2015-2019 South West FAB Performance Plan

RP2 SOWEPP

Version 2.0

Version 2.0 - May 2016

INTENTIONALLY LEFT BLANK

Signatories

Performance Plan details	
FAB Name	SW FAB
Version number	Final Version
Date of issue	03/05/2016
Date of adoption	03/05/2016

Member State / FAB	Name, title and signature of representative	
Portugal	Luis Ribeiro	Chairman of the Board of the Portuguese Civil Aviation Authority ANAC,
Spain	Raúl Medina Caballero	Director General of Civil Aviation

Document versions

2015-2019 South West FAB Performance Plan (RP2 SOWEPP)		
Document		*Date of adoption*
RP2 SOWEPP	Version 1.0	30/06/2014
RP2 SOWEPP	Version 2.0	03/05/2016

Note

According to CHAPTER III (THE ADOPTION OF PERFORMANCE PLANS) Article 13 of the Commission Implementing Regulation (EU) No 390/2013 of 3 May 2013 laying down a performance scheme for air navigation services and network functions;

Article 14
Assessment and revision of performance plans and targets

"3. *Where the Commission finds that a performance plan, or part thereof, and some or all of its target(s) are not consistent with the Union-wide targets and are not contributing adequately to them and/or are not consistent with one or more of the criteria laid down in Annex IV, it shall, within five months after reception of the performance plan and in accordance with the procedure established in Article 5(2) of Regulation (EC) No 549/2004, issue a recommendation to the Member State(s) concerned to adopt a revised performance plan, or part thereof, and/or target(s). This recommendation shall be made after consultation of the Member State(s) concerned, and shall identify precisely which parts of the performance plan and/or target(s) are to be revised as well as explaining the rationale of the Commission's assessment.*

4. In such case, the Member State(s) concerned shall adopt a revised performance plan, or part thereof, and/or target(s), taking account of the Commission's views, together with the appropriate measures for reaching those targets and shall notify the Commission accordingly within four months after the notification of the recommendation"

The revision of the RP2 SOWEPP (version 2.0) was motivated by the COMMISSION IMPLEMENTING DECISION (EU) 2015/347 of 2 March 2015, concerning the inconsistency of certain targets included in the national or functional airspace block plans submitted pursuant to Regulation (EC) No 549/2004 of the European Parliament and of the Council with the Union-wide performance targets for the second reference period and setting out recommendations for the revision of those targets.

The South West FAB Performance Plan for the period 2015-2019 (RP2 SOWEPP) is adopted on the basis of the proposal made by the Supervisory Authorities Committee of the South West FAB (SW FAB SAC), as modified by its subsequent corrigenda (versions 1.0, 1.1, 1.2, 2.0 and 2.2). This final document is elaborated on the basis of the consolidated text drafted and kindly facilitated by AESA, on behalf of the SAC, to the SW FAB Council solely for working purposes (only the initial text and the successive corrigenda have formal status as NSA proposals of the SW FAB SAC).
This final document incorporates the initial RP2 SOWEPP (version 1.0) and all the later amendments (corrigenda) endorsed by the SW FAB SAC and represents the final version adopted by the SW FAB Council of the RP2 SOWEPP.

Contents

0 Executive Summary

The purpose of the 2015-2019 SW FAB Performance (RP2 SOWEPP) is twofold: in first place to establish the high-level performance targets for the Air Navigation Services provided in Portugal and Spain within the scope of the plan, and secondly to set out the guidelines for the action plans to meet them.

Safety

Safety targets are set for the three key performance indicators (KPIs) - effectiveness of safety management (EoSM), application of the severity classification based on the Risk Analysis Tool (RAT), and Just Culture (JC). Targets are set at SW FAB level, and shall be monitored at national level, in line with Regulation 390/2013.

Safety Targets – SW FAB level			**2015**	**2016**	**2017**	**2018**	**2019**
Safety KPI #1: **EoSM**	**NSAs**		**B**	**B**	**B**	**B**	**C**
	ANSPs		**C**	**C**	**C**	**C**	**D**
Safety KPI #2: **RAT**	**Ground Score**	SMIs	**90%**	**90%**	**90%**	**95%**	**100%**
		RIs	**90%**	**90%**	**90%**	**95%**	**100%**
		ATM-S	**85%**	**85%**	**90%**	**95%**	**100%**
	Overall Score	SMIs	**40%**	**60%**	**80%**	**80%**	**80%**
		RIs	**25%**	**53%**	**80%**	**80%**	**80%**
		ATM-S	**85%**	**85%**	**90%**	**95%**	**100%**
Safety KPI #3: **JC**	**NSAs**		Common Just Culture enhancement plan and policy statement.				
	ANSPs		Common Just Culture enhancement plan.				

Environment

Environment targets are set for the horizontal en route flight efficiency of the actual trajectory (KEA), which is applicable at FAB-level.

Environment Targets – SW FAB level	**2015**	**2016**	**2017**	**2018**	**2019**
Environment KPI #1: **KEA**	**3.85%**	**3.71%**	**3.57%**	**3.43%**	**3.28%**

Capacity

Capacity targets are proposed for two KPIs: en route ATFM delay per flight and terminal and airport ANS ATFM arrival delay per flight. Together with the range of values proposed for the en route SW FAB capacity target, indicative figures are provided for Portugal and Spain.

Terminal and airport capacity targets are set at National level, considering past performance levels. There are no UE-wide targets on this KPI. For Spain, only airports with more than 70.000 IFR transport movements per year have been considered, while in the Portuguese target all nine airports are included, although only two of them have a strong contribution for this particular indicator, Lisboa and Porto, since, just these two have been monitored during the RP1. As a consequence only for Lisboa and Porto there are consistent data. The inclusion of all the remaining seven airports would "mask" the delay figures at national level. Thus, for national level the main contributors are only Lisboa and Porto.

An incentive mechanism is established on the SW FAB en-route capacity target. This incentive mechanism selected consists of a linear function, with a dead band around the SW FAB capacity target to be achieved. The maximum level of bonus/penalty is set at 0.50% of the income. Whenever the SW FAB target is met, only the ANSPs that have

performed better than their individual reference value are awarded a bonus. On the contrary, when the SW FAB target is not met, only the ANSPs that have performed worse than their individual reference value are penalised.

Capacity targets for the en route ATFM delay per flight, terminal and airport ANS ATFM arrival delay per flight are presented in the next table:

Capacity Targets – SW FAB and allocation at National level		2015	2016	2017	2018	2019
Capacity KPI #1: **minutes of en route ATFM delay / flight**	**SW FAB**	**0.30**	**0.31**	**0.31**	**0.30**	**0.30**
	Portugal (*NAV Portugal*)	0.19	0.15	0.14	0.14	0.13
	Spain (*ENAIRE*)	0.30	0.29	0.28	0.27	0.27
Capacity KPI #2: **minutes of terminal and airport ANS ATFM arrival delay / flight**	**Portugal (*)**	**0.60**	**0.60**	**0.60**	**0.60**	**0.60**
	Spain (**)	**0.80**	**0.80**	**0.80**	**0.80**	**0.80**

(*) Target based on the performance all 9 Portuguese airports.

(**) Target based on the performance of five airports: LEMD, LEBL, LEPA, LEMG and GCLP

Cost-Efficiency

There are two KPIs in the cost-efficiency KPA: the determined unit cost (DUC) for en route ANS; and the DUC for terminal ANS. The cost-efficiency targets for Portugal and Spain are set at charging zone level.

Portugal

Cost-Efficiency Targets - Portugal		2015	2016	2017	2018	2019
Cost efficiency KPI 1: **En-route DUC Portugal**	Nominal en-route determined costs	111.331	117.113	121.117	124.428	127.871
	Inflation index (base 2012)	102.32	103.85	105.41	106.99	108.59
	Real en-route determined costs	108.811	112.770	114.903	116.299	117.751
	Total en-route Service Units (000)	3,095	3,105	3,122	3,147	3,171
	Real (EUR 2012) en-route DUC	**35.15**	**36.32**	**36.80**	**36.95**	**37.13**
Cost efficiency KPI #2: **Terminal DUC Portugal (*)**	Nominal terminal determined costs	27.415	28.435	29.565	30.376	32.254
	Inflation index (base 2012)	102.32	103.85	105.41	106.99	108.59
	Real terminal determined costs	26.795	27.381	28.048	28.392	29.702
	Total terminal Service Units (000)	196.7	197.4	198.3	199.9	201.6
	Real (EUR 2012) terminal DUC	**136.22**	**138.71**	**141.44**	**142.03**	**147.33**

NOTE: Costs in MEUR, service units in thousands (000). Costs in real terms expressed in 2012 EUR.

Real en route unit costs (in €2009 prices) are expected to decrease at a pace of 3.5% over the period between 2009 and 2019, meaning a global reduction of more than 30% over the 10 years horizon. Portugal-Lisboa has been able to achieve, in the horizon of 2009-2019, an average annual reduction of 1.2% (average per annum in real terms) in determined costs, while the EU-wide trend is slightly lower (-1.1%). Is worth to mention that Portugal was the main contributor to the EU-wide cost-efficiency target in RP1 in the revised PP - annual average decrease of 7.7% in unit rate versus a EU-wide target of -3.5% - and also the level of local unit cost, which is 41% below the European average DUC. Real terminal unit costs (in €2009 prices) are expected to decrease 2.1% p.a. over the period 2009-2019, meaning a global reduction of about 19% for the ten years horizon.

Spain

Cost-Efficiency Targets - Spain		2015	2016	2017	2018	2019
Cost efficiency KPI #1: **En-route DUC Spain - Canarias**	Nominal en-route determined costs	98.528	98.751	99.004	98.495	98.327
	Inflation index (base 2012)	102.63	103.55	104.63	105.70	106.81
	Real en-route determined costs	96.005	95.366	94.622	93.185	92.056
	Total en-route Service Units (000)	1,531	1,528	1,531	1,537	1,543
	Real (EUR 2012) en-route DUC	**62.71**	**62.41**	**61.80**	**60.63**	**59.66**
Cost efficiency KPI #1: **En-route DUC Spain - Continental**	Nominal en-route determined costs	620.444	622.073	622.241	625.581	627.777
	Inflation index (base 2012)	102.63	103.55	104.63	105.70	106.81
	Real en-route determined costs	604.556	600.749	594.703	591.852	587.741
	Total en-route Service Units (000)	8,880	8,936	9,018	9,128	9,238
	Real (EUR 2012) en-route DUC	**68.08**	**67.23**	**65.95**	**64.84**	**63.62**
Cost efficiency KPI #2: **Terminal DUC Spain (*)**	Nominal terminal determined costs	99,792	99,110	97,635	96,512	95,269
	Inflation index (base 2012)	102.63	103.55	104.63	105.70	106.81
	Real terminal determined costs	97,237	95,713	93,314	91,308	89,193
	Total terminal Service Units (000)	642.0	646.4	653.6	663.4	672.0
	Real (EUR 2012) terminal DUC	**151.47**	**148.06**	**142.78**	**137.65**	**132.73**

(*) Considering only: Gran Canaria (GCLP), Barcelona (LEBL), Madrid-Barajas (LEMD), Málaga (LEMG) and Palma de Mallorca (LEPA).

NOTE: Costs in MEUR, service units in thousands (000). Costs in real terms expressed in 2012 EUR.

There are two en-route charging zones within Spain. Spain Canarias targets represent an average -2.7% reduction per annum of the en-route DUC (in real terms) during RP2. This trend is encompassed in the context of a global average -3.7% reduction per annum (an aggregated -31% improvement) since even before the introduction of the Performance Scheme (2019 vs 2009).

Spain Continental targets represent an average -2.1% reduction per annum of the en-route DUC (in real terms) during RP2. This evolution is part of a sharp global average yearly reduction of -4.6% (an aggregated -37% improvement) since even before the introduction of the Performance Scheme (2019 vs 2009).

Spain terminal cost-efficiency targets represent an average annual improvement of -3.2%, in terms of real terminal DUC KPI. This positive evolution is possible due to an average annual reduction of -1.2% of the terminal determined costs in nominal terms (-2.1% in real terms), in a context in of moderate traffic increase.

1 Introduction

1.1 Purpose of the SOWEPP

The purpose of the 2015-2019 SW FAB Performance (RP2 SOWEPP) is to establish the high-level performance targets for the Air Navigation Services provided in Portugal and Spain within the scope of the plan and set out the guidelines for the action plans to meet them. This has to be done in consistency with the Performance and Charging Regulations (390/2013 and 391/2013) and with the Commission Implementing Decision of 11 March 2014 setting the Union-wide performance targets for the air traffic management network and alert thresholds for the second reference period 2015-19.

1.2 Framework

The SOWEPP is encompassed within the framework of the European ANS Performance Scheme. The Performance Scheme is a Single European Sky initiative aimed at improving the performance of the air navigation services and network functions in Europe through:

- The establishment of European-wide targets in four key performance areas: safety, environment, capacity and cost-efficiency.
- The elaboration of performance plans at FAB level, consistent with and adequately contributing to the EU-wide targets.
- Periodic monitoring, review and assessment of performance.

The principles of the Performance Scheme were established in the SES Framework Regulation (Regulation (EC) 549/2004). The detailed requirements for RP2 are contained in two implementing regulations published in May 2013:

- Performance Regulation: Commission Implementing Regulation 390/2013 laying down a performance scheme for air navigation services and framework functions.
- Charging Regulation: Commission Implementing Regulation 391/2013 laying down a common charging scheme for air navigation services.

These regulations require NSAs to draw up Performance Plans at FAB level with targets in a gate-to-gate perspective, and adopt them after consultation with relevant stakeholders. The legal framework establishes a link between performance targets and the charging scheme, through mandatory financial incentives for capacity and cost-efficiency (in this case totally embedded in the charges calculation).

1.3 The SW FAB

A FAB is an airspace block based on operational requirements and established regardless of State boundaries, where the provision of air navigation services and related functions are performance-driven and optimised with a view to introducing, in each functional airspace block, enhanced cooperation among air navigation service providers.

Joint cooperation between Portuguese and Spanish authorities and ANSPs has taken place historically. Eventually, the constitution of the SW FAB was formalised with the signature of the "*Agreement between the Portuguese Republic and the Kingdom of Spain on the establishment of the South West Functional Airspace Block (SW FAB)*" by the Ministers of Transport of Spain and Portugal on the 17th of May 2013.

Formally, the SW FAB covers the airspace above FL245 under Portugal and Spain responsibility with the exception of Santa Maria FIR thus, being composed of the following Flight/Upper Information Regions (FIRs/UIRs):

- FIR Lisboa (FL245/UNL);
- UIR Madrid (FL245/UNL);
- UIR Barcelona (FL245/UNL); and
- UIR Canary Islands (FL245/UNL).

As already advanced, the Santa Maria Oceanic FIR, belongs to the ICAO North Atlantic Region (NAT). Therefore, for the purpose of the plan it is considered out of the scope of the RP2 SOWEPP.

Figure 1.a: Depiction of the SW FAB.

1.4 Situation and scope

The Portuguese and Spanish NSAs are jointly responsible for drawing up the South West FAB Performance Plan (RP2 SOWEPP):

- Portugal: ANAC (*Autoridade Nacional de Aviação Civil*)
- Spain: AESA (*Agencia Estatal de Seguridad Aérea*)

AESA has taken the responsibility of coordinating at SW FAB level the tasks associated to the elaboration of the SOWEPP in coordination with ANAC.

The RP2 SW FAB Performance Plan covers:

- The en-route air navigation services provided in the Barcelona, Canarias, Lisboa and Madrid Flight Information and Upper Information Regions (FIR/UIR). The SOWEPP does not cover Santa Maria Oceanic services provided by Portugal to flights over the Atlantic in high seas airspace operated under a mandate from ICAO, and therefore outside the scope of the SES legislation.

- The terminal air navigation services provided at airports in Spain with more than 70,000 instrument flight rules (IFR) air transport movements per year[1]: Adolfo Suárez Madrid-Barajas (LEMD), Barcelona (LEBL), Palma de Mallorca (LEPA), Málaga (LEMG) and Gran Canaria (GCLP).

- The terminal air navigation services provided at all airports in Portugal in spite of the fact that only Lisboa has more than 70,000 IFR air transport movements per year those nine airports are: Lisboa (LPPT), Porto (LPPR), Santa Maria (LPAZ), Flores (LPFL), Faro (LPFR), Horta (LPHR), Madeira (LPMA), Ponta Delgada (LPPD) and Porto Santo (LPPS).

In addition, target setting on cost-efficiency applies to the determined costs established in Article 15(2)(a) and (b) of Regulation (EC) No 550/2004. Consequently, the scope of the plan covers as well all the accountable entities for determined costs of en route air navigation services that are financed by en route charges imposed on users of air navigation services, in accordance with the provisions of the Charging Regulation (391/2013). Accordingly, the list of accountable entities within the scope of the RP2 SOWEPP is set out below:

- AESA (*Agencia Estatal de Seguridad Aérea*): Spanish NSA.
- ANAC (*Autoridade Nacional de Aviação Civil*): Portuguese NSA.
- ENAIRE: En-route and terminal ANSP in Spain.
- NAV Portugal: En-route and terminal ANSP in Portugal.
- AEMET (*Agencia Estatal de Meteorología*): MET services provider in Spain.
- IPMA (Instituto Português do Mar e da Atmosfera): MET services in Portugal.
- ANSP-EA: costs of the Spanish Air Forces (*Ejército del Aire*) associated to the provision of air navigation services.
- NSA-EA: costs of the Spanish Air Forces (*Ejército del Aire*) associated to supervision.
- ANSMET (*Autoridad Nacional de Supervisión Meteorológica*): costs associated to the supervision of MET services in Spain.
- SAR (Portugal): Search and Rescue services for Portugal (Navy and Portuguese Air Force).

In addition, it has to be considered that in the SW FAB, Eurocontrol costs are financed by en route charges as well.

NOTE: Search and Rescue (SAR) services are provided by the Portuguese Air Force and Navy, under bilateral agreements celebrated between the Portuguese Government and third countries. Due to "traffic risk" scheme, these costs are presented in an individual way.

1.5 Macro-economic scenario and overall assumptions

Economic Assumptions

The inflation forecasts considered in the development of the RP2 SOWEPP cost-efficiency data are included within the table below. Actual data are source Eurostat HICP, and forecasts are in line with those of the International Monetary Fund (IMF).

1 According to the Performance Regulation 390/2013, Article 2 (definitions): "'*IFR air transport movements' means the sum of take-offs and landings performed under instrument flight rules calculated as the yearly average over the three calendar years preceding the submission of the performance plans*;" (i.e. 2011 to 2013).

In addition, GDP forecasts for Portugal and Spain are included to provide a view of the economical context in which RP2 SOWEPP shall be implemented. GDP actual data and forecasts are in line with those of the IMF (World Economic Outlook Database, April 2014).

Table 2.a: Economic assumptions – Inflation and GDP forecasts for Portugal and Spain

Economic Assumptions		2012	2013	2014	2015	2016	2017	2018	2019
Inflation	Portugal	2.8%	0.4%	0.7%	1.2%	1.5%	1.5%	1.5%	1.5%
	Spain	2.4%	1.5%	0.3%	0.8%	0.9%	1.0%	1.0%	1.1%
GDP (growth rate)	Portugal	-3.2%	-1.4%	1.2%	1.5%	1.7%	1.8%	1.8%	1.8%
	Spain	-1.6%	-1.2%	0.9%	1.0%	1.1%	1.2%	1.2%	1.3%

Traffic Assumptions

IFR flights – En-route

Traffic forecasts for the SW FAB in the SOWEPP are in line with those published by STATFOR in February 2014 (low scenario) and are set out within the table below:

Table 2.b: RP2 SOWEPP IFR Flights forecast for RP2

IFR Flights		2013	2014	2015	2016	2017	2018	2019
Portugal (Lisboa FIR)	Flights (000)	449	476	494	505	514	525	536
	Annual variation %	2.6%	6.0%	3.7%	2.3%	1.8%	2.1%	2.1%
Spain Overall	Flights (000)	1,618	1,622	1,648	1,656	1,671	1,691	1,711
	Annual variation %		0.2%	1.6%	0.5%	0.9%	1.2%	1.2%
SW FAB	Flights (000)	1,661	1,671	1,694	1,703	1,718	1,739	1,758
	Annual variation %		0.6%	1.4%	0.5%	0.9%	1.2%	1.1%

The traffic forecasts for Spain in the SOWEPP are in line with those published by STATFOR in February 2014 (low scenario). The IFR flight forecast is shown for the overall Spanish airspace (Continental Spain and Canarias), as the reference values and targets in the operational KPAs are established in the same terms. The forecasts used for Spain are those estimated by ENAIRE.

