4	0,1	0,1	0,2	0,2	0,3	
	indra	2,5	1,2	0,9	0,2	0,3	0,4	0,1	0,5	
	natmig	0,0	0,0	0,2	0,0		0,0		0,0	
	selex	1,0	0,5	0,8	0,2	0,3	0,3	0,2	0,5	
	thales	3,5	1,8	2,6	0,9	0,9	1,8	0,6	2,4	
	airbus	4,0	2,0	1,6	0,6	0,4	1,3	0,4	1,6	
	alenia	0,7	0,4	0,5	0,2	0,1	0,4	0,1	0,5	
	honeywell									
	Sub Total		97,8	48,8	40,4	16,3	6,6	33,8	15,1	48,9
		eurocontrol	26,3					8,2	2,9	11,1
	Total	124,1					42,0	18,0	60,0	
06.	aena	13,4	6,7	6,2	2,5	0,5	4,9	2,1	7,0	
	dfs	5,3	2,7	5,3	1,0	0,5	2,0	0,6	2,6	
	dsna	10,3	5,1	6,7	1,2	1,0	4,2	2,0	6,2	
	enav	11,9	5,9	6,8	1,4	0,8	2,8	1,4	4,2	
	nats	5,2	2,6	3,3	1,0	0,2	2,0	1,5	3,5	
	noracon	13,2	6,6	6,0	2,8	0,2	5,6	1,5	7,1	
	seac	13,7	6,9	5,9	2,7		5,3	2,0	7,3	
	frequentis	0,5	0,3	1,2	0,0	0,1	0,1	0,2	0,3	
	indra	2,9	1,4	5,0	0,7	0,3	1,5	0,3	1,8	
	natmig	0,9	0,5	2,0	0,1	0,1	0,4	0,1	0,5	
	selex	2,0	1,0	3,0	0,7	0,2	1,3	0,3	1,6	
	thales	5,4	2,7	9,7	0,9	0,6	1,9	1,2	3,1	
	airbus	7,6	3,8	6,3	0,7	0,5	1,4	0,6	2,1	
	alenia	1,5	0,7	1,9	0,2	0,0	0,4	0,3	0,7	
	honeywell	0,3	0,1	1,7	0,1		0,2		0,2	
	Sub Total		94,1	47,0	71,0	16,0	5,1	34,0	14,1	48,1
		eurocontrol	46,7					14,5	5,9	20,4
	Total	140,7					48,5	19,9	68,5	

WP	Member	Realloc 2013 + BAFO III		co-financing part only			activities realized		
		In-Kind	Max Co-financing	Commitments 2008 - 2013	Co-fin paid 2008 - 2013	Pre-fin at 31.12.2013	IFS 2008 - 2012 in kind	estimated IFS 2013 in kind	estimated IFS 2008 -2013 in kind
07.	aena	2,9	1,4	1,6	0,3	0,4	0,6	0,2	0,8
	dfs	2,8	1,4	1,2	0,4	0,3	0,8	0,3	1,0
	dsna	2,1	1,1	1,0	0,2	0,3	0,8	0,4	1,2
	enav	3,6	1,8	1,3	0,4	0,4	0,7	0,2	0,9
	nats	3,5	1,8	1,5	0,5	0,3	1,1	0,4	1,5
	noracon	2,8	1,4	0,6	0,2		0,3	0,2	0,5
	seac	0,2	0,1	0,2	0,0		0,0		0,0
	frequentis	0,0	0,0						
	indra	5,1	2,5	0,2	0,0	0,1	0,1	0,0	0,1
	natmig								
	selex	1,5	0,7						
	thales	0,7	0,3	0,6	0,1	0,2	0,2	0,0	0,2
	airbus	0,1	0,1	0,1	0,0	0,0	0,1	0,0	0,1
	alenia								
	honeywell								
Sub Total		25,4	12,7	8,3	2,1	2,0	4,6	1,7	6,3
eurocontrol		76,0					19,7	9,0	28,8
Total		101,4					24,4	10,7	35,1
08.	aena	0,6	0,3	0,2	0,1	0,1	0,3	0,1	0,3
	dfs	5,4	2,7	2,5	1,2	0,7	2,3	1,0	3,3
	dsna	2,1	1,0	1,0	0,4	0,3	1,0	0,2	1,2
	enav	1,9	0,9	0,8	0,5	0,2	0,9	0,1	1,0
	nats								
	noracon	11,0	5,5	4,3	2,7	0,6	5,4	2,1	7,5
	seac	0,2	0,1	0,1	0,0		0,1	0,1	0,1
	frequentis	2,3	1,2	0,9	0,5	0,2	1,1	0,7	1,7
	indra	1,9	1,0	0,7	0,3	0,2	0,7	0,3	1,0
	natmig	2,2	1,1	1,0	0,3	0,2	1,0	0,4	1,3
	selex	1,6	0,8	0,6	0,4	0,2	0,9	0,3	1,2
	thales	1,4	0,7	0,9	0,3	0,3	0,6	0,2	0,8
	airbus								
	alenia								
	honeywell								
Sub Total		30,6	15,3	13,1	6,8	2,8	14,2	5,4	19,6
eurocontrol		21,0					7,0	3,0	10,0
Total		51,5					21,2	8,4	29,6
09.	aena								
	dfs								
	dsna	0,2	0,1	0,1	0,0		0,0	0,0	0,0
	enav								
	nats								
	noracon	0,0	0,0	0,1	0,0		0,0		0,0
	seac								
	frequentis								
	indra	0,1	0,1	0,0	0,0	0,0	0,0	0,0	0,0
	natmig								
	selex	5,5	2,8	2,7	1,7	0,3	3,4	1,5	4,9
	thales	60,2	30,1	22,5	12,1	3,7	24,1	13,1	37,2
	airbus	62,2	31,1	24,4	13,1	4,5	26,2	12,1	38,3
	alenia	25,3	12,6	10,1	3,8	2,4	7,7	5,2	12,9
	honeywell	38,0	19,0	14,5	6,9	2,6	13,9	5,0	18,8
Sub Total		191,6	95,8	74,5	37,7	13,5	75,3	36,8	112,1
eurocontrol		8,5					3,6	0,8	4,3
Total		200,1					78,9	37,5	116,5
10.	aena	1,3	0,7	1,1	0,3	0,2	0,6	0,4	1,0
	dfs	3,4	1,7	1,3	0,5	0,4	0,9	0,3	1,2
	dsna	1,6	0,8	1,6	0,3	0,4	0,8	0,3	1,1
	enav	3,8	1,9	1,8	0,6	0,5	1,2	1,5	2,7
	nats	0,8	0,4	0,4	0,1	0,1	0,2	0,1	0,2
	noracon	1,2	0,6	1,4	0,3		0,6	0,1	0,7
	seac								
	frequentis	0,9	0,5	0,6	0,4	0,2	0,7	0,3	1,0
	indra	32,4	16,2	13,9	4,9	3,7	9,9	4,8	14,7
	natmig	4,6	2,3	2,3	0,3	0,5	1,2	1,6	2,8
	selex	21,4	10,7	9,0	2,8	2,2	5,7	3,0	8,7
	thales	49,2	24,6	19,4	9,8	5,1	19,6	8,2	27,8
	airbus	0,1	0,1	0,2	0,0	0,1	0,1	0,0	0,1
	alenia								
	honeywell								
Sub Total		120,7	60,3	52,8	20,3	13,4	41,5	20,5	62,0
eurocontrol		18,4					8,2	3,0	11,1
Total		139,1					49,7	23,5	73,2

WP	Member	Realloc 2013 + BAFO III		co-financing part only			activities realized			
		In-Kind	Max Co-financing	Commitments 2008 - 2013	Co-fin paid 2008 - 2013	Pre-fin at 31.12.2013	IFS 2008 - 2012 in kind	estimated IFS 2013 in kind	estimated IFS 2008 -2013 in kind	
12.	aena	0,3	0,2	0,3	0,1	0,0	0,2	0,1	0,3	
	dfs	4,6	2,3	2,4	1,3	0,7	2,6	1,0	3,6	
	dsna	1,2	0,6	1,4	0,2	0,5	0,7	0,1	0,8	
	enav	1,0	0,5	0,4	0,1	0,1	0,1	0,1	0,2	
	nats	0,2	0,1	0,1	0,0	0,1	0,1	0,0	0,1	
	noracon	2,0	1,0	0,8	0,3		0,6	0,3	0,8	
	seac	0,4	0,2	0,2	0,1		0,1	0,1	0,2	
	frequentis	7,2	3,6	2,1	1,2	0,6	2,4	1,2	3,7	
	indra	27,4	13,7	10,5	4,5	3,2	8,9	5,7	14,6	
	natmig	13,8	6,9	4,7	1,3	0,8	5,5	3,7	9,2	
	selex	21,0	10,5	9,1	4,5	2,8	8,9	3,6	12,5	
	thales	29,8	14,9	10,7	5,6	3,2	11,2	5,8	17,0	
	airbus									
	alenia	0,6	0,3	0,2	0,1		0,2	0,2	0,4	
	honeywell									
	Sub Total		109,5	54,8	43,0	19,2	11,8	41,5	21,8	63,4
	eurocontrol		3,6					1,1	0,2	1,3
Total		113,2					42,6	22,0	64,7	
13.	aena	2,2	1,1	0,1	0,0	0,0	0,1	0,0	0,1	
	dfs	2,7	1,4	0,1	0,1	0,0	0,1	0,0	0,1	
	dsna	1,0	0,5							
	enav	0,6	0,3	0,2	0,1	0,1	0,2	0,1	0,3	
	nats	0,9	0,5	0,3	0,1	0,1	0,1	0,1	0,2	
	noracon	0,1	0,1	0,0	0,0		0,0	0,0	0,0	
	seac									
	frequentis	3,2	1,6	1,0	0,4	0,2	0,7	0,6	1,4	
	indra	3,4	1,7	2,5	0,7	0,6	1,4	0,7	2,0	
	natmig									
	selex	1,3	0,6	1,1	0,5	0,3	1,0	0,5	1,5	
	thales	3,1	1,6	1,3	0,5	0,4	1,1	0,2	1,3	
	airbus									
	alenia									
	honeywell									
	Sub Total		18,6	9,3	6,7	2,3	1,8	4,7	2,2	6,9
	eurocontrol		32,6					11,3	5,8	17,1
Total		51,2					15,9	8,0	24,0	
14.	aena									
	dfs	0,3	0,1	0,1	0,1	0,0	0,2	0,0	0,2	
	dsna	0,1	0,1	0,2	0,0	0,1	0,1	0,0	0,1	
	enav	0,3	0,1	0,1	0,0	0,0	0,1	0,0	0,1	
	nats									
	noracon	0,5	0,2	0,6	0,1		0,3	0,1	0,3	
	seac									
	frequentis	7,3	3,7	3,2	1,5	0,6	3,1	1,4	4,5	
	indra	8,7	4,3	5,4	2,0	1,3	4,0	3,0	6,9	
	natmig	1,8	0,9	1,1	0,7	0,1	1,5	0,2	1,7	
	selex	3,0	1,5	1,2	0,7	0,3	1,5	0,5	2,0	
	thales	16,0	8,0	8,7	3,8	2,3	7,6	2,9	10,5	
	airbus	0,3	0,1	0,1	0,0	0,0	0,1	0,0	0,1	
	alenia									
	honeywell	0,2	0,1	0,1	0,0		0,1	0,0	0,1	
	Sub Total		38,5	19,2	20,7	9,1	4,8	18,4	8,2	26,6
	eurocontrol		16,7					6,1	2,2	8,3
Total		55,1					24,5	10,4	34,9	
15.	aena	4,0	2,0	1,8	0,9	0,2	1,7	0,5	2,2	
	dfs	5,0	2,5	1,7	0,8	0,2	1,5	0,9	2,4	
	dsna	2,7	1,3	1,6	0,3	0,2	0,8	0,5	1,3	
	enav	1,8	0,9	0,9	0,3	0,1	0,6	0,2	0,8	
	nats	1,2	0,6	0,2	0,1	0,1	0,1	0,1	0,2	
	noracon	2,2	1,1	1,2	0,3	0,1	0,6	0,1	0,8	
	seac									
	frequentis	4,6	2,3	3,2	1,2	1,2	2,3	1,5	3,8	
	indra	18,7	9,4	8,4	2,5	2,1	5,0	1,8	6,8	
	natmig	13,3	6,6	4,5	1,8	0,8	5,6	2,0	7,6	
	selex	18,1	9,1	8,6	4,7	1,7	9,3	3,3	12,6	
	thales	32,0	16,0	14,4	6,0	4,9	12,0	5,6	17,6	
	airbus	5,4	2,7	0,9	0,3	0,3	0,7	0,3	0,9	
	alenia	4,1	2,0	1,8	0,6	0,3	1,2	0,4	1,6	
	honeywell	0,7	0,3	0,3	0,1		0,2	0,0	0,2	
	Sub Total		113,7	56,8	49,6	19,7	12,3	41,6	17,3	58,9
	eurocontrol		31,2					11,1	3,9	15,0
Total		144,9					52,7	21,2	73,8	

WP	Member	Realloc 2013 + BAFO III		co-financing part only			activities realized			
		In-Kind	Max Co-financing	Commitments 2008 - 2013	Co-fin paid 2008 - 2013	Pre-fin at 31.12.2013	IFS 2008 - 2012 in kind	estimated IFS 2013 in kind	estimated IFS 2008 -2013 in kind	
16.	aena	3,5	1,7	1,8	0,8	0,3	1,6	0,6	2,2	
	dfs	4,4	2,2	1,8	0,9	0,4	1,9	0,7	2,6	
	dsna	0,5	0,2	0,4	0,1	0,1	0,2	0,2	0,4	
	enav	5,0	2,5	1,7	1,0	0,3	2,0	1,6	3,6	
	nats	3,3	1,6	1,5	0,5	0,3	1,0	0,3	1,3	
	noracon	1,9	1,0	0,7	0,3		0,5	0,2	0,7	
	seac	0,6	0,3	0,3	0,1		0,2	0,0	0,2	
	frequentis	1,8	0,9	0,8	0,4	0,1	0,8	0,5	1,3	
	indra	3,6	1,8	1,3	0,8	0,3	1,5	0,8	2,4	
	natmig	2,9	1,4	1,1	0,3	0,1	1,4	0,7	2,1	
	selex	1,4	0,7	0,6	0,4	0,1	0,7	0,3	1,1	
	thales	4,2	2,1	2,0	0,9	0,5	1,9	0,9	2,8	
	airbus	12,1	6,1	5,3	3,0	1,1	5,9	3,5	9,4	
	alenia	0,5	0,2	0,1	0,1		0,2	0,1	0,3	
	honeywell									
	Sub Total		45,7	22,8	19,5	9,5	3,7	19,9	10,4	30,2
	eurocontrol		48,1					20,0	7,9	27,9
Total		93,8					39,9	18,2	58,1	
B.0	aena	2,9	1,5	1,3	0,7	0,2	1,4	0,5	1,9	
	dfs	11,6	5,8	3,5	2,6	0,8	5,1	1,6	6,7	
	dsna	3,9	2,0	0,8	0,3	0,2	0,8	0,3	1,1	
	enav	2,5	1,3	0,8	0,4	0,2	0,7	0,7	1,5	
	nats	5,0	2,5	2,1	1,2	0,5	2,5	1,0	3,5	
	noracon	4,0	2,0	1,5	1,2	0,2	2,4	0,3	2,8	
	seac	0,5	0,2	0,2	0,1		0,3	0,1	0,3	
	frequentis	1,7	0,8	0,3	0,2	0,1	0,5	0,1	0,6	
	indra	1,8	0,9	0,5	0,3	0,1	0,7	0,2	0,8	
	natmig									
	selex	3,3	1,7	0,9	0,6	0,2	1,1	0,4	1,5	
	thales	4,2	2,1	1,3	0,6	0,4	1,2	0,5	1,7	
	airbus	2,9	1,4	1,3	0,7	0,4	1,4	0,9	2,2	
	alenia	0,2	0,1	0,1	0,1	0,0	0,2	0,0	0,2	
	honeywell									
	Sub Total		44,6	22,3	14,5	9,0	3,3	18,2	6,7	25,0
	eurocontrol		33,6					9,8	3,8	13,6
Total		78,2					28,0	10,5	38,6	
C.0	aena	1,5	0,8	0,7	0,3	0,0	0,6	0,3	0,9	
	dfs	2,0	1,0	0,7	0,3	0,2	0,7	0,3	1,0	
	dsna	1,3	0,7	0,7	0,1	0,2	0,4	0,4	0,8	
	enav	2,0	1,0	0,7	0,3	0,2	0,6	0,5	1,0	
	nats	1,3	0,7	0,7	0,2	0,2	0,3	0,3	0,6	
	noracon	2,2	1,1	0,7	0,2		0,4	0,2	0,7	
	seac	0,7	0,3	0,2	0,1		0,2	0,1	0,3	
	frequentis									
	indra	2,1	1,0	0,8	0,3	0,3	0,7	0,3	0,9	
	natmig									
	selex									
	thales	2,1	1,0	1,0	0,3	0,3	0,5	0,4	1,0	
	airbus	2,4	1,2	1,2	0,3	0,4	0,6	0,9	1,6	
	alenia	0,3	0,1	0,2	0,1		0,1	0,1	0,2	
	honeywell	0,1	0,0	0,0	0,0		0,1	0,1	0,1	
	Sub Total		18,0	9,0	7,7	2,5	1,9	5,2	3,8	9,0
	eurocontrol		33,5					9,8	4,6	14,4
Total		51,5					15,0	8,3	23,4	
H.0	aena	0,3	0,2		0,3	0,0	0,6		0,6	
	dfs	0,3	0,1		0,3	0,2	0,7		0,7	
	dsna	0,3	0,1		0,1	0,2	0,2		0,2	
	enav	0,5	0,2		0,3	0,2	0,6		0,6	
	nats	0,3	0,2		0,2	0,2	0,3		0,3	
	noracon	0,6	0,3		0,2		0,4		0,4	
	seac	0,4	0,2		0,1		0,2		0,2	
	frequentis	0,2	0,1							
	indra	0,4	0,2		0,3	0,3	0,7		0,7	
	natmig	0,2	0,1							
	selex	0,8	0,4							
	thales	0,7	0,4		0,3	0,3	0,5		0,5	
	airbus	0,9	0,4		0,3	0,4	0,6		0,6	
	alenia	0,4	0,2		0,1		0,1		0,1	
	honeywell	0,3	0,1		0,0		0,1		0,1	
	Sub Total		6,5	3,2		2,5	1,9	5,0		5,0
	eurocontrol		1,1							
Total		7,6					5,0		5,0	

WP	Member	Realloc 2013 + BAFO III		co-financing part only			activities realized		
		In-Kind	Max Co-financing	Commitments 2008 - 2013	Co-fin paid 2008 - 2013	Pre-fin at 31.12.2013	IFS 2008 - 2012 in kind	estimated IFS 2013 in kind	estimated IFS 2008 -2013 in kind
Total	aena	62,2	31,1	28,7	11,5	4,3	23,0	7,4	30,4
	dfs	71,9	35,9	29,9	13,4	5,7	26,8	11,4	38,2
	dsna	67,4	33,7	28,4	7,6	6,2	25,9	11,7	37,6
	enav	71,3	35,5	29,9	12,8	5,9	25,6	11,2	36,7
	nats	64,4	32,2	28,6	9,7	5,2	19,5	8,8	28,3
	noracon	62,3	31,1	26,9	12,3	2,0	24,6	8,8	33,4
	seac	16,6	8,3	7,0	3,1		6,2	2,4	8,6
	frequentis	31,3	15,6	13,8	6,0	3,4	11,9	6,7	18,6
	indra	119,2	59,6	52,6	18,1	13,2	36,2	20,5	56,8
	natmig	39,6	19,8	16,9	4,9	2,5	16,5	8,7	25,1
	selex	88,1	44,0	40,3	18,4	9,4	36,9	14,8	51,7
	thales	231,0	115,5	101,9	45,0	24,7	90,0	41,7	131,7
	airbus	108,8	54,4	46,1	20,9	8,9	41,7	20,6	62,3
	alenia	37,9	19,0	16,2	5,7	3,0	11,5	6,6	18,1
	honeywell	40,7	20,3	17,4	7,5	2,8	15,0	5,2	20,2
	Sub Total	1.112,6	556,1	484,6	196,9	97,3	411,2	186,6	597,7
	WP11	5,2					5,2	1,7	
	WP E	7,4					7,4	4,7	
	Early Projects	9,4					9,4		
	Easa-Ectrl exp	5,0					5,0		
	PSO	24,0					24,0	2,1	
	Admin	7,3					7,3	3,0	
	other ectrl in kind	58,4					58,4	11,5	
	eurocontrol	505,2					206,4	71,3	207,8
	Total	1.617,8					734,2	280,9	805,5
	other from non Members	251,6							
	Total	1.869,4					734,2	280,9	

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Realloc 2013 + IBAFO III amounts of gross in kind contributions and max co-financing as result of the Reallocation 2013 and or IBAFO III

Cofinancing part only commitment= cumulative amount committed by the SJU at the end of 2013 in terms of co-fin
pre-financing= amount paid to the Members in terms of pre-financing considering the clearing of 2013 activities realized

Activities realized 2008 - 2013 amounts of gross in kind contributions related to activities realized up to 2013 for three members activities realized in 2012 are still subject to acceptance with regard to 2013, the activities are estimated on the quarterly reporting until September 2013 duly annualized

WP	Proj	Code	Deliverable Name	Deliverable Description	Template	Due date	Actual date	Assessment procedure	Provisional Assessment	Assessment Decision
03	03.03.02	D12-002	V&VI Software Material for Q4-2013	It will be provided the dump of WP3 Information Management System both for Operational and Engineering view that have been collected and managed during Q4 2013.	GEN	01/01/2014	20/12/2013	closed	No reservation (P)	No reservation (P)
		D11-003	WP3 IMS quarterly dump for Q4-2013		GEN	31/12/2013	19/12/2013	closed	No reservation (P)	No reservation (P)
03.03.01	03.00	D21	V&V IOP Report 2013	WP3 will elaborate in coordination with Sub-WP3 Managers dissemination material for the rest of the community. It will be issued on a yearly basis or after main milestones in the production of the V&V infrastructure. The report will be prepared with the input provided by the Sub-WP3 Managers that will be involved into the final review of the report.	GEN	10/12/2013	16/12/2013	closed	No reservation	No reservation
		D07-001	WP3 Dissemination Material		GEN	31/12/2012	16/12/2013	closed	No reservation (P)	No reservation (P)
03.01.01	D09-004	2013 V&V User Requirements Document - Q4	This document aims at providing an overview of the activities performed within the V&V Needs Collection and User Requirements Analysis Task during a quarter.	GEN	16/12/2013	10/12/2013	closed	No reservation (P)	No reservation (P)	
03.01.01	D11	2013 In Service Support Report	This document contains the analysis of the results of groups of exercises in the same OFA, to assess the metrics and measurement processes used, in order to be able to identify possibilities for harmonization as well as assess whether the validation exercise and its results could be understood and used by other partners.	GEN	31/12/2013	10/12/2013	closed	No reservation (P)	No reservation (P)	
03.03.01	D12	Support to Project 03.01.03 Report 2012		GEN	15/05/2013	02/12/2013	closed	No reservation (P)	No reservation (P)	
03.03.03	D443	In Service Support, Configuration Control and Problem Management Official Deliverable 2013	This deliverable provides all the information about the activity carried out within the scope of the In-Service Support, Configuration Control and Problem Management task (Task 444) performed by project 03.03.03 until October 2013.	GEN	31/10/2013	31/10/2013	closed	No reservation (P)	No reservation (P)	
03.03.03	D480	IBP V&VP Operational Acceptance Review 3Q2013	This deliverable describes all the Operational Acceptance Review activity performed during the third quarter of 2013. The document lists the exercises which have achieved M7 during this period and summarises the associated Operational Acceptance Review activity. The SJU recommends to establish the due date for this deliverable 15 days after the end of the quarter, so as to cover the activity of the whole quarter in this report. (email 03/03/2013)	GEN	15/10/2013	15/10/2013	closed	No reservation (P)	No reservation (P)	
03.03.03	D478	IBP V&VP Technical Acceptance 3Q2013	This deliverable describes all the Technical Acceptance activities performed during the third quarter of 2013. It presents the status of the exercises which should have achieved M6 during this period and summarises the associated Technical Acceptance activity performed on the exercises which have achieved M6. The SJU recommends to establish the due date for this deliverable 15 days after the end of the quarter, so as to cover the activity of the whole quarter in this report. (email 03/03/2013)	GEN	15/10/2013	15/10/2013	closed	No reservation	No reservation	
03.03.01	D14-003	V&VP Integration Plan - 2013 Q3	This deliverable will contain the collection of V&VP Integration Plan (specifically the reference to the WP3 EIMS) per each validation exercise with MF in the third quarter of 2013.	GEN	15/10/2013	15/10/2013	closed	No reservation	No reservation	
03.03.01	D12-003	V&VP Architecture Description & Tool Specification - 2013 Q3	This deliverable will contain the collection of V&VP Architecture Description Document (specifically the reference to the WP3 EIMS) per each validation exercise with ME in the second and third quarter of 2013.	TAD	15/10/2013	15/10/2013	closed	No reservation (P)	No reservation (P)	
03.01.03	D15-003	V&VP System Requirements Document Q3-2013	This deliverable addresses the V&V Platform System Requirements (SRs) defined in the 3rd quarter of 2013 to support the V&V Platforms preparation.	GEN	11/10/2013	11/10/2013	closed	No reservation (P)	No reservation (P)	
03.01.01	D09-003	2013 V&V User Requirements Document - Q3	This document aims at providing an overview of the activities performed within the V&V Needs Collection and User Requirements Analysis Task during a quarter.	GEN	30/09/2013	01/10/2013	closed	No reservation (P)	No reservation (P)	
03.01.01	D05-002	Validation Roadmap - Version 5 data	This deliverable represents the support to the preparation of a coherent and detailed overview of the validation activities foreseen, thus allowing detection of issues and inconsistencies among projects.	GEN	02/07/2013	09/09/2013	closed	No reservation	No reservation	
03.02.02	D06-001	2013 Evolution Plan 1st draft	This official deliverable is the intermediate 2013 yearly report providing the overview of the IBP's Evolution Plans delivered by P03.02.02 during Q1 and Q2. It contains the references to the artefacts uploaded on the WP3-IMS OV and EV databases (Remedy & eDEA) where known.	GEN	15/07/2013	16/07/2013	closed	No reservation (P)	No reservation (P)	
03.03.01	D12-002	V&VP Architecture Description & Tool Specification - 2013 Q2		GEN	15/07/2013	15/07/2013	closed	No reservation (P)	No reservation (P)	
03.03.01	D14-002	V&VP Integration Plan - 2013 Q2	This deliverable will contain the collection of V&VP Integration Plan (specifically the reference to the WP3 EIMS) per each validation exercise with ME in the first quarter of 2013.	GEN	15/07/2013	15/07/2013	closed	No reservation (P)	No reservation (P)	
03.02.02	D07-001	2013 Global Optimization report 1st draft	This deliverable will be the intermediate result of the gap analysis between the V&V requirements for validation exercises and the capabilities of existing IBP's. It will focus on common V&VI tools needed for the validation exercises which have early starting dates within 2012 schedule and will aim to consolidate and if possible, optimize the already existing validation roadmap for those exercises.	GEN	15/07/2013	12/07/2013	closed	No reservation (P)	No reservation (P)	
03.02.01	D07-001	IBPs & Tools Baseline Documentation Report Q2-2013 (external)	This deliverable summarises the results of T03.02.01-007 "IBPs & Tools Baseline Documentation for 2013 and 2014" during Q2/2013. The report provides for each exercise, information about relevant exercise milestone dates (contractual, planned, actual), as well as information about: - what has been currently done - what documents are already available - hyperlinks to Remedy for those documents - information about what is missing in order to consider that the exercise milestone has been achieved.	GEN	15/07/2013	12/07/2013	closed	No reservation (P)	No reservation (P)	
03.02.01	D04-001	Information Management Report (operational_management view) for 2013	This external deliverable summarises the results of the task T03.02.01-004 "Information Management (operational/management view) for 2013 and 2014" for the year 2013. This document contains information about the operational/management view of WP03 Information Management System. The purpose of the document is to achieve a level of description of the WP03 operational view process and the corresponding information that allow: - The various WP03 projects, contributing to the Operational View (OV), to be merged in a synchronised process and in a common information model - The development of the OV Information Management System (IMS) that supports this common process - Guidelines to be provided to the various stakeholders of the process.	GEN	15/07/2013	12/07/2013	closed	No reservation (P)	No reservation (P)	
03.01.03	D16-001	V&VP Technical Acceptance Test Plan Q1-Q2-2013	This deliverable addresses the set of V&V Platform Technical Acceptance Test Plans (TATPs) developed in the 1st and 2nd quarter of 2013 to support the Technical Acceptance of the V&V Platforms.	GEN	12/07/2013	11/07/2013	closed	No reservation (P)	No reservation (P)	
03.01.03	D15-002	V&VP System Requirements Document Q2-2013	This deliverable addresses the V&V Platform System Requirements (SRs) defined in the 2nd quarter of 2013 to support the V&V Platforms preparation.	GEN	12/07/2013	11/07/2013	closed	No reservation (P)	No reservation (P)	
03.00	D01-003	WP3 Coordination Meeting Report	This deliverable provides the synthesis of the discussion, actions and decisions taken during the coordination meetings (e.g. management panels, ad-hoc WP3 coordination meetings) in order to have a clear understanding of the status of WP3 and identify and track any problem that may arise.	GEN	27/08/2013	10/07/2013	closed	No reservation (P)	No reservation (P)	
03.01.01	D09-002	2013 V&V User Requirements Document - Q2	This document aims at providing an overview of the activities performed within the V&V Needs Collection and User Requirements Analysis Task during a quarter.	GEN	30/06/2013	03/07/2013	closed	No reservation (P)	No reservation (P)	
03.00	D11-002	WP3 IMS quarterly dump for Q2-2013	It will be provided the dump of WP3 Information Management System both for Operational and Engineering view that have been collected and managed during Q2 2013.	GEN	28/06/2013	28/06/2013	closed	No reservation (P)	No reservation (P)	
03.01.03	D15-001	V&VP System Requirements Document Q1-2013	This deliverable addresses the V&V Platform System Requirements (SRs) defined in the 1st quarter of 2013 to support the V&V Platforms preparation.	GEN	12/04/2013	12/04/2013	closed	No reservation	No reservation	
03.03.03	D477	IBP V&VP Technical Acceptance 1Q2013	This deliverable describes all the Technical Acceptance activities performed during the first quarter of 2013. It presents the status of the exercises which should have achieved M6 during this period and summarises the associated Technical Acceptance activity performed on the exercises which have achieved M6. The SJU recommends to establish the due date for this deliverable 15 days after the end of the quarter, so as to cover the activity of the whole quarter in this report. (email 03/03/2013)	GEN	15/04/2013	12/04/2013	closed	No reservation (P)	No reservation (P)	

	03.03.03	D479	IBP V&VP Operational Acceptance Review 102013	This deliverable describes all the Operational Acceptance Review activity performed during the first quarter of 2013. The document lists the exercises which have achieved M7 during this period and summarises the associated Operational Acceptance Review activity. The SJU recommends to establish the due date for this deliverable 15 days after the end of the quarter, so as to cover the activity of the whole quarter in this report.	GEN	15/04/2013	12/04/2013	closed	No reservation (P)	No reservation (P)
	03.01.03	D13	AIRBUS support to P03.03.01 Activity Report 2012	This deliverable is a brief report of the work and the contribution given by AIRBUS to P03.03.01 using the dedicated 2012 task in P03.01.03 (Task 3.1.3.T013)	GEN	26/04/2013	10/04/2013	closed	No reservation (P)	No reservation (P)
	03.01.01	D09-001	2013 V&V User Requirements Document - Q1	This document aims at providing an overview of the activities performed within the V&V Needs Collection and User Requirements Analysis Task during a quarter	GEN	31/03/2013	05/04/2013	closed	No reservation	No reservation
	03.03.01	D14-001	V&VP Integration Plan - 2013 Q1	This deliverable will contain the collection of V&VP Integration Plan (specifically the reference to the WP3 EIMS) per each validation exercise with ME in the first quarter of 2013	GEN	15/04/2013	29/03/2013	closed	No reservation	No reservation
	03.03.01	D12-001	V&VP Architecture Description & Tool Specification - 2013 Q1	This deliverable will contain the collection of V&VP Architecture Description Document (specifically the reference to the WP3 EIMS) per each validation exercise with ME in the last quarter of 2012 and the first quarter of 2013	GEN	15/04/2013	29/03/2013	closed	No reservation (P)	No reservation (P)
	03.00	D09-001	WP3 Deliverable Review Report	This deliverable will address the review of WP3 Deliverables Review prepared within 2012, in terms of technical coherence and quality consistency. It provides comments on deliverables according to the approval process agreed at WP Level by collecting the relevant SWP deliverable review report.	NONE	29/01/2013	07/02/2013			to be assessed
	03.00	D10-001	WP3 Engineering Methodologies Report	The report delivered every two years will provide evidence on the process applied within WP3 to manage and follow up the WP3 activities on the Engineering Exercise Lifecycle. It will take in input the contributes from the SWP 3.X	GEN	01/01/2013	07/02/2013	closed	No reservation (P)	No reservation (P)
	03.00	D02-003	WP3 Management and Communication Plan	WP3 Management Plan will be the key reference document to be used by the WP3 Executive Management Board. It details how WP3 is organised and how the various projects will be conducted. It describes the roles and processes identified for the WP3 management and activities, including the the progress reporting process, RIO process, deliverable review process, exercise monitoring process. The deliverable is updated every year with the contribute and support of the SWP3 Managers	GEN	02/02/2013	07/02/2013	closed	No reservation (P)	No reservation (P)
	03.01	D06-001	WP3.1 Deliverable Review Report	This deliverable will address WP3.1 review in terms of consistency and in terms of quality of the WP3.1.X Projects Deliverables produced in 2012	GEN	15/01/2013	07/02/2013	closed	No reservation (P)	No reservation (P)
	03.00	D11-001	WP3 IMS quarterly dump for Q4-2012	It will be provided the dump of WP3 Information Management System both for Operational and Engineering view that have been collected and managed during Q4 2012	GEN	02/01/2013	07/02/2013	closed	No reservation (P)	No reservation (P)
	03.03.02	D12-001	V&VI Software Material for Q1-2013	This deliverable will relate for exercises supported in scope or Q1-2013 what has been implemented in terms of V&VI and integration of software to enable deployment and integration of V&VPs for associated Validation Exercises	GEN	02/02/2013	31/01/2013	closed	No reservation (P)	No reservation (P)
	03.03.02	D13-001	Integration Report for Q1-2013	This deliverable will relate for exercises supported in scope or Q1-2013 what has been deployed and integrated in terms of V&VPs for associated Validation Exercises	GEN	01/02/2013	31/01/2013	closed	No reservation (P)	No reservation (P)
	03.02.02	D05-002	2012 Global Optimization Final Report	This deliverable will be the intermediate result of the gap analysis between the V&V requirements for validation exercises and the capabilities of existing IBP's. It will focus on common V&VI tools needed for the validation exercises which have early starting dates within 2012 schedule and will aim to consolidate and if possible, optimize the already existing validation roadmap for those exercises.	GEN	18/12/2012	30/01/2013	closed	No reservation (P)	No reservation (P)
	03.02	D06-001	WP3.2 Deliverable Review Report	SWP03.02 will review the official P03.02.0X deliverables to ensure the quality required within WP03, particularly using the quality checklist as a support The yearly deliverable will be a summary report including the deliverables reviewed (sorted by project) and any relevant comment which could apply	None	15/01/2013	14/01/2013	closed	No reservation (P)	No reservation (P)
	03.01.03	D12-002	V&VP Technical Acceptance Test Plan Q4-2012	This deliverable addresses the set of V&VP Platform Technical Acceptance Test Plans (TATPs) developed in the 3rd and 4th quarter of 2012 to support the Technical Acceptance of the V&VP Platforms	VP	11/01/2013	11/01/2013	closed	No reservation (P)	No reservation (P)
	03.01.03	D11-004	V&VP System Requirement Document Q4-2012	This deliverable addresses the V&VP Platform System Requirements (SRs) defined in the 4th quarter of 2012 to support the V&VP Platforms preparation	GEN	11/01/2013	11/01/2013	closed	No reservation (P)	No reservation (P)
	03.01.03	D10	V&VP Engineering Data Management Report - 2012	This deliverable reports the output of the V&VP engineering data management activity performed in the context of 3.1.3 task T010 during the year 2012.	GEN	11/01/2013	11/01/2013	closed	No reservation (P)	No reservation (P)
	03.03	D06-001	SWP03.03 Deliverable Review report	SWP03.03 will review the official P03.03.0X deliverables to ensure the quality required within WP03, particularly using the quality checklist as a support The yearly deliverable will be a summary report including the deliverables reviewed (sorted by project) and any relevant comment which could apply	None	15/01/2013	11/01/2013	closed	No reservation (P)	No reservation (P)
	03.01.01	D08-004	2012 V&V User Requirements Document - Q4	This document aims at providing an overview of the activities performed within the V&V Needs Collection and User Requirements Analysis Task during a quarter	GEN	10/01/2013	10/01/2013	closed	No reservation (P)	No reservation (P)
	03.03.02	D565	Support to P03.03.03 for 2012	This deliverable relates activity performed by DSNA in 2012 in supporting 03.03.03 activities.	GEN	09/01/2013	09/01/2013	closed	No reservation (P)	No reservation (P)
	03.03.02	D11-002	Maintenance Report for S2-2012	This deliverable will relate activity performed in the scope of corrective maintenance on software developed by 03.03.02 during S2-2012	GEN	09/01/2013	09/01/2013	closed	No reservation (P)	No reservation (P)
	03.01.01	D10	2012 In Service Support Report	This document contains a preliminary analysis of the results two groups of exercises in the same OFA (particularly i4D+CTA and AMAN & Extended AMAN Horizon), to assess the metrics and measurement processes used, in order to be able to identify possibilities for harmonization as well as assess whether the validation exercise and its results could be understood and used by other partners.	GEN	09/01/2013	09/01/2013	closed	No reservation (P)	No reservation (P)
	03.02.02	D13-002	Evolution Plan (2nd 2012)	This deliverable is the final 2012 release of the evolution plan for each IBP supporting validation exercises selected by WP3. This plan will identify the User's requirements covering the gaps vs the existing IBP version together with the IBP delivery date which is expected by the project running the validation exercise	GEN	07/01/2013	07/01/2013	closed	No reservation (P)	No reservation (P)
WP	Proj	Code	Deliverable Name	Deliverable Description	Template	Due date	Actual date	Assessment procedure	Provisional Assessment	Assessment Decision
04	04.03	D112	EXE-04.03-VP-030 Validation Plan	VALP EXE-04.03-VP-030	VALP	06/06/2014	29/11/2013	closed	No reservation (P)	No reservation (P)
	04.07.02	D19	Preliminary OSED_2	This is the output of T019	OSED	30/10/2013	25/11/2013	shared	Reservation/s requiring clarification/s	to be assessed
	04.08.02	D38	VALP-ACASX-CURRENT Validation plan for the evaluation of ACAS Xa in Europe	Report describing the validation approach, the objectives, the assumptions and the envisaged scenarios.	VALP	28/08/2013	28/08/2013	closed	No reservation	No reservation
	04.07.06	D02	Initial OSED	It will include the description of ASEP contribution to the Separation Provision Service and the characteristics of the intended operational environment (airspace, CNS, etc.). It will also include the set of operational requirements and procedures. This will be delivered at the end of the V1 validation cycle. An initial draft OSED will be produced which will contain the outcomes from the previous projects and the analysis of on going activities to act as a foundation for the V1 work.	OSED	04/07/2013	27/08/2013	closed	Reservation/s requiring clarification/s	No reservation
	04.03	D63	i4D Validation Plan - Step C	This deliverable will detail all the information needed to perform the validation of the i4D quick win; in particular the following information/data related to i4D will be described: - the Stakeholders Needs; - the Levels of Maturity of the concept; - the description of the Stakeholders expectations in term of Validation; - the Validation Objectives, with associated criteria and links with Requirements; - the validation scenarios; - the validation environment needs; - the list of planned validation exercises with selected validation techniques; - The detailed description of each planned validation exercise. Considering that this is a Step 1 activities (bottom-up approach) this deliverable will be consolidated by SWP4.2 in order to produce a WP4 Validation Strategy for Step 1. In addition this deliverable will describe the planning of the validation activities for the so-called "Step C" phase.	VALP	26/07/2013	26/07/2013	shared	Major reservation/s	to be assessed
	04.08.01	D19	VALP-DAP-G-SNET-V3 Validation Plan - V3- for enhanced STCA using DAP	Describe the validation plan for evaluating (in an integrated manner with other controller tools) an enhanced STCA system using existing down-link parameters.	VALP	31/05/2013	13/06/2013	closed	No reservation	No reservation

