



# EUROCONTROL Intermediate two-year Forecast – May 2016 Service Units 2016-2017

This is the report on the 2-year intermediate en-route service units forecast, May 2016 release. This document is an update of the two-year total en route service units forecast to reflect the IFR movements and service units developments observed during the first quarter of 2016.

Following the growth of flights between UK and Spain and other European destinations, and the dynamism of the low-cost market, total en-route service units growth rate was particularly strong around Western and Central Europe since the beginning of the year. Consequently, the total en-route service units in the participating EUROCONTROL member states (CRCO14) are now expected to grow by 3.6% ( $\pm 1$  percentage point) in 2016 compared to 2015 and reach 142.6 million. This is an upwards revision by 0.5pp compared to the February 2016 forecast.

Total en-route service units in 2017 are expected to reach 146.5 million in CRCO14, corresponding to a growth rate of 2.7% ( $\pm 1.5$  percentage point) compared to 2016. This is slightly lower (-0.1 percentage point) compared to what was expected in the February 2016 forecast. Considering that 2016 is a leap year, 2016 and 2017 growth figures might better be expressed in terms of average daily figures, which correspond respectively to a growth of 3.3% for 2016 and to a growth of 3% for 2017.

**Figure 1. Summary of forecast of total service units in Europe.**

Total en-route service units (Thousands)		2012	2013	2014	2015	2016	2017	2017/ 2015 Total Growth
CRCO14*	H	.	.	.	.	143,918	149,897	9%
	B	122,298	124,910	132,130	137,689	142,579	146,492	6%
	L	.	.	.	.	141,262	143,092	4%
RP2Region <sup>†</sup>	H	.	.	.	.	120,387	125,056	9%
	B	105,251	106,930	111,670	115,063	119,327	122,308	6%
	L	.	.	.	.	118,281	119,570	4%
Total en-route service units (Growth)		2012	2013	2014	2015	2016	2017	AAGR 2017/ 2015
CRCO14*	H	.	.	.	.	4.5%	4.2%	4.3%
	B	-1.3%	2.1%	5.8%	4.2%	3.6%	2.7%	3.1%
	L	.	.	.	.	2.6%	1.3%	1.9%
RP2Region <sup>†</sup>	H	.	.	.	.	4.6%	3.9%	4.3%
	B	-1.4%	1.6%	4.4%	3.0%	3.7%	2.5%	3.1%
	L	.	.	.	.	2.8%	1.1%	1.9%

\* CRCO14 designates the sum over all the states participating in the Multilateral Route Charges System in 2014 of all TSU either measured or forecasted for the corresponding year.

<sup>†</sup> RP2 series includes service units for flight segments performed as Operational Air Traffic (OAT) for Germany.

## Contents

1.	Introduction .....	4
1.1	Context .....	4
1.2	Forecast Method .....	4
2.	Recent en-route service units trends .....	4
3.	Forecast inputs and assumptions .....	5
4.	En-route service unit growth for 2016 and 2017 .....	5
5.	Risks to the forecast growth .....	8
6.	Glossary .....	10
Annex 1	Traffic region definitions .....	11
Annex 2	Two-year en-route service unit forecast per state .....	14
Annex 3	Two-year detailed en-route service unit forecast per state .....	16
Annex 4	Two-year detailed en-route service units forecast per state (Growth) .....	21
Annex 5	References .....	26

## 1. INTRODUCTION

### 1.1 Context

This is the report on the 2-year intermediate en-route service units forecast, May 2016. This document is an update of the two-year total en route service units (TSU) forecast to reflect the traffic (flight movements and TSU) developments observed during the first quarter of 2016. Neither the remaining years of the seven-year forecast horizon (2018-2022) nor the update of the IFR movement forecast are presented and we advise the reader to refer to the February 2016 forecast report (Ref. iii) to find this information.

This intermediate forecast should be seen as a “monitor” to get a first look at how the forecast is likely to change in September. The intermediate forecast published in this report remains focused on each participating EUROCONTROL member states (CRCO14) as well as on Estonia that is also involved in the Performance Scheme, and on Ukraine who has asked STATFOR to provide a forecast for them. A definition of all the zones mentioned in this forecast can be found in Annex 1.

The forecast will be updated in September with a seven-year horizon, as well as the IFR movements and Terminal Navigation Service Units.

### 1.2 Forecast Method

The full forecast process is described in a separate report on the forecast methods (Ref.i). This documentation describes the methods of the 7-year forecast at a number of levels of detail, from a two-page summary, to a function-by-function reference. For convenience of readers, a summary is reproduced in the February 2016 forecast report (Ref.ii).

For this intermediate forecast, the flight forecast was not reviewed but updated to take into account the first four months of actual data in 2016. As for the en-route service units, only the component that forecasts the first two years of the horizon was updated with the actual en-route service units up to April 2016.

## 2. RECENT EN-ROUTE SERVICE UNITS TRENDS

In 2015, the total service units (TSU) for the CRCO14 region increased by 4.2% from 132.1 million in the year-ago period to 137.7 million. Since the beginning of 2016, these growth rates average at a 3.5% growth in terms of daily<sup>1</sup> TSU generated in CRCO14. Following the growth of flights between UK and Spain and other European destinations, and the dynamism of the low-cost market, TSU growth was particularly strong around Western and Central Europe with, for example, average daily<sup>1</sup> growth rates of 5% in Germany and in the UK, 3.5% in France, 7% in the Netherlands and 8.7% in the Czech Republic since the beginning of the year.

However, if the monthly daily<sup>1</sup> growth rates at CRCO14 level remained in line with the 4% of the 2015 yearly growth up to March, lower traffic and TSU growth can be observed around South-Eastern Europe (e.g. Croatia, Greece, Albania, Romania) since the beginning of the Summer schedule.

This lower number of flights and TSU numbers in the region result from:

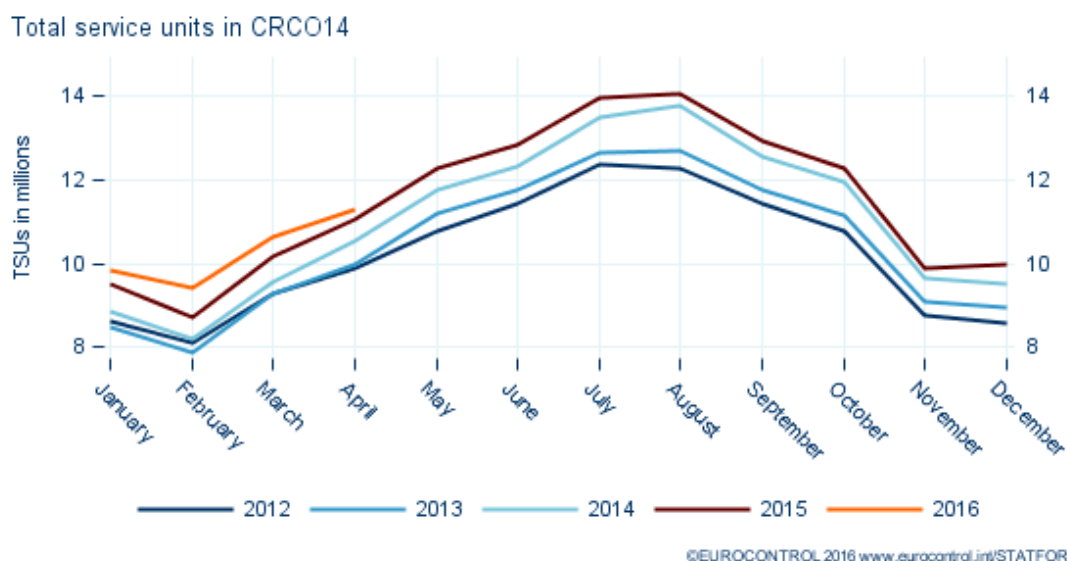
- changes of routes in the region with flights sent more North and East towards Serbia-Montenegro-KFOR and Bulgaria;
- a decline by 4.1% of international arrivals and departures to/from Turkey;
- and the existing decline of flights from and to Egypt and the Russian Federation.

As a consequence, en-route service units in April only grew by 2.1% in CRCO14. To a lesser extent,

<sup>1</sup> TSU growth rates are expressed in daily terms so as to eliminate the impact of the leap year (i.e. one extra day in February)

the decline of the international traffic to/from Belgium (-15%) following the terrorist attacks in Brussels has also contributed to the general lower figures at CRCO14 level.

**Figure 2. Evolution of total service units recorded in CRCO14 area from January 2012 to April 2016: the rate of TSU growth slowed down in April 2016 after some strong Winter months.**



### 3. FORECAST INPUTS AND ASSUMPTIONS

This intermediate en-route service units forecast is basically relying on the inputs and assumptions detailed in the 7-year IFR flight movements forecast published in February 2016 (see Ref.ii), with influential drivers being the economic growth, the events and trends, the airport capacity constraints to name a few. However, for this intermediate forecast the inputs have been refined to take into account the most up-to-date traffic and service units trends (see Section 2). Moreover, one assumption has been added to better reflect the recovery from the terrorist attacks in Brussels on TSU forecast in Belgium.