The flight forecast for Portugal is the one published by STATFOR in February 2014 (base scenario). In this case, Portugal has adopted the forecast of NAV Portugal which is STATFOR February 2014 (base scenario) in order to be consistent with the traffic levels used by the Network Manager in the estimation of the en-route capacity reference values for target setting.

STATFOR provides differentiated traffic forecast for Spain Continental (called "Spain" in the STATFOR report) and the Canary Islands. However, it does not provide an aggregated figure for the whole Spanish airspace. Therefore, the overall traffic figures provided for Spain are those estimated by ENAIRE under the assumption that the traffic will evolve accordingly the trend envisaged in the low scenario of STATFOR for Spain Continental.

It is important to note that actual figures of the STATFOR forecast for SW FAB are not consistent with the data recorded by the Network Manager (NM), at least for 2012 and 2013, where STATFOR figures are below NM ones. NM data is in line with ENAIRE's records for Spain overall. For these reasons, the SW FAB IFR flight forecast has been built based on the actual figures recorded by the NM for 2013 and the annual growth trend for the SW FAB envisaged in the STATFOR low scenario. Nevertheless, this is a rough calculation, and the lack of complete and consistent information from STATFOR, adds uncertainty to the forecast.

IFR flights – Terminal and airport

According the data in the last 13 years, the traffic has increased on average at a pace of 2.1% and 2.2% per year for Lisbon and Porto respectively. The IFR arrival movements forecast for Portugal in the SOWEPP is that estimated by NAV Portugal, reflecting an annual 2.3% increase slightly above historical average in line with the economic recovery:

Table 2.b: RP2 SOWEPP IFR arrival movements at airports forecast for Portugal

IFR arrival movements at airports		2015	2016	2017	2018	2019
LPPT: Lisboa	Arrival movs.	78,646	80,455	82,304	84,191	86,131
	Annual variation %		2.30%	2.30%	2.29%	2.30%
LPPR: Porto	Arrival movs.	32,208	32,950	33,710	34,487	35,282
	Annual variation %		2.30%	2.31%	2.30%	2.31%

Airport traffic forecasts for Spanish Airports have been estimated by ENAIRE making use of the NEST tool from EUROCONTROL and considering STATFOR forecasts:

Table 2.c: RP2 SOWEPP IFR arrival movements at airports forecast for Spain

IFR arrival movements at airports		2015	2016	2017	2018	2019
GCLP: Gran Canaria	Arrival movs.	53,763	54,121	54,323	54,850	54,991
	Annual variation %		0.67%	0.37%	0.97%	0.26%
LEBL: Barcelona	Arrival movs.	138,980	142,090	144,514	150,263	154,313
	Annual variation %		2.24%	1.71%	3.98%	2.70%
LEMD: Adolfo Suárez Madrid-Barajas	Arrival movs.	167,859	169,547	171,142	174,035	176,438
	Annual variation %		1.01%	0.94%	1.69%	1.38%
LEMG: Málaga	Arrival movs.	53,083	53,748	55,537	57,071	58,927
	Annual variation %		1.25%	3.33%	2.76%	3.25%
LEPA: Palma de Mallorca	Arrival movs.	85,451	86,640	88,893	92,064	94,321
	Annual variation %		1.39%	2.60%	3.57%	2.45%

En-route Service Units

The en-route total service units forecast for Spain are those estimated by ENAIRE, which are mainly in line with the ones published by STATFOR in February 2014 (low scenario). The STATFOR low scenario is recognised by the Commission in its "*Implementing Decision of 11 March 2014*" as the reference for the establishment of the cost-efficiency targets. This same rationale is followed in the SOWEPP. The service unit forecasts are presented per charging zone.

Forecasts for Portugal (Lisboa FIR), in terms of en-route service units are fully in line with the low scenario of the STATFOR forecast published in September 2014.

Table 2.d: RP2 SOWEPP en-route service units forecast

Total en- route service units		2013	2014	2015	2016	2017	2018	2019
Portugal – Lisboa FIR	SUs (000)	2,877	3,072	3,095	3,104	3,122	3,147	3,171
	Annual variation %	3.4%	6.8%	0.7%	0.3%	0.6%	0.8%	0.8%
Spain - Continental	SUs (000)	8,447	8,669	8,880	8,936	9,018	9,128	9,238
	Annual variation %	0.0%	2.6%	2.4%	0.6%	0.9%	1.2%	1.2%
Spain - Canarias	SUs (000)	1,516	1,516	1,531	1,528	1,531	1,537	1,543
	Annual variation %	-5.2%	0.0%	1.0%	-0.2%	0.2%	0.4%	0.4%

Spain Continental forecast is the same as the low scenario published by STATFOR in February 2014. On the other hand, Spain Canarias forecast is only consistent with the STATFOR low scenario in the annual growth estimates for the

2016-2019 period. In 2014 and 2015 the number of en-route service units foreseen in present SOWEPP is more conservative. ENAIRE and STATFOR have actively worked together to fine tune the traffic forecasts these years.

The analysis of past recorded traffic figures reveals that the summer period is not the highest season in the Canary Islands. Traffic to and from the Canary Islands is homogeneously distributed throughout the year. This phenomenon is mainly due to the fact that during the summer season the Canary Islands has to compete against other holiday destinations, while during the winter season the Canary Islands show to be one of the main preferred holiday destinations. Having said that, the SOWEPP forecasts for Spain Canarias have considered an increase of arrival/departure traffic consistent with STATFOR low scenario forecasts (February 2014).

Nevertheless, while service units for arrival/departure traffic are expected to grow, the situation envisaged for overflights and domestic traffic is rather conservative. Actual figures show a high decrease in the number of service units due to an important decrease in the number of overflights, and a modest increase in the domestic traffic (flights between Spain Canarias and Spain Continent are also consider as domestic flights) in an environment in which the traffic with origin or destination in the Canary Islands is slowly increasing.

The decrease in the number of overflights is in part due to a deviation of the flights from the major routes between Europe and South America. The shortest routes go through Spain Canarias airspace, however part of that traffic prefers to fly longer routes through Portuguese airspace. Domestic traffic between the islands is highly influenced by the economic situation of Canarian residents. The conclusion is that the trends in overflights and domestic traffic are dragging the expectations for the en-route service units in the Canary Islands airspace, in particular for 2014 and 2015. As from 2016, the service units are foreseen to evolve according to the trend published by STATFOR.

NOTE: The en-route TSU forecast for Spain Canarias is consistent with the low scenario of the latest STATFOR forecast available, published in September 2014:

Table 2.d (bis): RP2 SOWEPP en-route service units forecast Spain Canarias vs STATFOR low forecast September 2014

En-route TSUs – Spain Canarias		**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
SOWEPP forecast	SUs (000)	1,516	1,516	1,531	1,528	1,531	1,537	1,543
	Annual variation %	-5.2%	0.0%	1.0%	-0.2%	0.2%	0.4%	0.4%
STATFOR low forecast (SEP 2014)	SUs (000)	1,516	1,515	1,534	1,531	1,533	1,539	1,545
	Annual variation %	-5.2%	-0,1%	1,3%	-0,2%	0,1%	0,4%	0,4%

Terminal Service Units

Tables below provide the total terminal service units reference forecasts for RP2, for Spain and Portugal terminal charging zones. The forecast for Spain is the one provided by ENAIRE, who envisages an increase of 1.0% in 2014, and a subsequent evolution in line with the growth percentages of the STATFOR low scenario forecast (February 2014) for the 2015-2019 period. The forecast for Portugal is fully in line with STATFOR low scenario forecast (September 2014).

Table 2.e: RP2 SOWEPP terminal service units forecast

Total terminal service units		**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Portugal TCZ (*)	SUs (000)	180.4	190.8	196.7	197.4	198.3	199.9	201.6
	Annual variation %	1.6%	5.8%	3.1%	0.4%	0.5%	0.8%	0.9%
Spain TCZ (**)	SUs (000)	627.7	633.7	642.0	646.4	653.6	663.4	672.0
	Annual variation %		1.0%	1.3%	0.7%	1.1%	1.5%	1.3%

(*) Terminal Charging Zone defined for 9 Airports: Lisboa (LPPT), Porto (LPPR), Faro (LPFR), Madeira (LPMA), Porto Santo (LPPS), Ponta Delgada (LPPD), Santa Maria (LPAZ), Horta (LPHR) and Flores (LPFL).

(**) Terminal Charging Zone defined for 5 Airports: GCLP, LEBL, LEMD, LEMG, LEPA.

2 Safety

The Performance Regulation requires targets to be set at FAB level on the KPIs set out below:

- The effectiveness of safety management, with regard to Member States and their national supervisory authorities and air navigation service providers.
- The application of the severity classification based on the Risk Analysis Tool (RAT) methodology to the reporting of, as a minimum, separation minima infringements, runway incursions and ATM-specific occurrences at all air traffic services units.
- The reporting by the Member States and their air navigation service providers of the level of presence and corresponding level of absence of just culture.

Targets are set at EU-wide level on the first two key performance indicators listed above, as established in the Commission Implementing Decision of 11 March 2014.

2.1 Level of Effectiveness of Safety Management

The level of EoSM is calculated on the basis of the answers provided to questionnaires tailored for NSAs and ANSPs. Both types of questionnaires are divided in sections called management objectives (MOs). These MOs have been derived and adapted for each of the elements of the ICAO State Safety Programme (SSP) and Safety Management System (SMS) as described in ICAO Annex 19. In the questionnaires, for each MO, a question (or questions) has been derived and the levels of effectiveness have been described.

Targets set at EU-wide level on the level of EoSM are:

- NSAs: level C by 2019 in all management objectives.
- ANSPs: the possibility of having a target of level D in all management objectives by 2019, or at least reaching level D in 'safety policy and objectives', 'safety risk management', 'safety assurance', 'safety promotion' management objectives, and level C in 'safety promotion'.

With due consideration to the EU-wide goals, the RP2 SW FAB Performance Plan targets are set out below:

Table 2.a: RP2 SOWEPP level of EoSM targets at SW FAB level

Safety KPI #1: Level of Effectiveness of Safety Management			**2015**	**2016**	**2017**	**2018**	**2019**
NSAs		**Union-wide Target**	-	-	-	-	C
		SW FAB Targets	**B**	**B**	**B**	**B**	**C**
		Portugal contribution - ANAC	B	B	B	B	C
		Spain contribution - AESA	B	B	B	C	C
ANSPs	**Union-wide Targets**	For Safety Culture MO	-	-	-	-	C
		For all other MOs	-	-	-	-	D
	SW FAB Targets	**For all MOs**	**C**	**C**	**C**	**C**	**D**
	Portugal contribution - NAV Portugal	For Safety Culture MO	D	D	D	D	E
		For all other MOs	C	C	C	C	D
	Spain contribution - ENAIRE	For Safety Culture MO	C	C	C	C	D
		For all other MOs	D	D	D	D	D

NSAs

It is important to highlight that the EoSM questionnaire at State level has changed due to the latest amendments on the "Guidance Material for the implementation and measurement of Safety Key Performance Indicators (SKPIs) (ATM performance IR)" introduced by EASA by the means of Decision 2013/032/R (December 2013). These changes have an impact on the way the level of EoSM at State level is measured and assessed.

Portugal - ANAC

In 2014, ANAC is level "A" at EoSM global indicator, with only safety culture management objective (MO5) at level B. ANAC will act on several areas to bring the Standard up to level C which is required in 2019. The safety promotion objective (MO4), currently at level A, may be one requiring more time to be tackled due to the difficulties to identify, collect and classify external information on best practices and lessons learned, constructing then a working systematic system to use them. SW FAB activities shall contribute towards the achievement of the target in this MO.

All the other 3 objectives that are still at maturity level A shall receive the upmost attention to obtain progress. The most important highlights of the plan being developed to achieve level C by 2019 are set out below:

- Regarding MO1 Safety policy and Objectives, to ensure that the safety policies and objectives are uniform across the ANAC, through the implementation of an effective internal safety management system, which will also guarantee that the defined safety processes are being followed properly and the results are assessed.

- Regarding MO2 Safety Risk Management, actions will be taken to make the safety information that is already being collected and analysed available to the public, while working on better quality of safety information.

- Regarding MO3, Safety assurance, ANAC will intensify the risk based approach for inspection prioritization, to be fully compliant with requirements.

- Regarding MO4, Safety Promotion, most of the effort will be concentrated in the systematization of best practices and lessons learned, as already mentioned.

- Regarding MO5, Safety Culture, ANAC is currently at Level B and will continue to improve the measuring of Safety Culture and work on the necessary improvements.

Spain - AESA

Regarding the effectiveness of safety management, the objective is to achieve at least Level C in all management objectives by December 2019. Currently, all the questions of the effectiveness of safety management questionnaire are answered at least as Level C, except 4 of them: Q1.16, Q4.3, Q5.1 and Q5.2. In order to achieve level C in these questions, AESA has defined the next action plan:

- Regarding Q1.16 (MO1 - safety policy and objectives): Related internal management systems (e.g. QMS) have been coordinated. AESA's plan is to implement an ISO quality system. As part of the implementation of the Quality System, the processes related to the State Safety Programme will be reviewed.

- Regarding Q4.3 (MO4 - safety promotion): There is a process in place to share best (good) practices, safety-relevant information and safety lessons learnt internally, nationally, regionally and with international bodies. AESA's plan is to elaborate a new procedure ("preventive approach" procedure) to share safety information in 2014.

- Regarding Q5.1 (MO5 - safety culture): Establishment and promotion of safety culture within the competent authority/NAS. AESA's plan is to approve the safety policy by the Agreement of the Council of Ministers in the next month. This safety policy will be promoted between the employees for their involvement in safety activities during the SSP training courses.

- Regarding Q5.2: Safety culture in measured on a regular basis and there is an improvement programme in place. AESA's plan is develop a methodology to measure our internal safety culture in 2014-2015, to measure our internal safety culture in 2016 and to elaborate an improvement plan in 2017.

ANSPs

Portugal – NAV Portugal

By 31 December 2019 at the latest, NAV Portugal shall achieve at least level D for "Safety Policy", "Safety Risk Management", "Safety Promotion" and "Safety Assurance" and at least Level E for "Safety Culture". NAV Portugal has been monitoring the Safety Culture via a survey process since 2009.

Spain - ENAIRE

In its Safety Plan, ENAIRE has established actions focused on the improvement of the effectiveness of safety management that will allow for a performance beyond the targets set up at EU-level for the ANSPs in RP2. The reference set for ENAIRE is to reach level D in all EoSM management objectives (MOs) by 2019.

ENAIRE is currently level C in the global EoSM indicator (2013 data). The annual values introduced for monitoring purposes indicate ENAIRE shall be level D as from 2015 in all MOs but safety culture, that is: safety policy and objectives, safety risk management, safety assurance and safety promotion.

While advancing in the maturity of its safety management system (SMS), developing a positive and proactive culture through the means of the evaluation and measurement processes, ENAIRE's Safety Plan particularly seeks for improvement in those study areas in which ENAIRE is currently level C:

- ENAIRE foresees to advance in safety culture MO through the development of a positive and proactive culture by means of the implementation of evaluation and measurement processes. Actions scheduled include: the regular planning of safety culture surveys, the implementation of a "Just Culture Policy" and the development and introduction of monitoring tools, in particular the automated safety monitoring tool (ASMT).

- Actions aimed at improving and better defining the organisational and individual safety responsibilities are planned to advance in the awareness, dissemination and training in fatigue, stress and psychoactive drug abuse.

- The plan includes the development of a stress management system (CISM) as well as the implementation of a fatigue risk management system (FRMS).

- Other actions include the implementation of processes to actively anticipate compliance with international obligations and other regulatory requirements. In addition, the improvement in safety standards and procedures, safety assurance and performance monitoring shall be fostered. In particular, ENAIRE envisages the further development of procedures covering safety information dissemination and awareness and the establishment of a specific safety information sharing policy.

- In addition, ENAIRE will develop and implement new risk analysis and management methodologies.

2.2 Application of the severity classification based on the Risk Analysis Tool methodology

Targets set at EU-wide level on the level of application of the RAT methodology at SW FAB level are:

- Ground score: 80% of application for separation minima infringements, runway incursions with categories A, B and C by 2017 and 100% by 2019. 80% of application for ATM-specific occurrences with categories AA, A, B and C by 2017 and 100% by 2019.
- Overall score: 80% of application for separation minima infringements and runway incursions with categories A, B and C by 2017, and every year thereafter. 80% of application for ATM-specific occurrences with categories AA, A, B and C by 2017 and 100% by 2019.

With due consideration to the EU-wide targets, the RP2 SW FAB Performance Plan targets for the ground score are set out below:

Table 2.b: RP2 SOWEPP application of RAT (ground score) targets at SW FAB level

Safety KPI #2: Application of the severity classification based on the Risk Analysis Tool (RAT) methodology			**2015**	**2016**	**2017**	**2018**	**2019**
Ground Score	**Union-wide Targets**	SMIs	-	-	80%	-	100%
		RIs	-	-	80%	-	100%
		ATM-S	-	-	80%	-	100%
	SW FAB Targets	**SMIs**	**90%**	**90%**	**90%**	**95%**	**100%**
		RIs	**90%**	**90%**	**90%**	**95%**	**100%**
		ATM-S	**85%**	**85%**	**90%**	**95%**	**100%**
	Portugal contribution – NAV Portugal	SMIs	80%	80%	80%	90%	100%
		RIs	80%	80%	80%	90%	100%
		ATM-S	80%	80%	90%	90%	100%
	Spain contribution - ENAIRE	SMIs	100%	100%	100%	100%	100%
		RIs	100%	100%	100%	100%	100%
		ATM-S	90%	90%	90%	100%	100%

***NOTE:** All targets are referred only to SMIs and RIs with categories A, B and C; and ATM-s with categories AA, A, B and C.*

NAV Portugal is using the RAT to determine the ATM Overall Severity since 2012 and 2013 (for technical occurrences with impact on Safety). According to the plan, NAV Portugal shall report to ANAC the ATM ground severity using the RAT methodology for the classification of the annually reported separation minima infringements and runway incursions (with categories A,B and C), together with the ATM specific occurrences (with the categories AA, A, B and C) in order to meet the targets set.

ENAIRE is compromised to fully apply the severity classification of the RAT methodology throughout all RP2 (in separation minima infringements, runway incursions and ATM-specific occurrences). ENAIRE's Annual Reports show an application of almost 100%, and latest ENAIRE's Business Plan sets a target of full application of the RAT methodology as from 2014. Nevertheless, a 10% buffer is introduced in the SOWEPP targets on the application of the RAT for the ATM-S between 2015 and 2017, while the appropriate agreements between ENAIRE and AESA, and the resulting oversight procedures are put in place.

With due consideration to the EU-wide targets, the RP2 SW FAB Performance Plan targets for the overall score are detailed within the table below:

Table 2.c: RP2 SOWEPP application of RAT (overall score) targets at SW FAB level

Safety KPI #2: Application of the severity classification based on the Risk Analysis Tool (RAT) methodology			2015	2016	2017	2018	2019
Overall Score	Union-wide Targets	SMIs	-	-	80%	80%	80%
		RIs	-	-	80%	80%	80%
		ATM-S	-	-	80%	-	100%
	SW FAB Targets	**SMIs**	**40%**	**60%**	**80%**	**80%**	**80%**
		RIs	**25%**	**53%**	**80%**	**80%**	**80%**
		ATM-S	**85%**	**85%**	**90%**	**95%**	**100%**
	Portugal contribution	SMIs	20%	50%	80%	80%	80%
		RIs	20%	50%	80%	80%	80%
		ATM-S	80%	80%	90%	90%	100%
	Spain contribution	SMIs	60%	70%	80%	80%	80%
		RIs	30%	55%	80%	80%	80%
		ATM-S	90%	90%	90%	100%	100%

NOTE: *All targets are referred only to SMIs and RIs with categories A, B and C; and ATM-s with categories AA, A, B and C.*

ANAC will ensure the achievement of 80% of application of the severity classification based RAT methodology to SMIs and RIs, and a 90% to ATM-S occurrences (overall score) by 2017. In addition, ANAC will make the appropriate arrangements to keep the 80% value for SMIs and RIs until 2019, and to reach 100% on ATM specific occurrences (where the overall score has only a ground part).