04.03	D62	i4D Validation Report - Step B	This deliverable will contain the analysis of the results of the validation exercises related to i4D quick win. In addition specific sections (or separated documents) will be dedicated to: - updated OSED, - updated SPR and INTEROP, to be consolidated by Project 4.2 and WP16. In particular this deliverable will detail the integrated results coming from Step B activities .	VALR	24/05/2013	24/05/2013	closed	No reservation (P)	No reservation (P)	
04.08.01	D24	VALP-TRAJ-G-SNET-V2 Validation plan - V2- for G-SNETs adapted to 3-4D TRAJ	Describe the validation activities to be conducted for evaluating (in isolation within the project) the safety and performance benefits, the safety assurance and the costs of G-SNETs adapted to future TMA and en-route environments with enhanced 3/4D trajectory management and ground-based generation .	VALP	27/12/2012	18/05/2013	closed	No reservation (P)	No reservation (P)	
04.08.02	D36	OSD-ACASX-CURRENT Operational and performance requirements for ACAS Xa in Europe	Report identifying the requirements considered as necessary for Europe		29/04/2013	29/04/2013	closed	No reservation (P)	No reservation (P)	
04.07.08	D07	Acceptance Test Report (QW)	Acceptance test report for the Quick Win simulations QW1 and QW2. The report will document the status of the research-prototype software against the various requirements and specifications and ensure that the system is fit to use for a real-time simulation validation activity. Its signing represents the delivery of the research prototype software.	VR	14/11/2011	16/04/2013	closed	No reservation (P)	No reservation (P)	
04.07.07	D01	Management Report	It summarizes all the internal coordination activities amongst the partners in order to better achievement of the objective. Project close out report will be produced .	GEN	15/01/2013	04/04/2013	closed	No reservation (P)	No reservation (P)	
04.07.07	D26	Final SPR	Deliver of Final SPR	SPR	28/12/2012	03/04/2013	closed	Reservation/s requiring clarification/s	No reservation	
04.07.06	D10	V1 - Mock-ups Validation Report	The Validation Report will describe the results obtained for all the exercises performed using Mock-ups. The deliverable will include: - reference to validation strategy and validation plans; - description of validation environment, hypotheses and assumptions; - interrelation between individual validation activities; - description and integration of all results; - conclusions with key findings, outstanding issues, and recommendations. In addition this the report will contain information that will be used to support the cases.	VALR	21/01/2013	02/04/2013	closed	Reservation/s requiring clarification/s	No reservation	
04.07.07	D27	Cost Benefit Analysis	Deliver a CBA.	GEN	28/12/2012	06/03/2013	closed	Reservation/s requiring clarification/s	No reservation	
04.08.01	D18	SPR-DAP-G-SNET-V2 Preliminary SPR for G-SNETs using DAP	Consolidate the safety & performance requirements for enhanced G-SNETs using existing DAPs.	SPR	28/12/2012	22/02/2013	closed	No reservation (P)	No reservation (P)	
04.07.07	D24	Validation Report		VALR	31/10/2012	15/02/2013	closed	Reservation/s requiring clarification/s	No reservation	
04.05	D811	D811 STEP 1 Internal Validation Exercise Report (4.5 Deliverable)	4.5 Deliverable D811 report of internal validation exercise Fast-Time Simulation led by EUROCONTROL & AIRBUS - EXE-VP-044	VALR	15/02/2013	14/02/2013	closed	Reservation/s requiring clarification/s	No reservation	
04.07.01	D25	STEP 2 Initial Validation Report	This document contains the results coming from the analysis of the outputs provided by the V1 validation exercises. It will include R&D needs for the next phase.	VALR	31/01/2013	05/02/2013	closed	Reservation/s requiring clarification/s	No reservation	
04.05	D16	S1 ATFCM-FUA contribution to V3 Validation Report	Step 1 Validation report section to be integrated within overall V2 validation report. It encompasses the results and the conclusions of the V2 validation tests related to ATFCM/FLIA issues.	VALR	26/10/2012	01/02/2013	closed	Reservation/s requiring clarification/s	No reservation	
04.07.08	D03	OSD (QW)	V3 validated OSD emanating from the Quick Win task (the validation will have been performed on a local research prototype as it is Concept Step 1). The OSD will include system, architectural and HMI requirements, operating procedures and Human Factors considerations. As this is the Quick Win, the OSD will be targeted at the development of MSP for the London ACC using its iFACTS system and will be limited to 1P to 2Ts, although potential migration to multiple Ts may be included if the need for such activities arises .	OSD	02/02/2013	28/01/2013	closed	Reservation/s requiring clarification/s	No reservation	
04.07.07	D25	Final OSD	Deliver of Final OSD	OSD	28/12/2012	23/01/2013	closed	Reservation/s requiring clarification/s	No reservation	
04.07.06	D08	V1 - FTS Validation Report	The Validation Report will describe the results obtained for all the exercises performed using FTS techniques. It will also contain outstanding issues and recommendations. In addition this report will contain information that will be used to build the Business and other cases	VALR	05/10/2012	14/01/2013	closed	Reservation/s requiring clarification/s	No reservation	
04.07.02	D05	V2 Validation Report_1	In phase EOCVM V2 of P472 Build1, presentation of the validation characteristics, the information captured during the validation, the analysis of the information and the consequent results e.g the acceptability/operability/suitability, the performances results, the results chosen to the project milestones .	VALR	30/11/2012	14/01/2013	closed	Reservation/s requiring clarification/s	No reservation	
04.07.02	D08	V2 Safety and Performance Requirements_1	In phase EOCVM V2 of P472 Build1, definition of the overall operational requirements, including capacity, safety security and other performances, characteristics constraints and attributes.	SPR	30/11/2012	08/01/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s	
04.08.02	D12	VALR-TRAJDATA Validation report of using trajectory data in ACAS	VR-TRAJDATA	VALR	08/01/2013	08/01/2013	closed	Reservation/s requiring clarification/s	No reservation	
WP	Proj	Code	Deliverable Name	Deliverable Description	Template	Due date	Actual date	Assessment procedure	Provisional Assessment	Assessment Decision
05	05.07.02	D063	Initial (V1) OSD for Step 1	The Initial (V1) OSD will be mainly composed by a summary of the operational Concept from the STEP 1 DOD provided by SWP5.2 and the detailed operating method developed within P5.7.2. As an annex, an initial set of Safety and Performance Requirements will be provided.	OSD	20/12/2013	20/12/2013	shared	Reservation/s requiring clarification/s	to be assessed
	05.09	D103	2013 Technical Note Iteration 2	This deliverable reports the gap/coherency/consistency analysis on the HMI Operational Requirements and the safety related issues stemming from integration of several HMI elements performed in the linked task for the 2013 Iteration 2 .	GEN	16/12/2013	16/12/2013	closed	No reservation	No reservation
	05.06.04	D18	V2 Preliminary Validation Report stream C (internal1)	Execution of the validation exercises identified in the V2 Validation plan streamC (internal1). Collection and analysis of the results of the validation sessions (eventually disseminated internally and to all projects that may be interested in them) - part of V2 Preliminary Validation Report (package)	VALR	12/12/2013	13/12/2013	review in progress		to be assessed
	05.06.03	D26	Advanced Procedure Validation Report - EXE-05.06.03-VP-623 (VALR)	Report on the results of the exercise EXE-05.06.03-VP-623 (deliverable type VALR).	VALR	21/11/2013	02/12/2013	shared	Reservation/s requiring clarification/s	to be assessed
	05.06.01	D100	EXE-05.06.01-VP-477 Validation Plan	The validation plan for the EXE-477 Real Time Simulation - iteration 3	VALP	28/10/2013	22/11/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
	05.06.01	D81	EXE-05.06.01-VP-478 - Validation Plan	The validation plan for the EXE-478 i4D flight trials	VALP	28/06/2013	22/11/2013	closed	Reservation/s requiring clarification/s	No reservation
	05.06.06	D26	Stream 1 - VPLAN	The deliverable contains the validation plan for the Stream 1 V3 Activities and includes: v the identification of project and exercise validation objectives, refined validation requirements; v the identification of indicators and metrics; v the specification of validation scenarios; v the detailed validation exercise plan, also including the activities needed for preparing platform and for training different operators (ATCO, pilots, etc.) for the Stream 1 validation exercises.	VP	13/09/2013	13/11/2013	closed	No reservation (P)	No reservation (P)
	05.04.02	D01	Preliminary OSD Step 1	Preliminary OSD Step 1	OSD	31/10/2013	05/11/2013	shared	Major reservation/s	to be assessed
	05.06.04	D19	V2 Preliminary Validation Report stream C (internal2)	Execution of the validation exercises identified in the V2 Validation plan streamC (internal2). Collection and analysis of the results of the validation sessions (eventually disseminated internally and to all projects that may be interested in them) - part of V2 Preliminary Validation Report (package)	VALR	05/08/2013	28/10/2013	shared	Reservation/s requiring clarification/s	to be assessed
	05.06.07	D46	V3 Validation Plan - Step 1 - for EXE-485	This validation plan will prepare the V3 validation in exercise 485.	VALP	13/09/2013	06/09/2013	shared	Major reservation/s	to be assessed
	05.06.03	D19	Aircraft Assessment Report (INTEROP)	Aircraft and avionics needs to fly the selected advanced procedure , associated normative definitions and proposed solutions depending on the compliance (deliverable type INTEROP).	GEN	12/07/2013	28/08/2013	closed	Reservation/s requiring clarification/s	No reservation
	05.06.03	D12	Advanced Procedures (GEN)	Scenario description, flight procedure description, approach charts, preliminary coding and preliminary validation report for each of the flight procedures (deliverable type GEN).	GEN	21/06/2013	08/08/2013	closed	No reservation (P)	No reservation (P)

	05.06.04	D41	Coordination with P6.8.4	Preparation of Platform to perform validation exercises. Execution of the validation exercises identified in the V2 Validation Plan stream D (internal). Collection and analysis of the results of the validation sessions (eventually disseminated internally and to all projects that may be interested in them) - part of V2 Preliminary Validation Report (package)	None	23/08/2013	05/08/2013	closed	No reservation (P)	No reservation (P)
	05.06.04	D32	Updated Preliminary OSED	Update of preliminary OSED based on the results of V3a validation exercises analysed in the V3a Final Validation Report	OSED	15/07/2013	05/08/2013	shared	Major reservation/s	to be assessed
	05.06.03	D23	Validation Plan of Advanced Procedure (VALP)	Validation Plan (VALP) for the for the selected advanced procedure (deliverable type VALP).	VALP	12/07/2013	01/08/2013	closed	Reservation/s requiring clarification/s	No reservation
	05.03	D03	Integration Validation Plan (step 1)	This deliverable will report on the top-down process for the definition of exercises based on the integration validation needs from the POS.02 validation strategy and the OFAs and Level-three projects needs.	VALP	31/07/2013	31/07/2013	closed	No reservation (P)	No reservation (P)
	05.06.01	D80	EXE-05.06.01-VP-326 - Validation Report	The Validation Report for EXE-209 and EXE-326 including results from both flight trials and Real Time Simulation Report was handed over 11/07/2013	VALR	12/07/2013	11/07/2013	shared	Reservation/s requiring clarification/s	to be assessed
	05.06.06	D25	Stream 1 - INTEROP	This deliverable is an update of IT2 INTEROP considering the output of the IT2 validation process and will include the Interoperability requirements (INTEROP) for the implementation in the different systems of the Interval Management Sequencing and Merging IM-S&M functions. for the Stream 1 V3 Activities (EXEs 199/200)	INTEROP	14/06/2013	09/07/2013	closed	No reservation	No reservation
	05.06.06	D24	Stream 1 - SPR	This deliverable is an update of IT2 SPR considering the output of the IT2 validation process and will include the minimum safety and performance requirements (SPR) for the implementation of the ASPA-IM-S&M functions for Stream 1 V3 activities (EXEs 199/200)	SPR	14/06/2013	02/07/2013	shared	Reservation/s requiring clarification/s	to be assessed
	05.06.06	D23	Stream 1 - OSED	This deliverable is an update of IT2 OSED considering the output of the IT2 validation process and will include the scenarios specifications and validation objectives for the Stream 1 V3 Activities (EXEs 199/200)	OSED	16/05/2013	01/07/2013	shared	Major reservation/s	to be assessed
	05.06.02	D34	Procedural Improvements Validation Report	This deliverable will propose the Validation Report of the Procedural Improvements Step 1 V3	VALR	18/06/2013	18/06/2013	shared	Reservation/s requiring clarification/s	to be assessed
	05.06.02	D33	Procedural Improvements final OSED	This deliverable will takes into account the preliminary OSED, the results from both fast time simulations (with respectively DSNA and Eurocontrol tools) and real time simulations and propose recommendations on procedural improvements.	OSED	31/05/2013	31/05/2013	closed	No reservation (P)	No reservation (P)
	05.03	D84	Technical note describing the support to P05.06.01 in the execution and analysis of VP-203 & VP-204 results	Technical Note describing the support from SWP05.03 to P05.06.01 in the execution of validation exercises VP-203 & VP-204 and the analysis of their results.	GEN	17/05/2013	17/05/2013	closed	No reservation (P)	No reservation (P)
	05.06.04	D31	Release 2 Validation Report	Preparation of Platform to perform validation exercises. Integration of the prototype on the pre-industrial platform. Execution of the validation exercises identified in the V3 Validation Plan . Collection and analysis of the results of the validation sessions (eventually disseminated internally and to all projects that may be interested in them)	VALR	13/05/2013	13/05/2013	shared	Reservation/s requiring clarification/s	to be assessed
	05.03	D82	Validation report VA1 EXE-05.03-VP-034 including FTS complementary results	This deliverable summarises the results obtained in the FTS exercise defined to complement the conclusions drawn from the validation exercise VP-034. This deliverable also includes the recommendations to the OSEDs of the primary projects that fed the initial validation exercise, P5.6.4-D28 and P5.7.4-D03. Although VP34 was designed based on the available OSED when producing the VALP (05.06.04-D29), the VALR will produce an annex with inputs to the last available update of 05.06.04 OSED, which is 05.06.04-D28.	VALR	26/04/2013	26/04/2013	closed	Reservation/s requiring clarification/s	No reservation
	05.06.07	D14	Step 1 AMAN + Point Merge in E-TMA OSED	This document sets out the Operational Service and Environment Definition related to the Operational Focus Area (OFA) 04.01.03, "AMAN + Point Merge" produced by Project 5.6.7 in STEP1. This concept is extending the concept previously developed for the TMA by EUROCONTROL to the E-TMA airspace, coupled with the use of a basic AMAN tool. This issue of the document, related to SESAR Release 2, describes the operating method associated with a Point Merge centric route structure, with the support of an AMAN, for Enroute ACCs and TMAs with Very High Capacity needs (VHCn). old description: "Review the final operational concept under the aspect of activity 5a and 7 and their combination. Preparing the final OSED. The operational concept is fine tuned using a range of validation results."	OSED	27/05/2013	15/04/2013	closed	No reservation (P)	No reservation (P)
	05.03	D83	Technical note describing the support to P05.06.01 in the preparation of VP-203 & VP-204	Technical Note describing the support from SWP05.03 to P05.06.01 in the preparation of exercises VP-203 & VP-204.	VP	15/04/2013	15/04/2013	closed	No reservation (P)	No reservation (P)
	05.06.07	D02	Preliminary SPR - Step 1	Deliver the necessary SPRs for act. 05 and 07.4definition of the overall operational requirements, including capacity, safety, security and other performances, characteristics, constraints, and attributes.	SPR	12/04/2013	15/04/2013	closed	No reservation (P)	No reservation (P)
	05.02	D102	Interim WP Trajectory Based Validation Strategy Report available	A validation strategy to guide WP 5 level 3 projects in their validation activities, ensuring that all processes are kept in line with the overarching SESAR WP methodology and concept. The Validation Strategy will include specific scenarios identified from the operational requirements of the TMA DOD. In addition the Validation Strategy will also outline high level validation objectives for the validation activities for the level 3 projects, integrated validation within 5.3 and cross domain validation.	VALS	29/03/2013	05/04/2013	closed	Major reservation/s	Major reservation/s
	05.06.02	D32	CDO at Orly Validation Report	This deliverable will synthesis results from simulation activities (FTS and Mock Up) and propose recommendations on procedural improvements for the Orly TMA	VALR	29/03/2013	29/03/2013	shared	Reservation/s requiring clarification/s	to be assessed
	05.05.01	D502	D502 Updated STEP1 Validation Needs (5.5.1 Deliverable-4.5 Contribution)	D502 Updated STEP1 Validation Needs (5.5.1 Deliverable)	GEN	15/03/2013	15/03/2013	shared	Reservation/s requiring clarification/s	to be assessed
	05.06.06	D12	IT2 - VREP	This deliverable will describe the IT2 validation exercises results. It also contains issues and recommendation for the Stream 1 V3 Activities.	VALR	01/03/2013	14/03/2013	closed	Major reservation/s	No reservation
	05.06.06	D09	IT2 - SPR	The deliverable includes the minimum safety and performance requirements (SPR) for the implementation of the ASPA IM-S&M functions considering the output of the IT1 validation process.	SPR	01/03/2013	05/03/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
	05.06.07	D45	Deliverable Validation Report of EXE-05.06.07-VP-427	This validation report will contain the final experimental results and its assessment of validation exercise 427.	VALR	28/02/2013	28/02/2013	closed	No reservation (P)	No reservation (P)
	05.06.04	D08	V2 Validation Plan stream C (internal 1)	Identification of the objectives of the validation activities to be performed in streamC: Arrival Management Extended Horizon on ANSP1 facilities. Definition of the exercises to be performed together with tools and techniques to be used (MBS) - part of V2 Validation Plan (package)	VALP	21/02/2013	21/02/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
	05.06.01	D62	EXE-05.06.01-VP204 and 203 - Final report	The Validation Report for EXE-204 14D simulation To be noted: The EXE-203 was never carried out.	VALR	07/02/2013	07/02/2013	closed	Reservation/s requiring clarification/s	No reservation
	05.06.06	D10	IT2 - INTEROP	This document provides Interoperability Requirements (INTEROP) for the SESAR ASPA Interval Management - Sequencing and Merging (ASPA-IM-S&M) application considering the output of the IT1 validation process.	INTEROP	15/12/2012	04/01/2013	closed	Reservation/s requiring clarification/s	No reservation
WP	Proj	Code	Deliverable Name	Deliverable Description	Template	Due date	Actual date	Assessment procedure	Provisional Assessment	Assessment Decision
06	06.07.02	D80	V2 Validation Plan for advanced surface routine (RTS exercises)	V2 Validation Plan for advanced surface routing (RTS exercises)	VALP	01/06/2013	20/12/2013	shared	Major reservation/s	to be assessed
	06.03.01	D01	Overall validation plan	This deliverable will refine the validation strategy developed by SWP 6.2 and adapt it to project 6.3.1. It will also presents the validation guidelines applicable to all integrated validation packages identified in 6.3.1. From the 6.2 validation objectives, this deliverable will identify the integrated validation packages for each step of the concept story board and will also link together the validation plans developed by the individual validation packages.	VALP	30/09/2016	16/12/2013	closed	Major reservation/s	Major reservation/s
	06.03.02	D77	Release 3 - IBP acceptance tests for ENAV	After the reception of the IBP for Release 3 exercise 652, this deliverable will be an availability note explaining whether the delivered IBP is compliant with the needs expressed by the project for the exercise.	GEN	25/10/2013	28/11/2013	closed	No reservation (P)	No reservation (P)

06.05.02	D12	Theme 2 Validation report	A document describing the results of the validation activities associated with theme 2 and providing possible recommendations for changes to the definition of the airport performance framework	VALP	29/08/2013	21/11/2013	shared	Major reservation/s	to be assessed
06.05.02	D20	Final validation report	A document describing the results of the validation activity performed using the INDRA (12.6.2) prototype and including final recommendations for AOP content definition	VALR	31/12/2014	21/11/2013	shared	Major reservation/s	to be assessed
06.08.05	D12	Concept Validation Plan for GBAS CAT II-III for V2	This document will provide a detailed plan for the CAT II/III GBAS Concept validation, specially suited for the V2 validation exercises.	VALP	30/09/2013	15/11/2013	closed	Reservation/s requiring clarification/s	No reservation
06.07.02	D26	Analysis of 6.3.2 Overall Validation Report	Results of the V3 validation activity, collected and interpreted for the routing and planning function. This report will also include interoperability and integration aspects for V3 activities.	VALR	31/05/2013	13/11/2013	closed	Reservation/s requiring clarification/s	No reservation
06.07.03	D13	Final technical feasibility and interoperability Step 1	Merging and consolidation of the results, mainly in terms of interoperability requirements, matured into technical sub-tasks, taking into account - The final output of the verification of the technical feasibility of AGL as guidance on airport surface and the elaboration of the layout of the light system.- Final new HMI functionalities and requirements necessary for the ATCO to perform its task in the future environment. - the final output of the verification of the technical feasibility of datalink taxi clearances services on airport surface, covering start-up, push-back, taxi clearances and revisions. - The final output of the verification of the technical feasibility of mock-ups or early prototypes in the vehicles to display the guidance information according to the route emitted from the ground server.- The final output of the verification of the technical feasibility of mock-ups or early prototypes on the aircraft to display the guidance information according to the route emitted	INTEROP	01/03/2013	07/11/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
06.07.01	D28	Updated OSED for "Conformance Monitoring" following V2 trials	Update of the OSED for OFA ATCO Safety tools following V2 CMAC trials and V3 CATC trials. Updated OSED for "Conflicting ATC Clearances" and "Conformance Monitoring for Controllers" (following V2 CMAC trials and V3 CATC trials)	OSED	04/11/2013	05/11/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
06.07.02	D36	Preliminary SPR for advanced surface routing	Short deliverable addressing safety and performance requirements aspects according to the experience of V1 and V2 activities	SPR	29/03/2013	28/10/2013	shared	Reservation/s requiring clarification/s	to be assessed
06.08.05	D07	Concept Validation Plan for Advanced Procedures (DT concept) for V2	Concept Validation Plan of DT advanced procedure for the V2 stage of the concept lifecycle.	VALP	15/10/2013	15/10/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
06.05.03	D18	6.5.3 D013 Contribution Sheet to V2 Interop OFA 5.1.1		GEN	14/06/2013	11/10/2013	closed	No reservation (P)	No reservation (P)
06.06.02	D13	Written Note supporting OFA INTEROP Ed 2.0	An Interoperability document defining, on the basis of the OSED and the SPR, the interoperability requirements from an operational use point of view.	INTEROP	14/06/2013	08/10/2013	closed	No reservation (P)	No reservation
06.06.01	D08	D08 - Delivery note describing 6.6.1's contribution to OFA 05.01.01 INTEROP Edition 2		INTEROP	15/06/2013	04/10/2013	closed	No reservation (P)	No reservation (P)
06.09.03	D15	HF case-report for Single TWR & AFIS applications	This deliverable is an initial Human Factors case report for all the concept applications, identifying the Human Factors Issues and action plans. The initial HF case requirements will be derived from the initial concepts, fed into the validation strategy, and then updated with results from the various trials.	GEN	15/06/2013	30/09/2013	closed	Reservation/s requiring clarification/s	No reservation
06.08.01	D08-007	WVE severity metrics	Internal deliverable only - provides input to other tasks: mainly to support of safety cases and development of pairwise separations (S3)	GEN	31/12/2016	25/09/2013	closed	No reservation (P)	No reservation (P)
06.08.03	D24	S2 V1 Interoperability Requirements	Document containing the interoperability requirements as well as traceability of interoperability to operational services.	INTEROP	31/01/2013	24/09/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
06.08.05	D05	Approach Procedures Charts and Path Terminators for RNP transition to GLS and Displaced Thresholds	Approach Procedure Chart for Displaced Thresholds (Zurich Airport) plus Approach Procedure Chart, Path Terminators and FAS datablock of RNP transition to GLS procedure (Palermo airport). This will be an annex to the validation plan for V2.	GEN	16/09/2013	20/09/2013	closed	No reservation (P)	No reservation (P)
06.06.01	D06	D06 - Delivery note describing 6.6.1's contribution to OFA 05.01.01 SPR Edition 2		SPR	18/05/2013	19/09/2013	closed	No reservation (P)	No reservation (P)
06.08.05	D45	Concept Validation Plan for Advanced Procedures (RNP to GLS concept) for V3	Concept Validation Plan of RNP transition to GLS advanced procedure for the V3 validation activities.	VALP	15/12/2013	18/09/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
06.08.05	D06	Concept Validation Plan for Advanced Procedures (RNP to GLS concept) for V2	Concept Validation Plan of RNP transition to GLS advanced procedure for the V2 stage of the concept lifecycle.	VALR	18/10/2013	18/09/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
06.06.02	D09	Delivery Note supporting OFA INTEROP Ed 2.0	An Interoperability document defining, the interoperability requirements from an operational use point of view. It will be the result of input coming from OSED and SPR.	INTEROP	13/06/2013	13/09/2013	closed	No reservation (P)	No reservation (P)
06.05.03	D17	6.5.3 D012 Contribution Sheet to V2 SPR OFA 5.1.1		GEN	17/05/2013	10/09/2013	closed	No reservation (P)	No reservation (P)
06.06.02	D04	Delivery Note supporting OFA OSED Ed. 2.0	The deliverable will be a contribution to the joint OFA OSED Ed. 2.0. It will serve as input for P12.6.2, P12.6.7 and P12.7.3.	OSED	29/03/2013	09/09/2013	closed	No reservation (P)	No reservation (P)
06.06.02	D02	Delivery Note supporting OFA OSED 2.0	This version of the de-icing OSED will be a result of updates in line with the outcome of the V2 validation exercise and report together with further development. The deliverable will serve as input to P12.6.2.	OSED	29/03/2013	09/09/2013	closed	No reservation (P)	No reservation (P)
06.06.02	D12	Written Note supporting OFA SPR Ed 2.0	This deliverable corresponds to the operational process and service covered in the Performance Monitoring Service OSED V2. It will include safety requirements, performance requirements and their allocation to system functions identified in annex B.4.3.	SPR	17/05/2013	09/09/2013	closed	No reservation (P)	No reservation (P)
06.05.05	D08	Contribution to INTEROP Edition 2		VALR	15/06/2013	05/09/2013	closed	No reservation (P)	No reservation (P)
06.05.04	D12	OFA 05.01.01 INTEROP v1.0 Document	This deliverable is the OFA 05.01.01 INTEROP document, ed.2.0.	INTEROP	14/06/2013	04/09/2013	closed	No reservation	No reservation
06.07.03	D22	Preliminary OSED and Preliminary Operational Procedures Phase 2	Refinement of the OSED and Operational Procedures using results from V2 validation	OSED	02/08/2013	03/09/2013	shared	Reservation/s requiring clarification/s	to be assessed
06.08.07	D08	Preliminary SPR-Domain-3-V2-Step 1	Preliminary SPR (Domains-1 & 3)-V2-Step 1	SPR	31/03/2013	28/08/2013	closed	Reservation/s requiring clarification/s	No reservation
06.09.02	D108	Dxy - SPR (version 1 + version 2)		SPR	30/04/2013	23/08/2013	shared	Reservation/s requiring clarification/s	to be assessed
06.06.02	D08	Delivery Note supporting OFA SPR Ed 2.0	This deliverable corresponds to the operational process and service detailed in the OFA OSED Ed 2.0, de-icing concept being on a V3 maturity being a result of performed validation. It will include safety requirements, performance requirements and their allocation to system functions identified in annex B.4.3.	SPR	17/05/2013	13/08/2013	closed	No reservation (P)	No reservation (P)
06.08.04	D81	6.8.4-S01V2 Validation Report Basic AMAN-DMAN-ASMGCS-Approach Gap Indicator	Validation Report with the results of Basic AMAN/DMAN/ASMGCS/Approach Gap Indicator Real-time Simulation	VALR	30/06/2013	12/08/2013	shared	Reservation/s requiring clarification/s	to be assessed
06.07.03	D08	Mock-up development for Datalink Validation	Development of an integrated Mock-up for the validation of datalink functionality.	GEN	01/03/2012	09/08/2013	closed	No reservation (P)	No reservation (P)
06.05.02	D10	Delivery Note for Contribution to OFA 05.01.01 OSED Edition 2		OSED	28/03/2013	09/08/2013	closed	No reservation (P)	No reservation (P)
06.09.02	D106	Dxy - OSED (version 1 + version 2)		OSED	30/04/2013	06/08/2013	shared	Reservation/s requiring clarification/s	to be assessed
06.05.05	D07	Contribution to SPR Edition 2		GEN	18/05/2013	06/08/2013	closed	No reservation (P)	No reservation (P)
06.09.02	D12	Consolidated V3 OSED (step 1)		OSED	14/03/2013	05/08/2013	closed	Reservation/s requiring clarification/s	No reservation
06.05.02	D07	V1 OFA OSED	A document describing the requirements for the AOP content to support the extension of the notion of the 4D Business trajectory (flight phase) to the ground segment.	OSED	31/12/2011	05/08/2013	closed	No reservation (P)	No reservation (P)
06.06.01	D05	D05 - Delivery note describing 6.6.1's contribution to OFA 05.01.01 OSED Edition 2		OSED	29/03/2013	02/08/2013	closed	No reservation (P)	No reservation (P)
06.08.03	D04	S1 V1 SPR - Report	Safety Requirements and a summary of the OSA (Operational Safety Assessment), OHA (Operational Hazard Assessment), ASOR (Allocation of the Safety Operational Requirements), OPA (Operational Performance Assessment) and the Table for Allocation of Safety and Performance Requirements.	SPR	11/12/2012	30/07/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s

