EUROCONTROL SEVEN-YEAR FORECAST SEPTEMBER 2016

Flight Movements and Service Units 2016-2022

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EXECUTIVE SUMMARY

This report presents the September 2016 update of the EUROCONTROL seven-year flight and service units forecast. It replaces the February 2016 report (Ref. 1). This update uses the most-recent traffic statistics and economic forecasts, and more up-to-date information in terms of traffic trends and recent air-industry related events.

IFR Movements

As expected in the February forecast February (Ref. 1), European traffic in 2016 remained on average[1] 2.1% above the 2015 traffic levels (January-August period). More sustained growth rates emerged during summer months notably driven by the low-cost segment.

Since the previous forecast was published in February 2016, the economic outlook for EU was negatively affected by the UK decision to vote for leave the EU in June 2016. Following the fear of terrorist attacks in Egypt, Tunisia, and Turkey, a strong shift in tourism has been observed overall towards Iberia and Greece. Based on previous experience, we expect the recovery in Egypt, Tunisia and Turkey to take some time. The various airspace blockages (eg. Eastern Ukraine, Syria, Libya), which have significantly changed the traffic patterns in South-Eastern Europe since the second half of 2014, are still in place. On top of that, the ban on flights between Russia and Turkey, not only generated some additional traffic patterns changes in that region but also negatively affected arrival and departures in Turkey. The recent cancelling of this ban should bring the routings back to what they were before the start of the ban (November 2015).

At European level (ECAC area), the flight forecast has remained mostly unchanged in 2016 (compared to previous forecast) with a growth of 2.7% (±0.4 percentage point). The revision of the economic forecast will hinder in 2017 the sustained recorded growth of traffic in North Western Europe started beginning of this year. For 2017, the forecast has therefore been revised downwards to 1.4% (±2.0pp) due to the negative revision of the economic outlook in Europe. Removing the effect of the leap year in 2016; this in fact means that we expect a growth[1] of 2.4% for 2016 and 1.7% for 2017 (See Figure 1).

From 2018 onwards, European flight growth is expected to remain stable at around 2.1% per year over the 2018-2022 period. The 2008 peak of 10.2 million flights is forecasted to be outnumbered in 2017; a 9-year hiatus.

We continue to observe widely-differing rates of growth across member States, driven by different trend of economic growth and changes in tourism demand and route choices as mentioned above. The forecast reflects these variations.

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[1] In average daily terms.

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Figure 1. Summary of flight forecast for Europe (ECAC[2]).

ECAC		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	AAGR 2022/2015	RP2 2019/2014 AAGR
IFR Flight Movements (Thousands)	H	.	.	.	.	10,224	10,573	11,029	11,416	11,890	12,303	12,736	**3.6%**	**3.2%**
	B	9,710	9,603	9,770	9,923	10,187	10,329	10,544	10,760	11,016	11,221	11,456	**2.1%**	**1.9%**
	L	.	.	.	.	10,151	10,094	10,097	10,169	10,261	10,301	10,367	**0.6%**	**0.8%**
Annual Growth (compared to previous year unless otherwise mentioned)	H	.	.	.	.	3.0%	3.4%	4.3%	3.5%	4.2%	3.5%	3.5%	**3.6%**	**3.2%**
	B	-2.2%	-1.1%	1.7%	1.6%	2.7%	1.4%	2.1%	2.1%	2.4%	1.9%	2.1%	**2.1%**	**1.9%**
	L	.	.	.	.	2.3%	-0.6%	0.0%	0.7%	0.9%	0.4%	0.6%	**0.6%**	**0.8%**

Total En-route Service Units

Following the strong growth of flights over Western and South-West Europe whose service units growth has been further boosted by increasing aircraft weights and often distances, the total en-route service units forecast in the participating EUROCONTROL member states (CRCO14) has been revised upwards compared to the February 2016 forecast. This revision is stronger than that of the IFR movements, in line with the actual trends of en-route service units.

In 2016, 143.4 million service units are expected to be produced in EUROCONTROL member States (CRCO14). This is a one percentage point revision upwards compared to the February 2016 forecast and represents a growth of 4.1% (±0.4pp).

Despite of a revision downwards of the IFR movement forecast for 2017, the stronger growth trends observed in 2016 for en-route service units, in particular over UK, France and the South-West FAB have led to a revision upwards of service units by 0.4pp for 2017. Total service units in CRCO14 are expected to reach 148 million, thus a growth of 3.2% (±1.8pp).

However, in the following years, the impact of the strong trends declines and service units growth have been revised downwards in line with that of the flights. The total en-route service units in the participating EUROCONTROL member states (CRCO14) are expected to end slightly above the February 2016 forecast, reaching in total 168 million in 2022. This represents an average annual growth rate of 2.9% and a total growth of 22% compared to 2015, which are similar values to those forecasted in February 2016.

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[2] ECAC is the European Civil Aviation Conference. See Annex 1 for a definition.
2015 data for Azerbaijan were still missing when the February 2016 report was published and had therefore to be estimated. These data are now available which explains the difference in the data figure for 2015 between the previous report and this one.