To reach the objectives for Spain, AESA's action plan is:

- To request Air Navigation Service Providers their "ATM Ground" severity using RAT analyses.
- To update the CEANITA (Spanish Commission for the study and analysis of ATS incidents) Secretary working procedure.
- To standardise how the RAT is used (how the information is introduced in RAT) with the Air Navigation Service Providers. AESA will organize Workshops with the Air Navigation Service Providers.

2.3 Just Culture

There is no EU-wide target on the level of presence of Just Culture. The SW FAB Performance Plan establishes qualitative targets on Just Culture, consisting of common plans and policy statements at SW FAB level.

NSAs

Table 2.d: RP2 SOWEPP NSA Just culture targets at SW FAB level

Safety KPI #3: Just Culture		2019
NSAs	**SW FAB Target**	Advance in a common Just Culture enhancement plan and policy statement.

Regarding the safety culture indicator, AESA and ANAC plan to cooperate, in the FAB SW framework, in order to improve the safety culture. A common policy will be established during this year (2014). Moreover, training material regarding just culture for employees will be produced.

The SW FAB Performance Plan establishes qualitative targets on Just Culture, consisting of common plans and policy statements at SW FAB level, in particular on policy, occurrence reporting and investigation areas. This qualitative target is to be reached throughout RP2. For the sake of clarity, some more information in this respect is provided below:

Table 2.d (bis): RP2 SOWEPP NSA Just culture targets at SW FAB level – Detail on a yearly basis

Safety KPI #3: Just Culture		2015	2016	2017	2018	2019
NSAs	SW FAB Target	Development of a common Just Culture policy	Development of a common safety data sharing policy	Development of common Just Culture training material	-	Common Just culture summit
	Spain - AESA	FAB Just Culture policy dissemination and implementation	FAB safety data sharing policy dissemination and implementation	-	Courses including common Just Culture training material	Dissemination and implementation of summit conclusions
	Portugal - ANAC	FAB Just Culture policy dissemination and implementation	FAB safety data sharing policy dissemination and implementation	-	Courses including common Just Culture training material	Dissemination and implementation of summit conclusions

ANSPs

Table 2.e: RP2 SOWEPP ANSP Just culture targets at SW FAB level

Safety KPI #3: Just Culture		2019
ANSPs	SW FAB Target	Common Just Culture enhancement plan.

ENAIRE and NAV Portugal shall work together to find common areas of interest and development of Just Culture during RP2. The result is intended to be reflected in a common just culture policy enhancement plan at SW FAB level, despite of the different maturity levels.

NAV Portugal has recently developed its Just Culture Policy, which has been incorporated in its Safety Policy and endorsed by the CEO in 2013. This new policy provides assurance on the implementation of Just Culture principles.

Efforts made by ENAIRE in Just Culture are focused on the areas of policy and its implementation and occurrence reporting and investigation area. Evolution in aspects considered in the legal/judiciary area, is constrained by the structure of the Spanish Legal System. ENAIRE's action plan for the enhancement of Just Culture is focused on the following elements:

- The development of Just Culture Policy.
- The implementation of the CISM (Crisis and Incident Stress Management) programme, which is foreseen in 2015.
- The implementation of ASMT (Automatic Safety Monitoring Tool), which is foreseen 2015.
- The development of a safety data sharing policy.

3 Environment

The Performance Regulation establishes two environment KPIs: the horizontal en route flight efficiency of the actual trajectory (KEA), applicable at FAB-level, and horizontal en route flight efficiency of the last filed flight plan (KEP), applicable at the Network Manager and hence, not subject to target setting in the RP2 SOWEPP context.

The KEA is defined as:

- the comparison between the length of the en route part of the actual trajectory derived from surveillance data and the achieved distance, summed over all IFR flights within or traversing the local airspace;
- 'en route' refers to the distance flown outside a circle of 40NM around the airports;
- where a flight departs from or arrives at a place outside the local airspace, only the part inside the local airspace is considered;
- 'achieved distance' is a function of the position of the entry and exit points of the flight into and out of the local airspace.

3.1 Horizontal en route flight efficiency (KEA)

The EU-wide target is to reach an average of horizontal en route flight efficiency of at least 2.6 % in 2019 for the actual trajectory, as defined in the Performance Regulation (KEA), according to the Commission Implementing Decision of 11 March 2014. Considering the EU-wide target, and the reference values for the SW FAB provided by the Network Manager (in consistency with the principles for assessing performance plans and targets), the SOWEPP targets are listed below:

Table 3.a: RP2 SOWEPP environment targets at SW FAB level

Environment KPI #1: Horizontal en-route flight efficiency **(KEA)**	**2015**	**2016**	**2017**	**2018**	**2019**
Union-wide target	-	-	-	-	2.60%
FAB reference values	3.85%	3.71%	3.57%	3.43%	3.28%
SW FAB Targets	3.85%	3.71%	3.57%	3.43%	3.28%

SOWEPP targets for RP2 are fully in line with the reference values proposed by the Network Manager, and are hence considered an adequate contribution to the achievement of the EU-wide targets.

The trend drawn up for the improvement of the horizontal en route flight efficiency in the SW FAB is challenging but acceptable in view of the current overall performance in the rest of the FABs, and the action plans in place for the SW FAB. However, the potential improvement requires the implication of many actors, as well as a considerable coordination: civil/military, agreements within the FAB and with other FABs and ANSPs outside the SW FAB. The targets are consistent with the foreseen improvement to the routes structure although there is quite few information and experience available regarding the KPI.

The SW FAB level target set in the SOWEPP is a consequence of a sustainment of the performance levels in Portugal, where free route airspace (FRA) is currently implemented above FL245, and a gradual improvement of the flight efficiency in the Spanish airspace by means of the actions planned at FAB level.

It is important to highlight that the achievement of this improvement is subject to the evolution of some collateral agreements and the fostering of further use of FUA measures at State level, which is a pre-requisite before the resulting shorter routes can be offered.

Flight efficiency improvement action plan

The actions to be implemented in order to improve the horizontal en-route flight efficiency are part of a FAB level plan: "SW FAB Operational Board Common Plan 2014-2020". The contribution of each ANSP can be traced through the participation in the action plan drafted in this section.

In particular, the contribution of ENAIRE to the SW FAB targets is estimated to come mainly from:

- The potential reduction of the inefficiency in the most penalizing routes.
- The contribution from more direct routes availability thanks to the introduction of free route in the North-West of Spain (FRASAI Santiago-Asturias), which is expected to be significant.

As previously stated, NAV Portugal has already delivered significant benefit in terms of flight efficiency with the implementation of Free Route Airspace Lisboa (FRAL) above flight level 245. Since 7 May 2009, Free Route procedures are in place within NAV Portugal's airway structure, allowing relevant improvements of the en-route flight efficiency.

The FRAL project enabled an annual reduction of 1,300,000 NM (miles), which represents fuel savings of more than 8,783 tons, an emission reduction of about 27 Kton of CO_2, and an operational benefit towards companies estimated in over 12 million Euros per year.

Under the framework of SWFAB, NAV Portugal and ENAIRE implemented a new cross border boundary limit definition irrespective of national borders. Although this project was aimed primarily to increase safety and harmonization, it has also improved flight efficiency, contributing to the overall performance of the SWFAB.

SW FAB

SW FAB ATS route network redesign represents one of the greatest opportunities to optimize horizontal efficiency in terms of both KEP and KEA indicators. The overall approach foreseen at FAB level aims to a network continuum to be ensured through the consideration of all aspects related to lateral and vertical interconnectivity, including interface with SW FAB adjacent areas. These route network improvements will be based on the Advance Airspace Scheme principles and will be introduced via the implementation of ARN Version 2013-2015.

Three main areas of improvement have been identified, as detailed in the "SW FAB Operational Board Common Plan 2014-2020", through analysis of the main traffic flows in the SW FAB:

- Northbound-Southbound West area: main traffic flows into the SW FAB area as entry/exit traffic to airports within the FAB, and overflying traffic to South Operational Airspace Block via Casablanca FIR.
- Northbound-Southbound East area: main traffic flows into the SW FAB area as entry/exit traffic to Barcelona TMA and Balearic Islands. Cooperation between FAB initiatives, SW FAB and FABEC, will bring better connectivity with terminal areas and a better airspace management due to the presence of a large French military area.
- Westbound-Eastbound area: This area is serving as the connection between terminal areas for domestic traffic (Lisbon, Madrid, Valencia and Palma TMA) and for minor overflying traffic to Marseille FIR.

There are several flight efficiency projects in place and planned, which are an integral part of both the "European Route Network Improvement Plan 2014-2019" (ERNIP) and the "SW FAB Operational Board Common Plan 2014-2020" (this two plans are fully consistent between them, and hence with present SOWEPP). These projects range from minor ATS route alignments to a large scale reorganization and are listed below, within three main groups: FRA concept, network management and civil-military coordination.

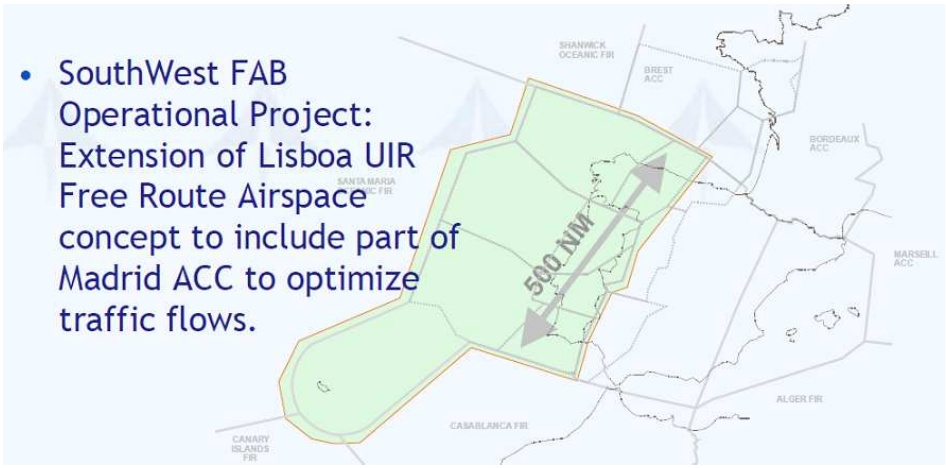
Free Route Airspace (FRA)

The SW FAB shall implement the Lisboa/Madrid/Brest free route airspace project during RP2. The aim of the project is the extension of SW FAB Free Route Airspace (FRA) towards the French coast (QPR and NTS area) to accommodate main traffic flows into the West Airspace Operational Block of the SW FAB airspace, creating one of the biggest Free Route Airspaces in the ECAC area. This FRA involves SW FAB and FABEC.

This project requires a number of activities to be undertaken throughout RP2. Actions will allow the improvement of the current ATS route structure, in particular between Madrid and Brest FIRs. ATS network improvements will facilitate the implementation of H24 Free Route Airspace in Santiago (SAN) and Asturias (ASI) sectors, from FL245 to UNL (FRASAI – implemented in 2014), thus extending the FRA concept from Lisboa FIR to the northwest area of Madrid FIR. Finally, the optimisation of the interface between SW FAB and FABEC will lead to Free Route operations in Brest airspace as continuation of Free Route Airspace in SW FAB.

This is a broad project, and is planned to be fully implemented by 2018. Benefits are not expected until very late in the period, and more likely getting into RP3.

Figure 3.a: Area within SW FAB where FRA shall be implemented.



Network Management

SW FAB ATS route network redesign is an important means to optimise the organisation and the use of airspace, ensuring a network continuum. The route network improvements within the SOWEPP deal with lateral and vertical interconnectivity, including interconnectivity with SW FAB adjacent areas. These route network improvements are based on the Advance Airspace Scheme principles and are an integral part of ERNIP. The action plan is structured as follows:

Canarias TMA project: implementation of a new P-RNAV based TMA in Canarias FIR to provide enough capacity and efficiency to main traffic flows between Europe and the Canary Islands. TMA design will enhance current SID/STAR structure, enabling flights to operate close to user preferred trajectories.

The project includes the design and implementation of new SID/STARs from and to some of the major airports in the Canary Islands: Lanzarote (GCRR), Fuerteventura (GCFV), Gran Canaria (GCLP) and Tenerife South (GCTS). The new TMA in Canarias is based in an agreed interface between Lisboa, Casablanca and Canarias FIRs. The project is expected to be fulfilled by the end of 2016 and start delivering by 2017.

SW FAB/Marseille FIR interface project: the restructuration of this interface will allow a better flow organisation and a better transfer of traffic between the eastern part of the SW FAB airspace and FABEC airspace (via Marseille FIR).

Some of the actions planned are part of a project already in place called LUMAS. The project is foreseen to be finalised by 2017.

SWFAB/Bordeaux interface project (BAMBI): the restructuration of the interface between the Barcelona, Madrid and Bordeaux FIR/UIRs. The objective is to improve the route network and the airspace structure between French and Spanish airspace by segregating major traffic flows and creating specialised ATC sectors, considering both civil and military airspace needs. The project is foreseen to be fully in place early in RP2 (by 2015), and in the end will allow a better organisation and transfer of traffic flows between Central (FABEC) and South-Western (SW FAB) Europe.

Casablanca Dualisation project: this joint initiative developed by SW FAB and ONDA Morocco consists on the split of ATS airways in the Lisboa-Casablanca-Canarias interface to accommodate main traffic flows between Europe and South Atlantic Region, including the Canary Islands. The implementation of the project is foreseen to be fulfilled by 2017.

Madrid TMA project: design and implementation of a new P-RNAV structure for Madrid TMA, re-organisation of Madrid approach sectors and implementation of independent parallel approaches. This project is planned to deliver as early as from 2016.

Barcelona TMA project: this project consists of the design and implementation of a new P-RNAV structure for Barcelona TMA including a re-organisation of ATC sectors. New SID/STARs will be introduced in the Barcelona airport (LEBL) prior to the implementation of the P-RNAV structure. Some key actions are planned for 2016, though the project lifecycle does not finalise until 2018.

ATS Network improvements projects: Implementation of short-term improvements proposal to the ATS route network and airspace sectorisation agreed by the Route Network Development Sub-Group (RNDSG) which affect to SW FAB. Many of these projects are expected to deliver quite early in RP2, as they are foreseen for 2014-2015.

Actions planned include the implementation of new routes, and CDRs affecting particularly Madrid and Barcelona FIRs. New SIDs from Ibiza (LEIB) and Palma de Mallorca (LEPA) airports, are also encompassed in this heterogeneous programme.

Faro TMA: new CNS infrastructure to develop P-RNAV procedures.

Lisboa TMA: terminal area will be restructured taking advantage of P-RNAV.

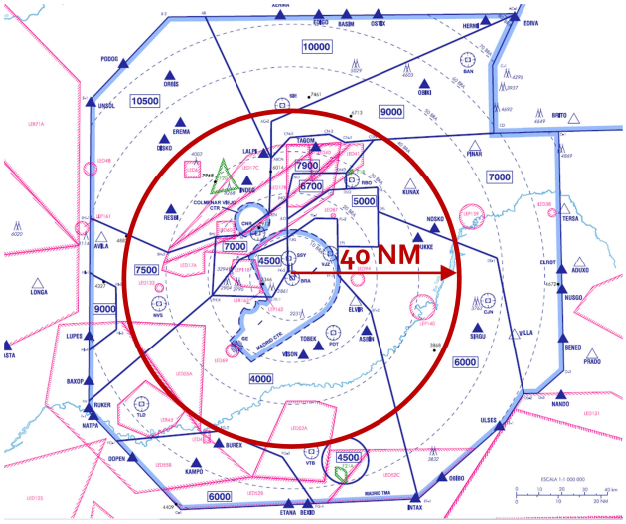
Civil-Military Coordination

The integration of civil and military needs is also taken into account in the operational SW FAB development plans. The "SW FAB OB Common Plan 2014-2020" includes a FUA optimisation projects foreseeing civil/military arrangements including more efficient management of airspace on a collaborative basis. Anyhow, the flight efficiency projects previously listed require civil-military coordination enhancements as already explained in their description. Consequently, civil-military coordination must not be seen in isolation, but as a fundamental part in the implementation of broader initiatives.

Quantification of the benefits and trade-offs

Preliminary results from studies carried out by ENAIRE reveal that there may be limitations in the current methodology used by EUROCONTROL to calculate horizontal flight inefficiencies. In the case of Spain, the most relevant issue is the fact that some inefficiency caused by the holdings in the terminal areas is currently being computed as en-route inefficiency.

Figure 3.b: Example *– 40 NM radius around the Madrid-Barajas airport vs TMA extension (in light blue)*



Work is to be done together with EUROCONTROL, since an erroneous allocation of the inefficiencies limits the scope for improvement. In addition, trade-offs between this KPI and the capacity KPA may be expected, since the initial conclusions derived from the studies undertaken show that inefficiency tends to be more significant in busy hours of the day and in high season months.

There are several trade-offs between flight efficiency and capacity. As airspace has a limited capacity, with high traffic demand, it is not always possible to offer direct routing to all planned flights. Regarding actual trajectory modifications with respect to the filed flight plan, (such as direct routing, higher flight level, etc) they may involve overload in other sectors and consequently cause unplanned congestion and additional workload.

It may also be pointed out that it is considered as a good practice (indeed, recommended by EUROCONTROL) to perform the actual trajectories as adherent as possible to the last filed flight plan. The relationship and implications of trade-offs between the European wide indicator (fostering abeyance to the filed flight plan route) and the local indicator (fostering direct routing to be given instead of "flying the flight plan") are not well understood and still need some clarification. Since ENAIRE follows these recommended practices it shows, in general, a very similar level of inefficiency contribution to the KEA and KEP indicators.

Similarly, it is expected that any improvements in the KEA will mainly come from a better route design or more direct routes availability thanks to the progressive introduction of free routing, rather than from the proliferation of tactical direct routings. It must also be noted that improvements over many of the identified routes are not only ANSP's responsibility, but also other actors may be involved, in particular:

- FUA: Improvements could contribute to significant efficiency gains.

- Transfer points: Some inefficiency, allocated to the FAB/States by application of the current methodology, has its origin in previous routings outside the FAB/State borders.

Finally, according to studies and stakeholder workshops, flight efficiency performance may be significantly affected by airspace users' business choices. A case of particular importance is route planning due to pricing considerations, and not flight efficiency. This acknowledged behaviour shows an economic trade-off at the airline side between the cost of the flight (charges-related) and the cost of the extra fuel needed to fly the inefficient route. It is important to note that external factors such as price of the fuel, may affect the final decision of the user.

4 Capacity

The Performance Regulation requires targets to be set at FAB level on the KPIs set out below:

- The average minutes of en route ATFM delay per flight.
- The average minutes of arrival ATFM delay per flight attributable to terminal and airport air navigation services and caused by landing restrictions at the destination airport.

4.1 En route ATFM delay per flight

The Performance Regulation requires that the en-route capacity target is set at FAB level with a breakdown monitored for reasons of transparency at the most appropriate level. The en route capacity KPI is the average minutes of en route ATFM delay per flight, defined as:

- the en route ATFM delay, that is, the delay calculated by the central unit of ATFM as defined in Regulation (EU) 255/2010 and expressed as the difference between the estimated take-off time requested by the aircraft operator in the last submitted flight plan and the calculated take-off time allocated by the central unit of ATFM;
- covering all IFR flights traversing the local airspace and all ATFM delay causes, excluding exceptional events;
- calculated for the whole calendar year and for each year of the reference period

The Charging Regulation also requires Member States to adopt financial incentives for their air navigation service providers in the key performance area of capacity. The SW FAB capacity target is broken down at national level to apply these incentives.

The EU-wide target for RP2 is an average en route air traffic flow management (ATFM) delay per flight of no more than 0.50 minutes per flight, to be reached for each calendar year, according to the Commission Implementing Decision of 11 March 2014. Considering the EU-wide target, and the reference values for the SW FAB and countries within the FAB, provided by the Network Manager (in consistency with the principles for assessing performance plans and targets), the SOWEPP targets are shown in the table below. The table shows as well, the allocation to ANSPs of the SW FAB targets.

Table 4.a: RP2 SOWEPP en-route capacity targets at SW FAB level

Capacity KPI #1: En route ATFM delay per flight	**2015**	**2016**	**2017**	**2018**	**2019**
Union-wide targets	0.50	0.50	0.50	0.50	0.50
SW FAB reference values	0.30	0.31	0.31	0.30	0.30
SW FAB Target	**0.30**	**0.31**	**0.31**	**0.30**	**0.30**
NAV Portugal *(Portugal allocation of FAB targets)*	0.19	0.15	0.14	0.14	0.13
ENAIRE *(Spain allocation of FAB targets)*	0.30	0.29	0.28	0.27	0.27

Performance in the capacity KPA achieved by ENAIRE at Spanish level shows a significant improvement over the first two years of RP1. Actual figures of en-route ATFM delay per flight have decreased an aggregated 74% between 2011 and 2013.