06.03.02	D74	Release 3 - Validation Plan		VALP	28/06/2013	24/07/2013	closed	Reservation/s requiring clarification/s	No reservation
06.08.01	D12	Final validation report - s1	Final validation report for phase 1 (S1 - TBS). The report includes the following lower level deliverables for phase 1 - TBS: Human factors case, Business case, Environmental case, Safety case, Interoperability requirements, Contribution to ATM services, KPA impact assessment report and Transition plan.	VALR	28/02/2013	22/07/2013	closed	No reservation (P)	No reservation (P)
06.09.02	D114	Dxy - EXE-06.09.02-VP-652 VALR S2V2 (ECTL exercise)		VALR	17/07/2013	17/07/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
06.05.04	D11	OFA 05.01.01 SPR v1.0 Document	This deliverable is the OFA 05.01.01 SPR document, ed.2.0.	SPR	17/05/2013	11/07/2013	closed	Reservation/s requiring clarification/s	No reservation
06.08.04	D96	6.8.4 VALP Multiple Remote V2	VALP for multiple Remote TWR in V2	VALP	01/07/2013	11/07/2013	closed	Reservation/s requiring clarification/s	No reservation
06.08.03	D06	S1 V1 Validation Report	Final validation report for step V1. The report includes the following lower level deliverables : Human factors case, Business case, Environmental case, Safety case, Interoperability requirements, Contribution to ATM services, KPA impact assessment report and Transition plan.	VALR	28/02/2013	10/07/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
06.06.02	D18	De-icing Step1 V2 Validation Report	This deliverable is a result of the de-icing Validation exercise V2. It will describe the outcome of the validation performed in shadow mode together with de-icing operators using a pre-industrial prototype.	VALR	31/10/2012	04/07/2013	closed	Major reservation/s	Major reservation/s
06.08.04	D22	6.8.4-S02V2 Validation Plan for V2	Integrated Validation Plan for all Validation activities for Advanced Coupled Arrival and Departure Management in V2	VALP	30/06/2013	28/06/2013	closed	No reservation (P)	No reservation (P)
06.03.02	D65	Step 1 V3 aircraft functions integration report	integration and validation report concerning the overall operational integration of the step 1 functions at the cockpit level (A/C-1).	VALR	15/03/2013	24/06/2013	closed	No reservation (P)	No reservation (P)
06.07.03	D61	Validation Plan development Phase 1 exe 649 (AGL-SEAC)	Validation resources, activities and performance indicators to be assessed for AGL are described. The R&D needs and corresponding validation objectives for the V2 phase are also outlined.	VALP	30/04/2013	18/06/2013	closed	No reservation (P)	No reservation (P)
06.09.03	D08	Single AFIS trial validation report	Validation report for the Single AFIS trial, taking place at Bodø (Norway), trailing a remote Rstt (Norway) airport AFIS service.	VALR	15/06/2013	13/06/2013	closed	Reservation/s requiring clarification/s	No reservation
06.07.02	D37	Preliminary OSED for advanced surface routing	Update of the Initial OCD using the results from V2 validation activities	OSED	29/03/2013	11/06/2013	closed	Reservation/s requiring clarification/s	No reservation
06.07.01	D40	Updated SPR for "Alerts for vehicle drivers" following first V2 trials	Update of the safety and performance requirements for "Alerts for vehicle drivers" following first V2 trials	SPR	23/05/2013	23/05/2013	closed	No reservation (P)	No reservation (P)
06.08.04	D23	6.8.4-S02V2 Validation Report Advanced DMAN-Routing	Validation Report with the results of Advanced DMAN/Routing Real-Time Simulation evaluation	VALR	30/04/2013	17/05/2013	closed	Reservation/s requiring clarification/s	No reservation
06.05.03	D16	6.5.3 D11 Contribution Sheet to OFA 5.1.1 OSED V2		GEN	29/03/2013	17/05/2013	closed	No reservation (P)	No reservation (P)
06.08.05	D11	GBAS CAT II-III Functional Descriptions Update Report for V2	This document will summarise all operational aspects (ATC procedures and interface, Pilot procedures and interface, maintenance procedures and approach design process and, AIS, NOTAM, Charting) and operational environment that are new to CAT II/III introduction compared to the GBAS CAT I concept and the existing initial CAT II/III functional description. This will support the safety assessment activity.	SPR	25/04/2013	16/05/2013	closed	No reservation (P)	No reservation (P)
06.03.02	D03	Release 2 validation report	This deliverable will group the results of ALL integrated validation exercises performed by 6.3.2 individual validation packages. It will also provide guidelines for the production of individual activity validation reports.	VALR	15/05/2013	15/05/2013	closed	Reservation/s requiring clarification/s	No reservation
06.05.05	D06	Contribution to OFA 05.01.01 OSED Edition 2		VALP	29/03/2013	07/05/2013	closed	No reservation (P)	No reservation (P)
06.07.01	D41	Updated INTEROP for "Alerts for vehicle drivers" following first V2 trials	Update of the technical interoperability requirements for "Alerts for vehicle drivers" following first V2 trials	INTEROP	06/05/2013	06/05/2013	closed	No reservation (P)	No reservation (P)
06.08.07	D12	Preliminary Validation Outcome Report (for Domain-3 prototype validation) V2-Step 1	Preliminary Validation Outcome Report (for Domain-3 prototype validation) V2-Step 1	VALR	31/03/2013	03/05/2013	closed	Reservation/s requiring clarification/s	No reservation
06.08.07	D11	Preliminary Validation Plan (for Domain-3 prototype validation) V2-Step 1 - Report	Preliminary Validation Plan (for Domain-3 prototype validation) V2-Step 1	VALP	31/01/2013	03/05/2013	closed	No reservation (P)	No reservation (P)
06.08.07	D07	Preliminary OSED-Domain-3-V2-Step 1 - Report	Preliminary OSED (Domains-1 & -3) V2-Step 1	OSED	31/01/2013	03/05/2013	closed	No reservation (P)	No reservation (P)
06.05.04	D08	OFA 05.01.01 OSED v2.0 Document	This deliverable is the OFA 05.01.01 OSED document, ed.2.0.	OSED	29/03/2013	30/04/2013	closed	Reservation/s requiring clarification/s	No reservation
06.02	D96	D09-00 Validation Needs - baseline	This document is the baseline for the coordination between this WP and WP3 in terms of validation needs and validation infrastructure requirements. This deliverable is the starting point for the work to be done in step 1, 2 and 3, and will be produced by the 6.2 Early Task.	VALS	30/04/2010	24/04/2013	closed	No reservation (P)	No reservation (P)
06.02	D30	D04-00 WP6 Validation Strategy and Framework - Baseline	The WP6 Validation Strategy will address both the top-down and bottom-up approach therefore reducing the potential deviation between the top-down priorities and the bottom-up work done at the level of third level projects, per step of the concept story board. On one hand, this deliverable will describe, per operational step, the validation objectives at Airport Operations area covering the V1-V3 maturity levels. On the other, the Validation Strategy will include a consistent and coherent analysis, description and integration of the WP6 third level projects validation plans. The gap/overlaps analysis between both approaches will also be part of D04 as well as those recommendations to WP6 third level projects to align their validation approach to the Programme objectives. This initial baseline is planned to be delivered after the completion of 6.2 Early Task. This baseline will represent the starting point for the work to be done in step1, 2 and 3.	VALS	30/04/2010	24/04/2013	closed	No reservation (P)	No reservation (P)
06.08.01	D05	OCD and OSED - s1	Update of OCD v0 and OSED v0, covering in more detail the first phase of the project - TBS	OSED	30/07/2012	19/04/2013	closed	Reservation/s requiring clarification/s	No reservation
06.07.03	D14	Final Validation exercises report Step 1	Use-cases/scenarios definition and trials execution in live environment. Support to P6.3.2 for performing integrated validation is also envisaged here.	VALP	02/03/2013	19/04/2013	closed	Reservation/s requiring clarification/s	No reservation
06.08.01	D11	Internal exercise results - s1	Internal validation exercise results - validation exercise results, preparation of inputs to cases (Safety case, HF case, etc) and contribution to SESAR (Interon, ATM services, KPA assessment)	VALR	31/12/2012	19/04/2013	closed	Reservation/s requiring clarification/s	No reservation
06.02	D98	D01-01-04 Aircraft Assessment of Airport DOD Step 1 Scenarios	An assessment of the DOD Step 1 scenarios from a Aircraft perspective. Special focus will be given to the impact of the HMI changes on the pilot's situational awareness and workload. This document will be used as an extension of DOD step 1.	DOD	26/12/2012	18/04/2013	closed	No reservation (P)	No reservation (P)
06.08.04	D87	6.8.4 OSED Single Remote TWR Ph1 V3	Contribution to 6.9.3 OSED for single Remote TWR Phase 1 in V3	AILABILITY N	01/05/2013	18/04/2013	closed	No reservation	No reservation
06.08.04	D95	6.8.4 OSED Multiple Remote TWR V2	Contribution to 6.9.3 OSED Multiple Remote TWR V2	AILABILITY N	30/03/2013	18/04/2013	closed	No reservation	No reservation
06.07.01	D67	V1 Validation Report for "Conformance Monitoring" for pilots	Results of the V1 validation activity, collected and interpreted for "Conformance Monitoring" for pilots	VALR	18/04/2013	18/04/2013	closed	Reservation/s requiring clarification/s	No reservation
06.08.04	D80	6.8.4-S01V2 Preliminary INTEROP	Preliminary Interoperability Requirements for Basic Coupled Arrival and Departure Management	INTEROP	30/03/2013	16/04/2013	closed	No reservation	No reservation
06.05.03	D06	6.5.3.D06 DCB-Validation Report for V2 (early)	This document includes the description of all validation activities and their results respectively related to V2 early validation.	VALR	15/04/2013	16/04/2013	closed	No reservation	No reservation
06.05.02	D16	Integrated validation strategy	A document outlining the scope of the validation activities to be performed using the prototype provided by INDRA	VALS	28/06/2013	12/04/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
06.07.03	D11	Final SPR and Operational Requirements Step 1	Consolidation of Operational Requirements and SPR thanks to the results from V3 validation activities	SPR	01/03/2013	10/04/2013	closed	Reservation/s requiring clarification/s	No reservation
06.03.02	D41	Release 2 CDG validation exercise results	This deliverable will describe the results obtained by the Release 2 CDG validation exercise.	VALR	30/11/2012	08/04/2013	closed	No reservation (P)	No reservation (P)
06.03.02	D39	Release 2 IBP acceptance tests for CDG	After the reception of the IBP for Release 2 CDG exercise, this deliverable will describe the acceptance tests performed on the IBP received in order to ensure that the delivered IBP is compliant with the needs expressed by the project. It will also give the results of these tests.	VR	08/11/2012	08/04/2013	closed	No reservation (P)	No reservation (P)
06.09.02	D111	Dxy - EXE-06.09.02-VP-652 VALP S2V2 (ECTL exercise)		VALP	16/04/2013	08/04/2013	closed	Reservation/s requiring clarification/s	No reservation

06.06.01	D03	D03 - Validation Plan (V1)		VALP	17/08/2012	05/04/2013	closed	No reservation (P)	No reservation (P)	
06.09.02	D107	Dxy - SPR (version 1)		SPR	28/02/2013	21/03/2013	closed	Reservation/s requiring clarification/s	No reservation	
06.09.02	D102	EXE-06.09.02-VP-568 ENAV - SELEX S1V3 validation report		VALR	01/02/2013	20/03/2013	closed	Reservation/s requiring clarification/s	No reservation	
06.09.02	D109	Dxy - INTEROP (version 1)		INTEROP	01/03/2013	11/03/2013	closed	No reservation (P)	No reservation	
06.08.03	D07	S1 V1 Safety Report	OSA (Operational Safety Assessment), OHA (Operational Hazard Assessment), ASOR (Allocation of the Safety Operational Requirements), OPA (Operational Performance Assessment) and the Table for Allocation of Safety and Performance Requirements	GEN	21/12/2012	07/03/2013	closed	No reservation (P)	No reservation	
06.07.02	D75	Preliminary INTEROP	Preliminary INTEROP	INTEROP	12/10/2012	05/03/2013	closed	No reservation (P)	No reservation (P)	
06.07.01	D19	V3 Validation Report for "Conflicting ATC Clearances"	Results of the V3 validation activity, collected and interpreted for "Conflicting ATC Clearances"	VALR	05/03/2013	05/03/2013	closed	Reservation/s requiring clarification/s	No reservation	
06.09.02	D101	EXE-06.09.02-VP-567 AENA S1V3 validation report		VALR	15/02/2013	04/03/2013	closed	Reservation/s requiring clarification/s	No reservation	
06.06.01	D04	D04 - Initial Validation Report (V1)		VALR	12/11/2012	19/02/2013	closed	No reservation	No reservation	
06.09.02	D105	Dxy - OSED (version 1)		OSED	15/01/2013	19/02/2013	closed	No reservation (P)	No reservation (P)	
06.07.02	D19	Assessment of 6.3.2 Overall Validation Plan	Describes the validation activity to take place in V3, possibly in P 6.3, for the routine and planning functions	VALP	12/10/2012	19/02/2013	closed	No reservation	No reservation	
06.08.04	D14	6.8.4-S01V2 Preliminary SPR	Preliminary Safety and Performance Requirements for Basic Coupled Arrival and Departure Management	SPR	31/01/2013	18/02/2013	closed	No reservation	No reservation	
06.07.01	D25	V2 Validation Report for "Conformance Monitoring" for controllers	Results of the V2 validation activity, collected and interpreted for "Conformance Monitoring" for controllers	VALR	18/02/2013	18/02/2013	closed	Reservation/s requiring clarification/s	No reservation	
06.08.04	D86	6.8.4 VALR - Single Remote TWR Ph1 V2	VALR for single Remote TWR Phase 1 in V2	VALR	30/11/2012	08/02/2013	closed	Reservation/s requiring clarification/s	No reservation	
06.08.04	D13	6.8.4-S01V2 Preliminary OSED	Preliminary Operational Service and Environment Document for Basic Coupled Arrival and Departure Management including operational procedures and operational requirements	OSED	31/01/2013	29/01/2013	closed	No reservation	No reservation	
06.05.02	D11	Theme 2 Validation Plan	Document outlining the scope of the validation activities to be performed in assessing the extent to which different airport actors are provided with the necessary situational awareness through the AOP.	VALP	30/11/2012	28/01/2013	closed	Reservation/s requiring clarification/s	No reservation	
06.09.02	D104	EXE-06.09.02-VP-317 DSNA S1V3 validation report		VALR	15/01/2013	22/01/2013	closed	Reservation/s requiring clarification/s	No reservation	
06.09.02	D103	EXE-06.09.02-VP-569 FREQ - ECTL - SEAC S1V3 validation report		VALR	15/01/2013	22/01/2013	closed	Reservation/s requiring clarification/s	No reservation	
06.02	D14	D02-01-02 Consistency Check Methodology	This deliverable will document the process to perform the consistency checks (OSED, VALP, INTEROPS, SPR, and VALR), in what the checks will consist, and how the information will be transmitted to the projects and the SII	OSED	01/03/2012	16/01/2013	closed	No reservation (P)	No reservation (P)	
06.03.02	D61	Release 2 AENA validation exercise results	This deliverable will describe the results obtained by the Release 2 AENA validation exercise.	VALR	30/11/2012	16/01/2013	closed	No reservation (P)	No reservation (P)	
06.03.02	D59	Release 2 IBP acceptance tests for AENA	After the reception of the IBP for Release 2 AENA exercise, this deliverable will describe the acceptance tests performed on the IBP received in order to ensure that the delivered IBP is compliant with the needs expressed by the project. It will also give the results of these tests.	VR	02/11/2012	16/01/2013	closed	No reservation (P)	No reservation (P)	
06.03.02	D06	Release 2 IBP acceptance tests for Malpensa	After the reception of the IBP for Release 2 Malpensa exercise, this deliverable will describe the acceptance tests performed on the IBP received in order to ensure that the delivered IBP is compliant with the needs expressed by the project. It will also give the results of these tests.	VP	26/10/2012	11/01/2013	closed	No reservation (P)	No reservation (P)	
WP	Proj	Code	Deliverable Name	Deliverable Description	Template	Due date	Actual date	Assessment procedure	Provisional Assessment	Assessment Decision
07	07.02	D27	Step 1 Release 3 DOD	Step 1 Release 3 DOD	DOD	24/12/2013	24/12/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
07.05.02	D43	Validation Plan V3 step 1 V2.0 R4	VALP V3 Step 1 for R4 SJU SE	VALP	29/11/2013	03/12/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s	
07.05.02	D39	OSED V3 step 1 V2.0 R4	OSED V3 Step 1 for R4 SJU SE	Other	29/11/2013	02/12/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s	
07.05.03	D03	INTEROP (Step 1 V3)	INTEROP as defined by EUROCAE for Step 1 V3.	INTEROP	30/11/2013	29/11/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s	
07.05.03	D35	Final VALR (Step 1 V3) - D035	Final VALR (Step 1 V3) - D035	VALR	30/11/2013	29/11/2013	closed	Major reservation/s	Major reservation/s	
07.05.03	D34	Final VALP (Step 1 V3)	Final VALP (Step 1 V3)	VALP	30/03/2013	29/11/2013	closed	Major reservation/s	Major reservation/s	
07.05.03	D33	Final OSED (Step 1 V3)	Final OSED (Step 1 V3)	OSED	30/11/2013	29/11/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s	
07.05.02	D42	SPR V3 step 1 V2.0 R4	SPR V3 Step 1 for R4 SJU SE	SPR	29/11/2013	28/11/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s	
07.05.02	D41	INTEROP V3 step 1 V2.0 R4	INTEROP V3 Step 1 for R4 SJU SE	INTEROP	29/11/2013	28/11/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s	
07.06.01	D06	OSED V1 Step 2	Step 2 OSED V1 - Operational concept, operational scenarios and operational requirements for a Collaborative NOP including feedback from Step 2 v1 validation activities.	OSED	15/11/2013	15/11/2013	closed	No reservation	No reservation	
07.06.02	D02	Step 1 V3 VALP - Final	Validation Plan for V3 maturity of Step 1 including validation exercises, planned dates and platforms to be used.	VALP	01/07/2013	11/11/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s	
07.06.01	D36	Network Performance Monitoring & Management Report Step 1	Report describing a network performance monitoring and assessment framework for Step 1.	GEN	19/10/2013	17/10/2013	shared	Reservation/s requiring clarification/s	to be assessed	
07.03.02	D02	Step1 Integrated Validation Plan	This document outlines the P7.3.2 Integrated Validation Plan for Step 1 "Time-based Operations". This deliverable will refine the Step 1 validation plan developed by SWP 7.2 and adapt it to project 7.3.2. From the 7.2 validation objectives, this deliverable will identify the integrated validation activities for step 1 of the concept story board and will also link together the validation plans developed by the individual validation activities. It will include refined operational scenarios (taking as input scenarios developed by primary project) for each integrated exercise. Only one validation exercise is currently planned in step 1 (see PIR part I section).	VALP	13/08/2013	03/09/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s	
07.06.05	D08	STEP2 OSED - Initial V1 delivered	Operational Service and Environment Description for V1 maturity of Step 2 detailing the process (actors, roles and responsibilities), operational procedure (modus operandi) and operational requirements of the Dynamic DCB	OSED	29/06/2013	10/07/2013	closed	No reservation	No reservation	
07.06.05	D07	STEP2 VALP - V1 delivered	Validation Plan for V1 maturity of Step 2 including validation exercises, planned dates and platforms to be used.	VALP	28/06/2013	10/07/2013	closed	Major reservation/s	Major reservation/s	
07.06.04	D14	UDPP Validation Plan Step 2 V1	UDPP Validation Plan Step 2 V1	VALP	05/07/2013	09/07/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s	
07.06.04	D33	UDPP interim Validation Plan Step1 V3	UDPP OSED Step1 V3	VALP	30/04/2013	11/06/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s	
07.06.04	D05	UDPP Validation Plan Step 1 V3	UDPP Validation Plan Step 1 V3	VALP	01/02/2014	07/06/2013	closed	No reservation (P)	No reservation (P)	
07.06.04	D32	UDPP OSED Interim Step1 V3	UDPP OSED Step1 V3	OSED	30/04/2013	07/06/2013	closed	Reservation/s requiring clarification/s	No reservation	
07.05.04	D02	Step2-V1 OSED	Operational concept and high-level service description and high-level operational requirements	OSED	01/05/2012	31/05/2013	closed	No reservation	No reservation	

07.02	D09	Step 2 V2 Integrated Validation Plan	This document outlines the WP7 Network Validation Plan for Step 2 V2 "Trajectory -based Operations". It is derived from consolidation of the top-down and bottom-up approach therefore reducing the potential deviation between the top-down priorities and the bottom-up work done at the level of third level projects. The Integrated Validation Plan will include a consistent and coherent analysis, description and integration of the WP7 third level projects validation plans. The document provides measurement strategies & practises, calibration reference techniques; it identifies gaps and overlaps, detects inconsistencies and solution strategies; The document concludes with a list of consolidated validation needs ready for hand over to WP3 and then to all relevant system WPs in particular WP13 for updating tools and industrial platforms; The Validation Plan is continuously updated based on findings e.g. performance assessments obtained by the projects; This document also includes the recomme	GEN	28/05/2013	28/05/2013	closed	Reservation/s requiring clarification/s	No reservation	
07.06.05	D34	STEP1 V3 VALP Edition 2	Update of Validation Plan for V3 maturity of Step 1 including release 3 validation exercises, planned dates and platforms to be used.	VALP	29/03/2013	17/05/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s	
07.05.04	D04	Step2-V1 Validation Report	Report of activities validation and results	VALR	02/04/2012	13/05/2013	closed	No reservation	No reservation	
07.06.01	D04	Interim Validation Plan V3 Step 1	Step1 V3-Validation Plan - validation plan describing the objectives of the validation, methods, tools and validation platform to be used for Step 1.	VALP	02/05/2013	02/05/2013	closed	Major reservation/s	Major reservation/s	
07.06.01	D01	Interim OSED V3 Step 1	Step 1 V3-OSED - Operational concept, operational scenarios and operational requirements for a Collaborative NOP. This will reflect and include results from validation exercises conducted in Step 1.	OSED	02/05/2013	02/05/2013	closed	Major reservation/s	Major reservation/s	
07.06.02	D07	Step 2 V1 OSED - Final	Operational Service and Environment Description for V1 maturity of Step 2 (trajectory based operations) detailing the content and lifecycle of the trajectory, roles and responsibilities for the actors and data flows.	OSED	29/03/2013	15/04/2013	closed	No reservation	No reservation	
07.05.04	D03	Step2-V1 Validation Plan	Plan of validation exercises	VALP	01/03/2012	29/03/2013	closed	No reservation	No reservation	
07.06.05	D35	STEP 1 V3 OSED initial	Initial OSED for V3 maturity of Step 1 detailing the process (actors, roles and responsibilities), operational procedure and operational requirements of the Dynamic DCB including release 3	OSED	28/02/2013	20/03/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s	
07.02	D06	Step 2 V1 Initial Detailed Operational Descriptions	A high level description of the operational concept as well as of the business architecture of the Network Operations in Step2 "Trajectory-based Operations": It will include Detailed Operational Descriptions (DODs), as well as the EA models for the description of a high level operational overview / business architecture. Scope: 4D based trajectory planning through common information sharing; Dynamic DCB on traffic mgt and initial dynamic airspace mgt; (pending PIRs and initial tasks for further detailing) The DODs Æ template and content will be agreed between Industrial Support (IS) and X.2 projects in order to guarantee that DODs properly capture SESAR Enterprise Architecture (EA) dimension. Before the DOD template is finally agreed, the WP7 DODs could contain: ð A description of the scope in terms of SESAR step, ATM Phases, Conops Process Model, OIs, KPAs/KPIs addressed; ð Current operating method and main changes; ð Mapping of the ATM Services within the scope of WP7; ð Operational	DOD	20/03/2013	20/03/2013	closed	Reservation/s requiring clarification/s	No reservation (P)	
07.06.02	D01	Step 1 V3 OSED V2.0 - Final	Operational Service and Environment Description for V3 maturity of Step 1 detailing the content and lifecycle of the trajectory, roles and responsibilities for the actors data flows and operational requirements.	OSED	28/02/2013	18/03/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s	
07.05.02	D04	SPR V3 Step 1	Integrated Safety and Performance Requirements based on initial OSED	SPR	28/02/2013	28/02/2013	closed	Major reservation/s	Reservation/s requiring clarification/s	
07.05.02	D06	Validation Report V3 Step 1	Consolidated results of the validation exercises for Step 1	VALR	28/02/2013	28/02/2013	closed	Major reservation/s	Major reservation/s	
07.05.02	D05	Validation Plan V3 Step 1	Initial VALP Step 1 V3	VALP	28/02/2013	28/02/2013	closed	Major reservation/s	Major reservation/s	
07.05.02	D03	INTEROP V3 Step 1	High level Interoperability requirements based on initial OSED	INTEROP	28/02/2013	28/02/2013	closed	Major reservation/s	Major reservation/s	
07.05.02	D02	OSED V3 Step 1	Detailed description of Operational services, environment and operational requirements for the implementation of the AFUA concept updated accordingly with the results of the validation activities	OSED	28/02/2013	28/02/2013	closed	Major reservation/s	Reservation/s requiring clarification/s	
07.06.03	D01	Closure Report	Project Closure Report	FINALR	28/02/2013	28/02/2013	closed	No reservation (P)	No reservation (P)	
07.05.03	D05	Initial VALP(Step 1 V3)	Plan of validation exercises for Step 1 V3.	VALP	27/02/2013	25/02/2013	closed	Major reservation/s	Major reservation/s	
07.05.03	D06	Initial VALR (Step 1 V3)	Report of activities validation and results for Step 1 V3.	VALR	27/02/2013	21/02/2013	closed	Major reservation/s	Major reservation/s	
07.05.03	D02	Initial OSED (Step 1 V3)	OSED as defined by EUROCAE for Step 1 V3.	OSED	27/02/2013	21/02/2013	closed	Major reservation/s	Major reservation/s	
WP	Proj	Code	Deliverable Name	Deliverable Description	Template	Due date	Actual date	Assessment procedure	Provisional Assessment	Assessment Decision
08	08.01.07	D16-001	Physical Modeling Contribution Version 2	Physical Data Model for Surveillance presented in at least one of the required languages (UML and/or XSD). From a NAF v3 terminology perspective it is a 'type' SV-11b Data Model. It contains - updated version of the standard ASTERIX-based PDM delivered in previous iterations; - any service payload and service data model (SDM) required by 8.3.x to support surveillance-related services; - any documented change required to ensure proper AIRM compliance and harmonization of physical modeling artefacts within the general WP8 NSV-11b framework.	GEN	19/07/2013	12/12/2013	closed	No reservation (P)	No reservation (P)
08.01.07	D15-001	Surveillance AIRM contribution Version 2	This deliverable contains the Surveillance PIM that will be integrated with models from other data domains to form the AIRM in the second step of the Storyboard, i.e.: - Surveillance Information Model (SurIM). It contributes to NAF OV-7; - the Surveillance Logical Model (SurLM). It contributes to NAF SV-11a; - the dictionary of terms used in the surveillance models which feeds the AIRM Glossary. The deliverable will be created by integrating in the Surveillance Domain model other requirements coming from: operational WPs, AIRM, sources external to SESAR. New model entities will be adapted to AIRM modeling guidelines. This deliverable also contains a report of any Validation and Verification activities needed by 8.1.3 for the current Step.	GEN	15/07/2013	12/12/2013	closed	No reservation (P)	No reservation (P)	
08.01.05	D41-001	Report on International Coordination in 2013	Annual report on activities conducted to achieve weather model global harmonisation.	GEN	09/12/2013	09/12/2013	closed	No reservation (P)	No reservation (P)	
08.03.03	D14-003	2.3 Update - Verification- Validation and Demonstration	Will describe and report activities to Verify, Validate and Demonstrate service models during the period. For the demonstrator activities a set of validation exercises identified will be created (see milestones).	VR	31/07/2013	06/12/2013	closed	No reservation (P)	No reservation (P)	
08.01.06	D49-002	Report on Contribution to AIRM v3.0 and Support to SYS-Service projects	Report on model development activities performed during past six months, vs. agreed workplan developed in collaboration with SWP 08.01	GEN	02/10/2013	04/11/2013	closed	No reservation (P)	No reservation (P)	
08.01.06	D51-001	Report on International Coordination in 2012	Annual report on activities conducted to achieve weather model global harmonisation.	GEN	05/03/2013	21/10/2013	closed	No reservation (P)	No reservation (P)	
08.01.06	D49-001	Report on Contribution to AIRM v2.3 and Support to SYS-Service projects	Report on model development activities performed during past six months, vs. agreed workplan developed in collaboration with SWP 08.01	GEN	01/04/2013	21/10/2013	closed	No reservation (P)	No reservation (P)	
08.01.03	D08	Consolidated deliverable: Validation Report for Third Major Release	This is the Validation Report of v3.0.0 of the AIRM. It includes the contribution by Frequentis via project 08.01.08, T017. y	VALR	30/09/2013	14/10/2013	closed	No reservation (P)	No reservation (P)	
08.01.09	D17-002	Report on Contribution to AIRM v3.0 and Support to SYS-Service projects	Report on model development activities performed during past six months, vs. agreed workplan developed in collaboration with SWP 08.01	GEN	01/10/2013	01/10/2013	closed	No reservation (P)	No reservation (P)	
08.03.10	D09	ISRM Iteration #7	The ISRM v. 1.3 based on the deliveries from the WP 8.3.x projects. The Package will contain following artefacts: ð Consolidated ISRM ð Glossary AV-2 ð ISRM Issue Iteration Report	GEN	30/09/2013	01/10/2013	closed	Major reservation/s	Reservation/s requiring clarification/s	
08.01.05	D39-002	Report on Contribution to AIRM v3.0 and Support to SYS-Service projects	Report on model development activities performed during past six months, vs. agreed workplan developed in collaboration with SWP 08.01	GEN	30/09/2013	30/09/2013	closed	No reservation (P)	No reservation (P)	
08.01.03	D07	Third Major Release of the AIRM	This is a major release of the AIRM. It will be v3.0.0. This provides the baseline for Step 2. Æ It will include updated versions of the five components of the AIRM: Æ1. The Primer Æ2. The Information Model Æ3. The Glossary Æ4. The Consolidated Logical Data Model Æ5. The Foundation Æ It will build on v2.0.0 of the AIRM and any intermediate Æ and hot-fix releases that have occurred since v2.0.0 was released.	GEN	30/09/2013	30/09/2013	closed	No reservation	No reservation	

08.03.05	D22-003	2.3 Update	The domain service model delivered to project 08.03.10 for iterative refinement, approval and integration into the ISRM. It comprises the domain model views conformant to SOV-1.5 (Information Service Model, expressed in SOAML), the AIRM and Data Dictionary updates in the DCB, R/ATM, TRA, ANA, XBI, CM areas of work.	GEN	31/07/2013	30/09/2013	closed	No reservation (P)	No reservation (P)
08.01.03	D20-008	Report 8	Repetitive report to be bundled into Project Report	GEN	01/10/2013	30/09/2013	closed	No reservation (P)	No reservation (P)
08.03.04	D07-003	ATC Information Services requirements specification STEP2	Specification of ATC Information Services STEP2	GEN	27/09/2013	26/09/2013	closed	No reservation (P)	No reservation (P)
08.03.03	D10-004	2.3 Update - Service Identification	The deliverable will summarize the Service Identification activities performed during the period, pointing at change proposals for the ISRM service portfolio and service description documents.	GEN	31/07/2013	19/09/2013	closed	No reservation (P)	No reservation (P)
08.03.03	D13-003	2.3 Update - Service Design and Modelling	The deliverable will summarize the Service Design activities performed during the period, pointing at change proposals for the ISRM Service Models and Service Description Documents.	GEN	31/07/2013	17/09/2013	closed	No reservation (P)	No reservation (P)
08.01.10	D11-003	I3 - Physical Modeling Contribution Iteration 4	Bi-annual Physical Modeling Contribution Mandatory: Activity report on work related to NSV-11b development, including systems project coordination aspects Optional: Documentation of any service payload models delivered to SWP 8.3 in the period, including AIRM NOV-7 traceability documentation Optional: Documentation of any non-service physical models delivered to SYS in the period, including AIRM traceability documentation Optional: Any proposal for extension and/or update to relevant standard data exchange models driven by SESAR needs	GEN	13/09/2013	13/09/2013	closed	No reservation (P)	No reservation (P)
08.01.10	D09-004	I3 - AIRM Contribution Iteration 4	Bi-annual AIRM Contribution Mandatory: Requirements Management Activity report, including operational projects coordination aspects. Mandatory: Documentation of AIRM contribution (AIRM CCB Change Requests and model/glossary contribution delivered to 8.1.3)	GEN	13/09/2013	13/09/2013	closed	No reservation (P)	No reservation (P)
08.03.07	D12-003	D - Revised Domain Service Model (internal) increment 2	The revised domain service model as a result of performing iterative refinement, approval and integration into the ISRM. Created in close cooperation with P 08.03.10 during feedback loop. It comprises the domain model views conformant to SOV-1.5 (Information Service Model, expressed in SOAML).	GEN	30/09/2013	10/09/2013	closed	No reservation (P)	No reservation (P)
08.03.03	D09-004	2.3 Update - Identification of Op. Req. and Collection of SESAR Internal-External Input	The deliverable will summarize the support performed to Operational Modelling and SESAR Internal/External activities during the period, pointing at change proposals for ISRM service portfolio, Service Description Docs, OFA documentation, OFEDs, DODs.	GEN	31/07/2013	09/09/2013	closed	No reservation (P)	No reservation (P)
08.01.10	D13-004	I3 - Verification and Validation Report for Iteration 4	Bi-annual Verification and Validation Report Mandatory: Verification report Optional: Validation report (if validation activities have taken place)	GEN	31/08/2013	30/08/2013	closed	No reservation (P)	No reservation (P)
08.03.06	D06-003	Fast Track Report increment 2	Fast Track Report: Collection of Fast Track Status, input planning to ISRM	GEN	31/07/2013	29/08/2013	closed	No reservation (P)	No reservation (P)
08.03.03	D10-003	2.2 Update - Service Identification	The deliverable will summarize the Service Identification activities performed during the period, pointing at change proposals for the ISRM service portfolio and service description documents.	GEN	31/01/2013	26/08/2013	closed	No reservation (P)	No reservation (P)
08.01.08	D11-001	AIRM Delivery - Increment 3	Package of Information Model, Logical Data Model and Dictionary Aspects as an export of an UML Tool to be imported into WP8.1 Repository by WP8.1.3 to form consolidated AIRM.	GEN	01/08/2013	13/08/2013	closed	No reservation (P)	No reservation (P)
08.03.07	D11-003	D - Dictionary Aspects increment 2	Comprises a list (conformant to AV-2) of updates or changes to the common ATM Dictionary proposed from the Airspace Users information service perspective.	GEN	31/07/2013	31/07/2013	closed	No reservation (P)	No reservation (P)
08.03.07	D10-003	D - Validated Domain Service Model increment 2	The validated domain service model as a result of project internal validation of information services. This model will be delivered to project 08.03.10 for iterative refinement, approval and integration into the ISRM. It comprises the domain model views conformant to SOV-1.5 (Information Service Model, expressed in SOAML).	GEN	31/07/2013	31/07/2013	closed	No reservation (P)	No reservation (P)
08.03.07	D09-003	D - Domain Service Model (internal) increment 2	The internal domain service model as a result of information services development. It comprises the domain model views conformant to SOV-1.5 (Information Service Model, expressed in SOAML).	GEN	31/07/2013	31/07/2013	closed	No reservation (P)	No reservation (P)
08.03.07	D08-003	D - AIRM Feedback Aspects increment 2	Project ATM Information Reference Model (AIRM) aspects giving feedback to WP 8.1 regarding AIRM from a service provision point of view.	GEN	31/07/2013	31/07/2013	closed	No reservation (P)	No reservation (P)
08.03.07	D07-003	D - Written Requirements (internal) increment 2	This internal delivery of the domain specific information requirements is derived from operational requirements provided by operational workpackages and workpackage B as well as operational services specification provided by workpackage B. It comprises a revised OV-3 and information requirements in textual form.	GEN	31/07/2013	31/07/2013	closed	No reservation (P)	No reservation (P)
08.01.04	D20	Version 3.0 Domain Contribution	All artifacts created for the version 3.0 release - e.g. requirements addressed; AIRM / SDM change proposals or change requests; physical model constructs created and validated; validation and verification report.	GEN	31/07/2013	31/07/2013	closed	No reservation (P)	No reservation (P)
08.01.08	D34	Deliverable Data Model Increment 3	Information Model as a UML Model contains main high level concepts of environment domain	GEN	18/07/2013	19/07/2013	closed	No reservation (P)	No reservation (P)
08.01.08	D13-001	Dictionary Aspects - Increment 3	Description/Glossary of modelled concepts and entities of Information model and Logical Data model	GEN	17/07/2013	19/07/2013	closed	No reservation (P)	No reservation (P)
08.01.08	D27	Internal Delivery: Requirements - Increment 3	This internal delivery of the domain specific information requirements is derived from operational requirements provided by operational workpackages and workpackage B (Operational Concept, OV-3, OV-5).	GEN	15/07/2013	16/07/2013	closed	No reservation (P)	No reservation (P)
08.01.04	D35-003	AIXM CCB Activity Report	A report on the activities of the AIXM CCB, including issues addressed at CCB meetings, information on new AIXM releases, and any other information that is relevant to the activities of PR 1.4	GEN	01/07/2013	12/07/2013	closed	No reservation (P)	No reservation (P)
08.01.01	D44	IM Functions v2 in formal requirements	This deliverable is an update the IM Function document as formal requirements	GEN	01/07/2013	01/07/2013	closed		
08.01.01	D16	IM Functions (governance specifications) V2	This document is an update of the IM functions, following the SWIM ConOps This deliverable is an update the IM Function document (including governance specifications), based on the previous version and the SWIM ConOps. It is the second version of the IM Functions with: - Update of previous IM functions with SWIM ConOps information - Include governance specifications into the IM functions (text only – no formal requirements version). Include updated information from previous deliverables (D09; D11, ...)	GEN	28/06/2013	28/06/2013	closed	Major reservation/s	Major reservation/s
08.03.06	D05-003	Coordination report increment 2	Coordination report: Focus on OFA status and maturity, no detailed analysis of requirements, capturing of Fast Track decisions	GEN	30/04/2013	31/05/2013	closed	No reservation (P)	No reservation (P)
08.03.03	D13-002	2.2 Update - Service Design and Modelling	The deliverable will summarize the Service Design activities performed during the period, pointing at change proposals for the ISRM Service Models and Service Description Documents.	GEN	31/01/2013	13/05/2013	closed	No reservation (P)	No reservation (P)
08.01.09	D17-001	Report on Contribution to AIRM v2.3 and Support to SYS-Service projects	Report on model development activities performed during past six months, vs. agreed workplan developed in collaboration with SWP 08.01	GEN	16/04/2013	08/05/2013	closed	No reservation (P)	No reservation (P)
08.03.03	D09-003	2.2 Update - Identification of Op. Req. and Collection of SESAR Internal-External Input	The deliverable will summarize the support performed to Operational Modelling and SESAR Internal/External activities during the period, pointing at change proposals for ISRM service portfolio, Service Description Docs, OFA documentation, OFEDs, DODs.	GEN	31/01/2013	06/05/2013	closed	No reservation (P)	No reservation (P)
08.03.03	D14-002	2.2 Update - Verification- Validation and Demonstration	Will describe and report activities to Verify, Validate and Demonstrate service models during the period. For the demonstrator activities a set of validation exercises identified will be created (see milestones).	GEN	31/01/2013	30/04/2013	closed	No reservation (P)	No reservation (P)
08.01.04	D36-007	EUROCAE WG44 - RTCA SC217 Activity Report	A report on the activities of EUROCAE WG44 / RTCA 217, including issues addressed at meetings, information on new releases of interchange standards for terrain, obstacle and aerodrome mapping data, and any other information that is relevant to the activities of PR.1.4	GEN	01/05/2013	29/04/2013	closed	No reservation (P)	No reservation (P)
08.01.04	D40-004	INSPIRE Thematic WGs Activity Report	A report on the activities of the INSPIRE Thematic Working Groups, including issues addressed at meetings, information on new INSPIRE specifications and other documents, and any other information that is relevant to the activities of PR 1.4	GEN	01/05/2013	22/04/2013	closed	No reservation (P)	No reservation (P)
08.03.04	D07-002	ATC Information Services requirements specification STEP2	Specification of ATC Information Services STEP2	GEN	29/03/2013	17/04/2013	closed	No reservation (P)	No reservation (P)
08.01.05	D39-001	Report on Contribution to AIRM v2.3 and Support to SYS-Service projects	Report on model development activities performed during past six months, vs. agreed workplan developed in collaboration with SWP 08.01	GEN	01/04/2013	17/04/2013	closed	No reservation (P)	No reservation (P)
08.03.10	D08	ISRM Iteration #6	The ISRM v. 1.2 based on the deliveries from the WP 8.3.x projects. The Package will contain following artefacts: 0 Consolidated ISRM 0 Glossary AV-2 0 ISRM Issue Iteration Report	GEN	31/03/2013	31/03/2013	closed	Reservation/s requiring clarification/s	Major reservation/s