### 4. EN-ROUTE SERVICE UNIT GROWTH FOR 2016 AND 2017

Following the TSU rate of growth in Europe since the beginning of the year, the total en-route service units in the participating EUROCONTROL member states (CRCO14) are expected to grow by 3.6% ( $\pm 1$  percentage point - pp) in 2016 compared to 2015 and reach 142.6 million (see Figure 3). This is an upwards revision by 0.5pp compared to the 3.1% growth expected in the February 2016 forecast (Ref.ii).

This upward revision mainly concerns Western and North-Eastern European countries, such as France, UK, Germany, the Czech Republic or Slovakia, whose forecasts have sometimes been revised by more than 1 pp upwards. One exception to it is Belgium, whose 2016 forecast growth has been revised down to 2.1% (-1.7 pp compared to the February 2016 forecast), as a consequence of the terrorist attacks at Brussels airport.

However, a general downwards revision is observed along the Adriatic coast (i.e. Italy, Croatia, Bosnia and Albania) as well as in FYROM and Greece following the recent weaker traffic from/to Turkey and Egypt and the re-rerouting of flows towards Serbia-Montenegro-KFOR and Bulgaria whose forecasts have been revised upwards. En-route service units are also expected to be lower in Finland and Sweden because of their weaker TSU trends, whereas the Norwegian forecast is now more optimistic with a revision 1.6pp upwards.

TSU growth rates in Spain, Canary Islands and Portugal are expected to be strong, and have been revised upwards to values over 6% in 2016 with expected additional traffic linked to their attractiveness as a holiday destination following the decline of touristic North-African destinations.

Growth of service units in 2017 is expected to be slightly lower (-0.1pp) compared to what was expected in the February 2016 forecast and the CRCO14 area is expected to see a rate of 2.7% (+/- 1.5pp) compared to 2016 to reach 146.5 million TSU.

Considering that 2016 is a leap year, 2016 and 2017 growth figures might better be expressed in terms of average daily<sup>1</sup> figures, which correspond respectively to a growth of 3.3% for 2016 and to a growth of 3% for 2017.

The detailed forecasts (en-route service units and associated growth) for each State are in Annex 2, Annex 3 and Annex 4.

Any user of this two-year forecast should consult the entire forecast range (low-growth to high-growth) as an indicator of risk (see Figure 9 and Figure 10 respectively in Annex 3 and Annex 4). This forecast includes downside risks (e.g. the economic indicators could worsen) and upside risks (e.g. new route changes could bring traffic to some states and take it from others).

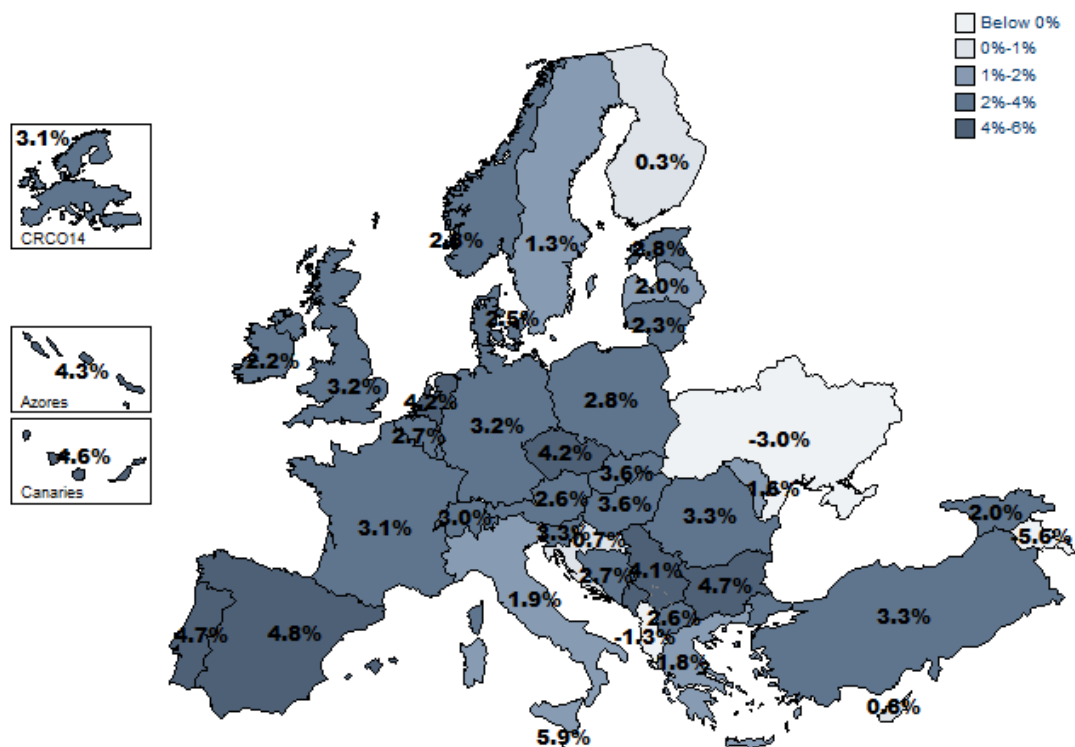
**Figure 3. Summary of forecast of total service units in Europe.**

Total en-route service units (Thousands)		2012	2013	2014	2015	2016	2017	2017/ 2015 Total Growth
CRCO14*	H	.	.	.	.	143,918	149,897	9%
	B	122,298	124,910	132,130	137,689	142,579	146,492	6%
	L	.	.	.	.	141,262	143,092	4%
RP2Region†	H	.	.	.	.	120,387	125,056	9%
	B	105,251	106,930	111,670	115,063	119,327	122,308	6%
	L	.	.	.	.	118,281	119,570	4%
Total en-route service units (Growth)		2012	2013	2014	2015	2016	2017	AAGR 2017/ 2015
CRCO14*	H	.	.	.	.	4.5%	4.2%	4.3%
	B	-1.3%	2.1%	5.8%	4.2%	3.6%	2.7%	3.1%
	L	.	.	.	.	2.6%	1.3%	1.9%
RP2Region†	H	.	.	.	.	4.6%	3.9%	4.3%
	B	-1.4%	1.6%	4.4%	3.0%	3.7%	2.5%	3.1%
	L	.	.	.	.	2.8%	1.1%	1.9%

\* CRCO14 designates the sum over all the states participating in the Multilateral Route Charges System in 2014 of all TSU either measured or forecasted for the corresponding year.

† RP2Region refers to the 28 EU member states plus Norway and Switzerland. RP2 series includes service units for flight segments performed as Operational Air Traffic (OAT) for Germany.

**Figure 4. Average annual growth of service units between 2015 and 2017.**



## 5. RISKS TO THE FORECAST GROWTH

Users of the forecasts are strongly advised to use the forecast range (low-growth to high-growth) as an indicator of risk. These flight forecasts are prepared in conditions of large changes in traffic routings. For many individual States, these are the biggest risks for traffic growth.

The main sources of uncertainty in the intermediate forecast are as follows. They correspond to what was already mentioned in the February 2016 forecast (Ref. iii)

In percentage terms for individual States, the biggest risks concern the **route choices** of airlines, which are generally downside risks for some States and simultaneously upside risks for others, balancing out across Europe as a whole:

- By 2022 there is a significant probability that *some* flights through **Ukraine** will be restored.
- Closure of **Libyan airspace** has reduced Maltese overflights as well as re-routed traffic to southern Africa. It is not clear when normal patterns will be restored.
- Currently, the **Syrian conflict** is having an important impact on overflights across South-East Europe. We have not included an end to this in our scenario nor intensification, though clearly at some point this network disruption will clear and the overflight changes reverse. Avoidance of Iraq and to a lesser extent Sinai is less significant for the forecast.
- The immigration crisis linked to the Syrian and Libyan conflict and the response of the Governments of the 26-country **Schengen area** is also a downside risk. Under the rules governing the open travel area, governments could suspend the Schengen system for two years, which would deter passenger travel, though to an unknown extent.
- Previous years have seen persistent (many months) reduction in *en route* capacity as a result of the introduction of **new ATC systems**. This results in tactical and strategic re-routing of traffic, enough to affect annual totals. More changes are on the way, presenting further risks, for example Spain, Norway and Turkey have changes planned.
- The **jet stream** influences route choice too, though this is more usually an effect over days or weeks than over the whole year.
- **Unit rates** are one of the many factors that influence an airline's choice of route. Large changes in rates could lead to low single-figure percentage changes in flight counts.
- **Oil prices** remain changeable. With fuel accounting for around 20% of operating costs, this can have an effect on fares and cost of travel for customer). There is, in the short-term, an upside risk if the airlines start reflecting the fall of fuel costs to the ticket prices (cheaper); the most recent data from Eurostat suggests prices may finally be in decline. On the opposite, a surge in oil prices could lead in an increase of fuel cost, hence an increase of the ticket prices which is a downside risk.
- More generally, future **network changes** (e.g., new routes) and airlines' changing choice of routes are not modelled by the forecast.