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Figure 2. Summary of forecast of total service units in Europe.

Total en-route service units (Thousands)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2022/ 2015 Total Growth	RP2 2019/ 2014 AAGR
CRCO14*	H	.	.	.	.	143,904	151,037	158,490	165,060	172,858	179,736	186,995	**36%**	**4.6%**
	B	122,298	124,910	132,130	137,689	143,389	147,952	151,762	155,630	160,011	163,745	167,902	**22%**	**3.3%**
	L	.	.	.	.	142,877	144,915	145,581	147,186	149,122	150,315	151,880	**10%**	**2.2%**
RP2Region†	H	.	.	.	.	120,901	126,742	132,514	137,487	143,511	148,686	154,094	**34%**	**4.2%**
	B	105,251	106,930	111,670	115,063	120,507	124,326	127,091	129,861	133,168	135,894	138,948	**21%**	**3.1%**
	L	.	.	.	.	120,116	121,937	122,138	123,096	124,351	125,036	126,045	**10%**	**2.0%**
Total en-route service units (Growth)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	AAGR 2022/ 2015	RP2 2019/ 2014 AAGR
CRCO14*	H	.	.	.	.	4.5%	5.0%	4.9%	4.1%	4.7%	4.0%	4.0%	**4.5%**	**4.6%**
	B	-1.3%	2.1%	5.8%	4.2%	4.1%	3.2%	2.6%	2.5%	2.8%	2.3%	2.5%	**2.9%**	**3.3%**
	L	.	.	.	.	3.8%	1.4%	0.5%	1.1%	1.3%	0.8%	1.0%	**1.4%**	**2.2%**
RP2Region†	H	.	.	.	.	5.1%	4.8%	4.6%	3.8%	4.4%	3.6%	3.6%	**4.3%**	**4.2%**
	B	-1.4%	1.6%	4.4%	3.0%	4.7%	3.2%	2.2%	2.2%	2.5%	2.0%	2.2%	**2.7%**	**3.1%**
	L	.	.	.	.	4.4%	1.5%	0.2%	0.8%	1.0%	0.6%	0.8%	**1.3%**	**2.0%**

* 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.
† RP2 series includes service units for flight segments performed as Operational Air Traffic (OAT) for Germany.

Terminal Navigation Service Units

For Terminal Navigation Service Units in the countries participating to the Performance Scheme in the Second Reference Period (RP2), the forecast for 2016 has been revised upwards by 1.5 percentage point and is expected to reach 7.8 million by the end of 2016, thus a growth of 4.6% (±0.4pp). Following similar trends as the en-route service units, growth will then slow and the average annual growth between 2015 and 2022 will stand at 2.9% to reach 9.1 million by 2022.

Figure 3. Summary of forecast for the terminal navigation service units in the RP2 Region area.

RP2 Region		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	AAGR 2022/ 2015	AAGR RP2 2019/ 2014
TNSU Total (thousands)	H	.	.	.	.	7,856.3	8,174.5	8,557.7	8,914.0	9,369.1	9,762.1	10,121.5	**4.4%**	**4.2%**
	B	7,234.3	7,223.5	7,266.7	7,484.2	7,830.7	8,003.6	8,182.9	8,390.5	8,647.6	8,875.1	9,111.5	**2.9%**	**2.9%**
	L	.	.	.	.	7,804.2	7,826.5	7,861.5	7,954.7	8,059.5	8,136.1	8,234.7	**1.4%**	**1.8%**
TNSU Annual Growth (%)	H	.	.	.	.	5.0%	4.0%	4.7%	4.2%	5.1%	4.2%	3.7%	**4.4%**	**4.2%**
	B	-1.9%	-0.1%	0.6%	3.0%	4.6%	2.2%	2.2%	2.5%	3.1%	2.6%	2.7%	**2.9%**	**2.9%**
	L	.	.	.	.	4.3%	0.3%	0.4%	1.2%	1.3%	1.0%	1.2%	**1.4%**	**1.8%**

Any user of these forecasts is strongly advised to use the forecast range (low-growth to high-growth) as an indicator of risk. These are discussed in Section 6.

The EUROCONTROL 7-year forecast will be next updated in February 2017.

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1 INTRODUCTION

1.1 CONTEXT

This document presents an update of the 7-year forecast published by EUROCONTROL in February this year (Ref. 1). This forecast update is produced every year, in particular to allow the capacity-planning process to use the most up-to-date information. To achieve this, the EUROCONTROL Statistics and Forecast Service (STATFOR) refreshes mid-year the main inputs to the forecast.

The forecast describes the annual number of IFR flight movements, annual number of total en-route service units and annual number of terminal navigation service units up to 2022.

For this update, three sets of the inputs have been revised: the assumptions on economic growth have been updated using economic forecasts available in mid-August ; the traffic (IFR movements and service units) baseline has been re-aligned to take into account annual traffic to the end of August ; the adjustments and assumptions have been refreshed to better reflect the effects of the different traffic disruptions. For all other inputs and assumptions, see the description in Section 3 of Ref. 1.