08.01.03	D13-003	Intermediate Release for v2	Intermediate Releases that change v2.0.0 of the AIRM are seen as optional in that they will not be needed if no new requirements are identified for incorporation into the AIRM. The need for an Intermediate release will be determined by the Review Forum. It will be composed of the five components of the AIRM: 1. The Primer 2. The Information Model 3. The Glossary 4. The Consolidated Logical Data Model 5. The Foundation 6. The Review Forum is planned to meet three times between the release of v2.0.0 and the next Major Release. That means there will be at most three Intermediate Releases for v2.0.0	GEN	30/03/2013	28/03/2013	closed	No reservation	No reservation	
08.01.03	D20-007	Report 7	Repetitive report to be bundled into Project Report	GEN	01/04/2013	28/03/2013	closed	No reservation (P)	No reservation (P)	
08.03.03	D30-001	EXE-08.03.03-VP-502 Validation Report	The deliverable will summarise the work performed and the outcome of the 502 validation exercise	VR	31/03/2013	15/03/2013	closed	Reservation/s requiring clarification/s	No reservation	
08.01.07	D14	Physical Modeling Contribution Version 1	This deliverable will be a report of the results achieved so far in the field of Physical Modeling. In particular it will present: - an Initial version of the Physical Data Model for Surveillance presented in at least one of the required languages (UML and/or XSD). From a NAF v3 terminology perspective it is a 'type' SV-11b Data Model. - data modeling (if any) done for fast Track Activities, in support of the Working Method on Services. - any consideration on the compliance of physical models to the AIRM	GEN	15/01/2013	08/03/2013	closed	No reservation (P)	No reservation (P)	
08.01.07	D05	Verification report for AIRM v2.2	This deliverable will report the activity and outcome of Verification done on the packages under the custodianship of 8.1.7. It will provide a contribution to 8.1.3 in order to allow the verification of the overall AIRM for versions subsequent to V2.2	GEN	15/01/2013	08/03/2013	closed	No reservation (P)	No reservation (P)	
08.01.07	D02-004	Surveillance AIRM contribution Version 1	This deliverable contains the Surveillance PIM that will be integrated with models from other data domains to form the AIRM in the first step of the Storyboard, i.e.: - Surveillance Information Model (SurIM). It contributes to NAF OV-7; - the Surveillance Logical Model (SurLM). It contributes to NAF SV-11a; - the dictionary of terms used in the surveillance models which feeds the AIRM Glossary. The deliverable will be created on the basis of existing models (mainly ASTERIX) and adapted to comply with the modeling guidelines of the AIRM. The first release is the baseline for the Surveillance component of the AIRM and as such uploaded in the AIRM	GEN	15/01/2013	08/03/2013	closed	No reservation (P)	No reservation (P)	
08.01.01	D41	SWIM ConOps v3	This deliverable is the updated version of the SWIM concept of operations	GEN	08/02/2013	08/02/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s	
08.03.05	D22-002	2.2 Update	The domain service model delivered to project 08.03.10 for iterative refinement, approval and integration into the ISRM. It comprises the domain model views conformant to SOV-1.5 (Information Service Model, expressed in SOAML), the AIRM and Data Dictionary updates in the DCB, R/M TM, AM, XDI, CM areas of work	GEN	31/01/2013	07/02/2013	closed	No reservation (P)	No reservation (P)	
08.01.10	D13-003	I3 - Verification and Validation Report for Iteration 3	Bi-annual Verification and Validation Report Mandatory: Verification report Optional: Validation report (if validation activities have taken place).	GEN	01/03/2013	06/02/2013	closed	No reservation (P)	No reservation (P)	
08.01.10	D11-002	I3 - Physical Modeling Contribution Iteration 3	Bi-annual Physical Modeling Contribution Mandatory: Activity report on work related to NSV-11b development, including systems project coordination aspects Optional: Documentation of any service payload models delivered to SWP 8.3 in the period, including AIRM NOV-7 traceability documentation Optional: Documentation of any non-service physical models delivered to SYS in the period, including AIRM traceability documentation Optional: Any proposal for extension and/or update to relevant standard data exchange models driven by SESAR needs	GEN	31/01/2013	05/02/2013	closed	No reservation (P)	No reservation (P)	
08.03.02	D19	AIRM-ISRM Registry - Operational Requirements and Demands concerning ATM information Catalogue and Registry Services (update)	ISRM/AIRM registry for programme use	GEN	31/01/2013	31/01/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s	
08.01.04	D16-003	Version 2.x Intermediate Release Domain Contribution	All artifacts created for the version 2.3 intermediate release - e.g. requirements addressed; AIRM / SDM change proposals or change requests; physical model constructs created and validated; validation and verification report	GEN	31/01/2013	31/01/2013	closed	No reservation (P)	No reservation (P)	
08.01.10	D09-003	I3 - AIRM Contribution Iteration 3	Bi-annual AIRM Contribution Mandatory: Requirements Management Activity report, including operational projects coordination aspects. Mandatory: Documentation of AIRM contribution (AIRM CCB Change Requests and model/glossary contribution delivered to 8.1.3)	GEN	30/01/2013	30/01/2013	closed	No reservation (P)	No reservation (P)	
08.03.07	D12-002	D - Revised Domain Service Model (internal) increment 2	The revised domain service model as a result of performing iterative refinement, approval and integration into the ISRM. Created in close cooperation with P 08.03.10 during feedback loop. It comprises the domain model views conformant to SOV-1.5 (Information Service Model, expressed in SOAML)	GEN	31/03/2013	30/01/2013	closed	No reservation (P)	No reservation (P)	
08.03.07	D11-002	D - Dictionary Aspects increment 2	Comprises a list (conformant to AV-2) of updates or changes to the common ATM Dictionary proposed from the Airspace Users information service perspective.	GEN	31/01/2013	30/01/2013	closed	No reservation (P)	No reservation (P)	
08.03.07	D10-002	D - Validated Domain Service Model increment 2	The validated domain service model as a result of project internal validation of information services. This model will be delivered to project 08.03.10 for iterative refinement, approval and integration into the ISRM. It comprises the domain model views conformant to SOV-1.5 (Information Service Model, expressed in SOAML)	GEN	31/01/2013	30/01/2013	closed	No reservation (P)	No reservation (P)	
08.03.07	D09-002	D - Domain Service Model (internal) increment 2	The internal domain service model as a result of information services development. It comprises the domain model views conformant to SOV-1.5 (Information Service Model, expressed in SOAML)	GEN	31/01/2013	30/01/2013	closed	No reservation (P)	No reservation (P)	
08.03.07	D08-002	D - AIRM Feedback Aspects increment 2	Project ATM Information Reference Model (AIRM) aspects giving feedback to WP 8.1 regarding AIRM from a service provision point of view.	GEN	31/01/2013	30/01/2013	closed	No reservation (P)	No reservation (P)	
08.03.07	D07-002	D - Written Requirements (internal) increment 2	This internal delivery of the domain specific information requirements is derived from operational requirements provided by operational workpackages and workpackage B as well as operational services specification provided by workpackage B. It comprises a revised OV-3 and information requirements in textual form.	GEN	31/01/2013	30/01/2013	closed	No reservation (P)	No reservation (P)	
08.03.06	D06-002	Airport services input to ISRM and ATM dictionary in increment 2	Input to ISRM and ATM Dictionary for respective iteration and increment	GEN	31/01/2013	17/01/2013	closed	No reservation (P)	No reservation (P)	
WP	Proj	Code	Deliverable Name	Deliverable Description	Template	Due date	Actual date	Assessment procedure	Provisional Assessment	Assessment Decision
09	09.20	D04	WA1.2 - Feasibility assessment (2nd release)	Update of the analysis of how existing airborne military technologies may be exploited for satisfying information exchange requirements in the new network centric SESAR context. The attention will be put on MIDS/Link 16 technologies considering its wide availability in many European military aircraft and for which, based on the new operational concept defined by SESAR, it is possible to devise some possible re-utilization to support: - CPDLC, initial 4D and trajectory management considering point to point data link communication; - Some surveillance ADS-B OUT applications where the communication (broadcast) latency may be considered acceptable.	GEN	15/10/2013	20/12/2013	review in progress		to be assessed
09.19	D14	D 9.19 - 07: WA3.2 ÷ SWIM A-G Regional Aircraft Prototype Development Report - version 1	Specification of the airborne communication architecture to be prototyped.	TS	30/09/2013	20/12/2013	closed	No reservation (P)	No reservation (P)	
09.06	D45	VI ASEP Functional Test Report - Regiona A/C	Test report focusing on functional behaviour of aircraft in the frame of ASEP continental applications.	VALR	18/10/2013	19/12/2013	closed	No reservation (P)	No reservation (P)	
09.01	D28	Technical Verification & Validation report of integration simulator and flight tests - Mainline Aircraft - step 2 (WA2.1)	This document will contain a synthesis of all the V&V test results done on integration simulator and flight test within 9.1, including performance assessment, as well as conclusions and recommendations regarding the maturity of Initial 4D aircraft function.	GEN	28/09/2013	19/12/2013	closed	No reservation (P)	No reservation (P)	
09.49	D07	Step 2 - Aircraft capabilities evolution report	As D6 but for Step 2.	GEN	29/11/2013	18/12/2013	closed	No reservation	No reservation	
09.20	D10	WA3.1 - Validation plan	The validation plan will consider the adopted process from definition to validation of projects; contents considering the test objectives and means of compliance to verify the objectives and the relevant plan covering the integration test, ground test and flight test necessary to have full readiness for the subsequent operational validation.	VALP	07/06/2013	12/12/2013	closed	No reservation (P)	No reservation (P)	

	09.20	D11	WA3.2 - Validation scenario	Definition of the most appropriate validation scenarios to be used in order to correctly stimulate in a realistic environment all the contents defined and developed inside the project. With the application of the validation scenario it will be possible to understand if the implemented concept may be considered adequate for the objective intended with special attention to the technical aspects.	VALP	02/09/2013	10/12/2013	closed	No reservation (P)	No reservation (P)
	09.06	D44	V1 Mock-up Availability Note - Regional A/C	Deliverable associated to the task "V1 Mock-up Preparation". It is the availability note for the V1 Regional Mock-up.	AVAILABILITY NOTE	12/07/2013	09/12/2013	closed	No reservation (P)	No reservation (P)
	09.33	D14	WA2.2 - Standard 2 - Technical Validation Report	for regional A/C for the second Standard, a synthesis of the technical validation conclusion.	VR	11/12/2013	09/12/2013	closed	No reservation (P)	No reservation (P)
	09.06	D12	High level Architecture for Regional A_C (preliminary document)	High Level Architecture for Regional Aircraft based on the following: a) external bodies (if any), b) operational requirements and c) first elements of functional definitions and HMI elements.	GEN	27/09/2013	06/12/2013	shared	Major reservation/s	to be assessed
	09.01	D51	Initial 4D - Overall Technical Verification & Validation Report Issue B (Mainline Aircraft)	Request (CR 979) to add this New Deliverable: This document will gather the airborne results found during the Initial 4D stepB validation run with 5.6.1 and 4.3.	VALR	30/06/2013	20/11/2013	closed	No reservation (P)	No reservation (P)
	09.27	D12	D3.2-2 Preliminary test report of MCR prototype for mainline / regional aviation v2.0	This deliverable will be the preliminary test reports of multi constellation receiver prototypes for mainline / regional aviation updated with performance test results. Receiver verification tests using constellation simulators will be used to guarantee that the expected performances are achieved. (Thales)	VR	12/09/2013	18/11/2013	closed	No reservation (P)	No reservation (P)
	09.27	D13	D3.3-2 Preliminary test report of the Receiver Simulation Platform v2.0	This deliverable will be the preliminary design document of the Receiver Simulation Platform developed by Alenia associated to results from extended tests. (Alenia)	VR	17/09/2013	18/11/2013	closed	No reservation (P)	No reservation (P)
	09.14	D23	WA2.2 High Level Architecture Definition Assumptions - release 3 (ADA_R3)	Business Aircraft : This deliverable will be updating the ADA-R2 document. It will follow changes stated in the third release of the FRD document and also it will reflect results of the first evaluation of the system and HMI validation process.	GEN	01/11/2013	13/11/2013	closed	No reservation (P)	No reservation (P)
	09.14	D26	WA2.2 Technical Validation Plan - release 2 (TVP_R2)	WA2.2 This deliverable will be updating the first release of the TVP document. It will follow changes stated in the third releases of the FRD and ADA documents and also it will reflect results of the first evaluation of the system and HMI validation process.	VP	01/11/2013	12/11/2013	shared	Major reservation/s	to be assessed
	09.01	D47	Technical Verification & Validation Scenarios - Regional Aircraft Issue 02 (WA2.2)	This document will describe the validation & verification scenarios that will be used to support validation and verification activities ISSUE 2	GEN	02/09/2013	08/11/2013	closed	No reservation (P)	No reservation (P)
	09.30	D17	WEPS-C Preliminary Validation Report	This preliminary validation report contains results from fast-time simulations using Platform A.	VALR	30/08/2013	08/11/2013	closed	No reservation (P)	No reservation (P)
	09.49	D15	Step 2 - Avionics interoperability roadmap	As D14 but for Step 2.	GEN	01/10/2013	07/11/2013	closed	No reservation (P)	No reservation (P)
	09.06	D01	First elements of functional definition document	First elements of functional definition taking into account: - AP23, ASSTAR, - Operational requirements from 4.7.4b - OSED Issue 0.1, - Operational requirements from 4.7.6 - Initial draft OSFD	TS	26/07/2013	04/11/2013	closed	No reservation (P)	No reservation (P)
	09.19	D05	D9.19 -02 WA2.1 Air-ground data link security context definition, risk assessment and security requirements version 2	Final data link security context definition, risk assessment, and data link security technical requirements. Focus on flight data sharing and service reliability.	TS	04/05/2013	01/11/2013	shared	Reservation/s requiring clarification/s	to be assessed
	09.06	D43	Verification & Validation Plan Document (for V1 Regional A/C Mock-up)	D43 (Verification & Validation activities planning for V1 regional A/C Mock-up) plans the Verification and Validation activities, at V1 OCVM level, of the ASAS ASEP application in the frame of 9.06 project. More in detail the document plans the activities of verification and validation of a preliminary ASEP functionality, basic HMI and initial performances for a regional platform.	VALP	10/06/2013	22/10/2013	review in progress		
	09.01	D09	Technical Verification & Validation Scenarios - Mainline Aircraft - step 2 (WA2.1)	This document should contain detailed operational scenarios for step 2, to be used for validation and verification purpose.	VP	17/10/2013	18/10/2013	closed	No reservation (P)	No reservation (P)
	09.31	D53	WA2 - Report on database prototype technical validation - Navigation and Airport Databases (second batch Y12-13)	Validation of A816-0 AMDB	VR	02/07/2013	14/10/2013	closed	No reservation (P)	No reservation (P)
	09.31	D13	WA1 - Database definitions and requirements at airborne level (updated issue Y13)	Includes old D13/D14/D15/D16	TS	05/06/2013	14/10/2013	closed	No reservation (P)	No reservation (P)
	09.48	D02	Functional Requirements Document	This document will specify the general characteristics of each of the aircraft sub-functions that contribute to provide AIS and MET information in the cockpit. This document will take inputs from relevant SESAR operational projects (OSED) and also from standardization documents (OSED, SPR). A first part of the functional definition will address the common part of AIS/MET for both Information Systems and Avionics Systems. A second part will address the specificity of each part (Information Systems or Avionics Systems). The second part will be as little as possible, i.e. all possible definition will be included in the first part. The second issue will update the initial functional document taking into account mock-up validation results and if any new inputs coming from SESAR operational projects.	GEN	14/10/2013	14/10/2013	closed	No reservation (P)	No reservation (P)
	09.49	D03	Step 2 - Consolidated functional airborne architecture	As D2 but for Step 2.	GEN	01/10/2013	09/10/2013	closed	No reservation (P)	No reservation (P)
	09.01	D27	Preliminary Technical Verification & Validation Report - Regional aircraft (WA2.2)	Report containing the results of validation and verification activities done on preliminary solution	GEN	30/09/2013	08/10/2013	closed	No reservation (P)	No reservation (P)
	09.05	D18	Aircraft Integration Simulator ready for evaluation form - step 2		GEN	28/06/2013	01/10/2013	closed	No reservation (P)	No reservation (P)
	09.20	D02	WA1.1 - Requirements review document (2nd release)	Analysis of the operational requirements derived from operational projects in order to capture the real needs in terms of required ATM information exchanges between military aircraft and ATM systems. This assessment will cover modern European military aircraft configuration considering the categories of fighter, transport and trainer.	TS	16/08/2013	24/09/2013	closed	No reservation (P)	No reservation (P)
	09.30	D11	LIDAR sensor requirements and technology selections for wake alleviation by flight control	This document contains the requirements on a LiDAR sensor to allow an efficient wake alleviation based on previous parametric studies.	TS	01/03/2013	24/09/2013	closed	No reservation (P)	No reservation (P)
	09.44	D12	D3.2: Report on the current status of research and Development in the SDR field	The report will include a summary survey of existing technologies in the area of flexible communications system and integrated/smart antennas. It will then assess and comment on the use of these technologies in the avionics environment and select candidate solutions and configurations that would be most suited for meeting the specified airframer requirements. The implementation, with flexible communication avionics, of the following set of communication technologies will be considered (as a minimum): o Current voice and data VHF communications technologies (25 kHz and 8.33 kHz DSB-AM, VHF Mode A/ACARS, VDL Mode 2) o LDACS o AeroMACS o Current and future Satellite communication technologies o HF Voice and Data Link Compatibility of the solutions with business A/C will also be considered. The report should provide a description of different alternative possible solutions with estimate on the order of their costs.	GEN	18/04/2013	03/09/2013	closed	No reservation (P)	No reservation (P)
	09.01	D23	Integration simulator delivery form - Mainline Aircraft - step 2 (WA2.1)		AVAILABILITY NOTE	26/04/2013	02/09/2013	closed	No reservation (P)	No reservation (P)
	09.21	D07	Simulation of the airborne model	The deliverable will be results of simulation on airborne ADS-B model for the selected solution.	GEN	20/07/2013	13/08/2013	shared	Reservation/s requiring clarification/s	to be assessed
	09.39	D20	D9.39 Benefit Analysis of En-Route Optimization Techniques for Bizjets	D9.39 Benefit Analysis of En-Route Optimization Techniques for Bizjets - Benefit analysis of En-Route optimization techniques in avionics for Business Aviation.	GEN	18/06/2013	08/08/2013	closed	Reservation/s requiring clarification/s	No reservation
	09.11	D18	Air-to-Air Datalink enabled Weather Data Fusion close to ground	This deliverable contains the weather data fusion algorithms for IGE and a note describing them.	GEN	31/12/2012	02/08/2013	closed	No reservation (P)	No reservation (P)
	09.10	D12	Validation scenario definition - V0	This deliverable will describe the appropriate scenarios to perform, ensuring a validation inline with KPI definition. This deliverable will be based on 5.6.3 operational inputs, as well as on 9.10.D03 deliverable (APV Functional Req. - Operational need part)	VALP	01/03/2013	02/08/2013	closed	No reservation (P)	No reservation (P)
	09.10	D11	Equipments Test Report - V1	This deliverable will describe the verification activity at the GNSS-FMS system level. This report will describe test scenarios performed on a dedicated avionics bench where both units will be coupled.	VR	23/05/2013	31/07/2013	closed	No reservation (P)	No reservation (P)
	09.29	D08	Mock-up development report Regional aircraft	This document will include the Report of mock-up architecture and software plug-ins development, description of mock-up integration and initial interconnection tests.	AVAILABILITY NOTE	28/06/2013	30/07/2013	closed	No reservation (P)	No reservation (P)

09.13	D27	WA2.3 Regional Research Simulator "ready for test" form (Initial Package)	Regional aircraft : Regional Research Simulator "ready for test" form (Taxi clearances) Regional Research Simulator Modification (for taxi clearances) and trial preparation	AILABILITY NC	02/08/2013	30/07/2013	closed	No reservation (P)	No reservation (P)
09.33	D12	WA2.2 - Standard 2 - Technical Validation Plan	for regional A/C For the second Standard, a plan describing the technical validation activities scheduled. This document will give overall validation and verification strategy within 9.33 It will detail the V&V general objectives, the V&V activities which will be performed and how the different V&V means will be used to tackle the different validation objectives. It will also clarify the links with the V&V activities of related operational and ATC system projects.	VP	02/08/2013	25/07/2013	closed	No reservation (P)	No reservation (P)
09.12	D13	WA2 - Technical Validation Report for mainline & business - Static tests data from different locations	GAST-D Interoperability static tests report : This report will present the results of the static tests in accordance with the test plan and against acceptable standard.	VR	29/03/2013	24/07/2013	closed	Reservation/s requiring clarification/s	No reservation
09.14	D27	WA2.2 Technical Validation Report - release 1 (TVR_R1)	Business Aircraft : This deliverable will contain results of the first evaluation of the system and HMI validation process.	VR	12/07/2013	12/07/2013	closed	No reservation (P)	No reservation (P)
09.01	D08	Technical Verification & Validation Plan - Mainline Aircraft - step 2 (WA2.1)	This document will give overall validation and verification strategy of Initial 4D within 9.1 It will detail the V&V general objectives, the V&V activities which will be performed and how the different V&V means will be used to tackle the different validation objectives. It will also clarify the links with the V&V activities of related operational and ATC system projects.	VP	20/06/2013	04/07/2013	closed	No reservation (P)	No reservation (P)
09.16	D07	Airborne Aero Wimax test procedures document	Detailed Validation and Verification objectives, and associated test procedures, for the test sessions that will be achieved at the Airbus laboratory, with the Airbus Van and On the A/C	VP	20/06/2013	20/06/2013	closed	No reservation (P)	No reservation (P)
09.03	D07	WA1 - Phase #1 - Technical Note: Aircraft Architecture and HMI Definition - #Final	System requirements Definition Document	TS	28/06/2013	19/06/2013	closed	No reservation (P)	No reservation (P)
09.06	D20	V1 - Functional test report for continental applications	V1 - Functional test report for continental applications	VR	31/05/2013	14/06/2013	closed	No reservation (P)	No reservation (P)
09.44	D01	High Level Requirements for the radio Communication Systems on future mainline and regional A-Cs	Airframers specification of the transverse and specific high level requirements applicable to the future and legacy radio communication systems, in particular certification, safety, reliability, security, performance, physical, environmental operational, and functional high level requirements applicable on mainline and regional A/C (forward fit and retrofit being considered) , with some considerations being made when possible on the specific constraints/requirements for military A/C .	TS	31/05/2012	07/06/2013	closed	No reservation	No reservation
09.12	D15	WA2.2 - Technical Validation Plan for Business A C - Prototype Development	This document will provide SW specification for the initial development of a GAST-D receiver prototype for business aircraft. It will also report on the SW conception development for this initial prototype. Validation plan will be included to give an overview of the planned validation strategy which will be carried out in task T9.12-025.	VP	01/03/2013	06/06/2013	closed	No reservation (P)	No reservation (P)
09.11	D08	WEPS-P Preliminary Validation Report	This preliminary validation report contains results from a benefit analysis using Platform B.	VR	31/12/2012	31/05/2013	closed	No reservation (P)	No reservation (P)
09.29	D07	Mock-up development report Business aircraft	This document will include the Report of mock-up architecture and software plug-ins development, description of mock-up integration and initial integration tests.	AILABILITY NC	31/03/2013	28/05/2013	closed	No reservation (P)	No reservation (P)
09.27	D17	D1.4-2 MCR definition document for business / general aviation v2.0	This deliverable will be the final definition document for the business / general aviation multi constellation receiver. It will include high level requirements based on updated signal definition documents as well as output from SESAR WP15.3.4 (Honeywell).	GEN	31/01/2013	28/05/2013	shared	Reservation/s requiring clarification/s	to be assessed
09.03	D08	WA2.1 - Phase #1 - Software Design Description	Software Design Description Document	GEN	29/10/2012	20/05/2013	closed	No reservation (P)	No reservation (P)
09.47	D12	Verification & Validation plan (Improved hybrid surveillance)	Strategy and plans of verification & validation activities for improved hybrid surveillance testing.	VALP	20/05/2013	20/05/2013	closed	No reservation (P)	No reservation (P)
09.12	D18	WA2.2 - Technical Validation Report for Business A C - Autoland simulations and failure mode simulations for Business A C	This document will include update of the validation plan providing the expected scenarios for autoland simulations and failure mode simulations for business aircraft; the description of the execution of such validation scenarios and a report with the assessment of the results, namely the autoland performance statistics and failure modes evaluations.	VR	15/04/2013	10/05/2013	closed	No reservation (P)	No reservation (P)
09.19	D12	D 9.19 - 06: WA3.1 - SWIM A-G Mainline Aircraft Prototype Development Report - version 1	Report on development environment architecture and lab prototype development. Candidate technology evaluation.	AILABILITY NC	12/05/2013	09/05/2013	closed	No reservation (P)	No reservation (P)
09.13	D11	WA2.3 TVP Deliverable Taxiway Clearances (initial package)	Regional aircraft : Description Document on the test planned on the flight simulator	AILABILITY NC	02/05/2013	02/05/2013	closed	No reservation (P)	No reservation (P)
09.30	D13	Traffic Generator for Fast-Time Simulation	This deliverable describes the traffic generator for fast-time simulations.	GEN	30/04/2013	26/04/2013	closed	No reservation (P)	No reservation (P)
09.05	D09	Verification & Validation Plan - issue 2	functional, performance and interop aspects to be tested - first step on integration test bench - second step on cockpit integration test bench (A/C0) for operational and functional evaluation with flight crews - third step on flight test aircraft for technical and operational tests including operational scenario freeze for flight tests with project 5.6.6	VP	29/03/2013	23/04/2013	closed	No reservation (P)	No reservation (P)
09.13	D29	WA2.3 Regional Research Simulator delivery form (initial package)	Regional aircraft : Regional Research Simulator delivery form (Taxi clearances) Regional Research Simulator Modification (for taxi clearances) and trial preparation	AILABILITY NC	16/04/2013	16/04/2013	closed	No reservation (P)	No reservation (P)
09.10	D10	Equipments Test Report - V0	Summary of the Verification activity for each prototyped equipment (FMS and GNSS). This deliverable will enclose the test status for each equipment verified in a standalone environment. (on equipment benches).	VR	01/04/2013	29/03/2013	closed	No reservation (P)	No reservation (P)
09.09	D10	Equipment Functional Test Report	Summary of the Verification activity for the prototyped equipment (FMS). This deliverable will enclose the test status for the equipment verified in a standalone environment (Equipment benches) and in a system environment (System Bench).	VR	25/03/2013	29/03/2013	closed	No reservation (P)	No reservation (P)
09.01	D26	Specifications report - Regional aircraft (WA2.2)	Report describing the specification activities done on Initial 4D solution	GEN	31/01/2013	25/03/2013	closed	No reservation (P)	No reservation (P)
09.47	D01	Feedback on proposed TCAS changes	Technical feedback to operational project 4.8.2 after system impact analysis of the proposed TCAS changes.	GEN	23/03/2013	22/03/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
09.24	D09	WA2.3 - Lab Ground tests report	Report including results of integration bench tests.	VALR	30/04/2012	20/03/2013	closed	No reservation (P)	No reservation (P)
09.48	D01	State of the Art Description	This document will provide the state of the art concerning AIS and MET. The objective is to describe the current applications and data that are already operational or under development.	GEN	18/03/2013	18/03/2013	closed	Major reservation/s	No reservation
09.33	D11	WA2.1 - Standard 2 - Technical Validation Plan	for mainline A/C For the second Standard, a plan describing the technical validation activities scheduled. This document will give overall validation and verification strategy within 9.33 It will detail the V&V general objectives, the V&V activities which will be performed and how the different V&V means will be used to tackle the different validation objectives. It will also clarify the links with the V&V activities of related operational and ATC system projects.	VP	08/03/2013	06/03/2013	closed	No reservation (P)	No reservation (P)
09.24	D11	WA3.2 - Validation scenario report	Definition of validation scenarios.	VALR	31/05/2013	28/02/2013	closed	No reservation (P)	No reservation (P)
09.10	D09	White Paper for GNSS & FMS APV-SBAS Prototype Readiness	This white paper will describe Real GNSS Prototyped Equipment ready for Verification Tests with a statement defining the usage domain and a summary of the integration test result. Real Prototyped FMS Software ready for Integration and Verification Tests with a statement defining the usage domain and a summary of the integration test result.	GEN	28/02/2013	28/02/2013	closed	No reservation (P)	No reservation (P)
09.01	D05	Initial 4D - Overall Technical Verification & Validation Report Issue A (Mainline A-C)	This document will contain a synthesis of all the V&V results, on step 1, on all the test means including performance assessment and full flight test results, as well as conclusions and recommendations regarding the maturity of Initial 4D aircraft function.	VR	15/09/2012	28/02/2013	closed	No reservation (P)	No reservation (P)
09.33	D16-003	Yearly synthesis of standardisation contributions		GEN	28/02/2013	28/02/2013	closed	No reservation	No reservation
09.49	D06-002	Step 1 - Aircraft capabilities evolution report - V2	The report will present the retrofitability difficulties that each aviation segment will face to have legacy aircraft capable of the new functions as introduced by the ATM Concept Storyboard Steps. The report will include: - Neither the detailed individual airframe manufacturers' physical architecture nor the implementation details will be included in the document; Each airframe manufacturer will assess its airframe capabilities evolution (and produce assessment results according the template as defined in 09.49.D05); the report will include these "standardised" assessment results - a summary of the main conclusions resulting from the individual assessments	GEN	31/12/2012	25/02/2013	closed	No reservation (P)	No reservation (P)