The **economic forecasts** used in this report have been updated in January 2016. The economic outlook remains uncertain and this includes the possibility of Brexit. The low scenario provides some guidance here although no specific scenario has been introduced in this forecast to anticipate the potential impact. Economic risks are to some extent synchronised, so do not balance out across Europe as routing risks do. The uncertainty concerning what would happen given Brexit is too large for any study to be worth the effort.

A few years ago, two States, Turkey and Russia, were the predominant drivers of flight growth. This makes growth sensitive to the continued expansion of these **two economies**. Sanctions on Russia, and Russia's response to them, are significant for the downward revision of the forecast overall. This could improve, but could easily get worse, representing on balance a downside risk.

On the other hand, there are growing competitive pressures for expansion, especially for low-cost carriers, so as **aircraft deliveries** accelerate we could see more rapid expansion, although in our view this is likely to be localised. The high scenario provides some guidance for this, but only for

local, not widespread application.

**Load factors** remain at or near record highs. As traffic begins to grow again, this means that load factors might be able to absorb less of the passenger growth than they have in past years. From the present position, the recovery would then come more rapidly than anticipated. This is therefore an upside risk.

**Tourism trends** are quite variable. The forecast does not identify which will be the new holiday 'destination of preference' in a given year. The recent events in both Egypt and Tunisia have led to more variability in tourism destinations. On the whole this is more likely a downside risk.

**Terrorist attacks, wars and natural disasters.** Following the February 2014 forecast publication, in which a further volcanic eruption or pandemic were mentioned as some of the risks, both have occurred. The impact on air traffic could be a temporary one, or more significant. The Zika virus is included here as a potential risk.



## 6. GLOSSARY

<b>AAGR</b>	Average annual growth
<b>B</b>	(in tables) Baseline Scenario
<b>CRCO11</b>	States participating to the Multilateral Route Charges System dated 2012 (see Annex 1)..
<b>CRCO14</b>	States participating to the Multilateral Route Charges System dated 2014. Namely CRCO14 includes the list of States within CRCO11 plus <i>Georgia</i> .
<b>FAB</b>	Functional Airspace Block
<b>FIR</b>	Flight Information Region
<b>H</b>	(in tables) High-Growth Scenario
<b>IFR</b>	Instrument Flight Rules
<b>KFOR</b>	Kosovo Force
<b>L</b>	(in tables) Low-Growth Scenario
<b>pp</b>	percentage point
<b>PScheme</b>	States involved in the Performance scheme first period of reference (EU27, Norway and Switzerland – no longer used)
<b>RP1</b>	First Period of Reference (2012-2014) for the Performance Scheme of the SES
<b>RP2</b>	Second Period of Reference (2015-2019) for the Performance Scheme of the SES
<b>RP1Region</b>	See PScheme
<b>RP2Region</b>	States involved in the Performance scheme second period of reference (EU28, Norway and Switzerland)
<b>SES</b>	Single European Sky
<b>STATFOR</b>	Eurocontrol Statistics and Forecast Service
<b>TOTAL</b>	The sum of CRCO14 with Estonia and Ukraine
<b>TSU</b>	Total En-Route Service Units
<b>UIR</b>	Upper Flight Information Region

Other abbreviations and acronyms used in this document are available in the EUROCONTROL Air Navigation Inter-site Acronym List (AIRIAL) which may be found here:

<http://www.eurocontrol.int/airial/definitionListInit.do?skipLogon=true&glossaryUid=AIRIAL>

## Annex 1 Traffic region definitions

### CRCO11

‘CRCO11’ refers to the EUROCONTROL Member States participating in the Multilateral Route Charges System in 2012. This list comprises: Albania, Armenia, Austria, Belgium/Luxembourg, Bosnia-Herzegovina, Bulgaria, Canary Islands, Croatia, Cyprus, Czech Republic, Denmark, FYROM, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lisbon FIR, Lithuania, Malta, Moldova, Netherlands, Norway, Poland, Romania, Santa Maria FIR, Serbia-Montenegro-, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, UK.

### CRCO14

‘CRCO14’ refers to the EUROCONTROL Member States participating in the Multilateral Route Charges System in 2014. This list comprises: CRCO11 and Georgia, which joined EUROCONTROL in 2014.

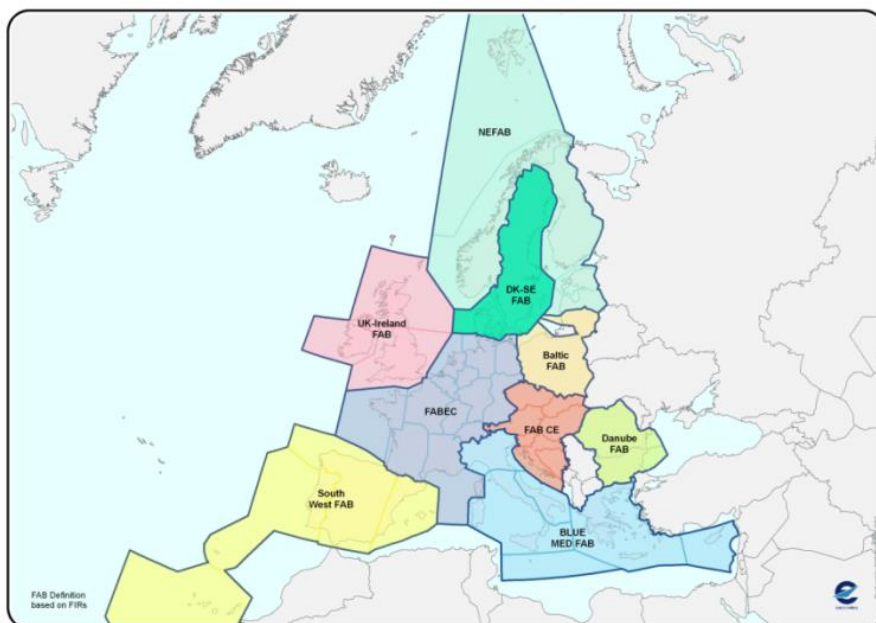
### Functional Airspace Blocks

On top of the traffic zones, this report also presents the forecast of IFR movements from 2014 to 2020 for the Functional Airspace Blocks (FAB). A FAB is a block of airspace based on operational requirements regardless of the State boundaries (Figure 5). FAB initiatives (definitions) are now frozen according to the targets defined to improve the performance of the European air traffic management network. STATFOR defines the FABs based on the FIR<sup>2</sup> boundaries. The definition of FAB-FIR is:

- **UK-Ireland FAB** (Scottish FIR&UIR, London FIR&UIR, Shannon FIR&UIR)
- **Danish-Swedish FAB** (Copenhagen FIR, Sweden FIR)
- **Baltic FAB** (Warszawa FIR, Vilnius FIR&UIR)
- **BLUE MED FAB** (Nicosia FIR&UIR, Athinai FIR&UIR, Brindisi FIR&UIR, Milano FIR&UIR, Roma FIR&UIR, Malta FIR&UIR)
- **Danube FAB** (Sofia FIR, Bucarest FIR)
- **FAB CE** (Zagreb FIR, Budapest FIR, Ljubljana FIR, Praha FIR, Wien FIR, Sarajevo FIR&UIR, Bratislava FIR)
- **FABEC** (Brussels FIR&UIR, Langen FIR, Munchen FIR, Rhein UIR, Hannover UIR, Bremen FIR, Amsterdam FIR, Bordeaux FIR, Reims FIR, Paris FIR, France UIR, Marseille FIR, Brest FIR, Switzerland FIR, Switzerland UIR)
- **North European FAB** (Tallinn FIR, Finland FIR&UIR, Enor FIR, Riga FIR, Bodo Oceanic FIR)
- **South West FAB** (Canarias FIR&UIR, Lisboa FIR, Madrid FIR&UIR, Barcelona FIR&UIR)

---

<sup>2</sup> Note that the PRU uses the FAB-ANSP definition.

**Figure 5. FABs as stipulated by the European Commission.**

## RPRegions

RP1Region and RP2Region are the two regions involved in the Performance Scheme respectively related to First Reference Period (2012-2014) and Second Review Period (2015-2019).