The priority in ENAIRE will be to maintain current service levels. Operational measures are also ongoing with NAV Portugal in the frame of the SW FAB, in order to deploy the operational projects contained in the "SW FAB Common Plan 2015-2019". A new ATM system will have to be implemented and fully operational in Lisbon ACC with the technology enablers to comply with the European regulations and the European ATM Master Plan and to improve the capacity plan.

The figures indicated for NAV Portugal are to be addressed under the Lisbon capacity plan that is delivered as part of the 2016-2020 European Network Operations Plan (NOP). Taking into consideration the huge "unexpected" traffic demand forecast for the SW Axis due to the political instability in the classical tourist destinations capacity reference values for Lisboa, and its capacity plan, will be an operational challenge which may be a concern to manage traffic and capacity.

NAV Portugal's reference values were developed in close collaboration with the NM. New capacity targets represent an improvement when compared with actual performance in the last few years. New targets reflect as well, a balanced approach between cost-efficiency and capacity trade-off.

En-route capacity plan

ENAIRE - Spain

ENAIRE's capacity plans are included in the 2016-2020 European Network Operations Plan (NOP). Some of the NM proposed actions for mitigation (such as addressing civil/military cooperation aspects, improving the cross-border interface and improving routes and sectorisation) are expected to progress during the course of RP2 and have been kept in mind when considering RP2 proposed targets in capacity and environment.

A summary of ENAIRE's capacity plans for ACCs according to NOP developments is drafted below:

Barcelona ACC: In 2014 the efforts have been focussed on maximizing opening time of the full available sectorisation (11 sectors). From 2015 onwards, the en-route sectors of Barcelona ACC will be separated in two different clusters. Two new sectors are planned in order to increase capacity for flows arriving to Alicante (LEAL), Valencia (LEVC), Barcelona (LEBL) and airports in the Balearic Islands. Then, opening new sectors will be possible according to the following timeline:

- In 2015 maximum sectorisation will be 12, but full time use of 12 sectors will not be possible. According to peak arrivals or departures demand and availability, one or the other of the new sectors will be opened.
- In 2016 the 12th sector will be open full time (summer season).
- In 2017 maximum sectorisation will be 13. One of the new sectors will be open full time (summer season), the other partially.
- In 2018 13 sectors will be available full time for the summer season.
- In 2019 maximum sectorisation will be increased up to 14.

The main projects for Barcelona ACC with an impact on capacity performance are:

- 2015: Flexible sectorisation for BALSE and MED sectors.
- 2015: SACTA CF2 implementation with full impact in 2016.
- 2016-2017: Staff increase.
- 2016-2017: Improvement of the Madrid-Barcelona interface.
- 2017-2018: Further improvements on the France-Spain interface.
- 2019: Implementation of SACTA version, including MTCD functionality.
- Ongoing: Improved ATFCM procedures.

Table 4.b: Capacity Plan Barcelona ACC (LECB)					
Year	**2015**	**2016**	**2017**	**2018**	**2019**
Free Route Airspace					
Airspace Management		Use of FUA	Enhanced AMC		

Advanced FUA		Restrictions			
Airport & TMA Network Integration					RNP APCH in LEBL
Cooperative Traffic Management	Improved ATFCM, including STAM				
		Use of OCC in PONENT sectors			
Airspace	TMA-resectorisation (sectors TGR and XAL)		SWFAB/FABEC Marseille interface, including LUMAS		
	Vertical split of central sector		Splitting Axis LECL-LF	SWFAB/FABEC Bordeaux interface GIROM-OKABI	
		LECM-LECB interface (sectorisation, procedures)			
Procedures		Improve arrivals to LEBL			
Staffing		Staff increase	Staff increase		
Technical		Full implementation of SACTA CF2 version (Nov 2015)			SACTA version including MTCD
				SACTA version 3.Z5.60 (AGDL)	
		Safety Nets (STCA)			
Capacity	Optimised sector configurations				
	Flexible sectorisation for BALSE and MED sectors	Review (increase in sector capacities)			
	Capacity increase in some en-route sectors (specially P1U)				
Significant events	A-CDM at LEBL airport	TLP – European military activity (every 2 months) SIRIO – European military activity (once per year) FLOTEX/NOBLE MARINER – European military activity (once per year)			
Max sectors	11/12	12	12/13	13	Up to 14

Source: 2016-2020 European Network Operations Plan

Canarias ACC: A new sector is planned for 2015, which is expected to improve the management of departures and arrivals between Europe and the airports in the Canary Islands. As a consequence, the maximum configuration will be raised to 10 sectors. Nonetheless, in 2015 this new sector will not be available all times. From 2016 onwards, the tenth sector will be open full time (during the winter season).

The main projects for Canarias ACC with an impact on capacity performance are:

- 2015: Redesign of the sector managing arrivals and departures to GCFV and GCRR.
- 2016: Implementation of RNP Approach procedures in Canary airports.
- 2018: Improvements on the interface with Casablanca FIR.
- 2019: RNAV1 structure for Canarias TMA phase 2a.
- 2019: Implementation of SACTA version, including MTCD functionality.
- Ongoing: Improved ATFCM procedures.

Table 4.c: Capacity Plan Canarias ACC (GCCC)

Year	**2015**	**2016**	**2017**	**2018**	**2019**
Free Route Airspace					
Airspace Management Advanced FUA		Use of FUA Restrictions	Enhanced AMC		
Airport & TMA Network Integration	RNAV structure for Canarias TMA Phase 1 (procedures in GCRR and GCFV)	RNP Approach (Canary airports)		New airspace structure at interface with Casablanca FIR	RNAV1 structure for Canarias TMA phase 2a

Cooperative Traffic Management	Improved ATFCM, including STAM				
Airspace					
Procedures			Improve arrivals/departures in GCFV & GCRR (south config)		
Staffing					
Technical	Minor ATC system upgrades			SACTA version 3.Z5.60 (AGDL)	SACTA version including MTCD
		Safety Nets (STCA)			
Capacity	Optimised sector configurations				
		Review (increase in sector capacities)			
Significant events		DACT military event (Once per year)			
Max sectors	9/10 (5 APP/4+1ENR)	10 (5 APP/4+1ENR)	10 (5 APP/4+1ENR)	10 (5 APP/4+1ENR)	10 (5 APP/4+1ENR)

Source: 2016-2020 European Network Operations Plan

Madrid ACC: In 2016 a new high sector is planned to increase capacity in the North-western area, to handle overflights and thus increase available capacity for the lower sectors. An additional sector is planned for 2018 with the same outline and goals, but targeting the South-Western part of the FIR, which handles flights to and from South and Central America, Portugal, Canary Islands and Southern Spain.

The main projects for Madrid ACC with an impact on capacity performance are:

- 2015: SACTA CF2 implementation.
- 2016-2017: Improvement on the Madrid-Barcelona interface.
- 2018: Improvements on the France-Spain interface.
- 2018: Independent approaches to parallel runways in Madrid airport.
- 2019: Implementation of SACTA version, including MTCD functionality.
- Ongoing: Improved ATFCM procedures.

Table 4.d: Capacity Plan Madrid ACC (LECM)					
Year	**2015**	**2016**	**2017**	**2018**	**2019**
Free Route Airspace				Free Route Lisboa/Madrid/ Brest	Free Route extension to Cantabrico
Airspace Management Advanced FUA		Use of FUA Restrictions	Enhanced AMC		
Airport & TMA Network Integration				Independent approaches to parallel runways (LEMD)	Transition to RNP1 LEMD TMA
Cooperative Traffic Management	Improved ATFCM, including STAM				
Airspace		LECM-LECB interface		New Madrid-Bordeaux interface (BAMBI)	
Procedures					
Staffing					
Technical	Full implementation of SACTA CF2 version - (Feb 2015)			SACTA version 3.Z5.60 (AGDL)	SACTA version including MTCD
		Safety Nets (STCA)			
Capacity	Optimised sector configurations				
				New sector & Changes in north sectors	
		New sector configuration Santiago-Asturias			
Significant events		TLP – European military activity (every 2 months) SIRIO – European military activity (once per year)			

Max sectors	17	17/18	17/18	18/19	19

Source: 2016-2020 European Network Operations Plan

Palma ACC: A new sector is planned with the aim of improving traffic flows from/to Ibiza (LEIB), as well as increasing available capacity to handle traffic flows between Palma ACC and the Spanish mainland and Portugal. From 2015 onwards, the maximum configuration will consist of 8 sectors, with partial openings of the 8th sector (summer season). Finally in 2016, the 8th sector will be open full time (during the summer season).

The main projects for Palma ACC with an impact on capacity performance are:

- 2015: Implementation of different scenarios to improve the management of flow interchange between Barcelona ACC and Palma ACC.
- 2015: SACTA CF2 implementation with full impact in 2016.
- 2016: Improvement of arrivals sectors procedures in Palma de Mallorca.
- 2019: Implementation of SACTA version, including MTCD functionality.
- Ongoing: Improved ATFCM procedures.

Table 4.e: Capacity Plan Palma ACC (LECP)					
Year	**2015**	**2016**	**2017**	**2018**	**2019**
Free Route Airspace					
Airspace Management Advanced FUA					
Airport & TMA Network Integration			A-CDM at LEPA (Nov 16)		
Cooperative Traffic Management	Improved ATFCM, including STAM				
Airspace		Enhance Feeder 1 capacity			Menorca sector review (Palma TMA)
Procedures			Changes in arr/dep LEIB procs		
Staffing					
Technical		Full implementation of SACTA CF2 version (Nov 2015)			SACTA version including MTCD
				SACTA version 3.Z5.60 (AGDL)	
		Safety Nets (STCA)			
Capacity	Optimised sector configurations				
	Increase of capacity in sectors GXX and IRX	LEPA arrival capacity increase			
Significant events		SIRIO – European military activity (once per year)			
Max sectors	7/8 (3/4ACC+4APP)	8 (4APP + 4 ENR)	8 (4APP + 4 ENR)	8 (4APP + 4 ENR)	8 (4APP + 4 ENR)

Source: 2016-2020 European Network Operations Plan

Sevilla ACC: In 2016 the splitting of the northern sector is planned to increase capacity.

The main projects for Sevilla ACC with an impact on capacity performances are:

- 2015: Full impact of SACTA CF2 implementation.
- 2018: Improvements on the interface with Casablanca FIR.
- 2019: Implementation of SACTA version, including MTCD functionality.
- Ongoing: Improved ATFCM procedures.

Table 4.f: Capacity Plan Sevilla ACC (LECS)					
Year	**2015**	**2016**	**2017**	**2018**	**2019**
Free Route Airspace					
Airspace Management		Use of FUA	Enhanced AMC		

Advanced FUA		Restrictions			
Airport & TMA Network Integration					
Cooperative Traffic Management	Improved ATFCM, including STAM				
Airspace		Northern Sector Splitting		New airspace structure at interface with Casablanca FIR	
Procedures					
Staffing					
Technical	Full implementation of SACTA CF2 version - (Dec 2014)			SACTA version 3.Z5.60 (AGDL)	SACTA version including MTCD
		Safety Nets (STCA)			
Capacity	Optimised sector configurations				
Significant events	TLP – European military activity (every 2 months)	TLP – European military activity (every 2 months) SIRIO – European military activity (once per year) FLOTEX/NOBLE MARINER – European military activity (once per year)			
Max sectors	7 (5 ACC+2 APP)	7/8 (5/6ACC+2APP)	7/8 (5/6ACC+2APP)	8 (6ACC+2APP)	8 (6ACC+2APP)

Source: 2016-2020 European Network Operations Plan

NAV - Portugal

NAV Portugal's capacity plans are those included in the 2016-2020 European Network Operations Plan (NOP). According to the delay forecast coordinated with the NM, the Lisbon ACC capacity plan is fully consistent with the Portugal allocation of the SW FAB capacity target, as it foresees an actual performance around 0.14 minutes of en-route ATFM delay per flight throughout RP2. A summary of NAV Portugal's capacity plan is however set out below:

Table 4.g: Capacity Plan Lisbon ACC (LPPC)					
Year	**2015**	**2016**	**2017**	**2018**	**2019**
Free Route Airspace	Reduction of separation minima from 8 to 5NM			Free route extension to LFRR FIR	
			Free route extension to Santa Maria FIR		
Airspace Management Advanced FUA		Enhanced ASM/AFUA System Support			
Airport & TMA Network Integration		PBN LPFR			
Cooperative Traffic Management		Enhanced ATFCM procedures, including STAM			
Airspace				New airspace structure at interface with Casablanca FIR	
	Vertical split of South sector				
		Flexibility of DFL West sector			
Procedures					
Staffing	Flexible rostering				
	Maintain appropriate level of staffing to open up to 10 sectors				
Technical		APW		Datalink	New ATC system
Capacity	Increase capacity in MAD sector (*)				
	Dynamic split of West and South sectors				
		Flexible sector opening schemes			
Significant events		Olympic games in Brazil			
Max sectors	9 (7 ENR+2 TMA)	10 (8 ENR+2 TMA)	10 (8 ENR+2 TMA)	10 (8 ENR+2 TMA)	10 (8 ENR+2 TMA)

(*) Additional information: When second surveillance source becomes available.

Source: 2016-2020 European Network Operations Plan

During this time, NAV Portugal and the NM have run a set of simulations in order to identify which measures could be best addressed in order to mitigate the actual delay forecast.

It must be noted that, during these simulations the NM has identified a huge discrepancy in the traffic figures, mainly due to the fastest recover of traffic occurred in Lisbon in the past two years.

In relation to these last two years, from a quantitative point of view, and according with the last STATFOR publication, in 2014 Lisbon ACC reached 480.000 movements. These traffic figures were expected to be reached in 2018 according to the STATFOR Feb. 2013 information, the one used to calculate the actual capacity profile/plan values for the RP2, which proves that in Lisbon ACC traffic has a much faster recovery rate when compared with other regions, for those reasons mentioned above. Nevertheless, during the last 2 years, Lisbon ACC capacity has increased by 6% in 2013 and 7% in 2014, as calculated by the NM, demonstrating the effort by NAV Portugal to satisfy traffic demand increases, well above the capacity profile defined by the NM.

For the next four years (2016-2019), the STATFOR publication seven years forecast September 2015, predicted a traffic growing in Lisbon FIR in relation to the traffic forecast for the RP2

EUROCONTROL Seven-Year Forecast (September 2015)											
IFR flights yearly growth		2012 A	2013 A	2014 A	2015 F	2016 F	2017 F	2018 F	2019 F	2020 F	2021 F
Lisbon FIR	H				5.5%	5.3%	4.6%	4.1%	3.7%	4.0%	3.1%
	B	-2.7%	2.6%	6.8%	5.1%	3.2%	2.3%	2.4%	2.2%	2.5%	1.6%
	L				4.6%	1.2%	0.0%	0.7%	0.6%	0.8%	0.2%
ESRA08	B	-2.4%	-1.1%	1.7%	1.6%	2.3%	2.3%	2.3%	2.2%	2.7%	1.8%

Having in mind that, any increase of capacity can only be addressed if it doesn't impact the cost base already declared and approved by the Commission through the Implementing decision 2015/348, NAV Portugal in close cooperation with the NM were able to arrive to some measures that if introduced in a timely manner may contribute to ensure a level of performance close to the network requirements.

Quantification of the benefits and trade-offs

Trade-offs between capacity and cost-effectiveness are significant, and can be summarised in: the cost of delivering capacity versus the cost of delay. The main idea behind this rationale is that:

- Undertaking operational improvements to increase capacity incur an increase in the cost of ANS provision. In aggregate terms, the cost of capacity increases in line with capacity.

- While providing insufficient capacity to meet traffic demand results in additional expense for the airspace users. The cost of delay rises sharply when the capacity provided is not sufficient.

According to studies, these considerations lead to the conclusion that there is a cost optimum for capacity: the point at which the sum of the cost of ANS capacity and the cost of delay is minimised.

Estimating this point for the particular case of the SW FAB is quite difficult. The only reference available is the report on the unit cost of delay, prepared by the University of Westminster Report and published in 2004 and updated in 2011. According to this study, the latest estimated cost of one minute of ATFM delay is €81 in 2010 Euros (Network level). The SW FAB incentive scheme for en-route capacity has been built in due consideration of the effects of the cost of delay.

However, in response to a request for assistance by the Commission, the SJU launched a study aimed at the development of a model for interdependencies between KPAs. This study resulted in the "*Study on an ATM Performance Model and supporting methodology*" of 27th September 2013 (jointly developed by EADS, ALG and ENAC). Among the purposes of this study was to support the balancing of performance plans at FAB level in terms of targets, incentive scheme and associated details.

This study identified for instance, relationships between as traffic complexity and air traffic controller (ATCO) cost, as well as between traffic complexity and delay. Nevertheless, the general conclusion is that the model is still incomplete in several ways, mainly due to the lack of time, data available and expert judgement. Therefore, no specific conclusions can be worked out.

Anyway, as previously stated, Spain has given preference to cost-efficiency improvements, and will assure that efforts on capacity are focused on improving performance levels to match the challenging targets in the traffic growth scenario forecasted for RP2. Further details on the interdependencies between capacity and cost-efficiency are provided within section 7.

4.2 Terminal and airport ANS ATFM arrival delay per flight

The Performance Regulation requires that terminal and airport capacity targets are set at national level with a breakdown at airport level for monitoring purposes. The KPI is the average minutes of arrival ATFM delay per flight attributable to terminal and airport air navigation services and caused by landing restrictions at the destination airport, defined as follows, defined as:

- the average generated arrival ATFM delay per inbound IFR flight;
- covering all IFR flights landing at the destination airport and all ATFM delay causes, excluding exceptional events;
- calculated for the whole calendar year and for each year of the reference period

Portugal

The TNZ Portugal is composed by 9 airports, from which only Lisbon has more than 70.000 IFR flights. Thus, all airports but Lisbon, could be kept out of the scope of the Performance Regulation. From the nine airports, and in the past five years only two major airports have contributed to the global ATFM arrival delay in Portugal: Lisbon (LPPT) and Porto (LPPR). The remaining airports (LPFR, LPMA, LPPS, LPHR, LPSM, LPPD and LPFR), present an insignificant contribution to the total delay according to the past data.

Table 4.h: Average ATFM arrival delay in Portugal – historical data

Airport	2008	2009	2010	2011	2012	2013
LPPT – Lisboa	0.51	0.35	0.44	0.45	0.84	0.30
LPPR - Porto	1.02	0.60	0.53	0.52	0.87	0.70
Others (*)	0.00	0.00	0.00	0.24	0.16	0.02

(*) The combination of the rest of Portugal's airports: LPFR, LPMA, LPPS, LPHR, LPSM, LPPD and LPFR.

Consequently, although all the nine airports are included in the ATFM arrival delay KPI, only two of them have a strong contribution to this particular indicator, Lisboa and Porto. In addition, these two airports have been monitored during the RP1 and have reliable data. The Portuguese targets for RP2 are set within the table below. Reference values for monitoring purposes are only individually provided for Lisboa and Porto airports for the reasons explained above. The rest of the airports are grouped as "others":

Table 4.i: RP2 SOWEPP terminal capacity targets at Portuguese level

Capacity KPI #2: Terminal and airport ANS ATFM arrival delay per flight	2015	2016	2017	2018	2019
Portugal Target	**0.60**	**0.60**	**0.60**	**0.60**	**0.60**
LPPT – Lisboa	0.50	0.50	0.50	0.50	0.50
LPPR – Porto	0.75	0.75	0.75	0.75	0.75
Others(*)	0.02	0.02	0.02	0.02	0.02

(*) The combination of the rest of Portugal's airports: LPFR, LPMA, LPPS, LPHR, LPSM, LPPD and LPFR.

It is important to note that for Porto the weather weights between 85% and 95% of all the ATFM arrival delay, causing a great uncertainty when forecasting future delays. Taking into account these elements, and historical performance, the target and reference values are considered adequate.

Spain

There is no EU-wide target on terminal and airport capacity, or any other external reference. Considering local reference, the SOWEPP terminal and airport ANS capacity targets and airport level allocation for Spain are set out below. The reference values per airport are established only for monitoring purposes. It has to be noted that some reasons behind the achieved performance at these airports are considered as insurmountable at the time being, which reduces the scope for improvement.