	09.27	D14	D1.1-2 Studies for future MCR standardisation report v 2.0	This deliverable will gather results of the following subtasks: - Interoperability with military aircrafts phase 2 (Eurocontrol) - Support to Standard phase 2 (Thales + Honeywell) - Concept of Operations and combination techniques phase 2 (Thales + Honeywell + Eurocontrol)	GEN	31/01/2013	22/02/2013	closed	No reservation (P)	No reservation (P)
	09.27	D16	D1.3-2 Receiver Simulation Platform definition document v2.0	This new version of the deliverable will document the improved platform architecture, taking also into account updated signal definition and input from SFSAR 15.3.4 (Alenia)	GEN	31/01/2013	22/02/2013	closed	No reservation (P)	No reservation (P)
	09.27	D15	D1.2-2 MCR definition document for mainline / regional aviation v2.0	This deliverable will be the final definition document for the mainline / regional aviation multi constellation receiver. It will include high level requirements based on updated signal definition documents as well as output from SFSAR WP15.3.4 (Thales)	GEN	31/01/2013	21/02/2013	closed	No reservation (P)	No reservation (P)
	09.44	D23	D1.1: System requirements review [SRR v1]	The prototype "black box" requirements are defined and reviewed at this milestone. At this review following should be known and reviewed: what is the SDR prototype supposed to do (i.e. system level functional requirements) what standards, rules, design constrains etc. apply initial safety requirements coming from the preliminary results of the PSSA preliminary definition of the system functional architecture (i.e. decomposition of the prototype into functional blocks) Following external deliverables shall be provided at this milestone: System Requirements Report [SRR v1] (summary of key system requirements to be used as inputs for coordination with WP2, WP3 and possibly other external	TS	07/01/2013	19/02/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
	09.49	D10-002	Step 1 - Interoperability risk report V2	The report will present: - the regional interoperability risks, identified during the execution of the first 2 Work Areas. - the global harmonization risks identified from the review of external activities (e.g. US NextGen). - appropriate mitigation strategies if any.	GEN	31/12/2012	19/02/2013	closed	No reservation	No reservation
	09.33	D10	WA2.2 - Standard 2 - Technical Note on Avionics System Definition	for regional A/C For the second Standard a system level definition adapted to the regional architectures Update the Standard1 functions allocation on several avionics systems HMI definition	TS	27/02/2013	15/02/2013	closed	No reservation (P)	No reservation (P)
	09.33	D09	WA2.1 - Standard 2 - Technical Note on Avionics System Definition	for mainline A/C For the second Standard, a system level definition adapted to the mainline architectures Update the Standard1 functions allocation on several avionics systems HMI definition	GEN	14/02/2013	15/02/2013	closed	Reservation/s requiring clarification/s	No reservation
	09.05	D13	TCAS, FG, FMS, ATSU & EIS2 prototype delivery forms - step 2	TCAS, FG, FMS, ATSU & EIS2 prototypes detailed specifications and development - step 2	AILABILITY NC	12/02/2013	12/02/2013	closed	No reservation (P)	No reservation (P)
	09.01	D48	Preliminary studies Report - Regional Aircraft - Issue 02 (WA2.2)	Report of the result of the studies that will analyse how the Initial 4D solution could be implemented on Alenia and Thales research simulator ISSUE 2	GEN	27/12/2012	05/02/2013	closed	No reservation (P)	No reservation (P)
	09.09	D09	White Paper for prototype readiness	This white paper will describe Real Prototyped FMS Software ready for Integration and Verification Tests with a statement defining the usage domain and a summary of the integration test result.	GEN	30/01/2013	30/01/2013	closed	No reservation (P)	No reservation (P)
	09.11	D07	Platform B Technical Architecture	This deliverable will contain the description of the technical architecture of Platform B.	GEN	30/09/2012	30/01/2013	closed	No reservation (P)	No reservation (P)
	09.11	D14	Wake Prediction Model for Wake Alerting & Avoidance In and Out of Ground Effect	This deliverable contains the wake prediction model for In and Out of Ground Effect and a note describing it.	GEN	31/08/2012	30/01/2013	closed	No reservation (P)	No reservation (P)
	09.49	D14-002	Step 1 - Avionics interoperability roadmap V2	The document will present the Avionics Interoperability Roadmap enabling the evolution of the existing physical architectures towards the consolidated functional airborne architecture, taking into account implementation constraints (e.g. technology enablers, availability of industry standards and EASA (and FAA, etc.) supporting operational and airworthiness regulations). The level of details of the Avionics Interoperability Roadmap will be determined with a view to feeding the Standardisation Roadmap and considering US existing avionics roadmap.	GEN	31/12/2012	21/01/2013	closed	Reservation/s requiring clarification/s	No reservation
	09.01	D50	Initial 4D - FMS Maturity Standard Verification Report (Mainline A-C)	Request (CR 979) to add this New Deliverable: This document will gather the results found during the FMS maturity standards verification.	VR	14/12/2012	11/01/2013	closed	No reservation (P)	No reservation (P)
	09.12	D16	WA2.2 - Technical Validation Plan for Business A C - Specification Definition	This document will provide the summary of specifications for the airborne receiver for business aircraft which will be used for the initial prototype development in D15. It will give overall requirements and especially highlight the changes required for upgrading CAT-I airborne receiver to CAT II/III airborne receiver for business aircraft.	VP	07/01/2013	09/01/2013	closed	No reservation (P)	No reservation (P)
	09.06	D19	V1 Mock-up delivery form for 4.7.6	V1 Mock-up delivery form for 4.7.6	AILABILITY NC	09/01/2013	09/01/2013	closed	No reservation (P)	No reservation (P)
WP	Proj	Code	Deliverable Name	Deliverable Description	Template	Due date	Actual date	Assessment procedure	Provisional Assessment	Assessment Decision
10	10.02.05	D10	Integrated IOP MUAC Platform - Phase 1	A verification/validation platform release note including test and configuration management report based on the result of the integration of the IOP MUAC prototype for Phase 1 with the Flight Object Server prototype lead by Indra and provided by P14.2.9.	AILABILITY NC	08/05/2013	20/12/2013	closed	No reservation (P)	No reservation (P)
	10.02.05	D08	Integrated IOP ITEC Platform - Phase 1	A verification/validation platform release note including test and configuration management report based on the result of the integration of the IOP ITEC prototype for Phase 1 with the Flight Object Server prototype lead by Indra and provided by P14.2.9.	AILABILITY NC	08/05/2013	20/12/2013	closed	No reservation (P)	No reservation (P)
	10.01.09	D21	THALES verification report v2.0.0	This deliverable will describe the testing tools implemented to support the THALES V0.1 prototype testing campaign, as well as the tests outcome.	VR	21/12/2012	20/12/2013	closed	No reservation (P)	No reservation (P)
	10.01.09	D16	THALES verification plan v2.0.0	This deliverable will describe how the V2.0.0 THALES prototype will be verified and test cases for prototypes verification against V2.0.0 System requirements	VP	27/07/2012	20/12/2013	closed	No reservation (P)	No reservation (P)
	10.04.01	D49	Thales Verification Plan - Step 1	This deliverable will include the definition of a set of verification objectives and general verification exercises in Step 1. These verification objectives and verification exercises will be specified in a prototype neutral way and produced from the analysis and information developed in T010. Also the Thales Verification Plan includes: - Verification strategy for Thales. - Verification platform specification for Thales. - Specific verification exercises for Thales prototype and scenarios derived from the verification objectives and general verification exercises defined commonly in the	VP	30/05/2013	19/12/2013	closed	No reservation (P)	No reservation (P)
	10.09.01	D12	D10.9.1 - Phase 2 - INDRA Prototype - V2 - Step 2	The prototype implements System Requirements defined for Step 2 (V2)	AILABILITY NC	26/10/2013	25/11/2013	closed	No reservation (P)	No reservation (P)
	10.09.04	D97	Thales - Support to the concepts operational validation (phase 1) - Availability Note VP-478	After factory integration and verification: availability note describing the integrated prototype made available to WP3 and 5.6.1 projects for integration, verification and validation in operational environment for EXE-05.06.01-VP-478. Note: as this integrated prototype is based on the one used for EXE-05.06.01-VP-203/204 and EXE-05.06.07-VP-485, it integrates "individual" prototypes, developments and corrective maintenance from 10.2.1, 10.7.1, 10.9.2, 10.9.4 and 10.10.3.	GEN	04/11/2013	04/11/2013	closed	No reservation (P)	No reservation (P)
	10.04.04	D06	Selex prototype development delivery sheet	This delivery sheet will identify the release of the prototype.	AILABILITY NC	10/11/2012	31/10/2013	closed	No reservation (P)	No reservation (P)
	10.04.04	D11	Selex test verification report	Verification Tests report. This report will contain all verification tests results obtained when unfolding verification test cases on the TBS tool developed by Selex on their prototype. Traceability from test cases with system requirement will be highlighted in the document	VR	09/01/2013	31/10/2013	closed	No reservation (P)	No reservation (P)
	10.04.04	D08	Selex verification plan	Test Plan and Description of Selex prototype. This deliverable gather :-Test plan: -High level test cases definition	VP	10/11/2012	31/10/2013	closed	No reservation (P)	No reservation (P)
	10.02.05	D14	Verification Tests Reports - Phase 1	Result of the Test Cases Execution over the Complete IOP Validation Platform for Phase 1. It will contain at least:- Coverage Matrix- Test Results Reports- Objectives Reached- List of Issues such as:- 1) Identified modifications to the standard ED-133B 2) Known limitations and assumptions found in phase 1- 3) Foreseen risks when facing the	VR	08/05/2013	24/10/2013	closed	No reservation (P)	No reservation (P)
	10.04.03	D18	Partner 3 Verification Tests report for Phase 2	This report will contain all verification tests result obtained when unfolding verification test cases on the Safety Net functions developed by Partner 3 on prototype 2. Traceability from test cases with system requirement will be highlighted in the document. Related to Selex prototype (Enhance Safety Nets : functions : STCA- APM - APW)	VR	02/09/2013	22/10/2013	closed	No reservation (P)	No reservation (P)
	10.04.03	D39	Preliminary Technical Specifications for Phase 2 (Enhance Safety Nets and RADP)	Deliverable of "Phase 2 System Definition including RADP" task.	TS	14/10/2013	14/10/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
	10.04.03	D15	Partner 1 Phase 2 : Safety Nets functions delivery sheet	This delivery sheet will identify the release of the Partner 1 Safety Net functions (MSAW and APM) for phase 2.	AILABILITY NC	10/10/2013	11/10/2013	shared	Reservation/s requiring clarification/s	to be assessed

10.04.03	D14	Partner 1 Verification Tests report for Phase 2	This report will contain all verification tests result obtained when unfolding verification test cases on the Safety Net functions developed by Partner 1 on prototype 1. Traceability from test cases with system requirement will be highlighted in the document. Related to Thales prototype (Enhance Safety Nets : functions : STCA, MSAW and APM)	VR	10/10/2013	11/10/2013	closed	No reservation (P)	No reservation (P)
10.03.02	D27	Selex Test Verification Report Phase 2	Description of the Phase 2 verification Tests report. This report will contain all verification tests results obtained when unfolding verification test cases on the prototype developed by Selex. Traceability from test cases with system requirement will be highlighted in the document	VR	28/06/2013	07/10/2013	closed	No reservation (P)	No reservation (P)
10.04.03	D40	Test Plan and Description for Phase 2 (Enhance Safety Nets and RADP)	DEliverable of "Phase 2 Test Plan and Description including RADP" task.	AILABILITY NC	27/09/2013	04/10/2013	closed	No reservation (P)	No reservation (P)
10.07.01	D68	D10.7.1-8 - Availability Note for Prototype 2 - Phase 1 - it2	Availability note related to the upgraded / refined prototype 2 in 2013.	AILABILITY NC	30/09/2013	03/10/2013	shared	Reservation/s requiring clarification/s	to be assessed
10.07.01	D67	D10.7.1-11 - Test Report for Prototype 2 - Phase 1 - it2	Test report related to the upgrade of the prototype 2 in the scope of the i4D steo C	VR	30/09/2013	03/10/2013	closed	No reservation (P)	No reservation (P)
10.04.03	D22	Performance Assessment Framework for Phase 2	This report will define an evaluation method for Safety Nets performance assessment as well as performances. The method will be based on statistical approach, defined in collaboration with ANSP and possibly based on the outcomes of former EUROCONTROL studies (e.g. PASS project). Related to enhanced Safety Nets: MSAW, APW, APM	GEN	27/09/2013	27/09/2013	closed	No reservation (P)	No reservation (P)
10.04.03	D19	Partner 3 Phase 2 : Safety Nets functions delivery sheet	This delivery sheet will identify the release of the Partner 3 Safety Net functions (STCA, APM and APW) for phase 2.	AILABILITY NC	01/08/2013	08/08/2013	closed	No reservation (P)	No reservation (P)
10.04.03	D13	Test Plan and Description for Phase 2 (Enhance Safety Nets)	This deliverable gather :à-Test planà-High level test cases definitionàOne deliverable for all the prototypes	VP	29/07/2013	31/07/2013	closed	No reservation (P)	No reservation (P)
10.05.01	D19	Final Closeout Report	Project closeout report as requested by the SJU	FINALR	02/08/2013	26/07/2013	shared	Major reservation/s	to be assessed
10.03.02	D22	Selex Prototype Development-availability note Phase 2	This delivery sheet will identify the release of the Phase 2 Selex prototype for the RTS performed within EXE-05.06.06-VR-199.	AILABILITY NC	28/06/2013	26/07/2013	closed	No reservation (P)	No reservation (P)
10.00	D16	Standardization coordination meeting minutes	Standardization coordination meeting minutes	GEN	22/11/2012	25/07/2013	closed	No reservation (P)	No reservation (P)
10.03.02	D25	Test cases Phase 2	Description of the test scenarios defined for the Phase 2 prototypes verification purposes	VP	03/06/2013	22/07/2013	closed	No reservation (P)	No reservation (P)
10.07.01	D74	D10.7.1-8 - Availability Note for MUAC ATC System - Phase 1 - it2	availability note corresponding to MUAC upgrade new developments in the scope of the EXE releases.	AILABILITY NC	02/07/2013	16/07/2013	closed	No reservation (P)	No reservation (P)
10.07.01	D73	D10.7.1-11 - Test Report for MUAC ATC System - Phase 1 - it2	Test report related to the upgrade of the MUAC ATC System, containing the results of tests contributing to the preparation of the EXE 463/472	VR	02/07/2013	16/07/2013	closed	No reservation (P)	No reservation (P)
10.07.01	D72	D10.7.1-6 - Specific Test Scenarios for MUAC ATC System - Phase 1 - it2	update of the specific test scenario, in relationship with the EXE 463/477 and if relevant	GEN	02/07/2013	16/07/2013	closed	No reservation (P)	No reservation (P)
10.07.01	D60	D10.7.1-8 - Availability Note for APP ER Prototype 1 - Phase 1 - it2	Delivery of the availability note for the Prototype 1, APP ER instance, prepared by INDRA and delivered to 4.3 for the EXE 463/472.	AILABILITY NC	02/07/2013	02/07/2013	closed	No reservation (P)	No reservation (P)
10.07.01	D59	D10.7.1-11 - Test Report for APP ER Prototype 1 - Phase 1 - it2	Test report related to the upgrade of the APP ER prototype 1, containing the results of tests contributing to the preparation of the EXE 463/472	VR	02/07/2013	02/07/2013	closed	No reservation (P)	No reservation (P)
10.07.01	D58	D10.7.1-6 - Specific Test Scenarios for APP ER Prototype 1 - Phase 1	D08: The Phase 1 Specific Test Cases, in the form of specific Test Scenarios for the Prototype 1, for the APP ER domain, developed and verified by Indra, is updated if relevant to implement upgrades performed in the scope of the EXE 463/472	GEN	09/07/2013	02/07/2013	closed	No reservation (P)	No reservation (P)
10.03.02	D33	Consolidated System Requirements Phase 2	Consolidated TS for Phase2 respect to the new set of input Stream1 OSED, Stream1 SPR and Stream1 INTEROP provided by P5.6.6. To be provided for R2 SFA3	TS	30/04/2013	02/07/2013	closed	No reservation (P)	No reservation (P)
10.05.01	D18	Technical Specification update	This deliverable includes a closure report of the project, and the final delivery of all project deliverables, as updated during the maintenance phase	FINALR	04/04/2013	28/06/2013	closed	No reservation (P)	No reservation (P)
10.01.09	D12	THALES prototype development delivery v2.0.0	This deliverable will be the accompanying note the the V2.0.0 release of THALES prototype	AILABILITY NC	30/11/2012	24/06/2013	closed	No reservation (P)	No reservation (P)
10.02.01	D80	Step1 Validation Support with Prototype 1 for release 2	This document will explain the nature of expert technical support (clarifications, analysis of observations, etc) during the different validation tasks and support to interated verification activities.	GEN	29/03/2013	30/05/2013	closed	No reservation (P)	No reservation (P)
10.07.01	D48	D10.7.1-10 - Availability Note for Testing Platform and Tools for ATC System - Phase 1	Availability Note for Testing Platform & Tools for Prototype 1 - Phase 1 (EUROCONTROL MUAC System Upgrade part)	AILABILITY NC	24/05/2013	23/05/2013	closed	No reservation (P)	No reservation (P)
10.01.07	D105	Technical Architecture Document Cycle 2	Provides the functional breakdown and analysis and the allocation of enablers to functional blocks and primary projects according to available material from the operational and technical primary projects. The architecture at each storyboard step shall be clearly distinguished.	TAD	07/02/2013	03/05/2013	closed	No reservation	No reservation
10.09.02	D15	10.9.2-D15-Natmig phaseA Validation Support Report	Activity report on the support provided by partners to Operational project during the validation of the prototype	GEN	15/11/2013	26/04/2013	closed	No reservation (P)	No reservation (P)
10.04.01	D06	Conflict Detection and Resolution Tools System Requirements - Step 1	System requirements derived from operational requirements in Step 1 related with Conflict Detection and Resolution Tools from project 4.7.2.	TS	20/12/2012	12/04/2013	closed	Reservation/s requiring clarification/s	No reservation
10.01.09	D19	Selex verification report v2.0.0	This deliverable will describe the testing tools implemented to support the SELEX V2.0.0 prototype testing campaign, as well as the tests outcome.	VR	21/12/2012	12/04/2013	closed	No reservation (P)	No reservation (P)
10.01.09	D14	Selex verification plan v2.0.0	This deliverable will describe how the V2.0.0 SELEX prototype will be verified and test cases for prototypes verification against System requirements V2.0.0	VP	27/07/2012	12/04/2013	closed	No reservation (P)	No reservation (P)
10.01.09	D10	Selex prototype development delivery sheet v2.0.0	This deliverable will be the accompanying note for the V0.1 release of SELEX prototype...	AILABILITY NC	30/11/2012	12/04/2013	closed	No reservation (P)	No reservation (P)
10.04.03	D11	Preliminary Technical Specifications for Phase 2 (Enhance Safety Nets)	This deliverable gather : Preliminary Architecture part- Preliminary System Requirement part Preliminary Logical Interfaces Specification part (Serge Bagieu mail 2013-03-21: to be submitted without RADP)	GEN	05/10/2012	11/04/2013	closed	No reservation (P)	No reservation (P)
10.02.01	D78	Technical Verification Report (Prototype 1) step1 for release 2	This document will include the results of the tests, containing the status along with any other information which might be of interest such as incidendes, improvement onnortunities, etc. for Prototype 1	VR	28/02/2013	27/03/2013	closed	No reservation (P)	No reservation (P)
10.01.07	D42	Pilot Architecture Review and Coordination	Review of pilot architecture and coordination with other projects	TAD	04/04/2011	01/03/2013	closed	No reservation (P)	No reservation (P)
10.01.07	D104	Specifications Issues Cycle 2	Contains issues and recommendations to the WP10 primary projects. The information shall subsequently be included in the Technical Architecture Document.	GEN	06/01/2013	27/02/2013	closed	No reservation	No reservation
10.01.07	D103	Allocated Requirements & Models Cycle 2	Provides a table allocating the operational requirements documented in OSED, SPR and INTEROP to ER/APP ATC functional blocks. The main collaborations between functional blocks are described by Message Sequence Diagrams (SV-10). The information shall subsequently be included in the Technical Architecture Document.	GEN	26/01/2013	27/02/2013	closed	No reservation	No reservation
10.01.07	D102	Functional Decomposition Cycle 2	Describes the breakdown of the system into functional blocks and their interfaces according to the available primary project material. Functional decomposition is performed separately for each storyboard step. The information shall subsequently be included in the Technical Architecture Document.	GEN	06/01/2013	27/02/2013	closed	No reservation	No reservation
10.01.07	D101	ER APP Enablers Cycle 2	Describes the mapping of enablers to functional blocks and to primary projects, tracks their V3 data and documents any issues. The information shall subsequently be included in the Technical Architecture Document.	TAD	06/01/2013	27/02/2013	closed	No reservation	No reservation
10.07.01	D71	D10.7.1-8 - Availability Note for MUAC ATC System - Phase 1 - it1	availability note corresponding to MUAC upgrade new developments in the scope of the EXE release. The 00 03 01 release of D44 stands for this deliverv	AILABILITY NC	12/02/2013	12/02/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
10.07.01	D70	D10.7.1-11 - Test Report for MUAC ATC System - Phase 1 - it1	Test report related to the upgrade of the MUAC ATC System, containing the results of tests contributing to the preparation of the EXE 324. The 00 03 01 release of D50 stands for this deliverv	VR	12/02/2013	12/02/2013	closed	No reservation (P)	No reservation (P)
10.07.01	D69	D10.7.1-6 - Specific Test Scenarios for MUAC ATC System - Phase 1 it1	Update of the specific test scenario, in relationship with the EXE 324. The 00 02 01 release of D42 stands for this delivery	VP	12/02/2013	12/02/2013	closed	No reservation (P)	No reservation (P)
10.10.02	D08	TMA-ACC specific Style Guide - STEP2	This deliverable refines the generic style guide by taking into account specific aspects of a TMA/ACC environment. It is used as guideline for the User Interface Design Document.	GEN	04/02/2013	04/02/2013	closed	No reservation (P)	No reservation (P)
10.10.02	D04	Human Factors Design Document for TMA-ACC - STEP2	This deliverable is defining the requirements for the physical layout of the integrated working positions.This document is developed taking into account the HF Baseline Requirements Document and the operational requirements	GEN	04/02/2013	04/02/2013	closed	No reservation (P)	No reservation (P)
10.07.01	D57	D10.7.1-8 - Availability Note for Prototype 1 - Phase 1 - it1	New iteration of D11: Delivery of the availability note for the Prototype 1, APP ER instance, prepared by INDRA and delivered to 4.3 for the EXE 324.	AILABILITY NC	01/02/2013	01/02/2013	closed	No reservation (P)	No reservation (P)

	10.07.01	D55	D10.7.1-6 - Specific Test Scenarios for Prototype 1 - Phase 1 - it1	new iteration of D08: The Phase 1 Specific Test Cases, in the form of specific Test Scenarios for the Prototype 1, for the APP ER domain, developed and verified by Indra, is updated if relevant to implement upgrades performed in the scope of the EXE 374.	VP	01/02/2013	01/02/2013	closed	No reservation (P)	No reservation (P)
	10.07.01	D66	D10.7.1-8 - Availability Note for Prototype 2 - Phase 1 - it1	Availability note related to the upgraded / refined prototype 2	AVAILABILITY NG	25/01/2013	25/01/2013	closed	No reservation (P)	No reservation (P)
	10.07.01	D65	D10.7.1-11 - Test Report for Prototype 2 - Phase 1 - it1	Test report related to the upgrade of the prototype 2, containing the results of tests contributing to the preparation of the step B i4D validation EXE	VR	25/01/2013	25/01/2013	closed	No reservation (P)	No reservation (P)
WP	Proj	Code	Deliverable Name	Deliverable Description	Template	Due date	Actual date	Assessment procedure	Provisional Assessment	Assessment Decision
11FW	11.01.02	D03	D11.1.2-3 - WOC operational and performance requirements for Step 2 and Step 3 as available including the traceability of the AU comments	The operational and performance requirements will include: ý OSED- defining the target operational service and environment, the actors involved, roles & responsibilities, interactions between actors and detailed operational procedures and requirements;ý SPR- defining the high level safety and performance requirements as a result of a high level Operational Safety and Performance Assessment;ý INTEROP- defining the interoperability requirements from an operational use point of view	OSED	29/11/2013	29/11/2013	closed	Reservation/s requiring clarification/s	No reservation
	11FW.00	D06	D11.0.1-4c - Management Report - Gate 3	Provide:ý- An Overview of the work toward the objectives of the Deliverables (incl. a detailed status of the activities)ý- A Publishable Summary Report of the work	GEN	02/09/2013	18/11/2013	closed	No reservation (P)	No reservation (P)
	11.01.04	D04	D11.1.4-4 - Step 1 V&V in a Standalone Mode FOC (Sub) System Delivery Sheet	D11.1.4.4 - Step 1 verified & validated in a standalone mode FOC (sub-) system delivery sheet	AVAILABILITY NG	26/09/2013	10/10/2013	closed	No reservation (P)	No reservation (P)
	11.01.02	D02	D11.1.2-2 - FOC operational and performance requirements for Step 2 and Step 3 as available including the traceability of the AU comments	The operational and performance requirements will include: ý OSED- defining the target operational service and environment, the actors involved, roles & responsibilities, interactions between actors and detailed operational procedures and requirements;ý SPR- defining the high level safety and performance requirements as a result of a high level Operational Safety and Performance Assessment;ý INTEROP- defining the interoperability requirements from an operational use point of view	OSED	30/10/2013	09/10/2013	closed	Major reservation/s	No reservation
	11.01.04	D01	D11.1.4-1 - Step 1 FOC/WOC (sub-) system delivery sheet	Confirmation of the completion of prototype development of FOC sub-systems to specification	AVAILABILITY NG	02/10/2013	02/10/2013	closed	No reservation (P)	No reservation (P)
	11FW.00	D05	D11.0.1-4b - Management Report - Gate 2	Provide:ý- An Overview of the work toward the objectives of the Deliverables (incl. a detailed status of the activities)ý- A Publishable Summary Report of the work	GEN	28/01/2013	28/01/2013	closed	No reservation (P)	No reservation (P)
	11.01.05	D08	Project Initiation Report	Project Initiation Report	GEN	16/01/2013	16/01/2013	closed	No reservation (P)	No reservation (P)
WP	Proj	Code	Deliverable Name	Deliverable Description	Template	Due date	Actual date	Assessment procedure	Provisional Assessment	Assessment Decision
11M	11.02.02	D32	Validation Report Contributions, Step 1	validation report step 1	VALR	31/12/2012	28/10/2013	selected	No reservation (P)	No reservation (P)
	11.02.01	D29	11.2.1-D29 Preliminary Technical Specification, Step 2	Preliminary Technical (MET System) Specification for Step 2, used to inform 11.02.02 deliverables (D23,24). A Technical Specification Document.	TS	31/03/2013	10/10/2013	shared	Reservation/s requiring clarification/s	to be assessed
	11M.00	D02	Gate Report	Gate Report	None	29/03/2013	13/09/2013	closed	No reservation	No reservation
	11M.00	D01	Gate Report	Gate Report	None	31/10/2012	13/09/2013	closed	No reservation	No reservation
	11.02.01	D07	11.2.1-D7 Final Technical Specification Wx Monitoring and ATM Impact	Initial set of MET requirements, derived from ATM requirements for Wx Monitoring and short-term nowcasting, in relation to ATM impact. Provides input to Step 3 activities in 11.02.01 and 11.02.02. Developed from 11.2.1-D3 following Requirements Gathering 'campaigns' and feedback from SESAR WPs/OFAs. A Technical Specification Document.	TS	30/08/2013	07/09/2013	closed	No reservation (P)	No reservation (P)
	11.02.01	D06	11.2.1-D6 Final Technical Specification Probability Forecasting	Initial set of MET requirements, derived from ATM requirements for probability forecasting. Provides input to Step 3 activities in 11.02.01 and 11.02.02. Developed from 11.2.1-D2 following Requirements Gathering 'campaigns' and feedback from SESAR WPs/OFAs. A Technical Specification Document.	TS	30/08/2013	07/09/2013	closed	No reservation (P)	No reservation (P)
	11.02.01	D05	11.2.1-D5 Final Technical Specification Convective Wx	Initial set of MET requirements, derived from ATM requirements for convective weather situations. Provides input to Step 3 activities in 11.02.01 and 11.02.02. Developed from 11.2.1-D1 following Requirements Gathering 'campaigns' and feedback from SESAR WPs/OFAs. A Technical Specification document.	TS	30/08/2013	07/09/2013	closed	No reservation (P)	No reservation (P)
	11.02.01	D15	11.2.1-D15 Preliminary Operational Requirements, Step 2	Preliminary Operational MET Requirements for Step 2, used to inform 11.02.02 deliverables (D4,5,6). An OSED document.	OSED	31/03/2013	07/09/2013	closed	No reservation	No reservation
WP	Proj	Code	Deliverable Name	Deliverable Description	Template	Due date	Actual date	Assessment procedure	Provisional Assessment	Assessment Decision
12	12.07.05	D05	Phase 2 - Improved Weather Information System Requirements	System Requirements definition (Phase 2) taking into account input from Operational Project 6.5.5 and functional and non functional requirements from 12.1.7	TS	26/04/2013	19/12/2013	shared	Reservation/s requiring clarification/s	to be assessed
	12.05.07	D20	Availability Note phase 2 (DFS)		AVAILABILITY NG	31/10/2013	18/12/2013	closed	No reservation (P)	No reservation (P)
	12.01.07	D02	Step1 Airport System Requirements analysis	Document containing the result of the SR consistency/overlap/conflict check and of the traceability verification between TEs and SRs.	GEN	19/10/2012	18/12/2013	shared	Major reservation/s	to be assessed
	12.04.08	D16	NATMIG V2 Verification Report	The verification report for the NATMIG V2 prototype verification.	VR	04/09/2013	17/12/2013	closed	No reservation (P)	No reservation (P)
	12.03.03	D13	Phase 2 - Test Report	This documents contains the results and analysis of the verification exercises carried out on the Phase 2 prototype.	VR	01/12/2013	13/12/2013	closed	No reservation (P)	No reservation (P)
	12.05.04	D81	Technical specification - Phase 2 - Part 2		TS	27/09/2013	12/12/2013	shared	Major reservation/s	to be assessed
	12.03.02	D27	Phase2 -Specific Test Reports (NATMIG)	Test reports coming out from Phase 2 NATMIG prototype verification session, performed according to a specific NATMIG verification plan included in this deliverable.	VR	27/09/2013	09/12/2013	closed	No reservation (P)	No reservation (P)
	12.05.07	D26	Verification report for phase 2 (DFS)		VR	04/11/2013	09/12/2013	closed	No reservation (P)	No reservation (P)
	12.04.04	D11	System requirements definition STEP 2 (Phase 2)	This document is an iteration of the deliverable "System requirements definition" produced for phase1. It will be upgraded to take into account the feedback from the phase1 prototype development, and the modified operational requirements of projects 6.8.4 and 6.7.2. It also includes technical system requirements of project 5.6.4's preliminary operational requirements.	TS	01/11/2013	06/12/2013	closed	No reservation (P)	No reservation (P)
	12.03.01	D26	Phase2 - Specific Verification Strategy (DFS)-Deliverable	The document will include the Verification Plan, the testing platform and testing tools requirements, and test cases and scenarios specific for DFS prototype verification session in phase 2.	VP	31/12/2013	03/12/2013	closed	No reservation (P)	No reservation (P)
	12.03.05	D11	Phase 2 - Prototype	The prototype implements Preliminary System Requirements defined for Step 2 (V2)	AVAILABILITY NG	07/10/2013	25/11/2013	closed	No reservation (P)	No reservation (P)
	12.03.01	D28	Phase2 -Specific Test Reports (INDRA)	Test reports coming out from Phase 2 INDRA prototype verification session.	VR	27/09/2013	21/11/2013	closed	No reservation (P)	No reservation (P)
	12.06.02	D32	Phase 2 DIMT Technical Specification	Phase 1: Safety related activities and specification of related requirements	TS	07/06/2013	21/11/2013	closed		
	12.06.02	D13	Phase 1 DIMT Prototype Availability Note	Phase 1: Development by Natmig of a prototype implementing the required functionality involved in Turn-around process	AVAILABILITY NG	27/04/2012	17/11/2013	closed		
	12.04.09	D08	Refined research software for basic 2D-3D integration report	Refined research software for basic 3D model and object generation from 2D data sources. The software is intended for lab demonstration.	GEN	07/09/2013	15/11/2013	closed	No reservation (P)	No reservation (P)
	12.04.08	D14	NATMIG V2 contingency prototype	The NATMIG contingency prototype at a V2 maturity level.	AVAILABILITY NG	30/08/2013	13/11/2013	closed	No reservation (P)	No reservation (P)
	12.04.08	D15	NATMIG V2 Verification Plan	This is the verification task for the NATMIG prototype at V2 maturity. This task will produce a verification plan.	VP	30/08/2013	12/11/2013	closed	No reservation (P)	No reservation (P)
	12.05.07	D23	Verification Plan phase 2 (DFS)		VP	30/06/2013	12/11/2013	closed	No reservation (P)	No reservation
	12.03.01	D24	Phase2 -Specific Verification Strategy (Thales)-Deliverable	The document will include the Verification Plan, the testing platform and testing tools requirements, and test cases and scenarios specific for Thales prototype verification session in phase 2.	VP	29/10/2013	08/11/2013	closed	No reservation (P)	No reservation (P)
	12.03.02	D59	Phase2 -Specific Test Reports (INDRA)		VR	27/09/2013	08/11/2013	closed	No reservation (P)	No reservation (P)
	12.05.03	D08	THALES prototype executable and availability note (Phase 2)	Prototype developed by THALES will be made available to 12.5.4 project for integration into the overall I-CWP prototype	AVAILABILITY NG	01/07/2013	04/11/2013	closed	No reservation (P)	No reservation (P)
	12.03.03	D34	Phase 2 - Prototype NATMIG	Phase 2 - Prototype NATMIG	AVAILABILITY NG	31/10/2013	29/10/2013	closed	No reservation (P)	No reservation (P)
	12.03.02	D23	Phase2 -Prototype Documentation (NATMIG)	The NATMIG second release of research prototype will provide user manual and integration plan.	AVAILABILITY NG	27/09/2013	29/10/2013	closed	No reservation (P)	No reservation (P)
	12.05.04	D36	Indra Verification Report - Phase 2	This deliverable contents the results of the generic and specific (Indra) test cases execution based on the (Indra) Test plan and Test cases specification documents.	VR	27/09/2013	28/10/2013	closed	No reservation (P)	No reservation (P)
	12.06.02	D19	Phase 1 DIMT Verification Report	Phase 1: Execution of the defined tests on Natmig prototype	VR	23/05/2012	27/10/2013	closed		
	12.05.07	D24	Verification report for phase 2 (Indra)	Within this deliverable the outcome on the technical verification for the tools introduced within this project for step 2 is reported. Note that the final verification will be done by the operational projects on the prototype built within 12.5.4 with the support of 12.5.7	VR	27/09/2013	21/10/2013	closed	No reservation (P)	No reservation (P)