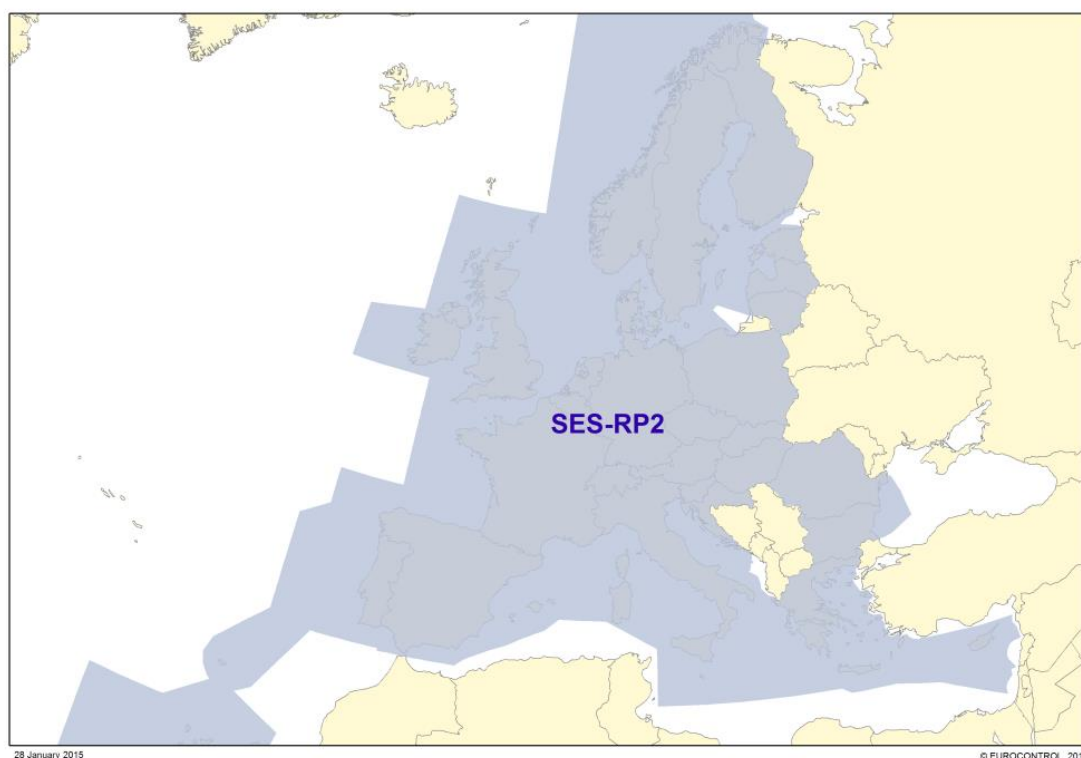
- **RP1Region:** stands for the sum over all the 29 States that were involved in the EU-wide performance target setting for the first period, namely: 28 EU Member States plus Norway plus Switzerland minus Croatia.
- **RP2Region:** stands for the sum over all the 30 States that are involved in the EU-wide performance target setting for the second period, namely: 28 EU Member States plus Norway plus Switzerland. This zone is also called SES-RP2 in this report.

The “PScheme” region presented in previous reports (Traffic Tables of the Annexes) is not reported anymore, as it could introduce some confusion with respect to the RPRegions above mentioned.

## SES-RP2

The SES-RP2 area mentioned in this report is covering the 30 States that are involved in the EU-wide performance target setting for the second period, namely: 28 EU member States plus Norway plus Switzerland. SES-RP2 includes Canarias but not Azores. The SES-RP2 zone is also called RP2Region in our reports.

**Figure 6. States within SES-RP2 Region in this report (Performance Scheme Region for the Second Review Period).**



The “SES” region presented in previous reports (Traffic Tables of the Annexes) is not reported anymore, as it could introduce some confusion with respect to the SES-RP2 above mentioned.

## Annex 2 Two-year en-route service unit forecast per state

Figure 7. Forecast Summary: Annual total en-route service units 2016-2017.

Charging Area	2015 Actual TSU	2016 STATFOR Forecast TSU	2016/2015 Forecast Growth	2017 STATFOR Forecast TSU	2017/2016 Forecast Growth	2016 States Forecast TSU	2016 STATFOR/States
EB Belgium/Luxembourg	2,454,178	2,505,099	2.1%	2,590,441	3.4%	2,510,000	-0.2%
ED Germany <sup>A</sup>	12,976,261	13,548,160	4.4%	13,831,077	2.1%	13,057,000	3.8%
LF France	18,867,771	19,530,068	3.5%	20,074,646	2.8%	19,177,000	1.8%
EG UK	10,153,907	10,594,608	4.3%	10,818,423	2.1%	10,435,000	1.5%
EH Netherlands	2,892,654	3,061,590	5.8%	3,140,059	2.6%	2,825,835	8.3%
EI Ireland	4,182,450	4,291,045	2.6%	4,366,786	1.8%	4,049,624	6.0%
LS Switzerland	1,454,786	1,508,934	3.7%	1,542,232	2.2%	1,470,066	2.6%
LP Lisbon FIR	3,150,186	3,363,540	6.8%	3,454,465	2.7%	3,104,536	8.3%
LO Austria	2,739,285	2,799,852	2.2%	2,881,131	2.9%	2,777,000	0.8%
LE Spain	8,997,417	9,636,569	7.1%	9,887,235	2.6%	8,936,000	7.8%
GC Canary Islands	1,402,349	1,488,174	6.1%	1,533,141	3.0%	1,528,000	-2.6%
AZ Santa Maria FIR	4,661,620	4,904,773	5.2%	5,067,130	3.3%	4,336,772	13.1%
LG Greece	4,898,818	4,920,105	0.4%	5,072,995	3.1%	4,318,281	13.9%
LT Turkey	14,181,607	14,518,471	2.4%	15,143,981	4.3%	15,002,648	-3.2%
LM Malta	823,344	909,904	10.5%	923,719	1.5%	621,000	46.5%
LI Italy	8,171,509	8,342,710	2.1%	8,486,946	1.7%	8,866,051	-5.9%
LC Cyprus	1,547,646	1,518,231	-1.9%	1,567,237	3.2%	1,425,773	6.5%
LH Hungary	2,695,133	2,800,755	3.9%	2,889,996	3.2%	2,364,165	18.5%
EN Norway	2,313,891	2,403,347	3.9%	2,444,601	1.7%	2,367,954	1.5%
EK Denmark	1,583,445	1,627,394	2.8%	1,664,369	2.3%	1,571,000	3.6%
LJ Slovenia	466,264	484,326	3.9%	497,230	2.7%	499,637	-3.1%
LR Romania	4,570,684	4,713,045	3.1%	4,875,411	3.4%	4,117,019	14.5%
LK Czech Republic	2,531,815	2,684,844	6.0%	2,749,210	2.4%	2,637,000	1.8%
ES Sweden	3,354,938	3,386,117	0.9%	3,443,258	1.7%	3,303,000	2.5%
LZ Slovakia	1,071,382	1,121,269	4.7%	1,150,750	2.6%	1,126,000	-0.4%
LD Croatia	1,790,210	1,767,172	-1.3%	1,814,986	2.7%	1,783,000	-0.9%
LB Bulgaria	3,222,750	3,421,551	6.2%	3,535,352	3.3%	2,667,000	28.3%
LW FYROM	263,988	268,920	1.9%	277,987	3.4%	282,000	-4.6%
LU Moldova	73,816	66,797	-9.5%	76,193	14.1%	77,000	-13.3%
EF Finland	760,383	753,230	-0.9%	764,354	1.5%	812,000	-7.2%
LA Albania	484,426	452,356	-6.6%	471,702	4.3%	522,080	-13.4%
LQ Bosnia-Herzegovina	870,175	886,150	1.8%	918,515	3.7%	917,937	-3.5%
UD Armenia	125,671	107,060	-14.8%	111,994	4.6%	135,000	-20.7%
LY Serbia-Montenegro-	1,974,864	2,083,295	5.5%	2,139,936	2.7%	2,017,944	3.2%
EP Poland	3,880,013	3,996,783	3.0%	4,098,371	2.5%	4,544,000	-12.0%
EY Lithuania	492,283	502,851	2.1%	514,778	2.4%	508,601	-1.1%
EE Estonia	815,648	840,297	3.0%	861,617	2.5%	801,575	4.8%
EV Latvia <sup>C</sup>	801,836	805,634	0.5%	833,425	3.4%	824,000	-2.2%
UK Ukraine <sup>D</sup>	1,285,878	1,125,396	-12.5%	1,209,134	7.4%	.	.
UG Georgia	805,195	804,679	-0.1%	838,103	4.2%	840,510	-4.3%
Charging Area	2015 Actual TSU	2016 STATFOR Forecast TSU	2016/2015 Forecast Growth	2017 STATFOR Forecast TSU	2017/2016 Forecast Growth	2016 States Forecast TSU	2016 STATFOR/States
CRCO11	136,883,757	141,774,729	3.6%	145,654,063	2.7%	137,516,922	3.1%
CRCO14	137,688,952	142,579,407	3.6%	146,492,167	2.7%	138,357,432	3.1%
RP1 Region	113,273,027	117,560,031	3.8%	120,493,258	2.5%	113,244,116	3.8%
RP2 Region	115,063,237	119,327,203	3.7%	122,308,244	2.5%	115,027,116	3.7%
Total <sup>D</sup>	139,790,478	144,545,100	3.4%	148,562,918	2.8%	139,159,007	3.9%

(A) For Germany, hence for SES29 and RP2, series, includes service units for flight segments performed as Operational Air Traffic. 69,922 service units concerned for 2015. Estimated number for the coming years is previously 75,000 per year.