The forecast method is similar to the one used in the EUROCONTROL 7-year forecast published in February 2016. An overview of the forecast method is given in the Section 1.2.

This document contains a presentation of the latest traffic trends (Section 2), a presentation of the forecast inputs and assumptions (Section 3). The flights (Section 4) and Service Units (Section 5) forecasts to 2022 are then discussed. Section 6 indicates the main risks surrounding the forecast. A presentation of the geographical definitions can be found in Annex 1. Forecast details for Europe as a whole are presented in Annex 2. Annual total forecasts per States for IFR flights, en-route service units and terminal navigation service units can be found in Annex 3 to Annex 9. The IFR flights forecasts per State (with details per flows) are provided via the STATFOR Interactive Dashboard (Ref. 2).

The next 7-year outlook, covering 2017 to 2023 period, will be published in February 2017.

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1.2 FORECAST METHOD

For the new forecast process, we have produced a completely revised set of documentation on the forecast methods (Ref. 3). This documentation describes the methods at a number of levels of detail, from a two-page summary, to a function-by-function reference. For convenience of readers, the summary is reproduced in this section.

EUROCONTROL/STATFOR provides impartial air traffic forecasts, market analyses and statistics to the ATM community in the widest sense, to improve understanding of current and future trends, to enable better-informed decision making and thus to improve network performance. The STATFOR forecast has been serving European ATM since the 1970s. It is the only air traffic forecast covering Europe.

STATFOR publishes a forecast of IFR flights and both en-route and terminal service units for the next seven years in Europe. The main forecast update is published in February each year and refreshed in September. Our focus is on the traffic forecast for States or larger regions. This influences the modelling choices made in the forecasting process. Other EUROCONTROL units use this high level forecast to drill down to the level of airports, control centres, sectors etc.

The number of flights depends on the interaction of supply and demand: an airline operates a flight between an airport A and an airport B because it has customers who pay to travel or ship goods from A to B. Supply and demand are each influenced by a large number of factors like economy, regulation, demographics, business development, oil prices, high-speed rail. When forecasting, we use data that describe these factors, and data more directly about actual and future supply (past flights, and future schedules). Some data are more relevant to the short-term horizon (e.g., airline schedules) while others are used in the medium-term horizon (e.g., demographics). Probably the three most influential inputs to the forecast are:

- **Economic growth** forecasts obtained from external specialists, and which in recent years have been very variable; growth has slowed, but there is nothing in our data to show that flight growth has decoupled from economic growth;

- **Regulation**, e.g., rules on visas, open skies, airport funding, aviation taxes;

- **Overflight** patterns since, for the majority of States, most of their flights are overflights. A crisis such as that in Ukraine can easily change the number of flights by 10% or more in a number of States due to re-routing, even if the number of flights on the network as a whole is little changed.

Overall, the components of the forecast can be grouped into five elements as in Figure 4.

- An initial annual forecast for the next seven years based on economic, transport and other trends;

- A monthly forecast based on trends, economics and airlines' plans;

- These are merged, and constrained by airport capacities to give the constrained forecast;

- The final step of the flight forecast is to calculate how many flights are generated in each State, using both routings through airspace observed in the historical data and recent trends.

- The number of service units in a charging zone depends on the number of flights, the weight of aircraft and, in the *en route* case, the distance flown. The two service unit forecasts therefore take the flight forecast as an input and combine this with time series forecasts of weight and distance as needed. This gives total service units, from which future chargeable service units are estimated using the ratio of chargeable/total from the previous calendar year.

Figure 4. The components of the STATFOR seven-year forecast.

We use a highly-automated and structured process to produce traffic forecasts and because of the variety of factors and inputs, different forecasting techniques are used: traditional time series methods to extrapolate historical patterns, econometric analyses to take into account how economic, social and operational conditions have an effect on the development of traffic, scenario-based inputs to describe the future (what Europe will be in 10 years' time?) and specific data-driven models (e.g., high-speed rail development model). As for any forecast, the method relies on historical data either for taking a snapshot of the most recent trends or longer history to calibrate the models.

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The future is always uncertain. We capture this uncertainty in the forecast through three forecast scenarios: low- and high-growth scenarios, with the most-likely 'base' forecast in between. All three scenarios should be considered as part of the risk management of any decision based on the forecast.

As requested by Stakeholders, we have re-calibrated:

- since the February 2014 forecast, the key relationships with economic growth, including introducing more specific country-pair flow relationships where these make statistical sense. This re-calibration process is described in Ref. 4.

- since the February 2015 forecast, the key relationships with high-speed train growth. This re-calibration process is described in Ref 5.

- Since the February 2016 forecast, we have switched to reporting based on the whole of the ECAC region in place of the smaller 'ESRA08'. So 'Europe' in this report refers to the total of all ECAC member States. For more details see Annex 1.