12.06.07	D01	System Requirements for Phase 1	This document describes the system technical requirements for Phase 1. It will be based on the analysis of operational input coming from WP 6 projects (and/or external projects), as well as operational requirements.	TS	30/05/2013	17/10/2013	closed	Reservation/s requiring clarification/s	No reservation
12.05.04	D34	Test cases specification - Phase 2 - Part 1	This deliverable defines the specification of test tools and platforms requested from WP3 for execution of the AICWP prototype verification	VP	30/08/2013	09/10/2013	closed	No reservation (P)	No reservation (P)
12.03.02	D22	Phase2 -Prototype Documentation (SELEX)	The SELEX second release of research prototype will provide user manual and integration plan.	AILABILITY NC	27/09/2013	02/10/2013	closed	No reservation (P)	No reservation (P)
12.05.02	D16	SELEX prototype for Phase 2	Prototype developed by SELEX according to system requirements for Phase 2.	AILABILITY NC	28/06/2013	02/10/2013	closed	No reservation (P)	No reservation (P)
12.03.02	D26	Phase2 -Specific Test Reports (SELEX)	Test reports coming out from Phase 2 SELEX prototype verification session, performed according to a specific SELEX verification plan included in this deliverable.	VR	27/09/2013	02/10/2013	closed	No reservation (P)	No reservation (P)
12.05.03	D07	INDRA prototype executable and availability note (Phase 2)	Prototype developed by INDRA will be made available to 12.5.4 project for interation into the overall i-CWP prototype	AILABILITY NC	01/07/2013	27/09/2013	closed	No reservation (P)	No reservation (P)
12.03.02	D58	Phase2 -Prototype Documentation (INDRA)		AVAILABILITY NC	27/09/2013	27/09/2013	closed	No reservation (P)	No reservation (P)
12.03.03	D10	Phase 2- Prototype INDRA	This is an update of the INDRA Phase 1 deliverable, with additional functionality and improvements according to the updated technical specification.	AILABILITY NC	27/09/2013	27/09/2013	closed	No reservation (P)	No reservation (P)
12.05.04	D27	Indra prototype availability note - Phase 2	Prototype availability note for the Indra developed prototype for Step2, formalizing its availability for further use in WP3 and P6.9.2	AILABILITY NC	27/09/2013	26/09/2013	closed	No reservation (P)	No reservation (P)
12.05.07	D18	Availability Note phase 2 (Indra)	The deliverable consists of Pre-Industrial Prototypes for step 2 (1 Prototype built by Frequentis and DFS, 1 Prototype built by Indra). Each prototype will cover different aspects/roles and therefore also different PBM+DSTs. The prototypes are used for the validation of the introduced tools which will be performed with the operational projects.	AILABILITY NC	28/09/2013	26/09/2013	closed	No reservation (P)	No reservation (P)
12.03.01	D22	Phase2 -Prototype Documentation (INDRA)	The INDRA second release of research prototype will provide user manual and integration plan.	AILABILITY NC	27/09/2013	26/09/2013	closed	No reservation (P)	No reservation (P)
12.05.04	D31	Indra Verification Plan - Phase 2	ò Specific test cases and scenarios definition for Indra prototype for Step2 verification phase. ò Indra verification plan. ò Tools definition and specification needed for verification exercises.	VP	30/08/2013	09/09/2013	closed	No reservation (P)	No reservation (P)
12.03.01	D25	Phase2 - Specific Verification Strategy (INDRA)-Deliverable	The document will include the Verification Plan, the testing platform and testing tools requirements, and test cases and scenarios specific for INDRA prototype verification session in phase 2.	VP	16/08/2013	28/08/2013	closed	No reservation (P)	No reservation (P)
12.05.07	D22	Verification Plan phase 2 (Frequentis)		VP	30/06/2013	19/08/2013	closed	No reservation (P)	No reservation (P)
12.03.01	D13	Phase1 -Support to Operational Validation (Thales)-Deliverable	This document summarizes the list of prototype errors that have been corrected and a description of the solution in order to support the operational validation of the operational concepts when THALES' prototype is used.	GEN	28/02/2013	14/08/2013	closed	No reservation (P)	No reservation (P)
12.01.09	D21	DFS verification report V2.0.0	This deliverable will describe the testing tools implemented to support the DFS V2.0.0 prototype testing campaign, as well as the tests outcome.	VR	21/12/2012	14/08/2013	closed	No reservation (P)	No reservation (P)
12.04.03	D02	Phase 2 - Technical specifications	Phase 2: Specification of the system requirements related to the full develop. include functional and non-functional ones	TS	30/04/2013	13/08/2013	shared	Major reservation/s	to be assessed
12.01.09	D12	DFS prototype development delivery V2.0.0	This deliverable will be the accompanying note the the V2.0.0 release of DFS prototype	AILABILITY NC	30/11/2012	02/08/2013	closed	No reservation (P)	No reservation (P)
12.01.09	D16	DFS verification plan V2.0.0	This deliverable will describe how the V2.0.0 DFS prototype will be verified and test cases for prototypes verification against V2.0.0 System requirements	VP	27/07/2012	02/08/2013	closed	No reservation (P)	No reservation (P)
12.03.03	D11	Phase 2- Test definition	This is an update of the Phase 1 deliverable, taking into account modified operational requirements and feedback from P 6.7.2 validation activities.	VP	01/05/2013	19/07/2013	closed	No reservation (P)	No reservation (P)
12.05.07	D21	Verification Plan phase 2 (Indra)		VP	31/05/2013	08/07/2013	closed	No reservation (P)	No reservation (P)
12.03.04	D07	D12.3.4-06s1v3 Surface guidance prototypes	Prototype availability note for the NATMIG developed prototype for Step1, formalizing its availability for further use in WP3 and P6.7.3	AILABILITY NC	29/02/2012	28/06/2013	closed	No reservation (P)	No reservation (P)
12.03.01	D33	Phase2 -Common Verification strategy- Deliverable	This document will describe the verification principles, commonly agreed between project members and will apply to all prototypes independently from the internal verification tests executions. It will explain how the different prototypes will cover all the system requirements. It includes common description of test procedures, scenarios, metrics and measurement tools for Phase 2 verification sessions. Traceability between common test cases and the system requirement to be verified is also	VS	26/06/2013	26/06/2013	closed	No reservation (P)	No reservation (P)
12.01.09	D04	User Requirements Development Report V2S2	Description of the RDT process to collect requirements and of the V2 set of supervision user requirements. Description of the test cases against V2 user requirements.	TS	28/09/2012	24/06/2013	closed	No reservation (P)	No reservation (P)
12.05.03	D06	Verification Strategy (Phase 2)	This document describes the strategy for the verification of the prototypes produced in phase 2. It defines how the prototypes will be tested to verify that it meets the technical specifications. It includes the definition of the metrics and measurement procedures to be used, the test case scenarios, the test platform and test tools.	VS	26/04/2013	21/06/2013	closed	No reservation (P)	No reservation (P)
12.04.04	D10	THALES Support to operational validation report (Phase1)	This document summarizes the list of prototype errors that have been corrected and a description of the solution in order to support the operational validation of the operational concepts.	GEN	27/04/2013	20/06/2013	closed	No reservation (P)	No reservation (P)
12.03.02	D33	Phase2 -Common Verification strategy	This document will describe the verification principles, commonly agreed between project members and will apply to all prototypes independently from the internal verification tests executions. It will explain how the different prototypes will cover all the system requirements. It includes common description of test procedures, scenarios, metrics and measurement tools for Phase 2 verification sessions. The document will also include the traceability between test procedures and System requirements.	VS	11/06/2013	11/06/2013	closed	Reservation/s requiring clarification/s	No reservation
12.05.02	D15	Verification Strategy for Phase 2	This document describes the strategy for the verification of the research prototypes produced in Phase 2. It defines how the prototypes will be tested, the metrics and the scenarios.	VS	19/02/2013	06/06/2013	closed	No reservation (P)	No reservation (P)
12.05.04	D23	Technical specification - Phase 2	System requirements, functional and non-functional ones, not included in deliverables produced 12.1.7, 12.5.5 and 12.X.Y projects, such as standard AICWP functions, "core" functionality of the AICWP, etcà	TS	24/05/2013	23/05/2013	closed	Major reservation/s	Major reservation/s
12.03.04	D11	D12.3.4-10s1v3 Support to Validation		GEN	28/04/2012	16/05/2013	closed	No reservation (P)	No reservation (P)
12.03.05	D08-001	Phase 2 - Initial system Requirement Specification	Initial System requirements derived from operational requirements and other technical projects for Step 2 (V2)	TS	12/05/2013	09/05/2013	closed	No reservation (P)	No reservation (P)
12.04.04	D07	Consolidated Verification Results STEP1 (Phase1)	This documents contains the consolidation of the verification results carried out on the Phase 1 prototypes. It will also contain a section dedicated to standardisation activities.	VR	27/04/2013	19/04/2013	closed	No reservation (P)	No reservation (P)
12.01.09	D14	Selex verification plan V2.0.0	This deliverable will describe how the V2.0.0 SELEX prototype will be verified and test cases for prototypes verification against System requirements. V2.0.0	VP	27/07/2012	12/04/2013	closed	No reservation (P)	No reservation (P)
12.01.09	D10	Selex prototype development delivery sheet V2.0.0	This deliverable will be the accompanying note for the V2.0.0 release of SELEX prototype...	AILABILITY NC	30/11/2012	12/04/2013	closed	No reservation (P)	No reservation (P)
12.03.02	D20	Phase2 - Technical study Report	Iteration of D03 starting from new operational and technical requirements and needs coming from external projects. Impact of Wake Vortex effects, interoperability with Approach safety Nets and Conflict Resolution tools will be also studied.	GEN	17/04/2013	12/04/2013	closed	No reservation (P)	No reservation (P)
12.01.09	D19	Selex verification report V2.0.0	This deliverable will describe the testing tools implemented to support the SELEX V2.0.0 prototype testing campaign, as well as the tests outcome.	VR	21/12/2012	12/04/2013	closed	No reservation (P)	No reservation (P)
12.06.03	D07	Feedback assessment and Basic System Refinement - Report		TS	15/03/2013	03/04/2013	closed	No reservation (P)	No reservation (P)
12.04.07	D12	NATMIG single remote AFIS prototype	The third NATMIG single remote tower prototype deliverable.	AILABILITY NC	17/09/2012	27/03/2013	closed	No reservation (P)	No reservation (P)
12.04.04	D08	INDRA Support to operational validation report (Phase1)	This document summarizes the list of prototype errors that have been corrected and a description of the solution in order to support the operational validation of the operational concepts.	GEN	15/03/2013	15/03/2013	closed	No reservation (P)	No reservation (P)
12.03.05	D32	Phase 1 - Support to Validation - report	Report summarising the contribution to the operational validation	VALR	28/02/2013	08/03/2013	closed	No reservation (P)	No reservation (P)
12.03.01	D14	Phase1 -Support to Operational Validation (INDRA)-Deliverable	This document summarizes the list of prototype errors that have been corrected and a description of the solution in order to support the operational validation of the operational concepts when INDRA's prototype is used.	GEN	28/02/2013	04/03/2013	closed	No reservation (P)	No reservation (P)
12.05.07	D07	Preliminary Performance based Monitoring and Decision Support Specification for step 2	Within this specification the requirements for the performance based monitoring and decision support tools are defined. This includes HMI requirements to perform the HMI specification in cooperation with 12.5.5, and the outcome of the fallback assessment together with early acceptance tests with the end user. It will specify the operational procedures for working with the PBM+DSTs (in collaboration with the project partners).	GEN	04/03/2013	04/03/2013	closed	No reservation (P)	No reservation (P)

	12.03.03	D08	Phase 2- System Requirements Specifications	This is an update of the Phase 1 deliverable, taking into account modified operational requirements and feedback from P 6.7.2 validation activities. This document will also contain technological assessment and enhanced algorithms definition according to the reached maturity level.	TS	01/03/2013	01/03/2013	closed	Reservation/s requiring clarification/s	No reservation
	12.05.02	D10	THALES support to validation report for Phase 1	This document analyses the verification exercises of THALES pre-industrial prototype for Phase 1 from a technical point of view (any generated anomalies, ecc.)	GEN	27/12/2012	28/02/2013	closed	No reservation (P)	No reservation (P)
	12.05.03	D04	System requirements definition (Phase 2)	This document is an iteration of the deliverable "System requirements definition" produced for phase1. It will be upgraded to take into account the feedback from the mock-up development, and the modified operational requirements of projects 6.7.2, 6.7.3 and 6.9.2. It is the final set of system requirements for the HMI of 4D trajectory management function addressing STEP2 of the SESAR Storyboard, updated according to the reached maturity level. It will include safety and performance	TS	30/11/2012	15/02/2013	closed	Reservation/s requiring clarification/s	No reservation
	12.03.01	D20	Phase2 -Technological study Report	Iteration of D03 starting from new operational and technical requirements and needs come from external projects.	GEN	31/01/2013	12/02/2013	closed	No reservation (P)	No reservation (P)
	12.05.04	D18	Verification synthesis Report -Step1	Report summarizing the content of the 4 AICWP Step 1 prototypes test reports, and assess their respective readiness for use in validation activities	VR	07/02/2013	07/02/2013	closed	No reservation (P)	No reservation (P)
	12.05.02	D11	FREQUENTIS-DFS support to validation report for Phase 1 (Phase 1)	This document analyses the verification exercises of FREQUENTIS/DFS pre-industrial prototype for Phase 1 from a technical point of view (any generated anomalies, ecc.)	GEN	11/01/2013	05/02/2013	closed	No reservation (P)	No reservation (P)
	12.04.09	D04	First software solution	A first implementation with initial and reduced capabilities for creating accurate 3D airport models from heterogeneous data sets, and for visualizing them. The software will encompass registration and processing of input from heterogeneous data to a unified 3D airport model, and compact hierarchal representation suitable for multiple uses.	GEN	03/07/2012	05/02/2013	closed	No reservation (P)	No reservation (P)
	12.05.02	D08	Consolidated verification report for Phase 1	This document describes the three specific test platform, tools and reports of the verification exercises. Finally it analyses the results from the three separated tests report regarding the coverage of requirements and consolidates the verification exercises.	VR	22/08/2012	30/01/2013	closed	No reservation	No reservation
	12.04.06	D09	Technical Feasibility Report - Stage 2		GEN	20/08/2012	28/01/2013	closed	No reservation (P)	No reservation (P)
	12.03.02	D14	Phase1 -Support to Operational Validation (NATMIG) - Report	This document summarizes the list of prototype errors that have been corrected and a description of the solution in order to support the operational validation of the operational concepts when NATMIG's prototype is used.	GEN	22/01/2013	22/01/2013	closed	No reservation (P)	No reservation (P)
	12.03.02	D13	Phase1 -Support to Operational Validation (SELEX) - Report	This document summarizes the list of prototype errors that have been corrected and a description of the solution in order to support the operational validation of the operational concepts when SELEX's prototype is used.	GEN	22/01/2013	22/01/2013	closed	No reservation (P)	No reservation (P)
	12.05.02	D09	SELEX support to validation report for Phase 1	This document analyses the verification exercises of SELEX pre-industrial prototype for Phase 1 from a technical point of view (any generated anomalies, ecc.)	GEN	07/12/2012	21/01/2013	closed	No reservation (P)	No reservation (P)
	12.02.02	D06	Testing Platform and Tools Requirements V1 (Time Based Separation)	Requirements for tools and platform which will be used in both verification and validation (P6.8.1) activities for phase 1 (TBS)	VP	31/01/2012	17/01/2013	closed		No reservation (P)
	12.03.02	D18	Phase2 - System specification - Report	This document is an iteration of the deliverable "Baseline System requirements" produced for phase1. It will be upgraded to take into account the feedback from the phase 1 prototypes development, and the modified operational requirements from projects 6.7.1. It will include safety and performance requirements.	TS	16/01/2013	16/01/2013	closed	Reservation/s requiring clarification/s	No reservation
	12.05.02	D12	System Requirement for Phase 2	This document describes the system technical requirements for Phase 2. It will be based on operational requirements and on technical specification from other system projects.	TS	26/10/2012	15/01/2013	closed	No reservation (P)	No reservation (P)
	12.03.02	D15	Phase1 -Support to Operational Validation (DFS) - Report	This document summarizes the list of prototype errors that have been corrected and a description of the solution in order to support the operational validation of the operational concepts when DFS's prototype is used.	GEN	08/01/2013	08/01/2013	closed	No reservation (P)	No reservation (P)
WP	Proj	Code	Deliverable Name	Deliverable Description	Template	Due date	Actual date	Assessment procedure	Provisional Assessment	Assessment Decision
13	13.02.02	D09	Validation Report for the Digital NOTAM prototype	Final Validation Report based on the validation execution for the Digital NOTAM prototype	VALR	30/08/2013	09/12/2013	closed	Major reservation/s	Major reservation/s
	13.02.03	D10	Federated DCB step1 Development	Unverified pre-industrial prototype of the regional part of the step 1 version of "A Federated Demand-Capacity Balancing System"	GEN	15/09/2011	20/11/2013	closed	No reservation (P)	No reservation (P)
	13.02.01	D139	ASM Final System Requirements V1.0	Final version of system requirements, including the results of the safety and security assessments. These system requirements will be the ones implemented by the prototype, and are based on the operational requirements, translated to system requirements and refined by the project team.	TS	30/04/2013	19/11/2013	closed	Major reservation/s	Reservation/s requiring clarification/s
	13.02.02	D08	Validation Plan for S#1 Digital NOTAM	Will describe activities to validate the Digital NOTAM prototype	VALP	03/03/2013	21/10/2013	closed	Major reservation/s	Major reservation/s
	13.02.01	D145	TM Perfo Final System Requirements V1.0	Final version of system requirements, including the results of the safety and security assessments. These system requirements will be the revised ones once the validation exercise is completed and the revised OSED deliverable.	TS	01/04/2013	11/10/2013	closed	No reservation	No reservation
	13.01.04	D01	Project Management Close Out Report	End of the project documents	FINALR	01/11/2013	04/10/2013	closed	No reservation (P)	No reservation (P)
	13.02.01	D148	FO Verification Report delivery for PRO1 Verification Exercise	Delivery of a Report corresponding to the carrying out and results analysis of the PRO1 technical Verification Exercise.	GEN	04/09/2013	23/09/2013	closed	No reservation (P)	No reservation (P)
	13.02.01	D21	FO Availability Note for PRO1 Verification Exercise	Availability Note delivery after PRO1 technical Verification Exercise. Indicates the achievement of a set of prototypes accomplishing the integration level required (possibly in an implicit way) by the PRO1 TS version and the scenario defined for the exercise.	AILABILITY NC	02/07/2013	19/09/2013	closed	No reservation (P)	No reservation (P)
	13.01.01	D04	S1: NIMS technical Architecture	WP13 NIMS consolidated technical architecture for step1: the baseline architecture	TAD	31/07/2013	05/07/2013	closed	Major reservation/s	Major reservation/s
	13.02.01	D101	FO Verification Plan Delivery for PRO1 Verification Exercise	Delivery of the Plan for the PRO1 technical Verification Exercise. The Plan shall include NM_System and MUAC prototypes to achieve the integration level required (possibly in an implicit way) by the PRO1 TS version and the scenario defined for the exercise.	VP	23/05/2013	04/06/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
	13.02.01	D100	FO TS for PRO1 Technical Verification	Delivery of the TS document version that will be base for the PRO1 technical Verification Exercise.	TS	25/03/2013	04/06/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
	13.02.04	D01	Project Closure Report	Project Closure Report	FINALR	22/05/2013	21/05/2013	closed	No reservation	No reservation
	13.02.01	D02	ASM Initial System Requirements V1.0	Initial version of system requirements. These system requirements will be the ones implemented by the prototype, and are based on the operational requirements, translated to system requirements and refined by the project team.	TS	01/05/2013	25/04/2013	closed	Major reservation/s	Major reservation/s
	13.02.03	D80	Federated DCB release 3 Prototype Regional	The regional elements of a prototype to support validation of the OSED underlying the tech spec D79 in its draft form. This is a CTOT2TA prototype, which is perhaps not obvious from the title	AILABILITY NC	19/04/2013	19/04/2013	closed	No reservation (P)	No reservation (P)
	13.02.03	D02	DCB-ASM Scenario step1 System Definition final	Technical specifications for the step 1 prototype for "DCB and ASM Scenario Management Tools".	TS	22/03/2013	22/03/2013	closed	Major reservation/s	No reservation
	13.01.04	D02	Step 2 - V1 - Architecture Specification	System function distribution description based upon THALES & INDRA ATM experience and knowledge	GEN	12/09/2013	25/02/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
	13.01.04	D17	Step 2 - V1 - Baseline Study for local / regional interaction (deliverable)	System function distribution description based upon THALES & INDRA ATM experience and knowledge	GEN	12/09/2013	20/02/2013	closed	Reservation/s requiring clarification/s	No reservation
	13.02.01	D10	TM Perfo Initial System Requirements V1.0	Initial version of system requirements, including the results of the safety and security assessments. These system requirements will be the ones implemented by the prototype, and are based on the operational requirements, translated to system requirements and refined by the project team.	TS	28/01/2013	28/01/2013	closed	Reservation/s requiring clarification/s	No reservation
	13.02.01	D11	TM Perfo ECTL Prototype V1.0.C	Delivery of the the verified pre-industrial prototype implementing the system requirements	AILABILITY NC	21/01/2013	21/01/2013	closed	No reservation (P)	No reservation (P)
WP	Proj	Code	Deliverable Name	Deliverable Description	Template	Due date	Actual date	Assessment procedure	Provisional Assessment	Assessment Decision
14	14.00	D15-003	Work Package Management Plan (WMP)	Work Package Management Plan	GEN	20/12/2013	20/12/2013	closed	No reservation (P)	No reservation (P)
	14.01.03	D33	SWIM (G/G, A/G) Architectural Definition for Step 2 - Iteration 2.1	Deliverable associated to T033.	TAD	28/09/2013	20/12/2013	shared	Reservation/s requiring clarification/s	to be assessed

14.01.04	D41-001	SWIM-TI Technical Specification Catalog 2.1	This deliverable represents an overview of the available SWIM-TI 2.1 Technical Specifications providing also references to all the available Technical Specifications. It also includes applicable guidelines concerning requirements and the way the TSs are organized.	GEN	21/11/2013	18/12/2013	closed	No reservation	No reservation	
14.01.04	D41-007	SWIM-TI Purple Profile Technical Specification 2.1	This deliverable represents the Technical Specification of SWIM-TI Purple Profile as specified in the context of Iteration 2.1. This deliverable includes: consolidated set of SWIM-TI Use Cases (when available) related to groups of similar external requirements (e.g. ATM service non-functional requirements) together with functional, non-functional and interface requirements (e.g. applicable standards and technologies). The deliverable shall be conform to the latest version of the SIJ TS (Technical Specification) template and related guidelines properly adapted to SWIM-TI specific needs and SWIM profiles attributes.	TS	21/11/2013	18/12/2013	closed	Reservation/s requiring clarification/s	No reservation	
14.01.04	D41-006	SWIM-TI Blue Profile Technical Specification 2.1	This deliverable represents the Technical Specification of SWIM-TI Blue Profile as specified in the context of Iteration 2.1. This deliverable includes: consolidated set of SWIM-TI Use Cases (when available) related to groups of similar external requirements (e.g. ATM service non-functional requirements) together with functional, non-functional and interface requirements (e.g. applicable standards and technologies). The deliverable shall be conform to the latest version of the SIJ TS (Technical Specification) template and related guidelines properly adapted to SWIM-TI specific needs and SWIM profiles attributes.	TS	21/11/2013	18/12/2013	closed	Reservation/s requiring clarification/s	No reservation	
14.01.04	D41-005	SWIM-TI Yellow Profile Technical Specification 2.1	This deliverable represents the Technical Specification of SWIM-TI Yellow Profile as specified in the context of Iteration 2.1. This deliverable includes: consolidated set of SWIM-TI Use Cases (when available) related to groups of similar external requirements (e.g. ATM service non-functional requirements) together with functional, non-functional and interface requirements (e.g. applicable standards and technologies). The deliverable shall be conform to the latest version of the SIJ TS (Technical Specification) template and related guidelines properly adapted to SWIM-TI specific needs and SWIM profiles attributes.	TS	21/11/2013	18/12/2013	closed	Reservation/s requiring clarification/s	No reservation	
14.01.04	D41-004	SWIM-TI Run-Time Registry Technical Specification 2.1	This deliverable represents the Technical Specification of SWIM-TI Run-Time Registry as specified in the context of project Iteration 2.1. This deliverable includes: consolidated set of SWIM-TI Use Cases (when available) related to groups of similar external requirements (e.g. ATM service non-functional requirements) together with functional, non-functional and interface requirements (e.g. applicable standards and technologies). The deliverable shall be conform to the latest version of the SIJ TS (Technical Specification) template and related guidelines.	TS	21/11/2013	18/12/2013	closed	Reservation/s requiring clarification/s	No reservation	
14.01.04	D41-003	SWIM-TI Bridge Certification Authority Technical Specification 2.1	This deliverable represents the Technical Specification of SWIM-TI BCA as specified in the context of project Iteration 2.1. This deliverable includes: consolidated set of SWIM-TI Use Cases (when available) related to groups of similar external requirements (e.g. ATM service non-functional requirements) together with functional, non-functional and interface requirements (e.g. applicable standards and technologies). The deliverable shall be conform to the latest version of the SIJ TS (Technical Specification) template and related guidelines.	TS	21/11/2013	18/12/2013	closed	Reservation/s requiring clarification/s	No reservation	
14.01.04	D41-002	SWIM-TI Public Key Infrastructure Technical Specification 2.1	This deliverable represents the Technical Specification of SWIM-TI PKI as specified in the context of project Iteration 2.1. This deliverable includes: consolidated set of SWIM-TI Use Cases related to groups of similar external requirements (e.g. ATM service non-functional requirements) together with functional, non-functional and interface requirements (e.g. applicable standards and technologies). The deliverable shall be conform to the latest version of the SIJ TS (Technical Specification) template and related guidelines.	TS	21/11/2013	18/12/2013	closed	Reservation/s requiring clarification/s	No reservation	
14.02.01	D06	A/G SWIM Deployment Options Mock-up Assessment	This document reflects the deployment option mock-ups evaluation results	GEN	18/10/2013	16/12/2013	closed	Major reservation/s	Major reservation/s	
14.04	D77-012	SWIM Communication action plan (quarterly) 12	Detailed description of quarterly actions	GEN	20/09/2013	18/10/2013	closed	No reservation (P)	No reservation (P)	
14.04	D77-011	SWIM Communication action plan (quarterly) 11	Detailed description of quarterly actions	GEN	20/06/2013	05/07/2013	closed	No reservation (P)	No reservation (P)	
14.02.01	D05	A/G SWIM Deployment Options Analysis	This document reflects the analysis of the A/G SWIM deployment options provided by P14.01.03	GEN	21/06/2013	27/06/2013	closed	Major reservation/s	Major reservation/s	
14.02.09	D21	V2.0.0 verification plan	Verification plan	VP	24/12/2012	24/06/2013	closed	No reservation (P)	No reservation (P)	
14.02.09	D70-002	V2.0.0 SWIM technical infrastructure package and documentation - Indra	Runtime software delivery of Frequentis part of V2.0.0 SIM-TI. Installation and user manual.	GEN	14/01/2013	23/04/2013	closed	No reservation (P)	No reservation (P)	
14.02.09	D70-001	V2.0.0 SWIM technical infrastructure packaging and documentation - Frequentis	Runtime software delivery of Frequentis part of V2.0.0 SIM-TI. Installation and user manual.	GEN	14/01/2013	16/04/2013	closed	No reservation (P)	No reservation (P)	
14.02.09	D70-003	V2.0.0 SWIM technical infrastructure packaging and documentation - Thales	Runtime software delivery of Frequentis part of V2.0.0 SIM-TI. Installation and user manual.	GEN	14/01/2013	15/04/2013	closed	No reservation (P)	No reservation (P)	
14.04	D77-010	SWIM Communication action plan (quarterly) 10	Detailed description of quarterly actions	GEN	20/03/2013	11/04/2013	closed	No reservation (P)	No reservation (P)	
14.02.09	D14	V2.0.0 SWIM technical infrastructure definition	SWIM technical infrastructure definition. It will describe how the SWIM prototypes implement requirements from P14.1.4 for Iteration 2.0 and all the profiles defined by P14.1.3	GEN	11/10/2012	06/03/2013	closed	Reservation/s requiring clarification/s	No reservation	
14.04	D16	Integration plan v1.1.0 report	Detailed description of integration and SWIM deployment for Syst WPs for V1.1.0 in the Industry Based Platform	GEN	31/12/2012	04/03/2013	closed			
14.04	D11	Impact assessment report - pre-integration plan v1.0.0-v1.1.0 report	Detailed description of the assessments sessions and the results of these sessions in terms of changes (impact assessment / pre-integration plan) requested for the SWIM design and/or the SWIM infrastructure for Step 1	GEN	31/10/2012	04/03/2013	closed			
14.01	D06	Work Package Management Plan (WMP)	Work Package Management Plan	GEN	21/02/2012	28/01/2013	closed	No reservation (P)	No reservation (P)	
14.00	D15-002	Work Package Management Plan (WMP)	Work Package Management Plan	GEN	20/12/2012	14/01/2013	closed	No reservation (P)	No reservation (P)	
WP	Proj	Code	Deliverable Name	Deliverable Description	Template	Due date	Actual date	Assessment procedure	Provisional Assessment	Assessment Decision
15	15.03.04	D08	GNSS Baseline Report	The document will specify a baseline for GNSS use by ATM in operational step 2, identifying the recommended combinations of constellations, augmentations, and frequencies for nominal and degraded modes and for civil and State aircraft. In addition, the document will define a preliminary baseline for operational step 3.	GEN	28/06/2013	22/12/2013	closed	Reservation/s requiring clarification/s	No reservation (P)
15.04.05.b	D14	Second Iteration - Verification Acceptance Report	The test results of the second development iteration (Trajectory Based Operations) will be captured in a verification acceptance report. After approval of the verification tests (wash-up meeting), the team will provide verified prototypes to Project 15.4.5.a for operational validation work.	VR	28/03/2013	19/12/2013	closed	No reservation (P)	No reservation (P)	
15.02.07	D06	Verification Plan & Report - Phase 1	Deliverable D06.1 will cover the Phase 1 Verification Objectives, described in the Verification Strategy document. This shall include the Verification Plan and Verification Report of this first testing iteration.	GEN	20/12/2013	11/12/2013	closed	No reservation (P)	No reservation (P)	
15.04.05.b	D13	Second Iteration - Provision of Verification Test Specification	Verification Test Specification document - The document will be a refinement of the second iteration test specification (Trajectory Based Operations) delivered by Project 15.4.5a. Remark: The test specification will be tailored according the agreed prototype provider Baseline Matrix reports (related mandatory and optional prototype provider requirements). Output will be a prototype provider phase adapted verification test specification document. The document will be reviewed and approved by the project team and SIJ.	VP	29/01/2013	29/11/2013	closed	No reservation (P)	No reservation (P)	

15.02.08	D07	Design Requirement for a Ground Station for Military Data Link Interaction with SESAR	This document will include the SSDD, SRS and SDD. It will describe the internal modules, their interfaces and map the requirements for every module. The following information will be provided: SSDD describes the system/subsystem-wide design and the architectural design of a system/subsystem (e.g. - Design decisions regarding inputs the system will accept and outputs it will produce -Design decisions on system behavior in response to each input or condition -Design and construction choices for hardware or hardware-software systems -Identify the components of the system - Show the static relationship(s) of the components -For each computer system or other aggregate of computer hardware resources identified for use in the system, describe its computer hardware resources (such as processors,memory, input/output devices, auxiliary storage, and communications/network equipment) -diagrams and descriptions showing the dynamic relationship of the components -Interface identification and diagram	GEN	31/01/2013	24/10/2013	closed	No reservation (P)	No reservation (P)
15.02.07	D07-001	Interim Standardization and Global Interoperability	This task will provide an interim deliverable for the WA7 activities covering the WA7 activities up to the submission of the interim report	GEN	12/10/2013	10/10/2013	review in progress		
15.01.06	D21	Report of WP5B meetings on radar spectrum requirements	Report of WP5B meetings on radar spectrum requirements	GEN	29/03/2013	10/10/2013	closed	No reservation (P)	No reservation (P)
15.04.03	D06	ACAS Monitoring Evaluation Report	Provision of ACAS Monitoring Evaluation Report to project and SJU.	GEN	20/07/2013	08/10/2013	shared	Major reservation/s	to be assessed
15.03.06	D13	TN: PT2: Draft Safety Assessment Report (Phase 1)	This report includes a Preliminary System Safety Assessment for the GAST D Signal-in-space compliant ground station, including FHA, FMEA and fault tree analysis with budgetary values for failure probabilities.	GEN	03/07/2013	27/09/2013	closed	No reservation (P)	No reservation (P)
15.03.01	D04	D4. SESAR Navigation Baseline	This deliverable will describe the architecture of the SESAR navigation Baseline and summarise the assessments performed considering the following aspects: safety, security, technical, economical, status of the fleet, spectrum, back-up level assessment, regulatory and civil-military interoperability. The deliverable will include the results and conclusions of the following studies undertaken as subtasks of this task:(a) Preliminary allocation to GNSS, nav aids and On board study(b) Safety & security analysis(c) Technical & performance assessment(d) Spectrum aspects analysis(e) Economical modelling and assessment(f) Fleet equipment assessment(g) Back up level assessment(h) Regulatory aspects analysis(i) Civil and military interoperability analysis(j) Final allocation to GNSS, Nav aids and on-board(k) Define Overall Architecture(l) Validation of SESAR Navigation Baseline	GEN	09/08/2013	20/09/2013	closed	Reservation/s requiring clarification/s	No reservation
15.04.05.b	D12	Second Iteration - Provision of ADS-B Ground Station Prototype (for Trajectory Based Operations) - Not verified	Provision of ADS-B prototype(s) by each prototype provider (Second development iteration - Trajectory Based Operations)	AILABILITY NC	26/02/2013	12/09/2013	closed	No reservation (P)	No reservation (P)
15.01.06	D16	1030-1090 Guidance Report Deliverable	Report on 1030/1090 guidance material and a summary of results	GEN	30/08/2013	11/09/2013	closed	No reservation (P)	No reservation (P)
15.02.06	D111-02	Iris Interface Control Document definition issue 2	This document is obtained by the integration of D18, D20 and D21 as reported in P15.2.6 PIR 01.05.05 (D18): This document supports Iris ICD definition, by investigating SESAR interfaces with the G/G network and with the external end-system. (D20): This document identifies performance requirements for ATN gateway satellite data link applications. (D21): This document specifies the design of interfaces of the ATN gateway.	IRS	01/02/2013	09/09/2013	closed	No reservation (P)	No reservation (P)
15.03.06	D02-006	LATO and IGWG meeting reports 6		GEN	31/07/2013	02/09/2013	closed	No reservation (P)	No reservation (P)
15.04.03	D12	Feasibility Study	Subject of the study are the analysis of safety and security related impacts of an ACAS monitoring system integration into ATM systems and the definition of architectural and technical solutions. The ACAS Monitoring Feasibility Study will be provided to the project and SJU.	GEN	02/07/2013	28/08/2013	shared	Reservation/s requiring clarification/s	to be assessed
15.04.05.b	D15	Second Iteration - Provision of Final Safety Assessment Report	Safety Assessment Report - The results of the second iteration safety assessment will be captured in Safety Assessment report (intermediate).		11/12/2012	28/08/2013	shared	Major reservation/s	to be assessed
15.04.09.c	D05	Verification Plan	The verification plan document will devise specific test procedures, scenarios and tools to check all prototype functionalities.	VP	26/07/2013	08/08/2013	closed	No reservation (P)	No reservation (P)
15.02.08	D08	modelling report for a Ground Station for Military Data Link Interaction with SFSAR	description of the method used to model the gateway ground station starting from the specifications defined in task7	GEN	03/04/2013	29/07/2013	closed	No reservation (P)	No reservation (P)
15.04.09.c	D06	Refinement of technical specification and system architecture	Having received feedback for the proposed system definition in D01 and D02 and taking into account the stabilized high level MET architecture in SESAR, D06 refines the system specification and architecture that the prototype will be developed on. To cover potential evolution or changes in the requirements a final specification and architecture document will be developed by Task 6.	TS	26/04/2013	15/07/2013	closed	No reservation	No reservation
15.04.05.b	D11	Second Iteration - Toolset for Verification Activities	The project team selects and provides a set of tools, which are necessary to support the verification of the prototype within the second development iteration.	VP	18/12/2012	11/07/2013	closed	No reservation (P)	No reservation (P)
15.04.05.b	D16	Second Iteration - Security Assessment Report	The analysis of the security implications of an ADS-B ground prototype design and the available mitigations for intrinsic design weaknesses/vulnerabilities will be written down in an assessment report. (Second iteration - intermediate version)		29/01/2013	11/07/2013	closed	No reservation (P)	No reservation (P)
15.03.04	D07	GNSS Monitoring and NOTAM Requirements	The document will identify requirements on monitoring on GNSS and generation of NOTAMs as far as this is considered necessary to meet the continuity requirements with the proposed configurations.	GEN	04/12/2012	28/06/2013	closed	No reservation (P)	No reservation (P)
15.04.03	D11	Integration Study	Subject of the study are the potential classification of ACAS conflicts, the handling of these conflicts by ATM surveillance system(s), and the verification of integration concepts of an ACAS monitoring system into the ATM infrastructure. The ACAS Monitoring Integration Study will be submitted to the project and SJU.	GEN	07/05/2013	07/06/2013	closed	No reservation (P)	No reservation (P)
15.02.10	D12	Report on Verification of VoIP Technology for G_G & A_G Communications	The deliverable will produce a report on Verification of VoIP G/G Technology for G/G & A/G Communications (inclusive proposed amendments to G/G and A/G communication standards), Phase II, which includes IPv6 PENS infrastructure. In addition to this, a report on the coordination activities carried out qith different international nodes: Europe, ICAO will be included.	VR	29/03/2013	03/06/2013	closed	No reservation	No reservation
15.02.07	D05	D05 - AeroMACS Prototypes Description and Verification Strategy	Deliverable D05 is comprised by two parts: -Part 1 will describe the AeroMACS Ground Prototypes to be used during tests. In particular, it shall detail: - IEEE 802.16e/aero standard will serve as framework to indicate the prototype features. - Prototype installation and setup. -Part 2 will describe the overall AeroMACS Verification Strategy. A multi-variable classification will be described, including: testing scenarios, time of testings, projects or programmes doing the integration, . It shall fine-detail the individual Verification Objectives that will serve as input to the 15.02.07 Verification Plan.	GEN	29/05/2013	29/05/2013	closed	No reservation (P)	No reservation (P)
15.03.04	D06-002	Vulnerability Report - Issue 2	The document is an update of D06-001 taking into account the lono monitoring data collected in 2012	GEN	26/04/2013	21/05/2013	closed	No reservation (P)	No reservation (P)
15.03.06	D23-003	Report on submissions to and activities of relevant GBAS standardisation groups		GEN	15/04/2013	14/05/2013	closed	No reservation (P)	No reservation (P)
15.02.10	D06	SWIM backbone security management	The deliverable will comprise a final report taking into account the Security Policy and Architecture agreed and design among the stakeholders, as well as a Security Risk Assessment for all the applications to be considered on the SWIM backbone.	GEN	21/12/2012	08/05/2013	closed	Reservation/s requiring clarification/s	No reservation
15.03.06	D12	TN: PT2 Delivery Form and Verification Report (Phase 1)	This report will summarise the test results for requirements based testing up until the level of maturity the ground station prototype will reach in phase 1. Interoperability test may be performed at this stage, but this is dependent on availability of airborne receivers, which is not clear at this stage. Alternatively, interoperability tests may be performed after installation on site.	AILABILITY NC	14/05/2013	07/05/2013	closed	No reservation (P)	No reservation (P)
15.04.09.c	D03	Specific Technology Report	This deliverable reports technical assessment for the first prototype implementation and evaluates useful and feasible technology standards suitable for the realisation of the system.	GEN	27/04/2013	02/05/2013	closed	No reservation (P)	No reservation (P)
15.04.09.c	D14-001	Coordination with WP11.2 Reports	A special separated coordination task is needed to manage all interactivities with WP11.2. The outcome will be reports, correspondences, e-mails exchanged and discussed with all stakeholders.	NONE	12/04/2013	12/04/2013			to be assessed