(B) The charging zone over Serbia and Montenegro has been renamed Serbia-Montenegro-KFOR (following the change in the naming convention, see Final minutes of the 103<sup>rd</sup> session of the Enlarged Committee dated 19-20.11.2014).

(C) Latvia has only joined EUROCONTROL member states in 2011. Before that date, only yearly data was available for the TSU

(D) Ukraine is not part of the CRCO but has asked STATFOR to produce an individual forecast for them as they did not have this capacity in 2012. In the TOTAL column the 2016 states forecast and the percentage difference between, the 2016 States and STATFOR forecast does not account for Ukraine

**Figure 8. Forecast Summary: Annual chargeable en-route service units 2016-2017.**

Charging Area		2015 Actual TSU	2016 STATFOR Forecast TSU	2017 STATFOR Forecast TSU	2015 Actual Exempted SU in %	2015 Actual Chargeable SU in %	2016 Chargeable SU Estimate	2017 Chargeable SU Estimate
EB	Belgium/Luxembourg	2,454,178	2,505,099	2,590,441	0.8%	99.2%	2,484,900	2,569,500
ED	Germany <sup>A</sup>	12,976,261	13,548,160	13,831,077	1.0%	99.0%	13,411,700	13,691,700
LF	France	18,867,771	19,530,068	20,074,646	1.0%	99.0%	19,338,600	19,877,800
EG	UK	10,153,907	10,594,608	10,818,423	1.6%	98.4%	10,430,300	10,650,600
EH	Netherlands	2,892,654	3,061,590	3,140,059	1.3%	98.7%	3,023,200	3,100,700
EI	Ireland	4,182,450	4,291,045	4,366,786	1.3%	98.7%	4,235,400	4,310,200
LS	Switzerland	1,454,786	1,508,934	1,542,232	0.3%	99.7%	1,504,500	1,537,700
LP	Lisbon FIR	3,150,186	3,363,540	3,454,465	1.1%	98.9%	3,325,300	3,415,200
LO	Austria	2,739,285	2,799,852	2,881,131	0.5%	99.5%	2,786,600	2,867,500
LE	Spain	8,997,417	9,636,569	9,887,235	1.1%	98.9%	9,533,600	9,781,600
GC	Canary Islands	1,402,349	1,488,174	1,533,141	0.9%	99.1%	1,475,300	1,519,900
AZ	Santa Maria FIR	4,661,620	4,904,773	5,067,130	2.0%	98.0%	4,804,500	4,963,600
LG	Greece	4,898,818	4,920,105	5,072,995	2.5%	97.5%	4,797,900	4,947,000
LT	Turkey	14,181,607	14,518,471	15,143,981	0.7%	99.3%	14,422,400	15,043,800
LM	Malta	823,344	909,904	923,719	3.6%	96.4%	876,900	890,200
LI	Italy	8,171,509	8,342,710	8,486,946	1.9%	98.1%	8,186,200	8,327,700
LC	Cyprus	1,547,646	1,518,231	1,567,237	1.7%	98.3%	1,493,100	1,541,300
LH	Hungary	2,695,133	2,800,755	2,889,996	1.3%	98.7%	2,765,000	2,853,100
EN	Norway	2,313,891	2,403,347	2,444,601	0.9%	99.1%	2,382,200	2,423,100
EK	Denmark	1,583,445	1,627,394	1,664,369	0.7%	99.3%	1,616,300	1,653,000
LJ	Slovenia	466,264	484,326	497,230	0.5%	99.5%	481,900	494,800
LR	Romania	4,570,684	4,713,045	4,875,411	1.0%	99.0%	4,663,800	4,824,500
LK	Czech Republic	2,531,815	2,684,844	2,749,210	1.9%	98.1%	2,634,500	2,697,700
ES	Sweden	3,354,938	3,386,117	3,443,258	0.5%	99.5%	3,368,900	3,425,800
LZ	Slovakia	1,071,382	1,121,269	1,150,750	1.5%	98.5%	1,104,900	1,133,900
LD	Croatia	1,790,210	1,767,172	1,814,986	0.3%	99.7%	1,762,200	1,809,900
LB	Bulgaria	3,222,750	3,421,551	3,535,352	1.1%	98.9%	3,383,900	3,496,400
LW	FYROM	263,988	268,920	277,987	0.1%	99.9%	268,800	277,800
LU	Moldova	73,816	66,797	76,193	0.1%	99.9%	66,700	76,100
EF	Finland	760,383	753,230	764,354	0.5%	99.5%	749,500	760,500
LA	Albania	484,426	452,356	471,702	0.7%	99.3%	449,200	468,400
LQ	Bosnia-Herzegovina	870,175	886,150	918,515	0.1%	99.9%	885,500	917,900
UD	Armenia	125,671	107,060	111,994	0.1%	99.9%	107,000	111,900
LY	Serbia-Montenegro-KFOR <sup>B</sup>	1,974,864	2,083,295	2,139,936	0.1%	99.9%	2,081,400	2,138,000
EP	Poland	3,880,013	3,996,783	4,098,371	0.6%	99.4%	3,971,100	4,072,100
EY	Lithuania	492,283	502,851	514,778	0.8%	99.2%	498,700	510,500
EE	Estonia	815,648	840,297	861,617	0.0%	100.0%	840,200	861,500
EV	Latvia <sup>C</sup>	801,836	805,634	833,425	0.8%	99.2%	799,200	826,800
UK	Ukraine <sup>D</sup>	1,285,878	1,125,396	1,209,134	0.5%	99.5%	1,119,800	1,203,100
UG	Georgia	805,195	804,679	838,103	1.3%	98.7%	793,800	826,800
<b>CRCO11</b>		<b>136,883,757</b>	<b>141,774,729</b>	<b>145,654,063</b>	<b>1.1%</b>	<b>98.9%</b>	<b>140,173,500</b>	<b>144,009,000</b>
<b>CRCO14</b>		<b>137,688,952</b>	<b>142,579,407</b>	<b>146,492,167</b>	<b>1.1%</b>	<b>98.9%</b>	<b>140,967,300</b>	<b>144,835,800</b>
<b>RP1 Region</b>		<b>113,273,027</b>	<b>117,560,031</b>	<b>120,493,258</b>	<b>1.2%</b>	<b>98.8%</b>	<b>116,163,300</b>	<b>119,061,700</b>
<b>RP2 Region</b>		<b>115,063,237</b>	<b>119,327,203</b>	<b>122,308,244</b>	<b>1.2%</b>	<b>98.8%</b>	<b>117,926,400</b>	<b>120,872,400</b>
<b>Total<sup>D</sup></b>		<b>139,790,478</b>	<b>144,545,100</b>	<b>148,562,918</b>	<b>1.1%</b>	<b>98.9%</b>	<b>142,928,600</b>	<b>146,901,500</b>

(A) For Germany, hence for RP1 and RP2, series, includes service units for flight segments performed as Operational Air Traffic, 69,922 service units concerned for 2015. Estimated number for the coming years is previously 75,000 per year.

(B) The charging zone over Serbia and Montenegro has been renamed Serbia-Montenegro-KFOR (following the change in the naming convention, see Final minutes of the 103rd session of the Enlarged Committee dated 19-20.11.2014).

(C) Latvia has only joined EUROCONTROL member states in 2011. Before that date, only yearly data was available for the TSU

(D) Ukraine is not part of the CRCO but has asked STATFOR to produce an individual forecast for them as they did not have this capacity in 2012. In the TOTAL column the 2016 states forecast and the percentage difference between, the 2016 States and STATFOR forecast does not account for Ukraine

### Annex 3 Two-year detailed en-route service unit forecast per state

The table below provides the results of the forecast along with a High (H) and Low (L) forecast, expressed in thousands total service units, between which the future value is likely to be with a 50% probability.