Table 4.j: RP2 SOWEPP terminal capacity targets at Spanish level

Capacity KPI #2: Terminal and airport ANS ATFM arrival delay per flight	2015	2016	2017	2018	2019
Spain Target	**0.80**	**0.80**	**0.80**	**0.80**	**0.80**
GCLP – Gran Canaria	0.32	0.32	0.32	0.32	0.32
LEBL – Barcelona	0.91	0.91	0.91	0.91	0.91
LEMD – Adolfo Suárez Madrid-Barajas	0.83	0.83	0.83	0.83	0.83
LEMG – Málaga	0.11	0.11	0.11	0.11	0.11
LEPA – Palma de Mallorca	1.29	1.29	1.29	1.29	1.29

Spain Terminal capacity plan - ENAIRE

Gran Canaria (GCLP): The number of approach sectors to be used will continue to be just one, with the possibility to use two sectors when necessary.

Barcelona (LEBL): The structural and operational capacity of the airport has reached its limit with the current use of runways (parallel and segregated). The situation is not planned to change as it is related to environmental issues.

Flow Control measures will be taken in order to better balance traffic between two TMA sectors: T1 which is currently overloaded and T2, which has available capacity. Additionally, a new sector in Barcelona TMA will increase capacity to/from Barcelona (LEBL) by handling some of its flows and mainly by managing traffic to/from Girona (LEGE). A-CDM (from 2015) will contribute to the accomplishment of the target.

Madrid-Barajas (LEMD): Once A-CDM has been implemented in 2014, the main project planned for the future is the implementation of independent simultaneous approaches to parallel runways.

Málaga (LEMG): The second runway will be used to satisfy demand when needed. Current approach sectors configurations are considered adequate.

Palma de Mallorca (LEPA): It is not possible to target a more ambitious achievement, considering current runway configuration. Nevertheless, several improvements in the ATC system will contribute to the accomplishment of the target:

- 2015: DMAN
- 2016: AMAN and A-CDM

4.3 Incentive schemes

Regulation EU 391/2013 provides for the obligation to establish financial incentive mechanisms in the capacity KPA. The SOWEPP complies with the regulation by drawing up an incentive mechanism associated to the SW FAB en route capacity target.

No incentive scheme shall be introduced to award or penalise performance with respect to terminal and airport capacity targets. Airport operations are strongly conditioned by weather and exceptional events, and are subject to high traffic variability due to many factors like, for instance, airline policies. In addition to the operational issues, there are other problems in the establishment of terminal capacity incentive mechanisms that are of financial nature. There are differences in the scope of service, the market structure, and cost allocation between en-route and terminal inside de SW FAB.

Furthermore, there is a lack of knowledge and experience in medium term terminal traffic forecasting, and there is no EU-wide reference. In RP2, terminal capacity targets will be set for the first time. These targets are considered not mature and robust enough for the establishment of an incentive mechanism.

General principles

The SOWEPP incentive mechanism for en-route capacity is applied at FAB level. The amount of the incentive is calculated at FAB level on the basis of the achievement of the SOWEPP FAB target for a given year. Incentives shall be calculated on a calendar year basis and be paid in year n+2.

The incentive shall be calculated as for the SOWEPP FAB target expressed in the KPI metrics (all regulation reasons - Annex 1 of Regulation 390/2013). The amount of incentive shall be the output of the formula applied at FAB level, and be the percentage of income to be received as a bonus or paid as a penalty by the ANSPs, up to 0.5% of the income.

Design of the formula:

- Bonuses are awarded for achievement of performance which goes beyond the target.
- The rate of payment € per delay flight minute is set on the basis of being sufficient to incentivise investment to solve capacity issues causing delay.

Eligibility:

- When the FAB target is not met: there is no bonus for any ANSP, and only the ANSPs that have not met their individual target are penalised.
- When the FAB target is met: there is no penalty for any ANSP, and only the ANSPs that have met their individual target can receive the bonus.

Table 4.k: Eligibility Scenarios in the en-route capacity incentive mechanism

FAB	ENAIRE	NAV Pt	Result
✓	✓	✓	Both ANSPs receive a bonus, calculated according to the FAB common function
✓	✓	×	Only ENAIRE receives a bonus, NAV is not penalised as the FAB target has been met
✓	×	✓	Only NAV receives a bonus, ENAIRE is not penalised as the FAB target has been met
×	×	×	Both ANSPs pay a penalty, calculated according to the FAB common function
×	✓	×	Only NAV pays a penalty, ENAIRE is not penalised as Spain value has been met
×	×	✓	Only ENAIRE pays a penalty, NAV is not penalised as Portugal value has been met

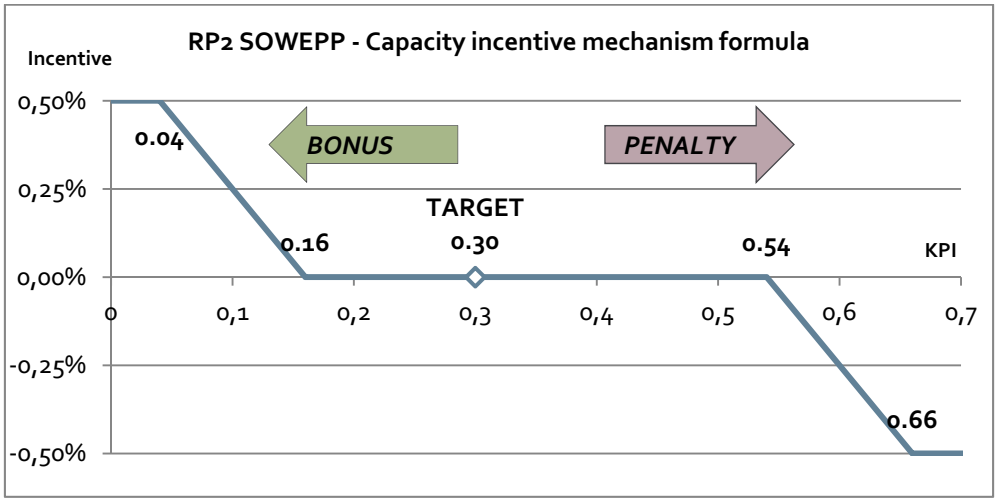
NOTE: *when the target or reference value is met, the cell is ticked off (✓), otherwise it is marked with a cross (×).*

Incentive formula

The incentive mechanism formula at FAB level consists of a linear function, with a dead band around the FAB target. This option has been chosen among others as it presents several advantages:

- It is a simple solution: application is clear, it is simple to understand and the parameters of the function can be easily adjusted.
- In the penalty zone above the target, incentives are not applied in cases where performance is very near the target, in order to avoid certain specific problems such as KPI round off issues.
- In the bonus zone below the target, incentives are not applied unless performance is significantly better than the target.
- The maximum amount of incentive (bonus or penalty) is set at 0.50% of the en-route actual revenue.

Figure 4.l: Depiction of the incentive formula structure - example for 2015



The incentive mechanism is based on the SW FAB en-route capacity target for each year.

The dead-band is an area in which incentives are not distributed, regardless of the delay KPI value achieved. The total width of the dead-band is established at 0.38 minutes/flight, spanning from 0.16 to the 0.54 minutes/flight regardless of the target applying in a given year.

Finally, the transition area is that in which the incentive level is a variable between zero and the maximum value. In other words, it is the zone in which the incentive formula is a linear function with a certain gradient. This transition area is calculated by setting the maximum bonus/penalty to be reached at a certain distance from the target. Both transition areas shall have a width of 0.12 min/flight and span from the edges of the dead-band to the maximum bonus and penalty points.

The main characteristics and parameters of the function described below, are summarised in the following table defined as follows:

Table 4.m: Formula parameters of the en-route capacity incentive mechanism

Parameter	Values
Target	SW FAB level target for the year, as set in within table 4.a.
Maximum incentive value	0.50% of the actual en-route income.
Dead Band	The range between 0.16 and 0.54 min/flight.

Transition area	Area 0.12 minutes/flight wide where the amount of the incentive varies from zero to the maximum following a linear function: • Bonus transition area: the range between 0.04 min/flight (maximum bonus), and 0.16 min/flight (no incentive – dead band). • Penalty transition area: the range between 0.54 min/flight (no incentive – dead band), and 0.66 min/flight (maximum penalty).

The Charging Regulation establishes (Article 15.1 (g)), that the target levels of performance may be adjusted, in the application of the incentive scheme, to cover only delay causes related to: ATC Capacity, ATC routing, ATC staffing, ATC equipment, airspace management and special events (codes C, R, S, T, M and P of the ATFCM user manual).

The KPI including all delay causes is the one applied to calculate the bonus/penalty, against the SW FAB targets, in order to capture delay issues as a whole, and also to avoid the definition of an additional target based only on the aforementioned causes. Nevertheless, an adjustment is introduced to mitigate the impact when for a given year, the minutes of delay due to causes other than those specified in Article 15.1 (g) of the Charging Regulation (non-ATC causes), are unusually high.

When for a given year, the minutes of non-ATC delay (as defined above) are 20% higher than the average of the three previous years, ANSPs can ask the excess of minutes to be discounted from the KPI before its actual value is applied in the calculation of the bonus/penalty, against the SW FAB targets.

In such case, ANSPs shall justify the application of this clause appropriately. NSAs shall analyse the situation and decide whether to accept the request from the ANSPs. External independent bodies can be consulted for opinion if NSAs judge it necessary to reach a conclusion on the issue. If the clause is to be applied, it shall be consulted to the airspace users in advance. NSAs shall monitor the proper implementation of these incentive schemes as established in Article 15.2 of the Charging Regulation.

The incentive in terms of a percentage of the en-route revenue is the output of the incentive mechanism defined above. This percentage is applied to the actual en route revenue of each ANSP to finally obtain the amount of incentive in terms of EUR, and introduced in the en route unit rates (of year n+2) of the corresponding charging zones in line with the provisions of Regulation 391/2013.

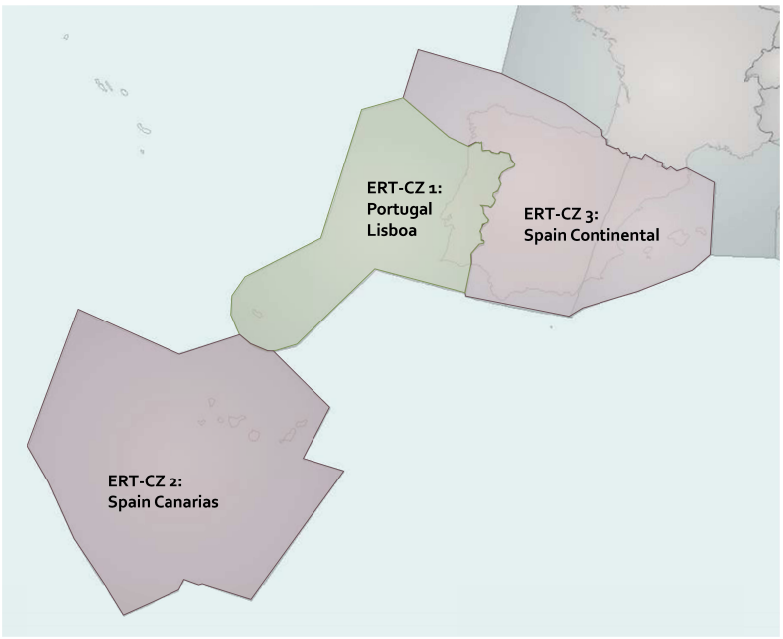
5 Cost-efficiency

5.1 En route cost-efficiency

The Performance Regulation requires a target for en route cost-efficiency for en route service to be expressed in terms of the determined unit costs (DUCs) at charging zone level and in local currency. There are three en-route charging zones within the SW FAB:

- Portugal Lisboa
- Spain Canarias
- Spain Continental

Figure 5.a: En-route charging zones (ERT-CZ) within the SW FAB.



The DUC is the ratio between the en route determined cost and the forecast traffic in the charging zone expressed in en route service units, expected during the period in the performance plan (RP2). En-route cost efficiency European wide performance targets, established through the "Commission Implementing Decision of 11 March 2014", are the reference for the SOWEPP DUC targets. They are shown in the table below:

Table 5.a: EU-wide en-route cost-efficiency targets

EU-wide en-route cost-efficiency targets for RP2	2015	2016	2017	2018	2019
EU-wide DUC (EUR 2009)	56.64	54.95	52.98	51.00	49.10
Determined costs profile (MEUR 2009 prices)	6,147,905	6,055,686	5,904,294	5,756,687	5,612,769
Total en-route service units profile (000)	108,541	110,196	111,436	112,884	114,305

Portugal

En-route cost-efficiency targets for Portugal are set out in the table below. The targets are expressed in real terms using 2012 values.

Table 5.b: RP2 SOWEPP en-route cost-efficiency targets – Portugal

Portugal En-route Cost-Efficiency Targets		**2015**	**2016**	**2017**	**2018**	**2019**
Cost efficiency KPI 1: **En-route DUC Portugal**	Nominal en-route determined costs	111.331	117.113	121.117	124.428	127.871
	Inflation index (base 2012)	102.32	103.85	105.41	106.99	108.59
	Real en-route determined costs	108.811	112.770	114.903	116.299	117.751
	Total en-route Service Units (000)	3,095	3,105	3,122	3,147	3,171
	Real (EUR 2012) en-route DUC	**35.15**	**36.32**	**36.80**	**36.95**	**37.13**

NOTE: Costs in MEUR, service units in thousands (000). Costs in real terms expressed in 2012 EUR.

Real en-route unit costs (in €2009 prices) are expected to decrease at a pace of 3.5% over the period between 2009 and 2019, meaning a global reduction of more than 30% over the 10 years horizon, assuming that the STATFOR low case scenario for traffic is the most realistic for the charging zone.

En-route Determined Costs are expected to increase 1.1% in RP2, as a result of two main factors:

- a meaningful investment plan and,
- a real 2% salary increase, following a period of four years where salaries have been frozen (and even reduced in 2012) and there were no career progression, due to the fact that Portugal was under the "European Support Mechanism", situation that is not sustainable for the near future.

Despite this, Portugal-Lisboa has been able to achieve, in the horizon of 2009-2019, an average annual reduction of 1.2% in DC, while the EU-wide trend is slightly more conservative (-1.1%). Is worth to mention that Portugal (Lisboa CZ) was the main contributor to the EU-wide cost-efficiency target in RP1 in the revised PP - annual average decrease of 7.7% in unit rate versus a EU-wide target of -3.5% - and also the level of local unit cost, which is 41% below the European average DUC.

Moreover, and taking into account the concept of total economic cost associated to the Air Navigation Services, we also need to stress the relevant fuel savings offered to the airlines after the implementation of the Free Route Airspace Lisboa (around 12 million euros annually), aside from the positive environmental impact on CO_2 emissions, that also means a significant cost saving to the society.

Spain

En-route cost-efficiency targets for the two charging zones within Spain are set out in the table below. The targets are expressed in real terms using 2012 values. EU-wide targets for RP2 are established in real terms using 2009 values (EUR 2009), to allow for comparisons with the level of performance achieved in RP1. Consequently, appropriate justifications are given considering as well the aggregated performance improvement that the targets represent for the two reference periods. In other words, comparing the 2019 targets with the 2009 actual situation.

Table 5.c: RP2 SOWEPP en-route cost-efficiency targets – Spain

Spain En-route Cost-Efficiency Targets		2015	2016	2017	2018	2019
Cost efficiency KPI #1: **En-route DUC Spain - Canarias**	Nominal en-route determined costs	98.528	98.751	99.004	98.495	98.327
	Inflation index (base 2012)	102.63	103.55	104.63	105.70	106.81
	Real en-route determined costs	96.005	95.366	94.622	93.185	92.056
	Total en-route Service Units (000)	1,531	1,528	1,531	1,537	1,543
	Real (EUR 2012) en-route DUC	**62.71**	**62.41**	**61.80**	**60.63**	**59.66**
Cost efficiency KPI #1: **En-route DUC Spain - Continental**	Nominal en-route determined costs	620.444	622.073	622.241	625.581	627.777
	Inflation index (base 2012)	102.63	103.55	104.63	105.70	106.81
	Real en-route determined costs	604.556	600.749	594.703	591.852	587.741
	Total en-route Service Units (000)	8,880	8,936	9,018	9,128	9,238
	Real (EUR 2012) en-route DUC	**68.08**	**67.23**	**65.95**	**64.84**	**63.62**

NOTE: Costs in MEUR, service units in thousands (000). Costs in real terms expressed in 2012 EUR.

Spain Canarias

A significant effort in cost saving has been undertaken since the years prior to RP1, paving the way for a good level of cost-efficiency in RP2, when costs in nominal terms shall remain stable. This situation, together with the slight traffic increase profile forecasted for RP2 and the modest evolution of the inflation, shape the SOWEPP targets for RP2.

Real en-route DUC experiences an average yearly improvement of -2.7% during RP2. Nevertheless, the global trend since the establishment of the Performance Scheme is much more notorious. Indeed, the Real en-route DUC is to be reduced an average of -3.7% per annum (more than a -31% aggregated improvement) in the two reference periods (2019 vs 2009).

Consequently, the en-route cost-efficiency targets for Spain Canarias represent an adequate contribution to the achievement of the EU-wide targets, and an added value for the airspace users.

Spain Continental

Cost reduction efforts due to the RP1 Spanish Performance Plan were very important. Nominal en-route determined costs are to be maintained more or less at a constant level throughout RP2. This circumstance, together with the slight growing trend of the inflation, according to the forecast, shall lead to a yearly reduction of the determined costs in real terms. En-route cost-efficiency targets for RP2 in Spain Continental charging zone are a consequence of this cost evolution profile, and are conditioned by the traffic forecasts which predict a conservative growth.

Real en-route DUC experiences an average yearly reduction of -2.1% during RP2. This positive cost-efficiency evolution set for RP2 is encompassed in a scenario of enormous improvement, as the targets represent a global average reduction of -4.6% of the Real en-route DUC per annum (a total -37% aggregated improvement) since the introduction of the Performance Scheme (2019 vs 2009).

This brief analysis reveals both, consistency with the EU-wide targets, as well as a significant cost-efficiency improvement outcome having a positive effect on the airspace users.

5.2 Terminal cost-efficiency

Portugal

Terminal cost-efficiency targets for Portugal are outlined in the table below. The figures presented are based on the terminal costs of all the airports in Portugal: Lisboa (LPPT), Porto (LPPR), Faro (LPFR), Madeira (LPMA), Porto Santo (LPPS), Ponta Delgada (LPPD), Santa Maria (LPAZ), Horta (LPHR) and Flores (LPFL)..

Table 5.d: RP2 SOWEPP terminal cost-efficiency targets - Portugal

Portugal Terminal Cost-Efficiency Targets		**2015**	**2016**	**2017**	**2018**	**2019**
Cost efficiency KPI #2: **Terminal DUC Portugal (*)**	Nominal terminal determined costs	27.415	28.435	29.565	30.376	32.254
	Inflation index (base 2012)	102.32	103.85	105.41	106.99	108.59
	Real terminal determined costs	26.795	27.381	28.048	28.392	29.702
	Total terminal Service Units (000)	196.7	197.4	198.3	199.9	201.6
	Real (EUR 2012) terminal DUC	**136.22**	**138.71**	**141.44**	**142.03**	**147.33**

NOTE: Costs in MEUR, service units in thousands (000). Costs in real terms expressed in 2012 EUR.

Real terminal unit costs (in €2009 prices) are expected to decrease 2.1% p.a. over the period 2009-2019, meaning a global reduction of about 19% for the ten years horizon. Total terminal determined costs are expected to increase 2.6% in RP2, as a result of two main factors:

- an ambitious investment plan in accordance with the European ATM network global plan and,
- a real 2% salary increase, following a period of four years where salaries have been frozen (and even reduced in 2012) and there were no career progression, due to the fact that Portugal was under the "European Support Mechanism", situation that is not sustainable for the near future.

However, total terminal determined costs in real terms are expected to reduce at a pace of 0.4% per year, on the expanded horizon of the 10 years.

Spain

Terminal cost-efficiency targets for Spain are outlined in the table below. Targets are based on the terminal costs of the Spanish airports that are within the scope of the RP2 SOWEPP: Gran Canaria (GCLP), Barcelona (LEBL), Madrid-Barajas (LEMD), Málaga (LEMG) and Palma de Mallorca (LEPA).