15.04.03	D05	Verification Report	The result of the ACAS monitoring system verification tests will be captured in a verification (acceptance) report. Base input of the verification tests are the verification test plan and verification test specification. The verifications test results will be reviewed by the project (wash-up meeting). The verification report will be seen as project internal report. Internal Deliverable	VR	27/02/2013	10/04/2013	closed	No reservation (P)	No reservation (P)	
15.04.03	D10	Final Data Evaluation Report	Final Data Evaluation report - created by the project team on the end of the Final data collection and evaluation task. The collection will be performed on the prototype system. Focus is the same as for the Initial report. Internal Deliverable	GEN	26/01/2013	10/04/2013	closed	Reservation/s requiring clarification/s	No reservation	
15.04.05.b	D10	Second Iteration - Baseline Report/Matrix	Prototype provider define their compliance to the specification baseline. Baseline will delivered by Project 15.4.5.a and contains the ADS-B Ground Station Specifications, SDPD Specifications, Interface Specifications and Test Specifications for the second prototype iteration (Trajectory Based Operations). The baseline reports will indicate for this development phase mandatory and optional requirements.	GEN	20/06/2012	09/04/2013	closed	No reservation (P)	No reservation (P)	
15.04.09.c	D04	Safety Analysis Report	This report will summarize all safety relevant issues with respect to the to be developed prototype and its output.	GEN	30/03/2013	28/03/2013	closed	Major reservation/s	No reservation	
15.03.06	D04	TN: Ground Architecture & Airport Installation	The report will consist of two parts:- The first part refers to GBAS CAT III L1 ground equipment functional and performance requirements specification and definition of the generic ground architecture. - The second part refers to ground equipment installation requirements and trade-offs for the two phases of prototype installation. This part will cover common manufacturer and site independent installation requirements. (Site and manufacturer dependent issues will be covered in T 4200 and T 4300)	GEN	29/03/2013	22/03/2013	closed	No reservation	No reservation	
15.02.10	D05	Security System Specification	The deliverable will include a description of the Security Mechanism Model and a vulnerability test specification taking into account civil/military specification, and report on the tests bed and tools performed for vulnerability and civil/military interoperability.	GEN	03/10/2012	28/02/2013	closed	No reservation (P)	No reservation (P)	
15.02.06	D112-02	V&V Test Plan & Test procedures V2	This Document is obtained by the integration of D22, D23 and D27 as reported in P15.2.6 PIR 01.05.5 This document is focused on the V2 step (D22): This document will define ATN test procedures, with focus on technical parameters of the required communication performances related to both AOC and ATS services, excluding the surveillance services. ATN test procedures will be tailored to satisfy the different classes of the services defined by COCR, considering also the impact of both satcom elements and the integration of the sub-network on the overall requirements performance. (D23): This document defines methodologies for test tools development, supporting the capability of integrating test-tools or test-beds developed by other WP in an easy way. (D27): Based on the system requirements and on the V&V strategy, this document produces the verification plan for the SATCOM system. The Verification Plan will be reviewed as soon as P15.2.4, Iris Programme and other related SESAR projects ha	VP	11/12/2012	25/02/2013	closed	No reservation (P)	No reservation (P)	
15.01.06	D15	1030-1090 Final Evaluation Report Deliverable	1030/1090 Final Evaluation Report Deliverable	GEN	01/02/2013	22/02/2013	closed	No reservation (P)	No reservation (P)	
15.04.05.b	D07	First Iteration - Verification Acceptance Report	The test results of the first development iteration (Time Based Operations) will be captured in a verification acceptance report. After approval of the verification tests (wash-up meeting), the team will provide verified prototypes to Project 15.4.5.a for operational validation work.	VR	29/03/2012	13/02/2013	closed	No reservation (P)	No reservation (P)	
15.03.06	D02-005	LATO and IGWG meeting reports 5		GEN	31/01/2013	01/02/2013	closed	No reservation (P)	No reservation (P)	
15.02.06	D104-04	SATCOM Mission Requirements Definition	This document is produced by the integration of D8 and D17 as reported in P15.2.6 PIR 01.05.5. This document is the Mission Requirement Document provided as input to the IRIS Program. (D08): The document identifies technical requirements for the satellite communication system. (D17): This document investigates non-GEO technologies to cope with polar and northern regions, addressing the definition of the complementary system to be integrated with the IRIS one	TS	02/02/2013	29/01/2013	closed	Major reservation/s	No reservation	
15.04.09.b	D03	Management	The output of this task is related to 'Project management' like 'general management'and 'Coordination with other project', especially to WP11.2 composing supervising, reporting, coordination, Meetings, etc. The Project Management activities will end with the delivery of Deliverable 2.	NONE	03/10/2012	29/01/2013			to be assessed	
15.02.08	D03-003	Report on Civil-Military Consultation Activities	periodic report that will contain the status, evolution and results of consultation of military authorities, international organizations (e.g. NATO, EJCCE) and civil-military focus groups (e.g. CNS FG)	GEN	11/01/2013	17/01/2013	closed	No reservation (P)	No reservation (P)	
15.02.08	D05	System Specification for a Ground Station for Military Data Link Interaction with SESAR	Final SSS (functional and not functional requirements) for the Ground Station examples of the listed requirements are - System capability requirements such as response times, throughput times, other timing constraints, sequencing, accuracy, capacities, priorities. - System external interface requirements: Interface identification, Priority that the system must assign the interface, Requirements on the type of interface, Required characteristics of individual data elements... - Computer resource requirements: Computer HW and SW requirements, Computer communication requirements. - Design and construction constraints: Use of a particular system architecture or requirements on the architecture, Use of particular design or construction standards, Physical characteristics of the system. it will also include a recommendation on subsequent standardisation actions to be conducted through the Multi-National Working Group (MNWG) and the NATO Data Link Working Group as needed to progress with	TS	20/12/2012	07/01/2013	closed	Reservation/s requiring clarification/s	No reservation	
WP	Proj	Code	Deliverable Name	Deliverable Description	Template	Due date	Actual date	Assessment procedure	Provisional Assessment	Assessment Decision
16	16.06.03	D30	Quarterly Report on ENV Assessments		GEN	31/12/2013	20/12/2013	closed	No reservation (P)	No reservation (P)
	16.06.03	D35	Step x (x=1,2 or 3) ENV Case & Inputs to Business Case		GEN	13/12/2013	20/12/2013	closed	No reservation (P)	No reservation (P)
	16.04.01	D10-002	Update of Modules 1 to 3 - Version 2	Based on the developments in the 16.4 and 16.5 projects, updated versions of the three modules of the HP assessment process will be produced. In these updates, the deliverables of the 16.4 and 16.5 projects will be integrated as assurance activities. If necessary, the updates will also take into considerations feedback from the application of the process in the WP4-15 projects (obtained through 16.06.05 Front Office). - Version 2	GEN	21/12/2013	19/12/2013	closed	No reservation (P)	No reservation (P)
	16.04.02	D04	e-HP repository incl. Guidance	The e-HP repository will be the final outcome of this project. It contains the SESAR standard methods and tools in an electronic format. It will be set up as a commonly used toolbox of validated, useful, and available Human Performance methods, tools, techniques etc. which is accessible by all stakeholders and shall facilitate use and implementation of these. After the definition of requirements and specifications for a e-HP Repository, a first prototype is established. This will be tested and refined. In parallel guidance material is prepared. At the end a first draft version of the e-HP repository including guidance material is available, which will be reviewed by P16.06.05. After review from 16.06.05 the final version of the e-HP repository will be created. It will contain latest adjustments and necessary updates with methods, tools, guidelines received from related HP projects in 16.4.x and 16.5.x.	GEN	10/12/2013	19/12/2013	closed	No reservation	No reservation
	16.05.02	D04	Final version of guidelines	A set of guidelines for addressing the tradeoffs described in the set of scenarios.	GEN	30/06/2013	12/12/2013	review in progress		to be assessed
	16.02.01	D07-003	Report on Support to 16.06.02 (Final)	This deliverable is an annual report detailing activities carried out support 16.06.02, including the following : y- Support for validation of the Implementation Guidance Material- Refinements to the 16.06.02 ATM Security Reference Material provided to SESAR projects- Amendments to coaching & training material- Coaching 16.02.02 staff	GEN	14/12/2013	10/12/2013	closed	No reservation (P)	No reservation (P)
	16.01.02	D14	Final Robustness & Resilience Guidance Material for Safety Cases (SRM) and Design	This deliverable is the main overarching and final deliverable on the Robustness and Resilience Guidance Material for Safety Cases and Design. It merges and integrates D07 and D12. It will be usable for and aligned with P16.06.01 and WP4-15 projects, in maintaining and enhancing the Robustness and Resilience of the ATM systems and services that SESAR develops.	GEN	30/11/2013	06/12/2013	closed	No reservation	No reservation

16.03.03	D03	Update of Nature of Trade-Offs report	Support, as requested by 16.3.7, on the trade-off aspects of transparent harmonised impact assessments for SESAR improvements	GEN	28/11/2013	28/11/2013	closed	No reservation (P)	No reservation (P)
16.02.04	D04	Information Needs - Categorization of information	The report provides the conclusion on application of security validation process. It will provide a synthesis of performed support activities (training and transfer of knowledge to P16.06.02). It will identify the main points raised by P16.06.02 resulting from feed-back from the WP ¹⁵ projects on security validation process and identify areas where improvement on security validation process has to be performed.	GEN	27/11/2013	27/11/2013	closed	No reservation (P)	No reservation (P)
16.06.03	D40	SE Release x (x=1-5) Review #2		GEN	29/06/2012	26/11/2013	closed	No reservation (P)	No reservation (P)
16.06.03	D29	Quarterly Report on ENV Assessments		GEN	31/12/2012	25/11/2013	closed	No reservation (P)	No reservation (P)
16.06.03	D34	Step x (x=1,2 or 3) ENV Case & Inputs to Business Case		GEN	14/12/2012	21/11/2013	closed	No reservation (P)	No reservation (P)
16.06.03	D44	SE Release x (x=1-5) Review #1		GEN	25/10/2013	21/11/2013	closed	No reservation (P)	No reservation (P)
16.06.03	D43	SE Release x (x=1-5) Review #2		GEN	28/06/2013	21/11/2013	closed	No reservation (P)	No reservation (P)
16.06.03	D41	SE Release x (x=1-5) Review #1		GEN	26/10/2012	21/11/2013	closed	No reservation (P)	No reservation (P)
16.06.03	D42	SE Release x (x=1-5) Review #3		GEN	26/04/2013	21/11/2013	closed	No reservation (P)	No reservation (P)
16.01.02	D10	Preliminary Safety Case (SRM) Resilience Guidance Application and Validation Results	This deliverable contains the Application and Validation Results of the Preliminary Guidance Material on Resilience for Safety Cases (SRM). It includes the application/validation approach taken, as well as a detailed account of the results, with examples from the Operational Concept Case(s) that were used.	GEN	12/11/2013	12/11/2013	closed	No reservation	No reservation
16.03.01	D12-001	ERM Toolset V1.0 Release (Noise)	ERM Deliverable: updated software packages for the ENV models (GHG, Noise and LAQ) and Input Data Pre-Processing modules. These packages will include source codes, executable(s), installation and user's guides and test/validation reports	GEN	08/11/2013	08/11/2013	closed	No reservation (P)	No reservation (P)
16.02.01	D07-001	Report on Support to 16.06.02	This deliverable is an annual report detailing activities carried out support 16.06.02, including the following : y- Support for validation of the Implementation Guidance Material- Refinements to the 16.06.02 ATM Security Reference Material provided to SESAR projects- Amendments to coaching & training material- Coaching 16.02.02 staff	GEN	31/10/2013	31/10/2013	closed	No reservation (P)	No reservation (P)
16.02.03	D04-001	Report on Support to 16.06.02	This deliverable is a report describing the activities carried out to support 16.06.02 in the following areas :y• the validation of the Implementation Guidance Material;y• its adaptation to ATM Security Reference Material, y• the provision of advice to 16.06.02 on request on issues relating to the compliance of project security risk assessments with the SESAR recommended SecRAM, andy• trial runs of the associated awareness, training, and coaching material, and performing subsequent amendments to the associated material.	GEN	19/07/2013	31/10/2013	closed	No reservation (P)	No reservation (P)
16.06.01	D59	SE Release 4 - Review 1		GEN	31/10/2013	31/10/2013	closed	No reservation (P)	No reservation (P)
16.06.01	D83	Safety Input to PCP		GEN	31/10/2013	31/10/2013	closed	No reservation (P)	No reservation (P)
16.06.01	D58	SE Release 3 - Review 2		GEN	31/10/2013	31/10/2013	closed	No reservation (P)	No reservation (P)
16.06.01	D57	SE Release 2 - Review 3		GEN	31/10/2013	31/10/2013	closed	No reservation (P)	No reservation (P)
16.06.01	D35	Quarterly Report on SAF Assessments - Q3 2013		GEN	31/10/2013	31/10/2013	closed	No reservation (P)	No reservation (P)
16.06.02	D111	Security Case and Inputs to Business Case Report 2012	Security Case and Inputs to Business Case Report 2012	GEN	30/01/2013	24/10/2013	closed	No reservation (P)	No reservation (P)
16.06.02	D21-001	ATM Security Training	Reports on the cross-TA and ATM Security Training Material delivery to WP4-15 through coaching, webinar and e-learning. It will present the status of all ATM Security training activities (ATM Security Training Plan) and will provide an overview of what has been achieved during the period in question, and will reference the outputs that have been produced by the 16.06.02 team in relation to coaching of WP4-15 personnel.	GEN	30/07/2012	24/10/2013	closed	No reservation (P)	No reservation (P)
16.06.02	D10-002	Project and Package Impacts - Benefits Mechanisms	This deliverable will represent the results of a review of the ATM changes that are expected to be implemented in the SESAR Concept of Operations in the period up to 2020 (to start off with we should make a high level first cut, but it is expected that the understanding of the benefits/impact mechanisms relative to each ATM change will be developed progressively during the course of the work). From a safety standpoint, in addition to informing the initial version of the Business Case, its purpose is to establish how to model them in the 16.01.01 AIM/STAR (once and if 16.01.01 is transferred into the Safety Reference Material). The ATM changes (OI, OI steps, enablers) will be grouped according to the main elements of ATM and/or ATM Services (L2) and/or packages. The following information will be provided for, for example, each OI step: (1) Description; (2) Timescale; (3) Benefit focus; (4) Safety benefits; (5) high level Safety hazards; (6) Overall effects; (7) Representation in the AI	GEN	30/07/2012	24/10/2013	closed	No reservation (P)	No reservation (P)
16.06.02	D09-003	Cross-TA Register	One of the challenges to be faced is managing the large amount of information involved, in such a way that the Evidence produced is complete, correct, consistent and sufficient to satisfy the ATM Security Argument, and can be readily assembled and referenced in the ATM Security Cases. This can be facilitated by maintaining a cross-TA Register during the life of the project in order to, as far as ATM Security is concerned, track progress and provide visibility of the status of the various ATM Security assurance objectives and activities for each phase of the lifecycle. It is planned that the Register be implemented in an appropriate format for handling data (eg MS Excel [®] or MS Access [®]) and posted on the SJU Extranet. From a safety standpoint, it will include the following: (1) ATM Security assurance objectives as derived in the ATM Security Management Plan; (2) Hazards (pre-existing and system generated) Log; (3) Assumptions; (4) ATM Security issues; and (5) Limitations.	GEN	30/07/2012	24/10/2013	closed	No reservation (P)	No reservation (P)
16.06.02	D09-002	Cross-TA Register	One of the challenges to be faced is managing the large amount of information involved, in such a way that the Evidence produced is complete, correct, consistent and sufficient to satisfy the ATM Security Argument, and can be readily assembled and referenced in the ATM Security Cases. This can be facilitated by maintaining a cross-TA Register during the life of the project in order to, as far as ATM Security is concerned, track progress and provide visibility of the status of the various ATM Security assurance objectives and activities for each phase of the lifecycle. It is planned that the Register be implemented in an appropriate format for handling data (eg MS Excel [®] or MS Access [®]) and posted on the SJU Extranet. From a safety standpoint, it will include the following: (1) ATM Security assurance objectives as derived in the ATM Security Management Plan; (2) Hazards (pre-existing and system generated) Log; (3) Assumptions; (4) ATM Security issues; and (5) Limitations.	GEN	30/07/2012	24/10/2013	closed	No reservation (P)	No reservation (P)
16.06.02	D07-003	Report on the support to Projects ATM Security Assessments - including Front Office Operation	This report will present the activities related to the delivery of the ATM Security Reference Material and the front line support ("trouble tickets", guidance, coaching, etc.) to the WP4-15 projects.	GEN	30/07/2012	24/10/2013	closed	No reservation (P)	No reservation (P)
16.06.02	D07-002	Report on the support to Projects ATM Security Assessments - including Front Office Operation	This report will present the activities related to the delivery of the ATM Security Reference Material and the front line support ("trouble tickets", guidance, coaching, etc.) to the WP4-15 projects.	GEN	30/07/2012	24/10/2013	closed	No reservation (P)	No reservation (P)
16.06.02	D04-002	SCF - ATM Security Regulatory Interface Reviews	The ATM Security Regulatory Interface will be established and reports will be compiled reviewing the results of the review by the ATM Security regulatory platform of relevant project ATM Security deliverables and the resulting follow-up action.	GEN	30/07/2012	24/10/2013	closed	No reservation (P)	No reservation (P)
16.06.02	D04-001	SCF - ATM Security Regulatory Interface Reviews	The ATM Security Regulatory Interface will be established and reports will be compiled reviewing the results of the review by the ATM Security regulatory platform of relevant project ATM Security deliverables and the resulting follow-up action.	GEN	30/07/2012	24/10/2013	closed	No reservation (P)	No reservation (P)
16.06.02	D02-002	SCF - SESAR ATM Security Policy and Principles	Description of the ATM Security Policy and Principles. Includes the ATM Security policy itself, its monitoring and update, and potentially the scope of the ATM Security Case Reference Material and the approach to consolidating projects' Safety assessment results. Includes opportunity for periodic revision.	GEN	30/07/2012	24/10/2013	closed	No reservation (P)	No reservation (P)
16.06.02	D11-001	Report on ATM Security Reviews for SEMP (for Steps 1 - 2 and 3)	This deliverable will report on the review activities that have been completed, are in progress or are planned for the relevant SEMP events.	GEN	30/07/2012	24/10/2013	closed	No reservation (P)	No reservation (P)
16.06.02	D11-002	Report on ATM Security Reviews for SEMP (for Steps 1 - 2 and 3)	This deliverable will report on the review activities that have been completed, are in progress or are planned for the relevant SEMP events.	GEN	30/07/2012	24/10/2013	closed	No reservation (P)	No reservation (P)

16.06.02	D21-002	ATM Security Training	Reports on the cross-TA and ATM Security Training Material delivery to WP4-15 through coaching, webinar and e-learning. It will present the status of all ATM Security training activities (ATM Security Training Plan) and will provide an overview of what has been achieved during the period in question, and will reference the outputs that have been produced by the 16.06.02 team in relation to coaching of WP4-15 personnel.	GEN	30/07/2012	24/10/2013	closed	No reservation (P)	No reservation (P)
16.04.01	D10-001	Update of Modules 1 to 3 - Version 1	Based on the developments in the 16.4 and 16.5 projects, updated versions of the three modules of the HP assessment process will be produced. In these updates, the deliverables of the 16.4 and 16.5 projects will be integrated as assurance activities. If necessary, the updates will also take into considerations feedback from the application of the process in the WP4-15 projects (obtained through 16.06.05 Front Office).	GEN	18/10/2013	18/10/2013	closed	No reservation (P)	No reservation (P)
16.03.07	D06-001	Analysis of environmental regulatory requirements - Report	An identification of supporting environment related regulations required to ensure the sustainability of SESAR outcomes and to avoid non-optimal environmental constraints being imposed externally.	GEN	30/09/2013	08/10/2013	closed	No reservation	No reservation
16.04.01	D06-002	Module 3 of the HP Assessment Process - Version 2	Version 2 Module 3 will describe the HP assessment process for one of the V-phases. Two versions will be delivered: an initial and a final version. The initial version will be used for test application. The final version will include more detailed user guidance and templates.	GEN	04/10/2013	04/10/2013	closed	No reservation	No reservation
16.04.01	D02-002	Process Requirements Register - Final	The register will capture all the required properties of the HP assessment process, mapped against V-phases and TA assessment steps. It will also track whether process requirements are satisfied by a delivered version and module of the HP assessment process. - Final	GEN	04/10/2013	04/10/2013	closed	No reservation (P)	No reservation (P)
16.06.06	D33	Quarterly Support Report III-13	Quarterly Support Report III-13	GEN	30/09/2013	02/10/2013	closed	No reservation (P)	No reservation (P)
16.05.03	D07	Project Closeout Report	Project Closeout Report	FINALR	12/08/2013	19/08/2013	closed	No reservation	No reservation
16.06.01	D34	Quarterly Report on SAF Assessments - Q2 2013		GEN	05/08/2013	05/08/2013	closed	No reservation (P)	No reservation (P)
16.03.07	D04-001	Regulatory and risk scenarios guidance	an analysis of environment regulatory and risk scenarios in the form of user guidance, including potential mitigation options; for use by SESAR projects, business case analysis and performance assessments; and, by the wider ATM industry, institutions and decision makers etc.	GEN	29/07/2013	29/07/2013	closed	No reservation (P)	No reservation (P)
16.06.05	D35	Quarterly Report on HP Assessments - Q2 2013		GEN	28/06/2013	09/07/2013	closed	No reservation (P)	No reservation (P)
16.06.06	D32	Quarterly Support Report II-13	Quarterly Support Report II-13	GEN	30/06/2013	05/07/2013	closed	No reservation (P)	No reservation (P)
16.06.06	D25	BC & CBA Reference Material v4	BC & CBA Reference Material v4	GEN	31/12/2013	23/06/2013	closed	No reservation (P)	No reservation (P)
16.02.03	D03-003	SESAR ATM Security Implementation Guidance	The Implementation Guidance deliverable associated with the SESAR ATM SecRAM consists of procedures and guidelines which will provide projects with the information necessary to perform the consistent analysis, identification, and treatment of security risks. The Implementation Guidance Material will include considerations of appropriate solutions for the V1 and V2 phases and will include tailored guidance for WP4-15 projects (e.g. airborne, ground, air/ground).	GEN	14/06/2013	14/06/2013	closed	No reservation (P)	No reservation (P)
16.01.02	D06	Safety Case (SRM) and Design Robustness Guidance	This deliverable contains Safety Case (SRM) Robustness Guidance, intended to challenge the Robustness of ATM changes. Guidance takes the form of a list of questions and checklist items (similar in form to SRM/SAME and similar in content to RAG) that enable analysts to address Robustness and the ability to cope with expected disturbances to an ATM system/service as part of a Safety Case. Practical examples (from D03 and D05) will be included for pedagogical purposes.	GEN	13/06/2013	13/06/2013	closed	No reservation	No reservation
16.06	D11	2013 Release 2 SE3 - Consolidated Deliverable: Contribution from projects 16.06.XX	Contribution from projects 16.06.XX to Release 2 SE3 (consolidated deliverable)	GEN	03/06/2013	13/06/2013	closed	No reservation	No reservation
16.06.05	D34	Quarterly Report on HP Assessments		GEN	29/03/2013	11/06/2013	closed	No reservation (P)	No reservation (P)
16.06.06	D73	Contribution to the ATM-MP Business View Tiger and Sherpa teams	Contribution to the ATM-MP Business View Tiger and Sherpa teams	GEN	05/06/2013	04/06/2013	closed	No reservation (P)	No reservation (P)
16.06.06	D74	Contribution to Pilot Common Projects	Contribution to Pilot Common Projects	GEN	05/06/2013	04/06/2013	closed	No reservation (P)	No reservation (P)
16.04.01	D05-003	Module 2 of the HP Assessment Process (airborne)	Module 2 will describe the HP assessment process for one of the V-phases. Two versions will be delivered: an initial and a final version. The initial version will be used for the test application. The final version will include more detailed guidance and templates.	GEN	22/05/2013	22/05/2013	closed	No reservation (P)	No reservation (P)
16.06.03	D24	SESAR ENV Assessment Process 1		GEN	14/12/2012	21/05/2013	closed	Reservation/s requiring clarification/s	No reservation (P)
16.06.06	D65	New CBA Models and Methods 2012	New CBA Models and Methods 2012	GEN	16/05/2013	16/05/2013	closed	No reservation (P)	No reservation (P)
16.04.01	D11-001	Guidance for HP Case Building - Initial Version	Guidance for HP Case Building - Initial Version	GEN	14/05/2013	14/05/2013	closed	No reservation (P)	No reservation (P)
16.02.04	D03	Security Validation Process	This deliverable defines the security validation process, in relation with WP3 and P16.06.02. It defines how, who and when for application of security validation tools and techniques, considering the SESAR steps and phases.	GEN	14/05/2013	14/05/2013	closed	No reservation (P)	No reservation (P)
16.02.05	D02	ATM security compendium	This deliverable is a comprehensive inventory resulting from the Information Acquisition and Analysis activity, recollecting existing standards, best practices and regulations which are indexed on the typical ATM environment. The delivery of D02 has been previously submitted to 16.06.02 partners	GEN	07/05/2013	07/05/2013	closed	No reservation (P)	No reservation (P)
16.06.02	D101	SESAR Security Reference Material v3	SESAR Security Reference Material v3	GEN	30/01/2013	02/05/2013	closed	Reservation/s requiring clarification/s	No reservation
16.02.03	D02-003	SESAR ATM Security Risk Assessment Methodology	The SecRAM is the main deliverable of 16.02.03. It will be developed in several iterations. The initial version will be based on the preliminary SecRAM produced by 16.02.01. The preliminary SecRAM will be augmented by a gap analysis of current methodologies and an analysis of SESAR programme requirements for Step1, with particular focus on Release 2. The SecRAM will be tailored to the particle needs of SESAR. The deliverable will be updated for Step 2 and Step 3	GEN	02/05/2013	02/05/2013	closed	Reservation/s requiring clarification/s	No reservation
16.03.01	D20	EMS Development - Scoping & Feasibility Study Report	This report will present the scope and feasibility of an EMS framework for stakeholders, highlighting the gaps that should be addressed in a future task to enable its practical and consistent implementation, especially in the context of the SESAR operational concepts to be deployed.	GEN	30/04/2013	30/04/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
16.04.01	D09	Training Material Modules 1 - 3	Training Material Modules 1 - 3	GEN	25/04/2013	25/04/2013	closed	No reservation (P)	No reservation (P)
16.04.01	D08	Coaching Sessions Module 1 - 3	Coaching Sessions Module 1 - 3	GEN	25/04/2013	25/04/2013	closed	No reservation (P)	No reservation (P)
16.05.01	D06	Project Closeout Report		FINALR	20/04/2013	22/04/2013	closed	No reservation	No reservation
16.05.03	D06	Updated Generic Information Presentation Guide	This deliverable consists of an update of the Generic SESAR Information Presentation Guide produced within the previous tasks. It takes the results documented in the evaluation report by 16.6.5 into account and incorporates the necessary changes into the style guide. Also updates in regard to changed operational procedures as a result of the validation activities of the operational projects will be taken into account.	GEN	30/04/2013	19/04/2013	closed	No reservation (P)	No reservation (P)
16.06.06	D31	Quarterly Support Report I-13	Quarterly Support Report I-13	GEN	15/04/2013	15/04/2013	closed	No reservation (P)	No reservation (P)
16.04.01	D07	Test Application Plan Modules 1 - 3	The deliverable will consist of an initial version dedicated to Module 1, updated for Modules 2 and 3, taking into account the specificities of the modules.	GEN	08/04/2013	08/04/2013	closed	No reservation (P)	No reservation (P)
16.06.01	D33	Quarterly Report on SAF Assessments - Q1 2013		GEN	05/04/2013	05/04/2013	closed	No reservation (P)	No reservation (P)

16.04.01	D05-002	Module 2 of the HP Assessment Process (ground)	Module 2 will describe the HP assessment process for one of the V-phases. Two versions will be delivered: an initial and a final version. The initial version will be used for the test application. The final version will include more detailed guidance and templates.	GEN	25/03/2013	25/03/2013	closed	No reservation (P)	No reservation (P)	
16.03.03	D02	Nature of Trade-Offs Report	A revision to the 16.3.3.1 task expanding upon the generic trade-off guidance and methodologies developed in early task report D1-D16.3.3.1.	GEN	07/03/2013	07/03/2013	closed	No reservation (P)	No reservation (P)	
16.03.07	D05-001	Analysis of evolution of drivers of environmental risk and regulation	an analysis of the evolution of environmental impacts and other environmental drivers of risk and regulation	GEN	06/03/2013	06/03/2013	closed	No reservation (P)	No reservation (P)	
16.06.06	D30	Quarterly Support Report QIV-12	Quarterly Support Report QIV-12	GEN	01/03/2013	01/03/2013	closed		No reservation (P)	
16.06.06	D29	Quarterly Support Report QIII-12	Quarterly Support Report QIII-12	GEN	01/03/2013	01/03/2013	closed		No reservation (P)	
16.05.01	D04	Guidelines for Addressing HP Automation Issues	This document provides guidance material on automation design and evaluation that HF specialists can apply to airborne and ground operational and technical projects involving automation. Guidance is proposed mainly for three HP activities relevant to automation design: Identifying potential human performance issues that may emerge as a result of the introduction of automation support, and which are considered to be specifically relevant to the SESAR Target Concept of Operations. Identifying the appropriate level of automation for an existing or targeted system or tool. Developing principles of automation design. In addition to providing guidance on automation design, this document summarizes methods relevant for HP automation support design and	GEN	15/02/2013	15/02/2013	closed	No reservation (P)	No reservation (P)	
16.06.06	D72	SATCOM CBA	SATCOM CBA	GEN	14/02/2013	14/02/2013	closed	Major reservation/s	Major reservation/s	
16.06.05	D57	SE Release x (x=1-5) Review 1		GEN	12/02/2013	12/02/2013	closed	No reservation (P)	No reservation (P)	
16.06.05	D33	Quarterly Report on HP Assessments		GEN	12/02/2013	12/02/2013	closed	No reservation (P)	No reservation (P)	
16.06.02	D106	Security Support Report 2012	Security Support Report 2012	GEN	30/01/2013	01/02/2013	closed	No reservation (P)	No reservation (P)	
16.04.04	D04	Social Factors Intervention Framework SFIF Version 1	Social Factors Intervention Framework Version 1 validated by 16.06.05 and including the Evaluation Framework final document (Task 16.04.04.003 internal deliverable). This framework will take the outputs from the Social Factors Evaluation Framework and provide intervention materials to address the social factors identified as being: strengths that facilitate transition or resistances that may impede the transition. These interventions will aim to maximise social factor benefits and or mitigate negative influences. This may be seen as a 'what to do' tool. This 'tool' will capitalise on existing materials, e.g. SENSE (EUROCONTROL in preparation), organisational culture and climate evaluation material, change management technologies, etc.	GEN	29/12/2012	29/01/2013	closed	No reservation (P)	No reservation (P)	
16.06.06	D24	BC & CBA Reference Material v3	BC & CBA Reference Material v3	GEN	25/01/2013	25/01/2013	closed	No reservation (P)	No reservation (P)	
16.06.01	D32	Quarterly Report on SAF Assessments		GEN	24/01/2013	24/01/2013	closed	No reservation (P)	No reservation (P)	
WP	Proj	Code	Deliverable Name	Deliverable Description	Template	Due date	Actual date	Assessment procedure	Provisional Assessment	Assessment Decision
B	B.00	D30	WP B Backbone Plan 2014-15	The main element of the planning process is the WP B Backbone Plan. It takes up the framework set by the PIRs and sets concrete and coordinated milestones for the main deliverables of W B, called Major Tasks, i.e. Enterprise Architecture Performance Targets CONOPS ADD Performance Analysis Integrated Roadmap The Backbone Plan is created and updated at the end of each year and comprises the two following years. It shall reflect the results of the programme decision gate performed each year in November. The most important function of the Backbone Plan is to coordinate the Major Tasks of the WP B projects and to align them with the IP-steps of the ATM Master Plan. The Backbone Plan itself is the base for the yearly Change Request submitted by the projects, which detail the planning of the upcoming year.	GEN	31/12/2013	23/12/2013	closed	No reservation (P)	No reservation (P)
B.00	D29	Updated product backlog 1-2014	The output of the Sprint Planning is the Product Backlog as a mutual agreement and commitment between Product Owner (SJU Program Manager) and Project Manager. The SJU Programme Manager is the owner of the Product Backlog. His main tasks is to maintain the Product Backlog, which includes setting priorities in coordination with the team. He tries to keep the Product Backlog clear and meaningful and defines the Backlog for a sprint and – even more important – keeps it stable during	GEN	31/12/2013	23/12/2013	closed	No reservation (P)	No reservation (P)	
B.01	D89	Roadmap Maintenance Process update	re-issue of IR/MP Process description according to lessons learned 2013	GEN	06/12/2013	18/12/2013	closed		No reservation (P)	
B.04.01	D115	EATMA Version 3.0	EATMA Model and Portal containing contents updated and integrated to the scope and contents agreed for EATMA Version 3.0	GEN	31/10/2013	09/12/2013	shared	Reservation/s requiring clarification/s	to be assessed	
B.04.01	D07	Delivery Note for EAEA Guidance Material	Updated EA Guidance Material - Note of Delivery	AILABILITY N	30/09/2011	09/12/2013	closed	No reservation	No reservation	
B.04.02	D66	ConOps for Step 1 ed 2013	Produce updated version of ConOps Step 1	GEN	01/11/2013	26/11/2013	shared	Reservation/s requiring clarification/s	to be assessed	
B.04.01	D66	Updated EATMA Guidance Material V3	Guidance Material updated in the light of lessons learnt during the development of EATMA V2.0 and the development of EA Guidance Material V2	GEN	28/06/2013	17/11/2013	shared	Reservation/s requiring clarification/s	to be assessed	
B.05	D68	Updated Performance Assessment in 2013	Update of the Performance Assessment cycle developed during 2012.	GEN	31/10/2013	15/11/2013	closed	Reservation/s requiring clarification/s	No reservation	
B.01	D67	Release 4 Rev. 1 Report		GEN	08/11/2013	12/11/2013	closed	No reservation	No reservation	
B.04.01	D04	Review Comments on ATM Business Model 1st Draft 1	Review Input for ATM Business Model 1st Draft	GEN	30/06/2010	04/11/2013	closed	No reservation (P)	No reservation (P)	
B.04.01	D114	EATMA Version 2.0	EA Model incorporating Guidance Material, Plan, Mega Based Model and Portal	GEN	26/04/2013	30/10/2013	closed	No reservation (P)	No reservation (P)	
B.04.02	D98	Updated Issue List (including prioritisation allocation and problem solve activities) 2013	Identify areas where there are still no agreements between partners (issues) – e.g. trajectory management, traffic synchronisation, ...; set priorities.	GEN	12/10/2013	16/10/2013	closed	No reservation (P)	No reservation (P)	
B.01	D79	IR Dataset11 Release Note		GEN	04/10/2013	11/10/2013	closed	No reservation	No reservation	
B.00	D28	Updated product backlog 4-2013	The output of the Sprint Planning is the Product Backlog as a mutual agreement and commitment between Product Owner (SJU Program Manager) and Project Manager. The SJU Programme Manager is the owner of the Product Backlog. His main tasks is to maintain the Product Backlog, which includes setting priorities in coordination with the team. He tries to keep the Product Backlog clear and meaningful and defines the Backlog for a sprint and – even more important – keeps it stable during	GEN	30/09/2013	03/10/2013	closed	No reservation (P)	No reservation (P)	
B.05	D74	B.05 Contribution to PCP Report	Final outcome of the PCP support task carried out by B.05. It will contain some refinements of the Initial Performance Assessment process developed during 2012, all of them related to the projects and OFAs contained in the Pilot Common Project.	GEN	01/04/2013	20/09/2013	closed	No reservation (P)	No reservation (P)	
B.05	D89	Performance Assessment Report (PAR) Template Update	Outcome of the "Update Template D58 PAR" task. D58 template (Performance Assessment Report) updated.	GEN	28/06/2013	05/09/2013	closed	Reservation/s requiring clarification/s	No reservation	
B.01	D97	Support Report Q3 2013		GEN	30/09/2013	03/09/2013	closed	No reservation (P)	No reservation (P)	
B.01	D96	Support Report Q2 2013		GEN	28/06/2013	03/09/2013	closed	No reservation (P)	No reservation (P)	
B.04.01	D106	Updated Validation Targets	Updated Targets	GEN	28/06/2013	24/07/2013	closed	Reservation/s requiring clarification/s	No reservation	
B.01	D93	Release 4 Rev. 1 Guidance material		GEN	30/08/2013	09/07/2013	closed	No reservation (P)	No reservation (P)	
B.00	D27	Updated product backlog 3-2013	The output of the Sprint Planning is the Product Backlog as a mutual agreement and commitment between Product Owner (SJU Program Manager) and Project Manager. The SJU Programme Manager is the owner of the Product Backlog. His main tasks is to maintain the Product Backlog, which includes setting priorities in coordination with the team. He tries to keep the Product Backlog clear and meaningful and defines the Backlog for a sprint and – even more important – keeps it stable during	GEN	30/06/2013	01/07/2013	closed	No reservation (P)	No reservation (P)	
B.04.01	D39	Updated Validation Targets including Step 3	Formally issued Validation Targets	GEN	21/12/2012	21/06/2013	closed	Reservation/s requiring clarification/s	No reservation	
B.05	D65	Refined B.05 Influence Models	Development of ID/IMs of those KPIs required by the 16.6.6 that are not included in the selected initial KPI list (prioritized by targets). These indicators are initially identified as three: minutes of delay per flight number / percentage of delayed flights unaccommodated flights/year	GEN	10/06/2013	10/06/2013	closed	Reservation/s requiring clarification/s	No reservation	
B.01	D78	IR Dataset10 Release Note		GEN	30/04/2013	22/05/2013	closed	No reservation	No reservation	