2 FLIGHT & SERVICE UNITS TRENDS IN 2016

Since the beginning of 2016, average daily flights in Europe (ECAC area) remained 2.1% above the 2015 traffic levels (compared with January to August in 2015). More sustained growth rates emerged during summer months, with the highest ever growth levels in May and August (respectively 2.7% and 2.6%). This was notably driven by the low-cost segment, which grew at a 7% rate. This growth matched the forecast published for Europe in February 2016.

Inside Europe, adverse travel advice for North-African States (Egypt and Tunisia) and Turkey are shifting tourism overall towards Iberia and Greece. Some shifts of traffic were observed from the South-East to the South-West axis. The various airspace blockages (eg. Eastern Ukraine, Syria, Libya), which have significantly changed the traffic patterns in South-Eastern Europe since the second half of 2014, are still in place. Ban on flights between Russia and Turkey generated some additional traffic patterns changes in that region but also more negatively affected arrival and departures in Turkey.

2.1 IFR MOVEMENTS

The overall European traffic has been growing by 2.1% since the beginning of 2016 (compared with January to August 2015, in average daily terms) mostly thanks to the dynamism of the low-cost segment which grew at a 7% rate followed by the 2% growth rate of the traditional scheduled segment.

During the first quarter of the year, the average growth rate reached 2.3% although January was weak (1.5%) and February growth (3%) was inflated by adverse weather conditions in February 2015. Since the summer schedules began, the traffic remained on average 2.2% above 2015 levels (compared with April to August 2015) with variations during the months, the higher growth rates of May (2.7%) and August (2.6%) were somewhat offset by a lower growth rate in June (1.3%) as a result of industrial actions throughout the month.

The actual IFR flight traffic for 2016 matched the forecast published in February 2016 (as shown in Figure 5).

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Figure 5. Summer 2016 number of flights was 2.2% above Summer 2015, in line with the February 2016 forecast.

2.1.1 BIGGEST CHANGES DURING THE SUMMER 2016

Figure 6 shows the States with growth change of total number of IFR movements bigger than 7% or lower than -7% over the summer period (April-August 2016 vs April-August 2015).

Figure 6. Traffic decline in Egypt and Turkey changed traffic patterns in the Summer 2016 (Apr-Aug).

Due to the high fear from terrorism, tourists have been discouraged to choose Egypt, Tunisia and Turkey as destination for their Summer holiday. This generated strong shift of traffic from the South-East axis to the South-West axis with high arrival/departures in Spain, Canary Islands, Portugal, Santa Maria and Greece. This traffic was strongly stimulated by the low-cost carriers.

UK and Ireland have had very strong overflights from North Atlantic flows. Ireland overflights are also boosted by the increase of the flows from UK and Northern Europe to the Iberian Peninsula and Canary Islands.

Russian have also been avoiding Egypt and Turkey over the Summer period generating high decline on overflights over Eastern Europe, mostly for Armenia and Turkey. Some additional overflights for Poland have been generated due to the growth of the Russian flows to Bulgaria and more recently to Tunisia. This last flow also generated some extra flights over Malta.

Finally, the constraints in terms of routing options due to the numerous airspace unavailability have also generated many re-routing affecting negatively Ukraine and Moldova and positively Malta and Ireland (flows North America to Middle East).

2.1.2 NETWORK CONTRIBUTORS

Figure 7 shows the main contributors to the local traffic growth (internals, international arrivals and departures, excluding overflights) for January-August 2016 period (compared with January – August 2015).

- The strongest contributor to the network growth was the United Kingdom (+280 daily flights) thanks to strong international arrival/departures. The Iberian Peninsula (Spain, Portugal) adding together 390 daily flights, Italy (+90 daily flights), the Canary Islands (+75 daily flights) as well as the other North-Western countries (The Netherlands, Germany, Ireland and France: +250 daily flights) are also adding many flights to the network.
- On the right-hand side of Figure 7, Turkey, which has been among the main contributors to traffic until March, has started to see fewer flights since April, in the aftermath of terrorist attacks and political unrest. The impact has been significant since May as the country has been losing circa 400 daily flights owing to a drastic drop in arrival/departures. On average, Turkey had 80 fewer daily flights between January and August (compared with January and August 2015). Norway continued to be impacted by the oil crisis but also to a lesser extent by the air passenger tax increase in effect since June. The country saw 50 fewer daily flights on average since the beginning of the year. Belgium/Luxembourg international arrival/departures flows have been suffering from the terrorist

attack on 22 March, which led to 35 fewer daily flights on average for the period January-August.

Figure 7. Since the beginning of the year 2016, most of the States have been adding traffic to the Network (vs same months last year) with the exception of Turkey which recorded less traffic since May.

2.1.3 EXTRA-EUROPEAN PARTNERS

As was already the case in 2015 (January to August), the United States was the number one destination from Europe in terms of number of flights: 470 departures per day on average, an increase of 6% compared with last year (see Figure 8). This flow represented 18% of all departures from ECAC to countries outside Europe for the period January to August. The Russian Federation remained Europe's second destination with 340 daily departures, although a decrease of 20% compared with the same period last year.