**Figure 9 Forecast of the total number of en-route service units (thousands) per State.**

Total en-route Service Units (Thousands)								
Total service units (thousands)		2012	2013	2014	2015	2016	2017	2017/2015 Total Growth
Albania	H	.	.	.	.	457	482	-1%
	B	443	456	469	484	452	472	-3%
	L	.	.	.	.	448	462	-5%
Armenia	H	.	.	.	.	114	124	-1%
	B	154	149	142	126	107	112	-11%
	L	.	.	.	.	100	100	-20%
Austria	H	.	.	.	.	2,829	2,952	8%
	B	2,469	2,456	2,645	2,739	2,800	2,881	5%
	L	.	.	.	.	2,771	2,810	3%
Belgium /Luxembourg	H	.	.	.	.	2,525	2,642	8%
	B	2,232	2,277	2,362	2,454	2,505	2,590	6%
	L	.	.	.	.	2,485	2,536	3%
Bosnia-Herzegovina	H	.	.	.	.	898	950	9%
	B	680	654	783	870	886	919	6%
	L	.	.	.	.	874	888	2%
Bulgaria	H	.	.	.	.	3,457	3,623	12%
	B	2,020	2,058	2,744	3,223	3,422	3,535	10%
	L	.	.	.	.	3,387	3,446	7%
Canary Islands	H	.	.	.	.	1,507	1,584	13%
	B	1,599	1,516	1,492	1,402	1,488	1,533	9%
	L	.	.	.	.	1,469	1,484	6%
Croatia	H	.	.	.	.	1,789	1,871	5%
	B	1,679	1,695	1,760	1,790	1,767	1,815	1%
	L	.	.	.	.	1,745	1,760	-2%
Cyprus	H	.	.	.	.	1,533	1,608	4%
	B	1,303	1,327	1,454	1,548	1,518	1,567	1%
	L	.	.	.	.	1,504	1,528	-1%
Czech Republic	H	.	.	.	.	2,713	2,823	12%
	B	2,305	2,374	2,393	2,532	2,685	2,749	9%
	L	.	.	.	.	2,657	2,674	6%
Denmark	H	.	.	.	.	1,641	1,695	7%
	B	1,429	1,524	1,532	1,583	1,627	1,664	5%
	L	.	.	.	.	1,614	1,633	3%



Total en-route Service Units (Thousands)								
Total service units (thousands)		2012	2013	2014	2015	2016	2017	2017/2015 Total Growth
Estonia	H	.	.	.	.	849	882	8%
	B	725	741	790	816	840	862	6%
	L	.	.	.	.	832	841	3%
FYROM	H	.	.	.	.	273	287	9%
	B	174	178	246	264	269	278	5%
	L	.	.	.	.	265	269	2%
Finland	H	.	.	.	.	761	781	3%
	B	790	770	796	760	753	764	1%
	L	.	.	.	.	746	748	-2%
France	H	.	.	.	.	19,652	20,438	8%
	B	17,515	17,900	18,497	18,868	19,530	20,075	6%
	L	.	.	.	.	19,410	19,718	5%
Georgia	H	.	.	.	.	825	876	9%
	B	709	747	752	805	805	838	4%
	L	.	.	.	.	784	800	-1%
Germany <sup>3</sup>	H	.	.	.	.	13,644	14,103	9%
	B	12,513	12,570	12,881	12,976	13,548	13,831	7%
	L	.	.	.	.	13,453	13,549	4%
Greece	H	.	.	.	.	4,983	5,244	7%
	B	4,358	4,216	4,618	4,899	4,920	5,073	4%
	L	.	.	.	.	4,859	4,907	0%
Hungary	H	.	.	.	.	2,834	2,960	10%
	B	2,023	2,101	2,406	2,695	2,801	2,890	7%
	L	.	.	.	.	2,768	2,819	5%
Ireland	H	.	.	.	.	4,330	4,454	6%
	B	3,806	3,813	3,922	4,182	4,291	4,367	4%
	L	.	.	.	.	4,253	4,274	2%
Italy	H	.	.	.	.	8,422	8,698	6%
	B	8,139	8,117	8,314	8,172	8,343	8,487	4%
	L	.	.	.	.	8,265	8,288	1%
Latvia	H	.	.	.	.	816	863	8%
	B	707	734	767	802	806	833	4%
	L	.	.	.	.	795	805	0%
Lisbon FIR	H	.	.	.	.	3,391	3,533	12%
	B	2,782	2,877	3,020	3,150	3,364	3,454	10%
	L	.	.	.	.	3,337	3,378	7%
Lithuania	H	.	.	.	.	510	531	8%
	B	430	451	487	492	503	515	5%
	L	.	.	.	.	496	498	1%

<sup>3</sup> For Germany, hence for RP1 and RP2, series, includes service units for flight segments performed as Operational Air Traffic. 69,922 service units were concerned for 2015. Estimated number for the coming years is 75,000 per year.



Total en-route Service Units (Thousands)								
Total service units (thousands)		2012	2013	2014	2015	2016	2017	2017/2015 Total Growth
Malta	H	.	.	.	.	929	971	18%
	B	641	735	727	823	910	924	12%
	L	.	.	.	.	891	879	7%
Moldova	H	.	.	.	.	72	88	19%
	B	206	240	131	74	67	76	3%
	L	.	.	.	.	62	65	-12%
Netherlands	H	.	.	.	.	3,085	3,198	11%
	B	2,587	2,702	2,767	2,893	3,062	3,140	9%
	L	.	.	.	.	3,039	3,075	6%
Norway	H	.	.	.	.	2,430	2,520	9%
	B	1,846	2,051	2,221	2,314	2,403	2,445	6%
	L	.	.	.	.	2,378	2,380	3%
Poland	H	.	.	.	.	4,026	4,181	8%
	B	3,854	3,984	3,931	3,880	3,997	4,098	6%
	L	.	.	.	.	3,968	4,019	4%
Romania	H	.	.	.	.	4,776	5,033	10%
	B	3,575	3,752	4,182	4,571	4,713	4,875	7%
	L	.	.	.	.	4,651	4,716	3%
Santa Maria FIR	H	.	.	.	.	4,963	5,175	11%
	B	3,874	4,021	4,166	4,662	4,905	5,067	9%
	L	.	.	.	.	4,847	4,958	6%
Serbia-Montenegro-KFOR <sup>4</sup>	H	.	.	.	.	2,110	2,206	12%
	B	1,719	1,639	1,752	1,975	2,083	2,140	8%
	L	.	.	.	.	2,057	2,075	5%
Slovakia	H	.	.	.	.	1,135	1,184	10%
	B	922	985	1,044	1,071	1,121	1,151	7%
	L	.	.	.	.	1,108	1,118	4%
Slovenia	H	.	.	.	.	489	510	9%
	B	425	411	459	466	484	497	7%
	L	.	.	.	.	480	485	4%
Spain	H	.	.	.	.	9,699	10,063	12%
	B	8,444	8,447	8,768	8,997	9,637	9,887	10%
	L	.	.	.	.	9,575	9,718	8%
Sweden	H	.	.	.	.	3,420	3,535	5%
	B	3,126	3,209	3,285	3,355	3,386	3,443	3%
	L	.	.	.	.	3,353	3,353	-0%
Switzerland	H	.	.	.	.	1,523	1,580	9%
	B	1,399	1,385	1,427	1,455	1,509	1,542	6%
	L	.	.	.	.	1,495	1,505	3%

<sup>4</sup> The charging zone over Serbia and Montenegro has been renamed Serbia-Montenegro-KFOR (following the change in the naming convention, see Final minutes of the 103rd session of the Enlarged Committee dated 19-20.11.2014).

Total en-route Service Units (Thousands)								
Total service units (thousands)		2012	2013	2014	2015	2016	2017	2017/2015 Total Growth
Turkey	H	.	.	.	.	14,668	15,536	10%
	B	9,813	10,637	12,809	14,182	14,518	15,144	7%
	L	.	.	.	.	14,374	14,746	4%
UK	H	.	.	.	.	10,691	10,995	8%
	B	9,608	9,755	9,979	10,154	10,595	10,818	7%
	L	.	.	.	.	10,499	10,626	5%
Ukraine	H	.	.	.	.	1,173	1,318	3%
	B	4,588	4,931	2,771	1,286	1,125	1,209	-6%
	L	.	.	.	.	1,078	1,102	-14%
BLUE MED FAB	H	.	.	.	.	15,866	16,520	7%
	B	14,441	14,395	15,113	15,441	15,691	16,051	4%
	L	.	.	.	.	15,519	15,602	1%
Baltic FAB	H	.	.	.	.	4,536	4,713	8%
	B	4,284	4,434	4,418	4,372	4,500	4,613	6%
	L	.	.	.	.	4,464	4,517	3%
Danube FAB	H	.	.	.	.	8,232	8,657	11%
	B	5,595	5,810	6,925	7,793	8,135	8,411	8%
	L	.	.	.	.	8,038	8,162	5%
FAB CE	H	.	.	.	.	12,688	13,251	9%
	B	10,503	10,676	11,492	12,164	12,544	12,902	6%
	L	.	.	.	.	12,402	12,554	3%
FABEC	H	.	.	.	.	40,429	41,960	9%
	B	36,246	36,834	37,934	38,646	40,154	41,178	7%
	L	.	.	.	.	39,882	40,384	4%
NEFAB	H	.	.	.	.	4,856	5,046	8%
	B	4,068	4,296	4,573	4,692	4,803	4,904	5%
	L	.	.	.	.	4,750	4,774	2%
South West FAB	H	.	.	.	.	14,597	15,181	12%
	B	12,825	12,840	13,279	13,550	14,488	14,875	10%
	L	.	.	.	.	14,381	14,579	8%
UK-Ireland FAB	H	.	.	.	.	15,020	15,449	8%
	B	13,414	13,568	13,902	14,336	14,886	15,185	6%
	L	.	.	.	.	14,752	14,901	4%
DK-SE FAB	H	.	.	.	.	5,061	5,230	6%
	B	4,555	4,732	4,817	4,938	5,014	5,108	3%
	L	.	.	.	.	4,967	4,986	1%
CRCO88	H	.	.	.	.	77,838	80,716	9%
	B	68,828	69,718	71,927	73,933	77,232	79,187	7%
	L	.	.	.	.	76,634	77,632	5%