	B.04.03	D73	ADD Step1 - pre-released version		GEN	01/03/2013	15/05/2013	closed	Reservation/s requiring clarification/s	No reservation
	B.04.02	D65-013	Deliverable: ConOps Step 2		GEN	03/05/2013	03/05/2013	closed	Reservation/s requiring clarification/s	No reservation
	B.00	D26	Updated product backlog 2-2013	The output of the Sprint Planning is the Product Backlog as a mutual agreement and commitment between Product Owner (SIU Program Manager) and Project Manager. The SIU Programme Manager is the owner of the Product Backlog. His main tasks is to maintain the Product Backlog, which includes setting priorities in coordination with the team. He tries to keep the Product Backlog clear and meaningful and defines the Backlog for a sprint and – even more important – keeps it stable during	GEN	31/03/2013	30/03/2013	closed	No reservation (P)	No reservation (P)
	B.01	D95	Support Report Q1_2013		GEN	30/03/2013	26/03/2013	closed	No reservation (P)	No reservation (P)
	B.01	D74-002	IR Step1+2 V1.04		GEN	16/12/2011	25/03/2013	closed	No reservation (P)	No reservation (P)
	B.04.01	D40	Refined Performance Framework for next edition Validation Targets	This Deliverable is an amalgamation of changes to the Performance Framework Support Documents undertaken to realise changes in programme circumstances.	GEN	25/05/2012	16/02/2013	closed	No reservation	No reservation
	B.04.01	D64	Fact Sheet	Overview description of the role of EATMA and its associated processes. Provided on a standard factsheet template.	GEN	15/01/2013	12/02/2013	closed	Reservation/s requiring clarification/s	No reservation
	B.04.01	D65	Updated EATMA Guidance Material V2	Guidance Material restructured in the light of lessons learnt during the EATMA Iteration 1 in 2012.	GEN	15/02/2013	12/02/2013	closed	Reservation/s requiring clarification/s	No reservation
	B.04.01	D111	EA Framework support environment	Updated EA environment for Framework Support	GEN	04/07/2012	08/02/2013	closed	Reservation/s requiring clarification/s	No reservation
	B.04.01	D120	Release 2 Delivery Note	Delivery Description for Release 2	GEN	14/01/2013	08/02/2013	closed	No reservation (P)	No reservation (P)
	B.05	D66	Initial Performance Assessment Step 1 based on Expectations	An initial estimation of performance benefits based on expectation of projects and X.2 of OFA contributions towards performance indicators identified with targets by B4.1. This will be the result of a series of workshops with X.2s and OFA lead projects.	GEN	01/02/2013	01/02/2013	closed	No reservation	No reservation
	B.04.01	D104	Delivery Note for 4 Performance Group Participation	Participation Report for 4 Performance Group	AVAILABILITY NC	27/12/2013	08/01/2013	closed	No reservation (P)	No reservation (P)
	B.04.03	D53	B.4.3 contribution to 2012 integrated roadmap	A short report (10 lines) confirming that provide human expert resources to B.1 to support the roadmap activities.	GEN	28/12/2012	07/01/2013	closed	No reservation (P)	No reservation (P)
	B.04.03	D51	B.4.3 contribution to 2012 EA	A short report (10 lines) confirming that provide human expert resources to B.4.1 to develop the EA.	GEN	26/12/2012	07/01/2013	closed	No reservation (P)	No reservation (P)
	B.04.01	D113	EA Model - Iteration 1 Second Release	EA Model incorporating Guidance Material, Plan, Mega Based Model and Portal	GEN	21/12/2012	07/01/2013	closed	Reservation/s requiring clarification/s	Reservation/s requiring clarification/s
WP	Proj	Code	Deliverable Name	Deliverable Description	Template	Due date	Actual date	Assessment procedure	Provisional Assessment	Assessment Decision
C	C.02	D104	Specific Financial Incentives per stakeholder group for Pilot Common Project (PCP)	On the basis of PCP CBA information and taking on board overall generic financial schemes (D3), this report will propose recommendations for financial incentives options related to specific PCP Technical Improvements.	GEN	15/10/2013	11/12/2013	closed	No reservation	No reservation
	C.03	D45	Regulatory Roadmap Development and Maintenance Process (2013)	Describes the process necessary to identify regulatory material considered as necessary to support timely implementation of the objectives described in the European ATM Master Plan. Addresses the process necessary for the development of the 2014 Regulatory Roadmap.	GEN	31/10/2013	14/11/2013	closed	No reservation	No reservation
	C.03	D42	Standardisation Roadmap Development and Maintenance Process (2013)	Describes the process necessary to identify standardisation material considered as necessary to support timely implementation of the objectives described in the European ATM Master Plan. Addresses the process necessary for the development of the 2014 Standardisation Roadmap.	GEN	31/10/2013	14/11/2013	closed	No reservation	No reservation
	C.02	D05-001	Deployment Packages and Scenarios Methodology	This deliverable will describe the methodology applied for the development of Deployment Package-Deployment Scenario (DP-DS) in response to Performance Needs. It will include as an appendix the latest DP-DS set, developed at ATM Master Plan level 2, for SESAR concept steps 1 to 3 (as available) and will cover the medium to long term time horizon (5-7 years onwards). Each deliverable edition will include, as necessary an update of the methodology and, the latest DP-DS set update.	GEN	30/09/2013	02/10/2013	shared	Reservation/s requiring clarification/s	to be assessed
	C.02	D06-003	ESSIP Plan - Edition 2013	This deliverable at ATM Master Plan level 3 will as a starting point, correspond to the scope of the current ESSIP European Implementation Plan.	GEN	06/08/2013	06/08/2013	closed	No reservation	No reservation
	C.02	D109	Contribution to Pilot Common Project (PCP)	This deliverable collects the results of the PCP development by the Expert Groups.	GEN	28/06/2013	28/06/2013	closed	No reservation (P)	No reservation (P)
	C.02	D66	ESSIP Report for 2012	This deliverable will report annually on deployment progress of active implementation objectives realised in Year N-1. The reported progress will be assessed to recommend adjustments if necessary of the short/medium term European Deployment Plan (D06) and or the Deployment Scenarios Plan (D05).	GEN	28/06/2013	28/06/2013	closed	No reservation	No reservation
	C.03	D05-002	Standardisation Roadmap 2013	Outlines the proposed activities required to meet the need-dates of the European ATM Master Plan. The Roadmap is provided by means of a high level description as an update to the European ATM Master Plan;	GEN	29/06/2013	28/06/2013	shared	Reservation/s requiring clarification/s	to be assessed
	C.03	D08-002	Regulatory Roadmap 2013	Outlines the proposed regulatory activities and means of compliance required to meet the objectives of the European ATM Master Plan. The Roadmap is provided by means of a high level description as an update to the European ATM Master Plan.	GEN	29/06/2013	28/06/2013	closed	Reservation/s requiring clarification/s	No reservation
	C.03	D07-002	List of Regulatory Activities 2013	Consolidates the Early Regulatory Impact Assessments for each iteration of the Regulatory Roadmap (and possibly Regulatory Development Plan (TBC)) and can be used the basis of consultations where necessary. It may contain the Early RIAs and Regulatory Roadmap as annexes but this is subject to completion of development of the associated processes	GEN	30/05/2013	29/05/2013	closed	Reservation/s requiring clarification/s	No reservation
	C.03	D04-002	List of Standardisation Activities 2013	Consolidates the Standardisation Cases for each iteration of the Standardisation Roadmap (and possibly Standards Development Plan (TBC)) and can be used the basis of consultations where necessary. It may contain the Standardisation Cases and Standardisation Roadmap as annexes but this is subject to completion of development of the associated processes.	GEN	08/05/2013	07/05/2013	closed	Major reservation/s	No reservation
	C.02	D03	Generic Financial Incentives Schemes	This report will include overall proposals for new financial incentive schemes at a generic level.	GEN	15/02/2013	15/02/2013	closed	No reservation (P)	No reservation (P)
	C.03	D14	Regulatory Roadmap Development and Maintenance Process (Review)	Describes the process necessary to identify regulatory material considered as necessary to support timely implementation of the objectives described in the European ATM Master Plan. Addresses the process necessary both the development of the Regulatory Roadmap and Regulatory Development Plan.	GEN	05/02/2013	05/02/2013	closed	No reservation	No reservation
	C.03	D12	Standardisation Roadmap Development and Maintenance Process (Review)	Describes the process necessary to identify standardisation material considered as necessary to support timely implementation of the objectives described in the European ATM Master Plan. Addresses the process necessary both the development of the Standardisation Roadmap and Standards Development Plan.	GEN	05/02/2013	05/02/2013	closed	No reservation	No reservation
WP	Proj	Code	Deliverable Name	Deliverable Description	Template	Due date	Actual date	Assessment procedure	Provisional Assessment	Assessment Decision
no Proj	01.07	D01	MAGGO Demonstration Plan	MAGGO Demonstration Plan	VALP	15/01/2013	06/03/2013	closed	Reservation/s requiring clarification/s	No reservation
	01.04	D01	SMART Demonstration Plan	SMART Demonstration Plan	VALP	15/01/2013	06/03/2013	closed	Reservation/s requiring clarification/s	No reservation
WP	Proj	Code	Deliverable Name	Deliverable Description	Template	Due date	Actual date	Assessment procedure	Provisional Assessment	Assessment Decision
E	E.02.39	D01	D2.1 draft simu model	D2.1 draft simu model		15/11/2013	17/12/2013	closed	No reservation	No reservation
	E.02.12	D21	dissemination and external coordination v3	various	GEN	12/12/2013	12/12/2013	closed	No reservation	No reservation
	E.02.17	D16	joint event contribution v3	scientific article	GEN	12/12/2013	12/12/2013	closed	No reservation	No reservation
	E.02.17	D17	dissemination and external coordination v3	various	GEN	12/12/2013	12/12/2013			to be assessed
	E.02.07	D10	Final report	Final project report	FINALR	11/12/2013	11/12/2013	selected		to be assessed
	E.02.36	D01	Operation and related safety issues (D1.1)	General aviation aircraft operation and related safety issues		15/10/2013	10/12/2013			
	E.02.34	D01	Experimental plan and metrics to evaluate separation management (D1.1)	Experimental plan and metrics to evaluate separation management (D1.1)		15/11/2013	10/12/2013			
	E.02.15	D19	Final report		FINALR	09/12/2013	09/12/2013	closed	No reservation	No reservation

E.02.15	D18	Simulation report	Report on the simulations conducted and final conclusions	GEN	09/12/2013	09/12/2013	closed	No reservation	No reservation
E.01.01	D10	y3 CW report from confs		GEN	09/12/2013	09/12/2013	closed	No reservation	No reservation
E.02.13	D18	Final report		GEN	05/12/2013	05/12/2013	closed	No reservation	No reservation
E.02.14	D25	D0.5 Final Report	Final report	FINALR	05/12/2013	05/12/2013	closed	No reservation	No reservation
E.02.13	D19	Framing the problem - final	Framing the problem - final	GEN	05/12/2013	05/12/2013	closed	No reservation	No reservation
E.02.40	D01	D1.1 Report on selected MET-AT topics	Report on selected MAT-AT topics, incl. relevant MET Input		30/10/2013	02/12/2013			
E.02.13	D15	The legal case - final version	The legal case - final version	GEN	29/11/2013	29/11/2013	closed	No reservation	No reservation
E.02.11	D17	D0.9 Final Report	Final Report	FINALR	29/11/2013	29/11/2013	closed	No reservation (P)	No reservation (P)
E.02.13	D14	Case-based analysis and modelling - final version	Case-based analysis and modelling - final version	GEN	29/11/2013	29/11/2013	closed	No reservation	No reservation
E.02.11	D18	D4.7 Public Report	Report for public dissemination	GEN	20/11/2013	20/11/2013	to be closed	No reservation	No reservation
E.02.07	D09	Conflict resolution high level methodology	Report of validation of conflict detection and resolution algorithm	VALR	19/11/2013	19/11/2013	to be closed		to be assessed
E.02.07	D07	Conflict detection algorithms and evaluation	Evaluation strategy for conflict detection and resolution algorithms	GEN	19/11/2013	19/11/2013	to be closed		to be assessed
E.02.14	D23	D4.3 Study Report - Case Study 3	results of analysis of defined scenario 3 with network model	GEN	14/11/2013	14/11/2013	closed	No reservation	No reservation
E.01.01	D09	y3 CW report from tutorials		GEN	13/11/2013	13/11/2013	closed	No reservation	No reservation
E.02.16	D10	Final report	Final report	FINALR	12/11/2013	12/11/2013	selected		to be assessed
E.02.08	D13	D0.9 Final Report	Final report	FINALR	12/11/2013	12/11/2013	closed	No reservation	No reservation
E.02.11	D12	D3.2 Intermediate design requirements		GEN	07/11/2013	07/11/2013	closed	No reservation	No reservation
E.02.14	D24	D5.3 Communication and Dissemination Final Report	D5.2 Communication and Dissemination intermediate report	GEN	06/11/2013	06/11/2013	closed	No reservation	No reservation
E.02.13	D16	Project web site - final	Project web site - final	GEN	06/11/2013	06/11/2013	closed	No reservation	No reservation
E.02.13	D17	Dissemination materials	Dissemination materials	GEN	06/11/2013	06/11/2013	closed	No reservation	No reservation
E.02.10	D19	joint event contribution y3	scientific article	GEN	05/11/2013	05/11/2013	to be closed		to be assessed
E.02.18	D14	draft validation report	tech report	GEN	05/11/2013	05/11/2013	closed	No reservation	No reservation
E.02.11	D14	D3.3 Report about final evaluations and recommendations for FAV & FAR	FAV = Functional Airspace View; FAR = Functional Airspace Representation	GEN	04/11/2013	04/11/2013	closed	No reservation	No reservation
E.02.14	D22	D4.2 Study Report - Case Study 2	results of analysis of defined scenario 2 with network model	GEN	04/11/2013	04/11/2013	closed	No reservation	No reservation
E.02.11	D15	D4.5 Workshop 2 Minutes	Outcome of a workshop with subject matter experts	GEN	04/11/2013	04/11/2013	closed	No reservation	No reservation
E.02.13	D13	Network of legal research in ATM - final version	Network of legal research in ATM - final version	GEN	30/10/2013	30/10/2013	closed	No reservation	No reservation
E.02.14	D13	D2.6 Performance Data Models	Document describing component of the network model developed in WP3 and delivered in D3.4	GEN	16/10/2013	16/10/2013	closed	No reservation	No reservation
E.02.11	D16	D4.7 Industrial plan version 2		GEN	14/10/2013	14/10/2013	closed	No reservation	No reservation
E.02.10	D16	final report	progress report	FINALR	11/10/2013	11/10/2013	selected		to be assessed
E.02.10	D17	validation of formal spec	tech report	GEN	11/10/2013	11/10/2013	to be closed		to be assessed
E.02.06	D17	D6.3 Final Strategic Report	POEM Final Strategic Report	GEN	03/10/2013	03/10/2013	closed	No reservation	No reservation
E.02.06	D16	D6.2 Final Technical Report	POEM Final Technical Report	FINALR	03/10/2013	03/10/2013	closed	No reservation	No reservation
E.02.11	D13	D2.3 Joint Cognitive System, version 2		GEN	01/10/2013	01/10/2013	closed	No reservation	No reservation
E.02.02	D09	D4.2 Dissemination, Communication and Knowledge Management Report		GEN	30/09/2013	30/09/2013	closed	No reservation	No reservation
E.02.02	D10	D5.1 Final Report on Conclusions and Recommendations		FINALR	30/09/2013	30/09/2013	closed	No reservation	No reservation
E.02.02	D08	D2.3 Workshop on Industry Feedback on Simulation Results		GEN	30/09/2013	30/09/2013	closed	No reservation	No reservation
E.02.12	D18	global patterns report	tech report	GEN	30/09/2013	30/09/2013	to be closed	No reservation	No reservation
E.02.10	D18	final assessment of new approach	tech report	GEN	24/09/2013	24/09/2013	closed	No reservation	No reservation
E.02.02	D11	D0.7 Final Report		FINALR	20/09/2013	20/09/2013	closed	No reservation	No reservation
E.02.02	D07	D3.2 Simulation Results and Analysis		GEN	19/09/2013	19/09/2013	closed	No reservation	No reservation
E.02.08	D11	D4 Refined Framework Report	Refined conceptual framework of automation, complexity, and heuristic cionformity	GEN	09/09/2013	09/09/2013	closed	No reservation	No reservation
E.02.07	D08	Trajectory prediction validation results	Report of validation of trajectory prediction algorithm	VALR	21/08/2013	21/08/2013	to be closed		to be assessed
E.02.07	D06	TP algorithms - ideal and uncertainty conditions	Algorithm decription for conflict detection and resolution	GEN	21/08/2013	21/08/2013	to be closed		to be assessed
E.02.10	D15	draft assessment of new approach	tech report	GEN	09/08/2013	09/08/2013	closed	No reservation	No reservation
E.02.04	D26	D8.1 EP	Exploitation Plan	GEN	01/08/2013	01/08/2013	closed	No reservation	No reservation
E.02.17	D13	validation	tech report	GEN	01/08/2013	01/08/2013	to be closed		to be assessed
E.02.09	D13	D0.5 Final Report	Final Report	FINALR	31/07/2013	31/07/2013	closed	No reservation	No reservation
E.02.14	D12	D2.5 Performance Indicators Models	Document describing component of the network model developed in WP3 and delivered in D3.4	GEN	31/07/2013	31/07/2013	closed	No reservation	No reservation
E.02.08	D12	D5 Final Workshop Report	Report of workshop with subject matter experts	GEN	30/07/2013	30/07/2013	closed	No reservation	No reservation
E.02.15	D17	Test plan	Test plan describing specific scenarios and documentation describing how to run the scenarios	GEN	12/07/2013	12/07/2013	closed	No reservation	No reservation
E.02.12	D15	safety patterns report	tech report	GEN	05/07/2013	05/07/2013	closed	No reservation	No reservation
E.02.12	D17	operation with life data	SW demonstration	GEN	03/07/2013	03/07/2013	closed	No reservation	No reservation
E.02.09	D11	D5.2 Dissemination Report		GEN	28/06/2013	28/06/2013	closed	No reservation	No reservation
E.02.18	D11	draft calibrated agent-based model	model	GEN	28/06/2013	28/06/2013	closed	No reservation	No reservation
E.02.04	D25	D7.2 EXR	Evaluation Exercises Report	GEN	26/06/2013	26/06/2013	closed	No reservation	No reservation
E.02.18	D09	validation plan	tech report	VALP	26/06/2013	26/06/2013	to be closed		to be assessed
E.02.12	D16	expert interface	SW prototype	GEN	26/06/2013	26/06/2013	closed	No reservation	No reservation
E.02.18	D07	prototype agent-based model	model	GEN	26/06/2013	26/06/2013	to be closed		to be assessed
E.02.18	D08	scenario selection	tech report	GEN	26/06/2013	26/06/2013	closed	No reservation	No reservation
E.02.09	D12	D4.1 Conclusions and Recommendations Report		GEN	25/06/2013	25/06/2013	closed	No reservation	No reservation
E.02.10	D13	final model of safety criticality	tech report	GEN	19/06/2013	19/06/2013	selected		to be assessed
E.02.13	D11	The legal case - 1st draft	The legal case - 1st draft	GEN	07/06/2013	07/06/2013	closed	No reservation	No reservation
E.02.13	D07	Case-based analysis and modelling 1st draft	Case-based analysis and modelling 1st draft	GEN	07/06/2013	07/06/2013	closed	No reservation	No reservation
E.02.05	D10	final report	progress report	FINALR	04/06/2013	04/06/2013	closed	No reservation	No reservation
E.02.14	D21	D4.1 Study Report - Case Study 1	results of analysis of defined scenario 1 with network model	GEN	04/06/2013	04/06/2013	closed	No reservation	No reservation
E.02.15	D16	Prototype of the simulation test bed		GEN	31/05/2013	31/05/2013	closed	No reservation	No reservation
E.02.01	D09	D0.5 Final Report	Final Report	FINALR	17/05/2013	17/05/2013	closed	No reservation	No reservation
E.02.01	D08	D4 Report "Supervision of Trajectory Optimizers"	Technical report	GEN	08/05/2013	08/05/2013	closed	No reservation	No reservation
E.02.08	D10	D3.2 Report on 3D validation	Report of HITL simulations at IAA	GEN	08/05/2013	08/05/2013	closed	No reservation	No reservation
E.02.03	D10	Final report	Final project report	FINALR	07/05/2013	07/05/2013	closed	No reservation	No reservation
E.02.17	D12	demonstrator specification	tech report	GEN	03/05/2013	03/05/2013	to be closed		to be assessed
E.02.05	D09	algorithm evaluation	tech report	GEN	02/05/2013	02/05/2013	closed	No reservation	No reservation
E.02.10	D12	final generic formal spec	tech report	GEN	02/05/2013	02/05/2013	closed	No reservation	No reservation
E.02.17	D11	revised UAS simulations	tech report	GEN	02/05/2013	02/05/2013	closed	No reservation	No reservation
E.02.17	D08	federation of models	tech report	GEN	02/05/2013	02/05/2013	closed	No reservation	No reservation
E.02.04	D11	D6.4 AOC + NM demonstrator user manual	NM Prototype User Manual	GEN	02/05/2013	02/05/2013	closed	No reservation	No reservation
E.02.04	D22	D5.3 EPUM	Evaluation Platform User manual	GEN	02/05/2013	02/05/2013	closed	No reservation	No reservation
E.02.05	D11	model analysis	tech report + final source	GEN	02/05/2013	02/05/2013	closed	No reservation	No reservation
E.02.16	D09	Evaluation results Phase 2	A complete report of evaluations and results for all experiments	GEN	29/04/2013	29/04/2013	closed	No reservation	No reservation
E.02.16	D08	ZeFMAP process final	Results from the second phase of work on productivity improvement tools	GEN	29/04/2013	29/04/2013	closed	No reservation	No reservation
E.02.03	D09	Final performance assessment	Performance assessment of developed strategic trajectory de-confliction tool to enable seamless aircraft conflict management	GEN	25/04/2013	25/04/2013	closed	No reservation	No reservation
E.02.13	D12	Launch of the legal case	Launch of the legal case	GEN	23/04/2013	23/04/2013	closed	No reservation	No reservation
E.02.15	D15	Operational scenarios	Design of the operational scenarios to be simulated using the test bed developed in WP4	GEN	23/04/2013	23/04/2013	closed	No reservation	No reservation
E.02.09	D10	D3.2 Game Report - Environment 2	Technical Report	GEN	22/04/2013	22/04/2013	closed	No reservation	No reservation
E.02.04	D17	S7.1 EST	Evaluation Scenarios Tool	GEN	19/04/2013	19/04/2013	closed	No reservation	No reservation
E.02.04	D21	S5.3 EPP	Evaluation Platform Prototype	AVAILABILITY N	19/04/2013	19/04/2013	closed	No reservation	No reservation
E.02.04	D24	S6.6 integrated AOC + NM demonstrator	NM Algorithm final	GEN	19/04/2013	19/04/2013	closed	No reservation	No reservation
E.02.11	D10	D1.2 Work Domain Analysis, refinement and lessons learned from first prototype		GEN	15/04/2013	15/04/2013	closed	No reservation	No reservation
E.02.04	D20	D8.2b DM	Presentation at joint network event	GEN	02/04/2013	02/04/2013	closed	No reservation	No reservation
E.02.04	D19	D6.7 evaluation scenario plan	NM Algorithm Validation Report	GEN	02/04/2013	02/04/2013	closed	No reservation	No reservation
E.02.04	D16	D7.1 ESTUM	Evaluation Scenarios Tool User Manual	GEN	29/03/2013	29/03/2013	closed	No reservation	No reservation
E.02.04	D15	S6.5 draft integrated AOC + NM demonstrator	NM Algorithm draft	GEN	29/03/2013	29/03/2013	closed	No reservation	No reservation
E.02.04	D13	S5.2 NMP	NM Prototype	GEN	29/03/2013	29/03/2013	closed	No reservation	No reservation
E.02.04	D12	S5.1 AOC	AOC Prototype	GEN	29/03/2013	29/03/2013	closed	No reservation	No reservation
E.02.14	D20	D3.5 User Manual	D3.5 User Manual	GEN	21/03/2013	21/03/2013	closed	No reservation	No reservation
E.02.14	D19	D3.6 System Evaluation Document	Evaluation design and analysis of D3.4	GEN	21/03/2013	21/03/2013	closed	No reservation	No reservation
E.02.14	D18	D3.4 System Implementation	Network model	GEN	21/03/2013	21/03/2013	closed	No reservation	No reservation
E.02.09	D09	D2.4 Hardware Based Platform	Technical Report	GEN	04/03/2013	04/03/2013	closed	No reservation	No reservation
E.02.15	D14	Adaptation Report - Environment 2	Functional implementation environment	GEN	27/02/2013	27/02/2013	closed	No reservation	No reservation
E.01.01	D07	y2 CW position paper			18/02/2013	18/02/2013	closed	No reservation	No reservation
E.01.01	D06	y2 CW report from confs/tutorials			18/02/2013	18/02/2013	closed	No reservation	No reservation

E.01.01	D05	y2 CW final report			18/02/2013	18/02/2013	closed	No reservation	No reservation
E.01.01	D04	CW PhD selection report			18/02/2013	18/02/2013	closed	No reservation	No reservation
E.01.01	D03	y1 CW position paper			18/02/2013	18/02/2013	closed	No reservation	No reservation
E.01.01	D02	y1 CW annual conf			18/02/2013	18/02/2013			to be assessed
E.01.01	D01	y1 CW final report			18/02/2013	18/02/2013			to be assessed
E.02.09	D07	D3.1 Game Report - Environment 1	Technical Report	GEN	14/02/2013	14/02/2013	closed	No reservation	No reservation
E.02.01	D07	D3 Report "Optimizer Formulations for Supervisory Control - Informing the Supervisor"	Technical report	GEN	14/02/2013	14/02/2013	closed	No reservation	No reservation
E.02.01	D06	D2 Report "Optimizer Formulations for Supervisory Control - Enabling Supervisor Inhibit"	Technical report	GEN	14/02/2013	14/02/2013	closed	No reservation	No reservation
E.02.14	D11	D2.4 Exogeneous Factors Models	Document describing component of the network model developed in WP3 and delivered in D3.4	GEN	30/01/2013	30/01/2013	closed	No reservation	No reservation
E.02.14	D09	D2.2 ATM Network Models	Document describing component of the network model developed in WP3 and delivered in D3.4	GEN	29/01/2013	29/01/2013	closed	No reservation	No reservation
E.02.14	D08	D2.1 Regulation Models	Document describing component of the network model developed in WP3 and delivered in D3.4	GEN	29/01/2013	29/01/2013	closed	No reservation	No reservation
E.02.12	D13	dissemination and external communication v2	various	GEN	25/01/2013	25/01/2013	closed	No reservation	No reservation
E.02.12	D14	joint event contribution y2	scientific article	None	25/01/2013	25/01/2013	closed	No reservation	No reservation
E.02.17	D10	dissemination and external coordination v2	various	GEN	25/01/2013	25/01/2013	closed	No reservation	No reservation
E.02.10	D14	joint event contribution v2	scientific article	GEN	25/01/2013	25/01/2013	closed	No reservation	No reservation
E.02.18	D06	final statistical regularities	tech report	GEN	23/01/2013	23/01/2013	closed	No reservation	No reservation
E.02.08	D09	D3.1 Experimental design, 3D validation	Experimental Plan for HITL simulations at IAA	GEN	23/01/2013	23/01/2013	closed	No reservation	No reservation
E.02.11	D11	D2.2 Joint Cognitive System, version 1		GEN	21/01/2013	21/01/2013	closed	No reservation	No reservation
E.02.05	D08	joint event contribution v2	scientific article	None	08/01/2013	08/01/2013	closed	No reservation	No reservation
E.02.06	D13	D5.2 Analysis Plan Update	Revisions to the analysis plan	GEN	07/01/2013	07/01/2013	closed	No reservation	No reservation

Provisional Annual Accounts 2013 – Annual General Accounts

Balance sheet

<i>all figures in EUR</i>	Note	31/12/2013	31/12/2012
<u>I. NON-CURRENT ASSETS</u>		<u>71.534.867</u>	<u>94.849.973</u>
Intangible fixed assets	1	571.332	699.268
Tangible fixed assets		360.786	400.154
<i>Furniture and Vehicles</i>	2	99.690	92.865
<i>Computer Hardware</i>	3	25.535	19.345
<i>Other tangible assets</i>	4	235.561	287.944
Long-term Pre-Financing	23	70.602.749	93.750.551
<u>II. CURRENT ASSETS</u>		<u>32.741.672</u>	<u>31.104.235</u>
Short-term Pre-Financing	23	26.707.196	15.307.277
Short-term receivables		818.214	83.660
<i>Current receivables</i>	5	78.293	26.853
<i>Sundry receivables</i>	6	272	11.506
<i>Accrued income</i>	7	29.380	39.631
<i>Deferred charges</i>	8	710.269	5.670
Cash & cash equivalents	9	5.216.262	15.713.298
TOTAL ASSETS		104.276.539	125.954.208
<u>III. CURRENT LIABILITIES</u>		<u>337.184.209</u>	<u>244.846.106</u>
Accounts payable		5.112.573	4.378.856
<i>Current payables</i>	10	356.227	59.612
<i>Accrued charges</i>	11	4.629.826	4.239.833

<i>all figures in EUR</i>	Note	31/12/2013	31/12/2012
<i>Other accounts payable</i>	13	126.520	79.411
Co-Financing to be paid to the Members	14	88.086.300	80.176.707
Contribution from Members to be validated	14	243.985.336	160.290.543
Cash Contributions from Members to be accepted	14	0	0
TOTAL LIABILITIES		337.184.209	244.846.106
NET ASSETS (Total Assets less Total Liabilities)		(232.907.670)	(118.891.898)
<u>IV. NET ASSETS</u>		(232.907.670)	(118.891.898)
Contribution from Members		745.291.300	579.442.694
<i>European Union</i>	15	344.800.515	267.265.000
<i>Eurocontrol</i>	15	185.286.408	177.605.351
<i>Other Members</i>	15	215.204.377	134.572.343
Accumulated contribution from Members used previous years	16	(698.334.592)	(427.368.372)
Contribution from Members used during the year (EOA)	16	(279.864.378)	(270.966.220)
TOTAL NET ASSETS		(232.907.670)	(118.891.898)

Economic outturn account

<i>all figures in EUR</i>	Note	2013	2012
<u>OPERATING REVENUE</u>			
Contributions from Members	15	0	0
Other Revenues	18	0	0
Total operating revenue		0	0
<u>OPERATING EXPENSES</u>			
Administrative expenses		(7.852.086)	(7.587.681)
Staff expenses	19	(4.487.255)	(4.373.765)
Fixed assets related expenses	1-4	(539.706)	(298.149)
Other administrative expenses	20	(2.825.125)	(2.915.767)
Operational expenses		(272.051.373)	(263.643.221)
Other operational expenses	21	(272.051.373)	(263.643.221)
Total operating expenses		(279.903.459)	(271.230.902)
<u>DEFICIT FROM OPERATING ACTIVITIES</u>		(279.903.459)	(271.230.902)
<u>NON-OPERATING ACTIVITIES</u>			
Financial operations revenues	22	33.495	268.778
Financial operations expenses	22	(3.282)	(4.261)
Other non operational income		8.868	165
Total non-operating activities		39.081	264.682

<i>all figures in EUR</i>	Note	2013	2012
CONTRIBUTIONS FROM MEMBERS USED DURING THE YEAR			
		(279.864.378)	(270.966.220)

Cash-flow table

<i>all figures in EUR</i>	Note	2013	2012
Contribution from Members used during the year (EOA)		(279.864.378)	(270.966.220)
<u>Operating activities</u>			
Increase/(decrease) in Contribution in-kind from Members		76.385.672	139.218.033
Increase/(decrease) in Amortisation of Intangible assets		429.016	203.748
Increase/(decrease) in Depreciation of Tangible assets		110.690	94.403
(Increase)/decrease in long-term Pre-financing		23.147.802	11.775.507
(Increase)/decrease in short-term Pre-financing		(11.399.919)	(8.031.378)
(Increase)/decrease in short-term receivables		(734.554)	547.665
Increase/(decrease) in accounts payable		92.338.103	20.388.739
		180.276.810	164.196.717
<u>Investing activities (except depreciat./amort. of the year)</u>			
(Increase)/decrease of intangible and tangible assets		(372.402)	(295.213)
<u>Cash Contributions from Members</u>			
Increase/(decrease) in Cash Contribution from Members		89.462.934	107.474.561

<i>all figures in EUR</i>	Note	2013	2012
NET CASHFLOW		(10.497.036)	409.845
Net increase/(decrease) in cash and cash equivalents		(10.497.036)	409.845
Cash and cash equivalents at the beginning of the year		15.713.298	15.303.453
Cash and cash equivalents at year-end		5.216.262	15.713.298

Statement of changes in net assets/liabilities

<i>all figures in EUR</i>	2013	2012
Balance at beginning of accounting period	(118.891.898)	(94.618.272)
Contribution from Members	165.848.606	246.692.594
Contribution from Members used during the year (EOA)	(279.864.378)	(270.966.220)
Balance as of 31 December	(232.907.670)	(118.891.898)

The table shows negative Net Assets at the end of 2013. This is due to the fact that

- the Programme activities are increasing substantially year after year
- as explained in Provisional Annual Accounts the contributions from Members related to a certain year are recognized by the SJU during the following year after the acceptance of the IFS of the year n-1.

With regard to the overall financial situation of the SJU, it should be noted that, by the end of 2013:

- the SJU has signed specific agreements related to the contribution of the European Union to the SJU for a total amount of EUR 700.000.000. In order to comply with the principle of budget equilibrium and to ensure strict financial management of its resources at year end 2013, out of EUR 700.000.000 the SJU has called and received cumulatively the amount of EUR 344.800.515, while the remaining amount will be requested at the moment of the recognition of the Members In Kind contributions and the payment of the relative co-financing;

- out of EUR 165.000.000 cash contribution of Eurocontrol, the SJU has requested and received a cumulative amount of EUR 82.725.967. Following the same approach applied for the EU resources, the SJU will call the difference when needed in order to face its financial obligations.

It can be consequently concluded that while the SJU shows negative Net Assets at the end of 2013, this is no manner due to a going concern issue but mostly to the nature of the SJU operations and the rules governing the recognition of Members' contributions.