The United Arab Emirates were the third extra-European partner with 160 daily departures on average, an increase of 8% on last year. Morocco was the fourth extra-European partner with 140 average daily departures, a decrease of 3% over the period January to August 2015. Israel was the fifth destination from Europe with an average of 140 departures per day, an increase of 8% on the same period in 2015.

Figure 8. For the second year in a row, the United States overtook Russia as the non-European destination adding the most flights in 2016

2.1.4 AIRLINE INDUSTRY

The load factors of major European flag carriers on Europe cross-border flows were one percentage point lower than the 2015 ones, at 76% on average for the period January to August 2016 (see Figure 9).

Figure 9. 2016 European load factors were on average one percentage point lower than in 2015 (January to August).

Figure 10 shows the traffic development per market segment. Over the January to August 2016 period, the low-cost segment maintained its dominant growth position, with a growth rate oscillating around 7% since April and was followed by the traditional scheduled segment, which grew by 2% on average since the beginning of 2016 (vs. same period 2015).

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Part of the low-cost segment's growth was because some traditional carriers, as part of restructuring, have handed their short-haul journeys to low-cost carriers. Also on the growth side, the all-cargo segment posted an average of 0.7% growth since the beginning of the year.

Business aviation recorded a decrease of 1.6%. Charter (non-scheduled) was the weakest market segment, with an average fall of 17% compared with the period a year ago. This was mainly due to a decline in traffic to/from Russia, Tunisia and Turkey. In addition, the charter segment decrease was also due to a number of aircraft operators filing a different flight type in 2016, compared with last year.

Figure 10. With an average growth rate of 7%, the low-cost segment was the main driver of flight growth.

Flight growth compared to previous year

Airline ticket price growth in Europe has decelerated since the beginning of the year owing to a drop in oil prices and increased competition (Figure 11). Ticket price inflation has stood at an average level of 2.7% less compared to a year ago. The peak in March 2016 was mostly driven by Easter.

Figure 11. In 2016, the trend in ticket price changes (air travel) in Europe decreased to circa 2.7% compared with the year before, on a 12-month trailing average. Note that, on this graph, ticket prices are deflated by overall consumer prices

Ticket Prices in Europe

As Figure 12 shows, oil prices fell to €42 per barrel in August; prices averaged out at €44 since the beginning of 2016. Fuel prices have consequently been low, with an average of €350 per tonne since the beginning of the year.

Figure 12. In 2016, oil prices dropped to an average of €44 per barrel.

2.2 EN-ROUTE SERVICE UNITS

During the first eight months of 2016, the total service units (TSU) for the CRCO14 region increased by 3.7% from 92.7 million in the year-ago period to 96.1 million. Such an increase of 3.7% is between the baseline (+3.1%) and the high scenario (+4.5%) published in the February forecast for 2016 (Ref. 1) and is in line with the 3.6% growth forecasted in May 2016 (Ref. 6).

Figure 13. Evolution of total service units recorded in CRCO14 area from January 2012 to August 2016.

This stronger growth of the TSU than expected in the February forecast is mainly driven by the strength of the IFR movements (see Section 2.1) combined with the on-going trend of increasing aircraft weights as observed in France, Germany and the UK. As for the IFR movements, TSU growth was particularly strong in Southern and Western Europe with, for example average daily[3] TSU growth in the UK of 6%, in the Netherlands of 7.2%, and in Poland of 6.8%, and, for Southern Europe, growths of average daily TSU of 8.4% for Spain, 9.9% for Portugal and 16.5% for Malta.

However, if growth has been strong for some countries, it is not even across all European countries since weaker IFR movements and TSU growths have been observed around South-Eastern Europe (e.g. Croatia, Greece, Albania, Romania) since the beginning of the summer schedules.

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

- changes of routes in the region with flights sent more North and East towards Serbia-Montenegro-KFOR and Bulgaria;
- a decline by 9.2% of international arrivals and departures to/from Turkey since the beginning of the year ; and
- the already-existing decline of flights between Egypt and the Russian Federation.

Consequently, the daily TSU growth in Romania, Albania and Greece declined by 3.4%, 4.9% and 8% respectively and the TSU growth over Bulgaria weakened to a daily growth of 4.8% whereas it was around 10% from January up to March 2016. Daily TSU growth in Turkey was also negative with a decline of 0.8% since the beginning of the year compared to last year for the reason mentioned above.

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[3] Growth figures are expressed in terms of daily average growth of the number of en-route service units to alleviate the impact of the leap-year in 2016. The growths are always evaluated compared to the previous year.

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3 FORECAST INPUTS AND ASSUMPTIONS

The forecast is driven by past trends and by scenario assumptions for the future. Since the previous forecast published in February 2016, the economic outlook was highly revised downwards after the UK decision to vote for leave the EU on June 23. Moreover, the fear of terrorist attacks in Egypt, Tunisia and Turkey has led to some strong changes in tourism destinations. The airspace unavailability over Ukraine, Libya, and Near-East are still generating changes in routings in Eastern Europe. Lacking any indication of when there might be a re-opening of these airspaces, we assumed that these new routing patterns will be used until the end of the forecast (2022).