Total en-route Service Units (Thousands)								
Total service units (thousands)		2012	2013	2014	2015	2016	2017	2017/2015 Total Growth
CRCO11	H	.	.	.	.	143,093	149,021	9%
	B	121,589	124,162	131,379	136,884	141,775	145,654	6%
	L	.	.	.	.	140,478	142,292	4%
CRCO14	H	.	.	.	.	143,918	149,897	9%
	B	122,298	124,910	132,130	137,689	142,579	146,492	6%
	L	.	.	.	.	141,262	143,092	4%
RP1Region <sup>3</sup>	H	.	.	.	.	118,598	123,185	9%
	B	103,572	105,235	109,910	113,273	117,560	120,493	6%
	L	.	.	.	.	116,536	117,811	4%
RP2Region <sup>3</sup>	H	.	.	.	.	120,387	125,056	9%
	B	105,251	106,930	111,670	115,063	119,327	122,308	6%
	L	.	.	.	.	118,281	119,570	4%
Total	H	.	.	.	.	145,940	152,098	9%
	B	127,611	130,582	135,692	139,790	144,545	148,563	6%
	L	.	.	.	.	143,172	145,035	4%

## Annex 4 Two-year detailed en-route service units forecast per state (Growth)

The table below provides the results of the forecast annual growth along with a High (H) and Low (L) forecast between which the future growth is likely to be with a 50% probability.

**Figure 10. Forecast of the total en-route service units growth per State.**

Total en-route Service Units (Thousands)								
Annual Growth		2012	2013	2014	2015	2016	2017	2017/ 2015 AAGR
Albania	H	.	.	.	.	-5.7%	5.5%	-0.3%
	B	-1.0%	2.9%	2.9%	3.3%	-6.6%	4.3%	-1.3%
	L	.	.	.	.	-7.5%	3.0%	-2.4%
Armenia	H	.	.	.	.	-9.3%	8.6%	-0.7%
	B	-9.5%	-2.9%	-4.5%	-11.8%	-14.8%	4.6%	-5.6%
	L	.	.	.	.	-20.3%	0.1%	-10.7%
Austria	H	.	.	.	.	3.3%	4.4%	3.8%
	B	-2.0%	-0.5%	7.7%	3.5%	2.2%	2.9%	2.6%
	L	.	.	.	.	1.2%	1.4%	1.3%
Belgium /Luxembourg	H	.	.	.	.	2.9%	4.6%	3.7%
	B	0.9%	2.0%	3.7%	3.9%	2.1%	3.4%	2.7%
	L	.	.	.	.	1.3%	2.0%	1.7%
Bosnia- Herzegovina	H	.	.	.	.	3.2%	5.7%	4.5%
	B	-5.1%	-3.8%	19.7%	11.2%	1.8%	3.7%	2.7%
	L	.	.	.	.	0.5%	1.6%	1.0%
Bulgaria	H	.	.	.	.	7.3%	4.8%	6.0%
	B	0.1%	1.9%	33.3%	17.5%	6.2%	3.3%	4.7%
	L	.	.	.	.	5.1%	1.7%	3.4%
Canary Islands	H	.	.	.	.	7.5%	5.1%	6.3%
	B	-4.0%	-5.2%	-1.6%	-6.0%	6.1%	3.0%	4.6%
	L	.	.	.	.	4.8%	1.0%	2.9%
Croatia	H	.	.	.	.	-0.1%	4.6%	2.2%
	B	2.7%	0.9%	3.9%	1.7%	-1.3%	2.7%	0.7%
	L	.	.	.	.	-2.5%	0.8%	-0.9%
Cyprus	H	.	.	.	.	-1.0%	4.9%	1.9%
	B	-3.3%	1.8%	9.6%	6.4%	-1.9%	3.2%	0.6%
	L	.	.	.	.	-2.8%	1.6%	-0.6%
Czech Republic	H	.	.	.	.	7.2%	4.1%	5.6%
	B	-0.0%	3.0%	0.8%	5.8%	6.0%	2.4%	4.2%
	L	.	.	.	.	4.9%	0.7%	2.8%
Denmark	H	.	.	.	.	3.6%	3.3%	3.5%
	B	-2.8%	6.6%	0.5%	3.4%	2.8%	2.3%	2.5%
	L	.	.	.	.	2.0%	1.1%	1.5%

Total en-route Service Units (Thousands)								
Annual Growth		2012	2013	2014	2015	2016	2017	2017/ 2015 AAGR
Estonia	H	.	.	.	.	4.1%	4.0%	4.0%
	B	2.9%	2.3%	6.6%	3.3%	3.0%	2.5%	2.8%
	L	.	.	.	.	2.0%	1.1%	1.5%
FYROM	H	.	.	.	.	3.3%	5.4%	4.3%
	B	-10.2%	1.9%	38.8%	7.1%	1.9%	3.4%	2.6%
	L	.	.	.	.	0.5%	1.3%	0.9%
Finland	H	.	.	.	.	0.1%	2.6%	1.3%
	B	-5.1%	-2.5%	3.3%	-4.4%	-0.9%	1.5%	0.3%
	L	.	.	.	.	-2.0%	0.3%	-0.8%
France	H	.	.	.	.	4.2%	4.0%	4.1%
	B	-1.0%	2.2%	3.3%	2.0%	3.5%	2.8%	3.1%
	L	.	.	.	.	2.9%	1.6%	2.2%
Georgia	H	.	.	.	.	2.5%	6.2%	4.3%
	B	-2.5%	5.4%	0.6%	7.1%	-0.1%	4.2%	2.0%
	L	.	.	.	.	-2.6%	2.0%	-0.3%
Germany <sup>5</sup>	H	.	.	.	.	5.1%	3.4%	4.2%
	B	-1.8%	0.5%	2.5%	0.7%	4.4%	2.1%	3.2%
	L	.	.	.	.	3.7%	0.7%	2.2%
Greece	H	.	.	.	.	1.7%	5.2%	3.5%
	B	-4.2%	-3.3%	9.5%	6.1%	0.4%	3.1%	1.8%
	L	.	.	.	.	-0.8%	1.0%	0.1%
Hungary	H	.	.	.	.	5.2%	4.4%	4.8%
	B	-2.1%	3.8%	14.5%	12.0%	3.9%	3.2%	3.6%
	L	.	.	.	.	2.7%	1.9%	2.3%
Ireland	H	.	.	.	.	3.5%	2.9%	3.2%
	B	0.9%	0.2%	2.9%	6.6%	2.6%	1.8%	2.2%
	L	.	.	.	.	1.7%	0.5%	1.1%
Italy	H	.	.	.	.	3.1%	3.3%	3.2%
	B	-2.8%	-0.3%	2.4%	-1.7%	2.1%	1.7%	1.9%
	L	.	.	.	.	1.1%	0.3%	0.7%
Latvia	H	.	.	.	.	1.8%	5.7%	3.7%
	B	0.7%	3.8%	4.5%	4.6%	0.5%	3.4%	2.0%
	L	.	.	.	.	-0.9%	1.2%	0.2%
Lisbon FIR	H	.	.	.	.	7.6%	4.2%	5.9%
	B	-1.4%	3.4%	5.0%	4.3%	6.8%	2.7%	4.7%
	L	.	.	.	.	5.9%	1.2%	3.5%

<sup>5</sup> For Germany, hence for RP1 and RP2, series, includes service units for flight segments performed as Operational Air Traffic. 69,922 service units were concerned for 2015. Estimated number for the coming years is 75,000 per year.