Table 5.e: RP2 SOWEPP terminal cost-efficiency targets - Spain

Spain Terminal Cost-Efficiency Targets		**2015**	**2016**	**2017**	**2018**	**2019**
Cost efficiency KPI #2: **Terminal DUC Spain (*)**	Nominal terminal determined costs	99,792	99,110	97,635	96,512	95,269
	Inflation index (base 2012)	102.63	103.55	104.63	105.70	106.81
	Real terminal determined costs	97,237	95,713	93,314	91,308	89,193
	Total terminal Service Units (000)	642.0	646.4	653.6	663.4	672.0
	Real (EUR 2012) terminal DUC	**151.47**	**148.06**	**142.78**	**137.65**	**132.73**

NOTE: Costs in MEUR, service units in thousands (000). Costs in real terms expressed in 2012 EUR.

Spain terminal cost-efficiency targets represent an average annual improvement of -3.2% during RP2, in terms of real terminal DUC KPI. This positive evolution is possible due to an average annual reduction of -1.2% of the terminal determined costs in nominal terms (-2.1% in real terms), in a context in of moderate traffic increase.

6 Investments

The purpose of this section is to provide a summary of the CAPEX programmes of ANSPs and other relevant contributors to the unit rates. The aim is to consult stakeholders on this topic.

The investments detailed have been considered main CAPEX projects, as either:

- New ATM systems.
- Major overhauls of existing ATM systems.
- Investments with significant cost impact (e.g. infrastructure, major replacements, etc).

6.1 ENAIRE

ENAIRE is the Spanish ANSP who is subject to the provisions of the Performance Regulation, and hence within the scope of the RP2 SOWEPP. ENAIRE's investment plan is summarised in this section. Detailed information for each main CAPEX project, as well as all the information required in order to comply with the Performance Regulation is provided in section 2 of the template version of the RP2 SOWEPP (Annex E).

Table 6.a: Summary of ENAIRE's CAPEX programme (in Nominal prices)

Name of investment	**Planned Amount of Capital Expenditures** (in MEUR)					**Total CAPEX for RP2**
	2015	**2016**	**2017**	**2018**	**2019**	
SHORT TERM IMPROVEMENTS - Airport Collaborative Decision Processes (A-CDM), Arrival and Departure Manager (AMAN/DMAN), Electronic Flight Strips (EFS), DATALINK Communications and Functional Configuration 2 (CF2).	6.3	0.9	0.0	0.0	0.0	7.2
SURVEILLANCE EVOLUTION – ModeS, ADSB	2.6	3.8	3.5	3.8	4.1	17.8
REDAN – Data Network	5.5	4.6	4.7	0.8	0.6	16.1
833 – Communication Channels	1.8	3.2	3.5	2.9	0.0	11.4
COMETA – Voice over Internet Protocol	4.8	10.7	9.3	9.1	8.8	42.8
iTEC – Flight Data Processing	4.4	8.0	10.6	13.7	14.1	50.8
SAFETY NETS – STCA, APW, MSAW	0.1	0.1	0.1	0.1	0.1	0.4
PBN PLAN – Performance Navigation	1.1	0.8	0.8	0.8	0.9	4.3
CWP – Controller Working Position	0.0	0.0	0.5	0.5	0.6	1.5
ÍCARO – Aeronautical information	1.3	1.3	1.0	1.0	0.8	5.3
PROJECT FACILITATORS	21.8	16.5	15.8	17.3	20.1	91.6
Sub-total of **main CAPEX** above (1)	49.8	49.8	49.6	50.0	50.0	249.2
Sub-total other Capex (2)	25.8	25.7	25.5	25.4	25.2	127.5
Total CAPEX (1) + (2)	75.5	75.5	75.1	75.3	75.2	376.6

Source: ENAIRE.

In global terms, contribution of CAPEX to the European ATM Master Plan deployment corresponds to a 66.2% of the total investment planned for RP2 (249,2 MEUR out from 376,6 MEUR in nominal terms).

This contribution is dedicated to the projects defined in order to address the implementation of Master Plan / ESSIP / IDP objectives, as well as to the enabling activities which support / facilitate the accomplishment of these projects.

6.2 NAV Portugal

NAV Portugal's investment plan is summarised within the table below. Further detail on the synergies at FAB level and the appropriate references to the European ATM Master Plan is provided, and all the information required in order to comply with the Performance Regulation is provided in section 2 of the template version of the RP2 SOWEPP (Annex E).

Table 6.2: Summary of NAV Portugal's CAPEX programme (in Nominal prices)

Name of investment	Planned Amount of Capital Expenditures (in MEUR)					Total CAPEX for RP2
	2015	2016	2017	2018	2019	
LISATM V9.2	0.6	0.0	0.2	0.0	0.0	0.8
Lisbon ACC New System	0.0	7.4	4.5	1.7	6.5	20.1
Communication systems	2.1	1.4	0.5	0.3	0.3	4.6
Navigation systems	1.6	0.0	1.4	1.9	3.6	8.5
NORMAW - Norte e Madeira WAM	2.6	0.0	0.0	0.0	0.0	2.6
Lisbon Terminal approach Radar replacement	0.5	2.0	2.4	0.0	0.0	4.9
SSR Mode S	0.4	3.8	0.3	2.7	1.0	8.2
Buildings and electromechanical systems	0.9	1.7	0.6	0.4	0.4	4.0
Sub-total of **main CAPEX** above (1)	8.7	16.3	9.9	7.0	11.8	53.7
Sub-total other Capex (2)	0.1	0.3	0.0	0.0	0.1	0.5
Total CAPEX (1) + (2)	8.8	16.6	9.9	7.0	11.9	54.2

Source: NAV Portugal.

In summary, the total CAPEX foreseen for RP2 in NAV Portugal's investment plan is up to 54.2 MEUR. Detail per CAPEX project is provided for 53.7 MEUR, a 99% of the total amount of investment.

ANAC (Portuguese NSA) will assure that same investments are not charged in both reference periods. This fact will be achieved by comparing investment programmes for each period, analysing individual items and correspondent "enter into operation" dates. Assurance that cancelled investments are not charged to airspace users can be verified by comparing Investment Plan with actual capital expenditure for RP1.

Thus, cancelled or postponed investments, included in NPP for RP1, are being evaluated, but final assessment can only be done after 31st Dec 2014. The correspondent amount for depreciation and cost of capital will be deducted from the total determined costs, using the item "5.Other revenues", on the same horizon as for the recovery of costs exempt from cost sharing, i.e. from 2016 until 2019.

7 Interdependencies and trade-offs

Environment vs Capacity and Cost-Efficiency

Trade-offs between environment and cost-efficiency, are in many ways trade-offs made by the airspace users when looking for their better balance between the extra cost of fuel burnt, and the cost of route charges. The consequences of this balance made by airlines for business strategic reasons, has an impact on the air navigation services provision that is reflected in interdependencies between environment, capacity and cost-efficiency.

In addition, airspace users may decide to use wind optimised trajectories (in particular for long flights), or deviate from the shortest routes available for many reasons, for instance the meteorological conditions. These circumstances affect the performance outcome of the environment KPI, and induce an impact in both capacity and cost-efficiency.

Economic impact of the implementation of FRA in Lisboa FIR

The implementation of Free Route Airspace in Lisboa FIR (FRAL) has delivered more flight efficiency since 2009. The direct consequence is the environmental benefit for the society as a whole. CO_2 and other pollutant emissions have decreased, also representing a significant global cost saving.

In addition, the implementation of FRAL has consistently enabled relevant fuel savings for the airlines, estimated at around 12 MEUR per year. This circumstance has to be considered as part of the total economic outcome of the Air Navigation Services in Portugal.

Capacity vs Cost-Efficiency

Interdependencies between capacity and cost-effectiveness are clear: additional capacity has cost that in the end is borne by the airspace users via charges, and poor capacity generates delays whose costs are also bore by the airspace users.

SW FAB capacity targets, and more particularly reference values for ENAIRE and the five Spanish airports within the scope of the SOWEPP have been set considering the trade-offs with the cost-efficiency KPA.

8 Civil - Military dimension of the plan

At SW FAB level, the civil-military coordination is highly supported and developed through the participation of civil and military representatives in the operational board of the SW FAB, as well as in its working groups. This participation aims at the fulfilment of both civil and military ATM/ANS requirements at operational and technical levels through harmonised airspace management (ASM) processes as well as more collaborative application of the flexible use of airspace (FUA).

SW FAB FUA optimisation project

Sometimes the utilisation of ATS Routes is affected by the activity of Restricted Areas. Through the solutions proposed in ARN Version-8, the military should be able to have a more dynamic airspace allocation system with enhanced FUA application.

The aim of the SW FAB FUA optimisation project, as detailed in the "SW FAB Operational Board Common Plan 2014-2020", is to allow and obtain a civil-military coordination and agreement to ease the application of FUA concept in the area of responsibility in the SW FAB. The project is divided into activities and associated actions that lead to the implementation of ATS network improvements in the short term, and the definition of new actions with common solutions at FAB level, to be implemented during RP2:

- Implementation of ATS Network improvements that are part of the 2014-2019 "*European Route Network Improvement Plan*". These improvements are essentially the implementation of new conditional routes and revision of conditional routes availability in order to offer an increase of ATC capacity and, both civil and military, flight efficiency for overflights, arrivals and departures in SW FAB.

Figure 8.1: example of FUA measure planned within the 2014-2019 ERNIP (RNDSG ID 66.030) –
To adapt the availability of UL150 CJN - ASTRO - LABRO within Madrid UIR / Barcelona UIR

- Analysis implementation ATM civil-military coordination systems:
    - Implementation at SW FAB level, of an Airspace Management Tool (such as LARA, developed by EUROCONTROL).

- Identification of FAB Reserved Military Areas Data on both ATM systems.

- Plan definition for implementation of common solutions, expected by 2015, followed by the implementation process of the measures defined throughout RP2.

In addition, many SW FAB flight efficiency projects such as the Marseille and Bordeaux interface projects, or ATS network improvement actions regarding CDRs (see section 3), require civil coordination elements to be undertaken.

Spain

Current scheme of airspace management at the strategic level has been developed throughout 2013. Since then, different alternatives for improvement within the area of competency of CIDEFO ("*Comisión Interministerial Defensa Fomento"* - Spanish Joint Defence and Transport Ministries Commission) have been analysed.

CIDEFO is an inter-ministerial Commission formed by representatives of the Ministry of Defence and the Ministry of Transport. CIDEFO undertakes the co-ordination between both Ministries as well as advices to the Government in airspace policy matters, the flexible use of national airspace, the regulation of ANS/ATM and CNS, the civil use of military air bases and the effective safeguarding of aerodromes and navigation aids easements. CIDEFO is structured in a Commission and several high-level standing working groups, which report in a regular basis to the plenary session of the Commission.

PREA ("*Ponencia de Reestructuración de Espacio Aéreo*" – Airspace Structure Group) is one of these high-level groups, whose functions and competences have been recently updated in order to comply with the requirements settled down in Regulation (EC) Nº 2150/2005, laying down common rules for the flexible use of airspace. According to the agreement reached at the end of last year on the new rules of functioning of CIDEFO, PREA is now in charge of the analysis and study of all tasks related to the strategic management of the airspace (Level 1)

PREA must submit for approval issues to ensure the overall application of the flexible use of the airspace concept at all levels, to coordinate airspace management policy with neighbouring Member States and to identify the persons or organizations responsible for the execution of tasks at level 1. The results of these activities must be approved by the Commission. Other matters related to civil-military coordination at level 1 may be approved directly by PREA.

In order to provide PREA with the necessary support to perform its duties, CIDEFO will approve in July 2014 the creation of a working group which will support it, starting to work on the following activities:

- Update and improvement of the procedures for processing and management of those activities that require reservation or restriction of airspace.
- Improvement of the mechanisms for data storage requests, allocation, and actual use of airspace.
- Definition of new airspace structures.
- Improvement of the consultation mechanisms to meet users needs.
- Definition of changes in the flexible use of airspace that can be subject of safety assessments

FUA Level 1

During the first reference period, the work at strategic level on the analysis of all matters leading to a more efficient use of airspace has continued.

The civil en-route ATS provider is conducting a large analysis of the flight efficiency, focused on the most inefficient routes, taking into account that one of the main factors contributing to limit the route network efficiency is the management of reserved/segregated areas, as well as the use of longer routes attending to other airlines interests.

Measures for improvement such as definition of new CDRs through the affected areas, or the revision of boundaries of these areas, are being evaluated, in coordination with the users of the airspace and based on actual utilization of segregated areas. These measures have also considered the most penalized origin-destination city pairs.

In this context, the military ATS provider is working on the analysis of the information currently published in the AIP, with the aim of transforming the restricted areas (R) and danger areas (D) into temporary reserved areas (TRA) and temporary segregated areas (TSA). It is expected that a significant improvement of the flexible use of airspace will be achieved in the short-medium term.

FUA Level 2

Until now, planned activities within restricted and temporary segregated areas for military use have been quite adjusted to the real needs and use of the airspace. However, to plan activities within dangerous areas is more complicated because they are used for military training exercises.

At the request of the airlines, that indicated the need to know with one month in advance the reserved dangerous areas for military use, an internal procedure of the military ATS provider was established in order to require to their potential users to issue the requests for the use of that airspace with enough time in advance, consequently the detail information on the military training exercises was not available at that moment.
Currently the internal military procedure is under revision to allow users to better plan the activities in the short-medium term, in order to reduce the difference between the hours allocated by AMC and the hours actually used.

In addition, the military ATS provider is working very intensively in assessing the real needs of the use of airspace, analyzing thoroughly the activity and operational requirements of all the units.

In this framework, contacts are in place between civil and military ATS providers in order to implement the use of PRISMIL service, in order to facilitate the performance measurements of common civil and military airspace management (ASM) processes.

The Pan-European Repository of Information Supporting Civil-Military performance measurement (PRISMIL) is the online performance management service developed under the lead of EUROCONTROL's Directorate of Civil-Military ATM Coordination (DCMAC). It facilitates the implementation of civil-military performance measurements, and PRISMIL service, as part of the PRISMIL program, allows the collection, integration and storage of the relevant performance data. It aggregates and displays performance measurements, making it possible for users to monitor, manage and analyze the status and trend of their key performance indicators.

FUA Level 3

It is expected to continue with the management of FUA Level 3 in the same way as before. Civil and military ATCOs work physically together in all ACCs, using coordination procedures and communication channels established to allow actual real-time activation, deactivation or reallocation of airspace. These procedures are set up by means of Operational Letters of Agreement between the civil ATS units and the military control units and by direct communication between civil and military ATCOs. Therefore the timely and effective exchange of any modification of the planned airspace reservations is ensured, as well as the adequate notification of any modification to all affected users.

In the longer term, evolution of the Automated Air Traffic Control System (SACTA) will incorporate level 3 functions which will improve automation of the tactic activation/deactivation of military areas.

9 Analysis of sensitivity

9.1 Sensitivity to external assumptions

The whole scheme of the RP2 SOWEPP is subject to the actual variations of demand with respect to the traffic forecasts. The evolution of traffic affects targets and reference values set in all KPAs. ANSPs are the accountable entities more sensitive to external assumptions made with regards to traffic. They, together with users, bear the weight of traffic risk sharing in the context of the cost-efficiency targets and the charging scheme.

In addition, both traffic forecasts and the RP2 SOWEPP itself, are based on a moderate but positive evolution of the Iberian economy. Changes in the perspectives would have an impact on the plan. Alert mechanisms, together with the possible revision of targets foreseen in Article 17 of the Performance regulation, linked to the monitoring of the performance plans, are means that would allow dealing with changes affecting the external assumptions.

Spain

With relation to the traffic forecasts, in the case actual traffic exceeded them substantially, within a better economic situation scenario, tourism increasing beyond forecasted, recovery of the domestic flights, GDP improvement, etc. an impact on several areas could be expected, in particular in the following:

- Accomplishment of capacity targets, especially in the last two years of RP2, would be less certain due to limitation on resources.
- Annual improvement of KEA indicator would be slowed down to some extent.
- Increase of income could be used to reduce the pending amounts of the traffic risk sharing mechanism derived from the significant deviations experienced in RP1 traffic with respect to the National Performance Plan.

The progressive consolidation of the plans associated to the PCP deployment could have some effect on the distribution of investment among the different projects, and a restructuration may be needed.

Portugal specific economic assumptions and considerations

The latest economic forecast published by IMF in April 2014– World Economic Outlook – points out to an improvement of 1.2 percent for the Portuguese economy in 2014, after a recession in 2013 (for the third consecutive year) of 1.4%, with a gradual recovery, that is expected to reach 1.8% in 2019.

For 2014, household consumption is finally expected to recover (0.7%), based on improved consumer confidence and less uncertainty, while public investment is expected to have a significant rise (6.6%). Exports will continue to boost the economic growth with an estimated increase of 5.5 percent. The construction sector is expected to remain a drag on activity, while the required fiscal consolidation will continue to narrow the domestic demand.

In line with the recent improvements of the activity, the downside risks to the near-term macroeconomic outlook have lessened somewhat, but the medium-term outlook remains unchanged from the previous forecasts, with a real GDP growth gradually strengthening to reach 1.8 percent by 2019, accompanied by a current account surplus that is projected to reach, by that time, 2.6 percent of GDP.

Having in mind the globalization of international air transport and gradual liberalization of international air services, as well as the open nature of the Portuguese economy, the economic global trends for the main economic areas and their respective impact on the traffic, shall be taken into consideration, because air navigation sector performance is heavily

reliant on these external developments. As a reference, IMF estimates for the 2nd Reference Period (2015 – 2019) are that GDP will grow around 1.9% and 3.9% p.a., in the European Union and the whole World, respectively.

9.2 Comparison with previous performance plan

The Performance Regulation 390/2013 applicable for RP2 has introduced a few main essential changes with respect to Regulation 691/2010 in force when RP1 performance plans were drawn:

- FAB perspective: performance plans for RP2 must be adopted at FAB level, while in RP1 they could be National, and this was the case for Portugal and Spain.
- Gate-to-gate perspective: for RP2 mandatory targets have to be set in both en-route and terminal scopes in all KPAs except environment, while in RP1 there were only mandatory targets in the en-route scope.
- KPIs: the number of key performance indicators in RP2 is larger.
- Incentive schemes: for RP2 a financial incentive scheme is mandatory at least in the capacity KPA, while this was not the case in RP1.

All the elements aforementioned, introduce important differences between the RP2 SOWEPP and the Portuguese and Spanish National performance plans for RP1. Considering this, the comparison with previous performance plan targets is set out within the table below.

Table 9.a: Summary RP1 and RP2 Performance Plan targets and reference values

KPA	RP1	RP2
Portugal		
Safety	Only monitoring	See SW FAB targets
Environment	Not applicable	See SW FAB targets
Capacity	**En-route ATFM delay/flight:** 0.15 min/flight by 2014	**En-route ATFM delay/flight:** Portugal allocation of FAB target: 0.13 min/flight by 2019 **Arrival ATFM delay/flight:** 0.60 min/flight for each year of RP2
Cost-Efficiency	**En-route DUC:** Portugal - Lisboa: 34.14 by 2014 (2009 EUR). Annual -7.7% improvement through RP1.	**En-route DUC:** Portugal - Lisboa: 34.38 by 2019 (2009 EUR). Annual +1.2% evolution through RP2 (2014-2019). **Terminal DUC:** Portugal: 136.43 by 2019 (2009 EUR). Annual -3.1% evolution through RP2 (2014-2019).
Spain		
Safety	Only monitoring	See SW FAB targets
Environment	Not applicable	See SW FAB targets
Capacity	**En-route ATFM delay/flight:** 0.50 min/flight by 2014	**En-route ATFM delay/flight:** Spain allocation of FAB target: 0.27 min/flight by 2019. **Arrival ATFM delay/flight:** 0.80 min/flight for each year of RP2.
Cost-Efficiency	**En-route DUC:** • Spain Canarias: 56.84 by 2014 (2009 EUR). Annual -3.7% improvement through RP1. • Spain Continental: 66.92 by 2014 (2009 EUR). Annual -1.8% improvement through RP1.	**En-route DUC:** • Spain Canarias: 55.38 by 2019 (2009 EUR). Annual -2.7% improvement through RP2. • Spain Continental: 59.06 by 2019 (2009 EUR). Annual -2.1% improvement through RP2. **Terminal DUC:** Spain: 123.21 by 2019 (2009 EUR). Annual -3.2% improvement through RP2.