The forecast is derived from historical traffic data and a set of scenario assumptions. All the input assumptions made in the February forecast (e.g., load factors evolution, demographics, high-speed rail network development etc, see Ref.1) have been reused, except for the economic growth forecast, airport information and the specific events and traffic trends. Sections 3.1, 3.2 and 3.3 describe how they influence the forecast.

As usual, there are three scenarios presented in this forecast. The "Base" scenario represents the most-likely development of the traffic and is an intermediate point between a "Low" scenario (weak growth) and a "High" scenario (strong growth).

3.1 ECONOMIC GROWTH

Forecasts of growth in gross domestic product (GDP) are provided by Oxford Economics Ltd (OE) for most of the States. For some States, when recommended by Stakeholders, other GDP forecasts are used. In particular, official government forecast (April 2016) has been used for Germany. All other States or region GDP forecast data in this report originate from the August 2016 update of the OE forecast. The high- and low-growth scenarios are based on fixed offsets[4] from these forecasts.

Economic forecast for Europe

Figure 14 illustrates how the economic forecast for EU countries has changed since the preparation of the February flight forecast (indicated as MTF16). The economic outlook for EU has been revised downwards across the 2016-2019 horizon in the OE August release (indicated as MTF16b), due to the negative impact of the UK

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[4] +1%, -1% for early years and big States, +1.5%, -1.5% for early years and small States, +0.5%, -0.5% for late years and big States, +0.8%, -0.8% for late years and small States.

decision to vote for leave on June 23. A prolonged period of uncertainty and market volatility is expected to create higher political uncertainty and lower economic confidence. This instability is set to weigh on companies' investment decisions, and thus on real GDP growth not only of the UK but also of its main trade partners.

The immediate shock from the referendum was however not as serious as had been expected (and forecasted in OE Aug2016 update). Even so, there are signs that business sentiment remains shaky. The first survey by the Federation of Small Businesses (FSB) since the referendum reveals business confidence fell into negative territory for the first time since 2012. The uncertainty behind the economic forecast is an element of risk surrounding this forecast. Economic growth being a key factor influencing growth of traffic, we know that any revision of the OE forecast will influence our forecast.

Figure 14. Due to the Brexit, EU GDP growth forecast has been revised downwards across the 2016-2019 horizon since the OE January 2016 update used in MTF16.

Details per state

The GDP forecasts are shown for all forecasted states and groupings in Figure 15 as well as for certain non-European states in Figure 16. For all other States, the economic growth of the traffic region is used (Figure 17). Traffic regions are listed in Figure 36.

To reflect the instability generated by the Brexit, Oxford Economics has downgraded the GDP forecast of the UK until the end of the forecast horizon, and to a lesser extent the one of its main EU trade partners.

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Russian economic growth (included in the Traffic Region 'Other Europe') is projected to turn positive in 2017 as falling inflation and rising real incomes strengthen domestic demand. The recovery will nevertheless be slow, amid a lack of structural reforms and uncertain prospects for oil prices.

Figure 15. GDP Growth by Traffic Zone.
Source: 2005-2022 from Oxford Economics Ltd (Aug 2016); Spring forecast of German Government (Apr 2016)
Comments: Real GDP Growth in Euro. Units: Growth per year. Data last updated: 25/08/2016