Total en-route Service Units (Thousands)								
Annual Growth		2012	2013	2014	2015	2016	2017	2017/ 2015 AAGR
Lithuania	H	.	.	.	.	3.5%	4.3%	3.9%
	B	2.3%	4.9%	8.1%	1.0%	2.1%	2.4%	2.3%
	L	.	.	.	.	0.8%	0.4%	0.6%
Malta	H	.	.	.	.	12.8%	4.6%	8.6%
	B	26.8%	14.7%	-1.1%	13.2%	10.5%	1.5%	5.9%
	L	.	.	.	.	8.3%	-1.4%	3.3%
Moldova	H	.	.	.	.	-2.4%	21.7%	9.0%
	B	5.7%	16.8%	-45.5%	-43.7%	-9.5%	14.1%	1.6%
	L	.	.	.	.	-16.6%	5.3%	-6.3%
Netherlands	H	.	.	.	.	6.6%	3.7%	5.1%
	B	-0.3%	4.4%	2.4%	4.5%	5.8%	2.6%	4.2%
	L	.	.	.	.	5.0%	1.2%	3.1%
Norway	H	.	.	.	.	5.0%	3.7%	4.4%
	B	7.8%	11.1%	8.3%	4.2%	3.9%	1.7%	2.8%
	L	.	.	.	.	2.8%	0.1%	1.4%
Poland	H	.	.	.	.	3.8%	3.8%	3.8%
	B	4.8%	3.4%	-1.3%	-1.3%	3.0%	2.5%	2.8%
	L	.	.	.	.	2.3%	1.3%	1.8%
Romania	H	.	.	.	.	4.5%	5.4%	4.9%
	B	1.2%	4.9%	11.5%	9.3%	3.1%	3.4%	3.3%
	L	.	.	.	.	1.8%	1.4%	1.6%
Santa Maria FIR	H	.	.	.	.	6.5%	4.3%	5.4%
	B	-2.7%	3.8%	3.6%	11.9%	5.2%	3.3%	4.3%
	L	.	.	.	.	4.0%	2.3%	3.1%
Serbia- Montenegro- KFOR <sup>6</sup>	H	.	.	.	.	6.8%	4.6%	5.7%
	B	-6.1%	-4.7%	6.9%	12.7%	5.5%	2.7%	4.1%
	L	.	.	.	.	4.2%	0.9%	2.5%
Slovakia	H	.	.	.	.	5.9%	4.3%	5.1%
	B	2.4%	6.9%	6.0%	2.6%	4.7%	2.6%	3.6%
	L	.	.	.	.	3.4%	0.9%	2.1%
Slovenia	H	.	.	.	.	4.9%	4.2%	4.6%
	B	0.1%	-3.3%	11.7%	1.5%	3.9%	2.7%	3.3%
	L	.	.	.	.	2.9%	1.1%	2.0%
Spain	H	.	.	.	.	7.8%	3.7%	5.8%
	B	-7.2%	0.0%	3.8%	2.6%	7.1%	2.6%	4.8%
	L	.	.	.	.	6.4%	1.5%	3.9%

<sup>6</sup> The charging zone over Serbia and Montenegro has been renamed Serbia-Montenegro-KFOR (following the change in the naming convention, see Final minutes of the 103rd session of the Enlarged Committee dated 19-20.11.2014).

Total en-route Service Units (Thousands)								
Annual Growth		2012	2013	2014	2015	2016	2017	2017/ 2015 AAGR
Sweden	H	.	.	.	.	1.9%	3.4%	2.6%
	B	-1.8%	2.6%	2.4%	2.1%	0.9%	1.7%	1.3%
	L	.	.	.	.	-0.1%	0.0%	-0.0%
Switzerland	H	.	.	.	.	4.7%	3.7%	4.2%
	B	-2.3%	-1.0%	3.0%	1.9%	3.7%	2.2%	3.0%
	L	.	.	.	.	2.8%	0.7%	1.7%
Turkey	H	.	.	.	.	3.4%	5.9%	4.7%
	B	2.0%	8.4%	20.4%	10.7%	2.4%	4.3%	3.3%
	L	.	.	.	.	1.4%	2.6%	2.0%
UK	H	.	.	.	.	5.3%	2.8%	4.1%
	B	-2.6%	1.5%	2.3%	1.7%	4.3%	2.1%	3.2%
	L	.	.	.	.	3.4%	1.2%	2.3%
Ukraine	H	.	.	.	.	-8.8%	12.4%	1.3%
	B	2.8%	7.5%	-43.8%	-53.6%	-12.5%	7.4%	-3.0%
	L	.	.	.	.	-16.1%	2.2%	-7.4%
BLUE MED FAB	H	.	.	.	.	2.8%	4.1%	3.4%
	B	-2.2%	-0.3%	5.0%	2.2%	1.6%	2.3%	2.0%
	L	.	.	.	.	0.5%	0.5%	0.5%
Baltic FAB	H	.	.	.	.	3.7%	3.9%	3.8%
	B	4.6%	3.5%	-0.4%	-1.0%	2.9%	2.5%	2.7%
	L	.	.	.	.	2.1%	1.2%	1.6%
Danube FAB	H	.	.	.	.	5.6%	5.2%	5.4%
	B	0.8%	3.8%	19.2%	12.5%	4.4%	3.4%	3.9%
	L	.	.	.	.	3.1%	1.5%	2.3%
FAB CE	H	.	.	.	.	4.3%	4.4%	4.4%
	B	-0.6%	1.6%	7.6%	5.9%	3.1%	2.8%	3.0%
	L	.	.	.	.	2.0%	1.2%	1.6%
FABEC	H	.	.	.	.	4.6%	3.8%	4.2%
	B	-1.2%	1.6%	3.0%	1.9%	3.9%	2.6%	3.2%
	L	.	.	.	.	3.2%	1.3%	2.2%
NEFAB	H	.	.	.	.	3.5%	3.9%	3.7%
	B	2.9%	5.6%	6.5%	2.6%	2.4%	2.1%	2.2%
	L	.	.	.	.	1.2%	0.5%	0.9%
South West FAB	H	.	.	.	.	7.7%	4.0%	5.8%
	B	-5.6%	0.1%	3.4%	2.0%	6.9%	2.7%	4.8%
	L	.	.	.	.	6.1%	1.4%	3.7%
UK-Ireland FAB	H	.	.	.	.	4.8%	2.9%	3.8%
	B	-1.6%	1.1%	2.5%	3.1%	3.8%	2.0%	2.9%
	L	.	.	.	.	2.9%	1.0%	1.9%

Total en-route Service Units (Thousands)								
Annual Growth		2012	2013	2014	2015	2016	2017	2017/ 2015 AAGR
DK-SE FAB	H	.	.	.	.	2.5%	3.4%	2.9%
	B	-2.1%	3.9%	1.8%	2.5%	1.5%	1.9%	1.7%
	L	.	.	.	.	0.6%	0.4%	0.5%
CRCO88	H	.	.	.	.	5.3%	3.7%	4.5%
	B	-2.2%	1.3%	3.2%	2.8%	4.5%	2.5%	3.5%
	L	.	.	.	.	3.7%	1.3%	2.5%
CRCO11	H	.	.	.	.	4.5%	4.1%	4.3%
	B	-1.3%	2.1%	5.8%	4.2%	3.6%	2.7%	3.2%
	L	.	.	.	.	2.6%	1.3%	2.0%
CRCO14	H	.	.	.	.	4.5%	4.2%	4.3%
	B	-1.3%	2.1%	5.8%	4.2%	3.6%	2.7%	3.1%
	L	.	.	.	.	2.6%	1.3%	1.9%
RP1Region <sup>3</sup>	H	.	.	.	.	4.7%	3.9%	4.3%
	B	-1.5%	1.6%	4.4%	3.1%	3.8%	2.5%	3.1%
	L	.	.	.	.	2.9%	1.1%	2.0%
RP2Region <sup>3</sup>	H	.	.	.	.	4.6%	3.9%	4.3%
	B	-1.4%	1.6%	4.4%	3.0%	3.7%	2.5%	3.1%
	L	.	.	.	.	2.8%	1.1%	1.9%
Total	H	.	.	.	.	4.4%	4.2%	4.3%
	B	-1.2%	2.3%	3.9%	3.0%	3.4%	2.8%	3.1%
	L	.	.	.	.	2.4%	1.3%	1.9%



## Annex 5      References

---

<sup>i</sup> *Methods of the STATFOR Seven-Year Forecast*, STATFOR Document 518, Draft v0.7, July 2015

<sup>ii</sup> *EUROCONTROL Seven-Year IFR Movements and Service Units Forecast, 2016-2022*, STATFOR Document 579, March 2016

© European Organisation for the Safety of Air Navigation (EUROCONTROL) 2016

This document is published by EUROCONTROL in the interests of exchange of information. It may be copied in whole or in part, providing that the copyright notice and disclaimer are included. The information contained in this document may not be modified without prior written permission from EUROCONTROL.

EUROCONTROL makes no warranty, either implied or express, for the information contained in this document, neither does it assume any legal liability or responsibility for the accuracy, completeness or usefulness of this information.

For further information please contact,  
STATFOR, the EUROCONTROL Statistics and Forecast Service  
[statfor.info@eurocontrol.int](mailto:statfor.info@eurocontrol.int)  
<http://www.eurocontrol.int/statfor>



STATFOR, the EUROCONTROL Statistics and Forecast Service is ISO 9001:2008 certified.