KPA	RP1	RP2
SW FAB		
Safety	Not applicable	**EoSM:** • NSAs: level C by 2019 • ANSPs: level D by 2019 **Application of the RAT:** • Ground score: 100% by 2019 • Overall score: 80% in SMIs and RIs, and 100% in ATM-S by 2019 **Just culture:** elaboration of FAB policy and plan.
Environment	Not applicable	**Average horizontal en route flight efficiency of the actual trajectory (KEA):** 3.28% by 2019.
Capacity	Not applicable	**En-route ATFM delay/flight:** 0.30 min/flight by 2019
Cost-Efficiency	Not applicable	Not applicable

10 Implementation of the plan

The governance structure of the SW FAB includes a "Supervisory Authorities Committee". Appropriate mechanisms will be developed within the context of the SW FAB Supervisory Authorities Committee for the joint monitoring and oversight of the implementation of the RP2 SW FAB Performance Plan at FAB level. NSAs shall coordinate to put in place processes for the joint assessment of the information monitored and, if applicable, the corrective measures proposed in case over a calendar year, FAB targets are not met. These mechanisms and processes will encompass at least the annual monitoring of the implementation of the RP2 SOWEPP, and will allow anticipation whenever performance targets risk not being achieved.

NSAs will monitor the performance of the accountable entities against the RP2 SOWEPP at National level. AESA and ANAC will develop adequate procedures for the monitoring of the implementation of the RP2 SOWEPP at National level. These procedures will be built taking advantage of NSAs lessons learnt from their oversight activities and from the monitoring activities during RP1, and in coordination with the accountable entities.

Actual performance against National targets and reference values established in the RP2 SOWEPP will be monitored at least on a quarterly basis. For this purpose, appropriate mechanisms will be designed to determine whether targets are evolving according to a trend that would allow meeting the target or not. The monitoring procedures will include as well, mechanisms for the assessment of the corrective measures proposed in case targets are not met over a calendar year, or of there is risk of not meeting the target during the year.

The National monitoring scheme will include the collection and supervision of the ANSPs' annual reports, annual plans and 5-year business plans. In addition, FAB and National schemes will consider a follow-up of the implementation of the action plans detailed in the RP2 SOWEPP

The Performance Regulation establishes (Article 18) that NSAs shall report to the Commission on the implementation of the performance plan no later than 1 June each year. In order to meet this requirement, accountable entities will report actual performance in the previous RP2 year to the appropriate NSA by 1 May the following year, or earlier if there is a more restrictive deadline established by the Regulation (for instance, 1 February deadlines established in Annex V of the Performance Regulation).

11 Public consultation

Four public consultation meetings have taken place during the elaboration of the RP2 South West FAB Performance Plan:

- Portugal RP2 cost-effectiveness stakeholder consultation, 10 April 2014.
- Spain RP2 cost-effectiveness bilateral meeting, 24 April 2014.
- Spanish Airport and ANSP National forum, 25 April 2014.
- RP2 SW FAB Performance Plan Consultation, 20 May 2014.

Portugal and Spain NSAs arranged bilateral meetings focused only on cost-efficiency and open to EU-wide airspace users. In addition, AESA (the Spanish NSA) presented the main elements of the operational part of the RP2 SOWEPP. Discussion focused on environment and capacity targets, and in particular Spain allocation.

Comments circulated and views raised during these first three thematic consultation meetings, were taking into account when drafting the consultation document that was distributed among main stakeholders for the SW FAB consultation meeting held in Madrid on May the 20th.

A summary of the comments made by the users, together with the responses made by the NSAs and the reference in the final SOWEPP is provided within a table in this Annex.

More relevant information regarding the SW FAB consultation meeting (meeting agenda, attendance list, slides, minutes, written comments, etc) is provided in Annex A to this RP2 SOWEPP document. Some more information on the consultation meetings is shown in section 1.3 of the RP2 SOWEPP template version (Annex E).

Stakeholder	Topic	Comment	NSA Response – Final RP2 SOWEPP	Reference to consultation document and final RP2 SOWEPP
Airline community: ACETA	General	RP2 SOWEPP performance targets should respond to the following overall goals: • Be built on the basis of realistic traffic forecasts. • Represent improvement in every area. • Seek overall European convergence. • Lay out an ambitious scenario able to allow the fulfilment of the EU-wide targets.	Noted. Final RP2 SOWEPP has tried to reflect and adequate balance taking into consideration users' concerns	See all document
IATA	General	The SW-FAB draft performance plan is not in line with the PRB draft PP template. (This comment applies in particular to cost-efficiency)	The consultation document was provided in a readable format to facilitate discussion. The final version of the SW FAB Performance Plan document includes the PRB template version in Annex E.	Annex E of the RP2 SOWEPP.
IATA	Macro-economic	Portugal and Spain inflation figures are aligned with the latest IMF inflation forecast (with the exception of the year 2016: Spain forecast a 0.69% inflation rate while the IMF forecasts 0.90%).	Spain inflation forecast for 2016 is 0.9% (actually 0.898 %) both in the consultation document and in the final version of the SW FAB Performance Plan.	Table in point 1.15 of the consultation document. Section 1.5 of RP2 SOWEPP.
IATA	Traffic forecasts	Both Portugal and Spain are using the STATFOR low scenario in their en route traffic forecast. It is believed that traffic increase will be more aligned with the STATFOR base scenario, especially considering the growth in GDP rates in both countries (which will have a multiplier effect on air traffic growth in return). In such a situation, Portugal and Spain are required to provide a sound justification on the choice of the low scenario or to adjust traffic assumptions upward.	In the case of cost-efficiency, the traffic forecast chosen is consistent with the reference for the establishment of the RP2 EU-wide targets. In addition, low scenario is the business option chosen by the ANSPs who are the only accountable entities bearing with the burden of the traffic risk. Lessons learnt from RP1 advice a more conservative approach. Considering the significant traffic deviations in years 2012 and 2013, where unit rates were fixed using traffic base scenario and significant revenue losses have been assumed by the ANSPs, determined unit costs are established on the basis of the STATFOR Feb2014 traffic forecast - low scenario - for RP2. However, this low scenario is still quite ambitious for Portugal, indicating a growth of almost 6% for 2015. Additionally the May 2014-2015 STATFOR forecasts (Document 533 2-year SUF/STATFOR published by	-

Stakeholder	Topic	Comment	NSA Response – Final RP2 SOWEPP	Reference to consultation document and final RP2 SOWEPP
			EUROCONTROL) reduces prevision of annual growth to 2.8%.	
Airline community: ACETA	Traffic forecasts	The STATFOR low scenario chosen for the traffic forecasts is considered too conservative. Traffic forecasts set the reference for the deployment of resources and systems. Therefore, SOWEPP traffic forecasts which are below the expected figures would lead to a service provision unable to cope with the actual demand. Consequently, the STATFOR base scenario should be adopted in the RP2 SOWEPP.	The same answer provided to IATA applies in this case. In addition, concerns with respect to the fact that the system and deployment of resources are planned considering the demand. The issue is noted, as the monitoring scheme during the implementation of the plan will follow up actual performance to make sure targets are met and analyse possible deviations.	-
Airport operators: ENAIRE Aeropuertos S.A.	Traffic forecasts	Arrival movements forecast made by the Spanish airport operator in May 2014 show higher traffic increases than those of the RP2 SOWEPP, in particular for LEMD. Alternative figures are proposed.	Noted	-
ENAIRE	Traffic forecasts	The use of a STATFOR Low traffic profile (ref. February 2014), both for Capacity and for Cost-Efficiency, is considered adequate and supported as it is completely coherent with the Decision adopted by the Commission on 11th March when establishing the traffic forecast underpinning the European Targets.	Noted	Section 1.5 of RP2 SOWEPP.
IATA	Safety	We appreciate that SW-FAB proposes to achieve safety targets in line with the EU-wide targets. The overall approach to safety is considered to be lacking a FAB perspective. There is no overall strategy and progression between the entities is at differing rates suggesting little best practice/resource sharing.	Noted As explained during the meeting NSAs and ANSPs are working together to share practices and establish a common FAB approach. This in fact is the target for RP2. Portugal and Spain NSAs and ANSPs are working to develop a common safety policy and training material for the SW FAB. In addition, a common safety policy is one of the priorities of the NSA groups, and a common safety policy is expected to be finalised by the end of this year. NSAs are developing common inspection procedures	-

Stakeholder	Topic	Comment	NSA Response – Final RP2 SOWEPP	Reference to consultation document and final RP2 SOWEPP
			and framework as well as common safety oversight activities. There is an effort to join teams and facilities. It is expected to exploit synergies to take full advantage of both partners. The obligation as an NSA is to have adequate resources in place and number. The intention is to have a robust plan and exploit synergies. The challenge is to save effort	
IATA	Safety	The activities to support progression towards achieving the targets by 2019 are in some cases unclear. In particular, ANAC provides very limited information on how targets will be achieved.	Safety plans were outlined in the consultation document in section 2. In particular AESA's safety plan is summarised in the bullets in paragraph 2.8 while ENAIRE's is provided in the bullets in paragraph 2.11. AESA is currently level B, in only four questions of the EoSM questionnaire. ENAIRE is currently level C globally, and in 8 questions of the questionnaire distributed in 4 of the 5 MOs. The EoSM plan outlined will allow ENAIRE to be level D globally by 2019. Portugal NSA expects to achieve level C before the end of 2019. Moro information has been included in the Safety chapter.	Section 2.1 of RP2 SOWEPP.
IATA	Safety	The approach to OVERALL application of the Risk Analysis Tool (RAT) methodology is a concern given the current levels of performance are considerably far from the target in the case of Spain and in the case of Portugal its appears the current performance level is not known.	RAT overall score reference values for Portugal and SW FAB targets for 2015 and 2016 have been included. The plan recognises current figures of application of the RAT overall score in Spain are far away from the target values established at EU-wide level for 2017. AESA. Nevertheless, gradual progress towards the EU-wide targets is expected in the next few years due to the establishment of arrangements at National level to ensure that the overall score can be determined making use of validated information from the stakeholders (mainly ANSPs which are currently at almost 100% of ground score application). Some other	

Stakeholder	Topic	Comment	NSA Response – Final RP2 SOWEPP	Reference to consultation document and final RP2 SOWEPP
			activities such as the update of working procedures, the standardisation of the use of RAT methodology and the harmonisation of safety data repositories are planned as detailed in the RP2 SOWEPP. All these elements, will contribute to the fulfilment of the targets.	
ENAIRE	Safety	ENAIRE N.A is committed to all the policies promoting safety increase.	Noted	-
Airline community: ACETA	Safety	Safety targets are aligned with EU-wide targets. No additional concern	Noted	-
IATA	Environment	We appreciate that the SW-FAB horizontal en route flight efficiency targets are in line with the FAB reference values proposed by the Network Manager. The current levels of horizontal en route flight efficiency within SW-FAB are relatively poor compared with other FABs. We therefore see considerable improvement possibilities, in particular across Spanish airspace.	Noted Within the plan it is admitted that the SW FAB is the worst in class EU-wide in horizontal flight efficiency, and this is particularly a Spanish issue. That is one of the main reasons why the performance improvement the SW FAB has to make in RP2 is the sharpest and will be based mainly on actions affecting Spanish airspace. Anyway, the targets are consistent with the EU-wide targets and the reference values provided by the NM.	-
IATA	Environment	Given the planned activities to address the KPI, we believe an even better level of horizontal en route flight efficiency is achievable and encourage SW-FAB to expedite deployment of FRA across Spanish airspace.	RP2 SOWEPP only contains solid actions consistent with the European Route Network Plan, what can be reasonably achieved in RP2. Activities planned point out the targets set can be achieved. Nevertheless, quantifying precise performance benefits out of the implementation of specific actions is not simple, and there is lack of experience on the matter in the case of the SW FAB (see "Quantification of the benefits and trade-offs" sub-section in the environment chapter of the plan). Anyway, some elements of the Flight efficiency plan sub-section have been revised and redrafted. In addition, some implementation and benefit delivery	Section 3 of RP2 SOWEPP.

Stakeholder	Topic	Comment	NSA Response – Final RP2 SOWEPP	Reference to consultation document and final RP2 SOWEPP
			dates have been revised.	
Airline community: ACETA	Environment	The flight efficiency improvements proposed in the targets are considered very little ambitious. The improvement is only of 0.57 percentage points between 2015 and 2019. SW FAB target should be set at 2.60 like the EU-wide target.	The EU-wide target does not establish a performance level every FAB must achieve, but the global aim at Network level. The Network manager allocated the EU-wide target to every FAB, estimating the adequate contribution of each one. The RP2 SOWEPP environment targets are fully consistent with this evolution estimated by the NM and are hence consistent. The SW FAB is currently worst in class, and the targets represent 1% improvement, the greatest effort any FAB will have to make in RP2 at Network level.	-
ENAIRE	Environment	ENAIRE N.A. supports the environment targets considering the current level of efficiency in the Spanish airspace, and taking into account that a share of responsibility with other involved actors to execute the planned improvements is needed.	Noted	-
IATA	En-route capacity	SW-FAB, Spain and Portugal en route ATFM delay per flight targets do not meet the FAB reference values by a considerable margin in any year of RP2. Additionally, we note that the NetOps assessment of SW-FAB planned capacity performance is considerably worse than the already poor proposed target. Additional effort to meet the target is required especially considering that the STATFOR low-case scenario for traffic evolution has been applied which we consider to be overly pessimistic.	A huge effort was made by ENAIRE and NAV Portugal to improve capacity planning trying to minimize impact in airspace user´s considering the new traffic forecast values (circulated in February 2014). SW FAB recognizes the excellent coordination between SW FAB and NM to improve capacity plans in a very short-time with a significant improvement taking into consideration the "unexpected" huge traffic demand presented by STATFOR last February. As a consequence, new capacity plans coordinated with the NM forecast min/flight delay values per annum of 0.43 / 0.50 / 0.53 / 0.58 / 0.60 / 0.64 (between 2014 and 2019), significantly much better compared to previous capacity plans. In the case of Portugal, who has finally chosen STATFOR base scenario (see section 1.5 of the plan)	Section 4.1 of RP2 SOWEPP

Stakeholder	Topic	Comment	NSA Response – Final RP2 SOWEPP	Reference to consultation document and final RP2 SOWEPP
			reference values are fully consistent with the delay forecast estimated by the NM and included in the NOP. In the case of Spain, the gap between the reference values proposed and the delay forecast is not insurmountable, and the figures proposed are expected to be met throughout RP2 considering also that Spain foresees flights will evolve in RP2 according to the STATFOF low case scenario (delay forecasts are estimated making use of a base scenario traffic). In the short term SW FAB delay forecast is close to SW FAB target. It is recognized that SW FAB capacity improvements in the NOP will have an impact in the cost-efficiency indicator, which will be have to make a coherent balanced trade-off between cost and capacity. Consequently, new initiatives in airspace design and procedures will be evaluated to increase capacity avoiding increase in costs for Airspace User's. Differences between target and forecast values are higher in the long term, but with enough time to implement capacity measures to close the gap between delay target and forecast. These capacity measures will be evaluated in cost-effective manner. Anyway, comparisons with respect to reference values are practically impossible, since the traffic assumptions, NOP forecasts and local capacity plans have been substantially revised since October 2013. The targets have been chosen to be realistic and achievable considering current plans, and all the necessary efforts to meet those targets will be made. They have also to be seen in the context of a 74%	

Stakeholder	Topic	Comment	NSA Response – Final RP2 SOWEPP	Reference to consultation document and final RP2 SOWEPP
			improvement in the indicators' behaviour during the first 2 years of RP1 and furthermore strict cost-efficiency measures and substantial improvements in capacity and other QoS indicators. In conclusion, taking the aforementioned considerations into account, the targets are coherent and challenging when compared to the NOP forecasts, which indicate a worse evolution of delay in Spain.	
Airline community: ACETA	En-route capacity	The reference value proposed for Spain (0.48 minutes of delay per flight) is not reasonable. The performance level in 2013 was at 0.41. A reference value of 0.40 seems more appropriate, considering the need to encourage performance improvements once a financial incentive scheme is established.	Noted It is a fact that ENAIRE is currently performing below the Spain allocation of the SW FAB target. Nevertheless, it must be noted that the targets for Spain in RP1 consisted in an evolution from 0.80 in 2012 to 0.50 in 2014. Targets represent a strategic compromise, and in RP1 ENAIRE has always performed below the target. RP2 reference values for Spain represent a stabilisation of the delay performance levels in a growing traffic environment.	-
ENAIRE	En-route capacity	ENAIRE N.A. evaluates the 0.48 minutes of delay per flight en-route and the 0.8 minutes of Terminal/Airport arrival delay targets as a rational approach, taking into account the evolution of the indicator throughout the first 2 years of RP1 (74% improvement achieved) and the optimum behavior of other quality of service indicators. It is also viewed as a coherent and challenging target when compared to the NOP forecasts, which indicate a worse evolution of delay in Spain using a base STATFOR traffic scenario.	Noted	-
ENAIRE	En-route capacity	Although the current South West FAB Performance Plan proposal attempts to balance the continuation of a strict policy in terms of cost-efficiency with the expectation of improving the performance in the other	Noted	-

Stakeholder	Topic	Comment	NSA Response – Final RP2 SOWEPP	Reference to consultation document and final RP2 SOWEPP
		Key Performance Areas, it has to be stressed that the targets in capacity are ambitious with the foreseen traffic increase and the context of restricted expenditures, and their achievement will require the effective and efficient accomplishment of all the planned actions.		
IATA	Incentive scheme	On the incentive scheme, we consider that the maximum bonus/penalty should be limited to a smaller amount than 1% of revenues during RP2 as this scheme is relatively immature. We would suggest not more than 0.5% be considered.	Changes have been introduced in the maximum level of the incentive. The maximum incentive has been lowered to 0.50% of the income.	See section 4.3 of the RP2 SOWEPP vs section 4.3 of the consultation document.
IATA	Incentive scheme	In terms of the design of the scheme, we request the application of an asymmetric dead band, whereby a bonus is relatively more difficult to achieve than a penalty. We believe that this approach to be more equitable since the airspace users are already funding the capital and operational capabilities to deliver any level of service and further, that the impact of delay on airspace users carries significantly greater costs in terms of fuel and network impact whereas there is no additional impact on ANSPs.	Noted A symmetric formula has been chosen so that, for results at an equal distance from the target in both directions, an equal level of bonus or penalty is applied. This is in in line with the provision of the Performance and Charging Regulations regarding incentives and it is considered the most appropriate approach for this first run of the incentives scheme.	-
Airline community: ACETA	Incentive scheme	The incentive scheme proposed (even with a maximum level of bonus/penalty set at 1% of the income) is considered reasonable as long as the target is set at the adequate level.	Noted	-
ENAIRE	Incentive scheme	ENAIRE N.A. agrees with the application of incentive mechanism only to the en-route capacity indicator, as the implications on the Terminal unit rate would be only partial (it is under contract agreements between Airports and Air Navigation companies) and complex when applied in the Spanish legal context	Noted	-
ENAIRE	Incentive scheme	The applicability of the incentive scheme at FAB level is supported, as well as the establishment of the maximum incentive value around 0.75% of the ANSPs	Noted Transition area is fixed at 0.14 around the target.	See section 4.3 of the RP2 SOWEPP vs section 4.3 of the

Stakeholder	Topic	Comment	NSA Response – Final RP2 SOWEPP	Reference to consultation document and final RP2 SOWEPP
		income. The maintenance of a symmetric function, addressing all causes with a buffer for unexpected behavior on those outside ANSPs control, is strongly recommended in order to really incentivize a good performance achievement. With respect to the specific values proposed in the document, a proposed transition area of 0.14 is considered to be a more reasonable value, taking into account the overall function and the potential impact on airspace users.	Symmetry of the incentive function is maintained. The KPI with all delay causes is the variable used in the calculation of the incentive. A 20% buffer is introduced for non-ATC causes.	consultation document.
NAV Portugal	Incentive scheme	The possibility of setting the maximum incentive value at 0.5% of the total income of the ANSP related to the service is completely supported in this first run of the incentives scheme	Noted Maximum incentive is lowered to 0.50%.	See section 4.3 of the RP2 SOWEPP vs section 4.3 of the consultation document
Airline community: ACETA	Terminal capacity - Spain	The target set for Spain (0.80 minutes of delay per flight) is too high considering historical performance. It is true that some of the years in the recent period were worse than the target proposed in terms of the KPI, but this situation was in part due to exceptional circumstances. A reasonable target would be 0.47 (the actual value of 2012). If the target is set at 0.47, the reference values proposed for LEBL, LEMD and LEPA should all be reduced to 0.53.	Noted. The average value of the KPI for the 2008-2013 period was 0.92 min/flight. It is true that 2010 and 2011 were unusually bad years due to many factors such as labour unrest. Nonetheless, even taking these two conflictive years, the average is 0.60 min/flight. The value proposed by the users (0.47) is in line with the performance delivered in the latest years (2012-2013). In the context of the RP2 SOWEPP, the target and reference values set have considered overall performance in the past years, together with the traffic forecasts, delay causes and future developments.	-
Airport operators: ENAIRE Aeropuertos S.A.	Terminal capacity - Spain	The overall Spanish target is considered too high. Based on past performance (excluding the exceptional circumstances of some years like 2010 and 2011) the target should be set at 0.57 instead of 0.80. This new target would lower the reference values for all airports (except LEMD and LEMG). ENAIRE Airports proposal is	Noted	-