			Actual			Base						
			2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Albania			1.1%	2.0%	2.6%	3.4%	3.7%	4.0%	4.1%	4.1%	4.1%	4.1%
Armenia			3.3%	3.5%	3.0%	2.1%	2.5%	3.0%	3.5%	4.3%	4.3%	4.3%
Austria			0.1%	0.7%	0.9%	1.2%	1.0%	1.3%	1.5%	1.8%	1.8%	1.8%
Azerbaijan			5.8%	2.7%	1.0%	-2.7%	1.2%	3.3%	4.5%	4.9%	4.9%	4.9%
Belarus			1.2%	1.7%	-3.9%	-2.0%	0.5%	1.2%	1.5%	2.2%	2.2%	2.2%
Belgium/Luxembourg			0.0%	1.3%	1.4%	1.4%	1.5%	1.6%	1.5%	1.6%	1.6%	1.6%
Bosnia-Herzegovina			2.5%	1.1%	2.5%	3.1%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Bulgaria			1.0%	1.7%	3.0%	2.8%	2.8%	2.5%	3.5%	3.6%	3.6%	3.6%
Canary Islands			-1.7%	1.4%	3.2%	3.0%	2.2%	2.0%	2.0%	1.9%	1.9%	1.9%
Croatia			-0.8%	-0.4%	1.6%	1.7%	1.5%	1.7%	1.8%	1.9%	1.9%	1.9%
Cyprus			-5.9%	-2.5%	1.6%	2.2%	2.1%	2.0%	2.0%	1.7%	1.7%	1.7%
Czech Republic			-0.5%	2.7%	4.6%	2.1%	2.5%	2.4%	2.3%	2.5%	2.5%	2.5%
Denmark			-0.2%	1.3%	1.0%	1.3%	1.8%	1.8%	1.8%	1.7%	1.7%	1.7%
Estonia			1.6%	2.9%	1.1%	2.0%	3.0%	4.0%	4.0%	3.8%	3.8%	3.8%
FYROM			2.9%	3.5%	3.7%	3.0%	3.3%	3.7%	3.3%	2.9%	2.9%	2.9%
Finland			-0.8%	-0.7%	0.2%	0.9%	1.2%	1.4%	1.7%	1.8%	1.8%	1.8%
France			0.6%	0.7%	1.2%	1.4%	1.6%	1.7%	1.6%	1.5%	1.5%	1.5%
Georgia			3.4%	4.2%	2.8%	2.6%	4.5%	5.0%	5.1%	4.4%	4.4%	4.4%
Germany			0.6%	1.6%	1.5%	1.7%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Greece			-3.1%	0.7%	-0.3%	-0.3%	0.5%	1.4%	2.1%	2.9%	2.9%	2.9%
Hungary			2.0%	3.6%	2.9%	1.2%	2.5%	2.0%	2.0%	1.9%	1.9%	1.9%
Iceland			4.4%	2.0%	4.0%	2.7%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Ireland			1.1%	8.4%	26%	4.0%	2.2%	2.2%	2.6%	3.5%	3.5%	3.5%
Italy			-1.8%	-0.3%	0.6%	0.8%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Latvia			3.0%	2.4%	2.7%	2.9%	3.6%	3.9%	4.1%	3.9%	3.9%	3.9%
Lisbon FIR			-1.1%	0.9%	1.5%	1.0%	1.2%	1.1%	1.1%	1.0%	1.0%	1.0%
Lithuania			3.5%	3.0%	1.6%	3.0%	3.4%	3.3%	3.2%	2.4%	2.4%	2.4%
Malta			4.3%	3.5%	6.4%	3.5%	2.7%	2.5%	2.5%	2.1%	2.1%	2.1%
Moldova			9.4%	4.6%	-1.0%	1.5%	3.0%	4.9%	5.1%	4.0%	4.0%	4.0%
Morocco			4.7%	2.4%	4.4%	1.4%	3.8%	4.0%	4.0%	4.1%	4.1%	4.1%
Netherlands			-0.1%	1.4%	2.0%	1.5%	1.7%	1.7%	1.6%	1.9%	1.9%	1.9%
Norway			1.1%	2.2%	1.7%	0.7%	1.0%	1.7%	2.0%	2.0%	2.0%	2.0%
Poland			1.2%	3.2%	3.5%	2.9%	3.2%	2.7%	2.8%	2.7%	2.7%	2.7%
Romania			3.3%	3.1%	3.8%	4.2%	3.5%	3.6%	3.5%	3.5%	3.5%	3.5%
Santa Maria FIR			-1.1%	0.9%	1.5%	1.0%	1.2%	1.1%	1.1%	1.0%	1.0%	1.0%
Serbia&Montenegro			2.6%	-1.8%	0.7%	1.8%	1.9%	3.0%	3.5%	3.3%	3.3%	3.3%

		Actual			Base						
		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Slovakia		1.4%	2.5%	3.6%	3.5%	2.7%	2.9%	3.1%	2.5%	2.5%	2.5%
Slovenia		-1.0%	2.8%	2.6%	1.8%	2.3%	2.7%	3.0%	3.2%	3.2%	3.2%
Spain		-1.7%	1.4%	3.2%	3.0%	2.2%	2.0%	2.0%	1.9%	1.9%	1.9%
Sweden		1.2%	2.4%	3.9%	3.1%	2.3%	1.8%	1.8%	1.7%	1.7%	1.7%
Switzerland		1.8%	1.9%	0.9%	1.0%	1.4%	1.9%	1.7%	1.5%	1.5%	1.5%
Turkey		4.2%	3.0%	4.0%	3.3%	3.4%	3.6%	3.5%	3.3%	3.3%	3.3%
UK		1.9%	3.1%	2.2%	1.8%	1.1%	1.4%	1.6%	2.4%	2.4%	2.4%
Ukraine		-0.0%	-6.6%	-9.9%	1.1%	2.5%	3.0%	3.0%	2.5%	2.5%	2.5%
EU28		0.2%	1.4%	1.9%	1.7%	1.6%	1.6%	1.7%	1.8%	1.8%	1.8%

Figure 16. GDP Growth by Origin-Destination Zone.
Source: 1993-2004 from STATFOR records. 2005 onwards from Oxford Economics Ltd, Aug16.
Comments: Real GDP Growth in Euro. Units: Growth per year. Data last updated: 26/08/2016

		Actual			Base						
		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Brazil		3.0%	0.1%	-3.9%	-3.3%	0.1%	1.8%	2.8%	3.1%	3.1%	3.1%
China		7.8%	7.3%	6.9%	6.5%	6.2%	5.9%	5.7%	5.2%	5.2%	5.2%
India		3.4%	2.6%	2.5%	2.8%	3.1%	3.5%	3.7%	3.7%	3.7%	3.7%
Israel		6.3%	7.0%	7.2%	7.5%	7.2%	7.0%	6.8%	6.2%	6.2%	6.2%
South Africa		2.3%	1.6%	1.3%	0.0%	1.1%	2.0%	2.4%	2.4%	2.4%	2.4%