Stakeholder	Topic	Comment	NSA Response – Final RP2 SOWEPP	Reference to consultation document and final RP2 SOWEPP
		as follows: • Spain target: 0.57 min/flight • LEMD: 0.87 min/flight • LEBL: 0.27 min/flight • LEPA: 1.08 min/flight • LEMG: 0.13 min/flight • GCCC: 0.23 min/flight		
Airport operators: ENAIRE Aeropuertos S.A.	Terminal capacity - Spain	The infrastructure of Spanish airports is able to cope with traffic levels above current levels of demand, as they have been all upgraded during the last decade before the traffic downturn. In addition, weather issues in Spain are not significant when compared to the rest of Europe. Consequently, target levels should be lower than the proposed. ENAIRE Aeropuertos perceives the targets and associated plans, as lack of compromise for increasing capacity and showing flexibility during RP2, which would go against SES principles. No PCP measures have been included in the SOWEPP, in particular the re-structure of airspace areas with capacity issues. In addition, some inconsistencies regarding A-CDM implementation dates have been found in the document. In particular regarding LEBL and LEPA.	Noted The dates of the implementation of A-CDM have been revised.	See section 4.2 of the RP2 SOWEPP
IATA	Terminal capacity	The Performance Regulation requires that terminal and airport capacity targets are set at national level with a breakdown at airport level for monitoring purposes. Spain has proposed to establish such a scheme; however there is no scheme proposed for Portugal.	Portuguese terminal capacity targets have been introduced.	See section 4.2 of the RP2 SOWEPP
IATA	Terminal capacity	For Spain, the approach to establishing a local terminal and airport ANS ATFM arrival delay per flight is unclear. There is no documented rationale for the proposed target of 0.8 min/flight. Given the relatively low levels of delay experienced during 2013 and	Noted	-

Stakeholder	Topic	Comment	NSA Response – Final RP2 SOWEPP	Reference to consultation document and final RP2 SOWEPP
		considering that the STATFOR low-case scenario for traffic evolution has been applied, the proposed Spanish target is lacking ambition. Additionally, the considerable capacity improvement actions planned during RP2 should deliver better performance and therefore encourage the setting of more ambitious targets		
ENAIRE	Terminal capacity - Spain	Targets set for Spain and reference values allocated for Spanish airports are consistent with historical performance. Records show ATC delay causes have only represented 35% of the delay in the 5 Spanish airports in average, while Aerodrome capacity has represented 25% of the delay, and meteorology 33%. The weight of met delays is considerable in some of the airports, and the evolution of the capacity of the infrastructure is constrained in some cases. Considering these circumstances, the targets set in other FAB performance plans, and the measures planned, RP2 SOWEPP targets are consistent.	Noted	-
IATA	En-route cost efficiency - Portugal	Portugal DC is increasing by 1.9% p.a. on average over the 2015-2019 period while the DUC is increasing by 1.3% p.a. on average. Such increases are unacceptable and Portugal is urged to re-adjust its DC and DUC according to the EU-wide target of 16.5% decrease in DC and 3.3% average p.a. decrease in DUC. Airspace users appreciated Portugal good performance over RP1, but such good performance does not mean that Portugal is exonerated from contributing toward the RP2 targets.	Cost estimates for RP2, combined with the STATFOR low traffic forecast, translates into a 3.8% average reduction of the DUC, over the period 2009-2019. Even considering only the 2nd Reference Period, the DUC is actually decreasing 0.4% in average, instead of the 1.3% increase, quoted in IATA comments above. Noteworthy is that Portugal was the main contributor to the EU-wide cost-efficiency target in RP1 in the revised PP - annual average decrease of 7.7% in unit rate versus a EU-wide target of -3.5% - and also the level of local unit cost, which is 41% below the European average DUC.	-
IATA	En-route cost efficiency -	ANSP staff costs are increasing by 12% over RP2 (and by 22% over the 2014D-2019D period!). We note that the draft performance plan mentions the need to	Regarding ANSP, the real determined costs are increasing at an annual pace of 1.0% in RP2, mainly due to following key factors: i) a meaningful	-

Stakeholder	Topic	Comment	NSA Response – Final RP2 SOWEPP	Reference to consultation document and final RP2 SOWEPP
	Portugal	increase salaries. Nonetheless, given that the latest ACE report shows that NAV Portugal has amongst the highest ATCO employment costs per ATCO-hour (gate-to-gate), we strongly believe that there is room to reduce staff costs rather than increasing them. A 22% increase over 2014-2019 is not acceptable.	investment plan and ii) a real 2% salary increase, following a period of four years where salaries have been frozen (and even reduced in 2012) and there were no career progression, due to the fact that Portugal was under the "European Support Mechanism", situation that is not sustainable for the future.	
IATA	En-route cost efficiency - Portugal	The plans also mentions investment as a reason for not meeting the EU-wide target without any further information. Furthermore, while the asset base is increasing by 25% over RP2, depreciation costs are increasing by 84%. Such a difference is of concern, especially considering the lack of information related to investments planned by Portugal. More information and transparency are requested on investments, especially as regards amortization periods, ER/TNC allocation, shift of investments from RP1 to RP2, etc.	All details concerning the investment plan for RP2 are included in the relevant chapter, namely the contribution to the European ATM MP, the amortization periods, ER/TNC allocation, etc.	-
IATA	En-route cost efficiency - Portugal	Supervision costs are increasing by 6% over the period (and by 46% over the 2014D-1019D period!). There is no justification for such an increase, which is not acceptable.	In the past, the supervision costs were underestimated. NSA has been improving its powers and competences regarding the Air Navigation Services Oversight and SES. In order to ensure its role will be necessary to increase the staff in the operational areas, the 2nd reference period.	-
IATA	En-route cost efficiency - Portugal	All SAR and supervision costs are allocated to en route. The portion of these costs attributable to terminal navigation must be shifted to TNC DC.	The allocation of terminal costs was set up according to Charging Regulation, which does not include the SARs services	-
IATA	En-route cost efficiency - Portugal	Table 2 - NAV Portugal display an amount ('000 EUR) of 6.826 for 2016, 2017, 2018 and 2019 for costs exempt from cost sharing. What is the justification for this yearly amount?	As detailed in the Additional Information Annex and NSA Monitoring Report for 2013, the amount of € 6.826K included in Table 2 of Reporting Tables for years 2016-2019 is related to the recovery of costs exempt from cost sharing (2012 and 2013 actuals and 2014 estimate). The total amount for RP1 has been divided over four years to smooth the impact on unit rates, starting in 2016, the first year where the total	-

Stakeholder	Topic	Comment	NSA Response – Final RP2 SOWEPP	Reference to consultation document and final RP2 SOWEPP
			real cost for the 1st Reference Period is actually known.	
IATA	En-route cost efficiency – Spain Continental	While we note that Spain CON DC and DUC are decreasing, the EU-wide targets of a 3.3% average p.a. decrease (for a total 16.5% decrease) in the DUC over RP2 are still far to be met and it is expected that the tables will be re-adjusted accordingly. Similar to Portugal, the good performance of Spain over RP1 is appreciated by airspace users, but it does not exonerate Spain from contribution toward the EU-wide target for RP2	Noted. Slight modifications have been made with respect to the consultation document. Average improvement in RP2 is an average DUC reduction of -2.0%. It also has to be noted that overall improvement since 2009 is -4.5% which goes way beyond the EU-wide. RP2 evolution is not that in part good due to the fact that cost-efficiency levels in 2014 are already very good. Targets have to be considered overall, Spain should not be penalised for having over-performed in the past. In addition, the analysis performed by IATA is based on the evolution taking 2015 as the baseline, which is not consistent with the performance framework established by the EU Regulation for RP2 In order to compare with the EU-Wide targets, nevertheless, it is necessary to take into account the starting point for 2014 established according to the Commission (see decision 2014/132/UE on the European Targets, considerandum (12)) and the tool developed by the Commission to that effect. In this framework, Spain Continental complies both with the DC and the DUC recommended evolution for RP2, as already presented during the consultation meeting.	-
IATA	En-route cost efficiency –	ENAIRE employment costs per ATCO-hour, which were the highest in 2011, have subsequently decreased and such decrease should continue in order to meet	Noted The efforts made by ENAIRE up to now have led to	-

Stakeholder	Topic	Comment	NSA Response – Final RP2 SOWEPP	Reference to consultation document and final RP2 SOWEPP
	Spain Continental	the RP2 targets. It is believe that more efforts must be made on the staff cost side.	meeting the EU-wide target for RP2. ENAIRE keeps the commitment to moderation and austerity in its management.	
IATA	En-route cost efficiency – Spain Continental	Other operating costs are increasing over RP2: efforts could be made to control such costs in order to contribute to the RP2 targets.	There is a -20.4% decrease of the determined costs between 2015 and 2014. Though there is a slight increase of +0.5 % average for RP2. Despite this increase, there is an overall -15% decrease of the determined costs in RP2 (2019 vs. 2014).	-
IATA	En-route cost efficiency – Spain Continental	Depreciation costs are decreasing much faster than the asset base: what is the explanation for the non-correlation of the two?	Asset base includes current assets. If fixed assets were considered, there would be a much better correlation.	-
IATA	En-route cost efficiency – Spain Continental	The reduction in the cost of capital from 6.7% in RP1 is appreciated, though it was understood that it would be reduced at 5.2% over RP2 (reporting tables are displaying a higher level - from 5.4% to 5.6% - which should be adjusted). It is believed that additional efforts can be made if ENAIRE cost of capital is aligned is AEMET (4.1%).	Cost of capital depends on financial structure. ENAIRE has calculated it, as always, according to guidelines from -Steer Davies Gleave- consultants. There is a significant reduction of near 20% in cost of capital rate between RP1 and RP2.	-
IATA	En-route cost efficiency – Spain Continental	All SAR costs are allocated to en route. The portion of these costs attributable to terminal navigation must be shifted to TNC DC.	Noted	-
IATA	En-route cost efficiency – Spain Continental	The presence of revenue from other sources is welcomed by the users: it must be ensured that such revenue will be available over the whole RP2 period.	Budgetary estimated data is included.	-
IATA	En-route cost efficiency – Spain	Spain CAN DC and DUC are decreasing over RP2, which is welcome by airspace users, but they are decreasing at a slower rather than Spain CON DC and DUCs. Furthermore, the EU-wide targets of a 3.3%	Noted. Slight modifications have been made with respect to the consultation document. Average improvement in	-

Stakeholder	Topic	Comment	NSA Response – Final RP2 SOWEPP	Reference to consultation document and final RP2 SOWEPP
	Canarias	average p.a. decrease (for a total 16.5% decrease) in the DUC over RP2 are still far to be met and it is expected that the tables will be re-adjusted accordingly.	RP2 is an average DUC reduction of -2.7%. It also has to be noted that overall improvement since 2009 is -3.7% which goes way beyond the EU-wide. Once again, over-performance in RP1 should not be penalised by considering only RP2 in isolation. In addition, the analysis performed by IATA is based on the evolution taking 2015 as the baseline, which is not consistent with the performance framework established by the EU Regulation for RP2 In order to compare with the EU-Wide targets, nevertheless, it is necessary to take into account the starting point for 2014 established according to the Commission (see decision 2014/132/UE on the European Targets, considerandum (12)) and the tool developed by the Commission to that effect. In this framework, Spain Continental complies both with the DC and the DUC recommended evolution for RP2, as already presented during the consultation meeting.	
IATA	En-route cost efficiency – Spain Canarias	As Spain CAN mostly mirrors Spain CON, same comments as above related to staff costs, other costs, depreciation and asset base, cost of capital, allocation of SAR costs and revenue from other sources apply).	See comments made for Spain Continental, which also apply to this case.	-
Airline community: ACETA	En-route cost efficiency - Spain	The targets proposed for the Spanish charging zones are not ambitious when considering the EU-wide target for 2019, which is 49.10. Consistent targets would be set if the difference in terms of performance level between the Spanish targets and the EU-wide targets: • is only 10% by 2019, i.e. 54.01 in both Spain	Noted The estimates made by the stakeholder are not fully correct, as the EU-wide targets are set in 2009 EUR while the targets in the RP2 SOWEPP are presented in 2012, following PRB's template. RP2 SOWEPP targets expressed in 2009 EUR are: • Spain Canarias: 55.44 EUR by 2019,	-

Stakeholder	Topic	Comment	NSA Response – Final RP2 SOWEPP	Reference to consultation document and final RP2 SOWEPP
		Canarias and Continental; • or the same in 2019 and 2015, 54.44 in Canarias and 59.43 in Continental.	• Spain Continental: 59.33 EUR by 2019. As a matter of fact they are fully consistent with the stakeholder's demand (see bullet 2 of ACETA's comment).	
IATA	Terminal cost efficiency - Portugal	The proposed increase in the unit rate of 1.9% p.a on average with a 2.6% p.a. increase in DC is not in line with the PRB recommendation of a flat cost development. We urge Portugal to review the cost base for TNC in order to work towards a cost reduction or at least a stable development. Portugal mentions the investment plans and the salary increase as a justification for not meeting the target. Nonetheless, it is believed that with efficient investments and adequate depreciation timeline as well as much-needed continuous effort on salaries (again, Portugal has amongst the highest ATCO employment costs per ATCO-hour) it is possible to meet the EU target. It is therefore expected that the tables will be re-adjusted downwards.	Real terminal unit costs (in €2009 prices) are expected to decrease 1.6% over the period between 2009 and 2019, meaning a global reduction of about 15% over the horizon. Total terminal determined costs are expected to increase 2.6% in RP2, as a result of two main factors: i) an ambitious investment plan in accordance with the European ATM network global plan and ii) a real 2% salary increase, following a period of four years where salaries have been frozen (and even reduced in 2012) and there were no career progression, due to the fact that Portugal was under the "European Support Mechanism", situation that is not sustainable for the future. However, total terminal determined costs are expected to reduce at a pace of 0.4% per year, on the expanded horizon of the 10 years.	-
IATA	Terminal cost efficiency - Portugal	All terminal costs are attributable to the ANSP: the reporting tables do not display any terminal costs attributable to the MET provider or the NSA. Costs attributable to these entities for terminal must be excluded from en route costs and shifted to terminal costs.	Noted	-
IATA	Terminal cost efficiency - Portugal	A cost of capital pre tax rate of 7.8% (far from the 6.1% rate for en route) is unacceptable and must be adjusted downward, at the level of the en route cost of capital.	Noted	-
IATA	Terminal cost efficiency - Portugal	Same comments as for Portugal en route related to staff costs, other costs and allocation of SAR and supervision costs apply.	Noted	-

Stakeholder	Topic	Comment	NSA Response – Final RP2 SOWEPP	Reference to consultation document and final RP2 SOWEPP
IATA	Terminal cost efficiency - Spain	The proposed decrease in the unit rate of 3.2% p.a. on average with a 2.1% p.a. decrease in DC is in line with the PRB recommendation of a flat cost development, which is appreciated by airspace users. Same comments as for Spain CON en route related to staff costs, other costs, depreciation and asset base, cost of capital, allocation of SAR costs and revenue from other sources apply).	The only charging zone set in Spain for Terminal Charges meets EU-wide target for RP2.	-

12 Acronyms

ACC	Area Control Centre
ACDM	Airport Collaborative Decision Making
AEMET	Agencia Estatal de Meteorología (MET services provider in Spain)
ENAIRE	Aeropuertos Españoles y Navegación Aérea (En-route and terminal ANSP in Spain)
AESA	Agencia Estatal de Seguridad Aérea (Spanish NSA)
AMAN	Arrival Manager
ANAC	Autoridade Nacional de Aviação Civil (Portuguese NSA)
ANS	Air Navigation Services
ANSMET	Autoridad Nacional de Supervisión Meteorológica (Supervisor of MET services in Spain)
ANSP	Air Navigation Services Provider
ANSP-EA	Spanish Air Forces (Ejército del Aire) – ANSP function
APW	Area Proximity Warning
ASMT	Automated Safety Monitoring Tool
AST	Annual Summary Template Mechanism
ATC	Air Traffic Control
ATCO	Air Traffic Controller
ATFM	Air Traffic Flow Management
ATFCM	Air Traffic Flow and Capacity Management
ATM	Air Traffic Management
ATM-S	ATM-specific occurrences
ATS	Air Traffic Services
CAPEX	Capital Expenditure
CDR	Conditional Route
CEANITA	Comisión de Estudio y Análisis de Notificaciones de Incidentes de Tránsito Aéreo (Spanish Commission for the study and analysis of ATS incidents)
CEO	Chief Executive Officer
CFIT	Controlled Flight Into Terrain
CISM	Crisis Stress Management System
CWP	Controller Working Position
DMAN	Departure Manager
DUC	Determined Unit Cost
EASA	European Air Safety Agency
EC	European Commission
ECAC	European Civil Aviation Conference
ECR	European Central Repository
EFS	Electronic Flight Strips
EoSM	Effectiveness of Safety Management
ERNIP	European Route Network Improvement Plan
ERT-CZ	En-Route Charging Zone
EU	European Union
FAB	Functional Airspace Block
FABEC	FAB Europe Central
FIR	Flight Information Region
FL	Flight Level
FRA	Free Route Airspace
FRAL	FRA Lisboa
FRASAI	FRA Santiago Asturias
FRMS	Fatigue Risk Management System
FUA	Flexible Use of Airspace
GDP	Gross Domestic Product
GCLP	Gran Canaria Airport
HICP	Harmonised Indices of Consumer Prices
ICAO	International Civil Aviation Organisation
IFR	Instrument Flight Rules
IMF	International Monetary Fund
IPMA	Instituto Português do Mar e da Atmosfera (MET services provider in Portugal)
iTEC	Flight Data Processing
JC	Just Culture

KEA	horizontal en route flight efficiency of the actual trajectory
KEP	horizontal en route flight efficiency of the flight plan
KPA	Key Performance Area
KPI	Key Performance Indicator
LEBL	Barcelona Airport
LEMD	Madrid-Barajas Airport
LEMG	Málaga Airport
LEPA	Palma de Mallorca Airport
LPAZ	Santa Maria
LPHR	Horta
LPFL	Flores
LPFR	Faro
LPMA	Madeira
LPPD	Ponta Delgada
LPPR	Porto
LPPS	Porto Santo
LPPT	Lisboa
MO	Management Objectives
MTCD	Medium Term Conflict Detection
MSAW	Minimum Safe Altitude Warning
NAV	NAV Portugal: En-route and terminal ANSP in Portugal.
NAT	North Atlantic ICAO region
NEST	Network Strategic Tool (EUROCONTROL)
NM	Network Manager
NM	Nautical Mile
NOP	Network Operations Plan
NSA	National Supervisory Authority
NSA-EA	Spanish Air Force (Ejército del Aire) – Supervision function
NSP	Network Strategic Plan
PBN	Performance Based Navigation
PCP	Pilot Common Project
PP	Performance Plan
PRB	Performance Review Body
P-RNAV	Precision Area Navigation
QMS	Quality Management System
RAT	Risk Analysis Tool
RI	Runway Incursion
RNDSG	Route Network Development Sub-Group
RP	Reference Period
SACTA	Sistema Automatizado de Control del Tránsito Aéreo (Automated Air Traffic Control System)
SAR	Search and Rescue (Portugal)
SES	Single European Sky
SID	Standard Instrument Departure
SMI	Separation Minima Infringement
SMS	Safety Management System
SOWEPP	SOuth WEst FAB Performance Plan
SSP	State Safety Plan
STCA	Short Term Conflict Alert
STAR	Standard Terminal Arrival
STATFOR	EUROCONTROL Statistics and Forecasts
SU	Service Units
SW FAB	South West FAB
TCZ	Terminal Charging Zone
TMA	Terminal Management Area
TNZ	Terminal Zone
UIR	Upper Flight Information Region
UNL	Unlimited height