Figure 17. GDP Growth by Traffic Region.
Source: 2005 onwards updated from Oxford Economics Aug16
Comments: Real GDP Growth. Units: Growth per year. Data last updated: 25/08/2016

		Actual			Base						
		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Asia/Pacific		2.3%	1.6%	1.7%	1.6%	1.8%	2.2%	2.1%	2.0%	2.0%	2.0%
ESRA East		1.2%	2.8%	3.4%	2.7%	2.9%	2.7%	2.8%	2.7%	2.7%	2.7%
ESRA Mediterranean		-0.8%	0.9%	2.0%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%
ESRA North-West		0.9%	1.9%	2.1%	1.7%	1.5%	1.6%	1.6%	1.7%	1.7%	1.7%
Mid-Atlantic		1.9%	2.4%	2.6%	2.4%	2.7%	2.9%	2.9%	3.0%	3.0%	3.0%
Middle-East		2.5%	1.6%	2.2%	2.1%	2.5%	3.2%	3.4%	3.6%	3.6%	3.6%
North Atlantic		1.7%	2.4%	2.5%	1.5%	2.2%	2.3%	2.1%	2.0%	2.0%	2.0%
North-Africa		-19%	-2.9%	1.8%	2.5%	3.0%	3.7%	3.2%	4.3%	4.3%	4.3%
Other Europe		1.7%	1.0%	-2.9%	-0.7%	1.7%	1.8%	1.9%	2.0%	2.0%	2.0%
South-Atlantic		3.4%	-0.2%	1.3%	-0.3%	2.4%	3.3%	3.4%	3.3%	3.3%	3.3%
Southern Africa		6.2%	6.3%	4.3%	4.0%	5.1%	5.5%	5.6%	5.4%	5.4%	5.4%

Figure 18 shows a state-by-state comparison of the change in GDP growth between the current and the previous forecast for 2017.

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Figure 18. GDP growth change per State in 2017 between this forecast (MTF16b) and the previous (MTF16).

Among advanced economies, the United Kingdom experienced the largest downward revision in forecasted growth. While growth in the first part of 2016 appears to have been slightly stronger than expected, the increase in uncertainty following the referendum is expected to significantly weaken domestic demand relative to previous forecasts, with growth revised down by about 1.3 percentage points in 2017. Brexit-related revisions are concentrated in Ireland and the advanced European economies including Spain, France and Italy. On the other hand, Greece saw an upward revision of its GDP growth. The downwards outlook revision of Azerbaijan primarily reflects the risks of weak economic performance becoming more persistent. Despite downwards revision already observed in the previous forecasts due to the continuing Russia-Ukraine crisis, Ukraine, Belarus and Moldova have seen a further negative revision of their economic growth.

Looking at the cumulated change over the seven years in terms of GDP growth (Figure 19), the results are an extrapolation of 2017 revisions. After Belarus and Azerbaijan, UK and Ireland are the countries with the highest revision of their forecasts.

Figure 19. GDP growth cumulative change per State by 2022 between this forecast (MTF16b) and the previous one (MTF16).

3.2 AIRPORTS

The assumptions shown in Figure 20 represent the expected traffic switches within the forecast period (varied by scenario). These assumptions are based on information from the news and/or information received from STATFOR User Group members.

The closure of Berlin/Tegel (EDDT) moves traffic to the new airport Berlin/Brandenburg (EDDB) as of September 2017 in the base and the high scenario. In the low scenario, the new airport is planned to be operational one year later.

The closure of Rome-Ciampino (LIRA) for 16 days as of 14 October 2016 is included with a transfer of all flights to Rome-Fiumicino (LIRF).

Also, the new (third) airport at Istanbul expected to be operational in the course of 2018 has been modelled in this forecast as a progressive increase in the capacity of LTBA[5] (Istanbul/Atatürk) until the end of the forecast horizon. We assumed that LTBA will continue to operate (lesser extent) after the third airport will open.

Figure 20. Airport traffic switch.
Source: EUROCONTROL Data and analysis
Comments: Updated for MTF16b inputs. Units: Airport Traffic Switching. Data last updated: 15/09/2016

					Low			Base			High		
					2016	2019	2020	2016	2018	2019	2016	2018	2019
Traffic Type	Traffic Between	Move To											
All	EDDT	EDDB			.	16%	100%	.	16%	100%	.	16%	100%
	LIRA	LIRF			4%	.	.	4%	.	.	4%	.	.

3.3 EVENTS AND TRENDS

The 'events and trends' assumptions consist of adjustments to arrival, departure, internal, overflight traffic (IFR movements) and also en-route service units.

The forecast has taken into account the following events falling into the 7-year horizon:

- Sport events: WORLDCUP 2018 and EURO 2020;
- Adverse travel advice for Turkey and North-African States (Tunisia and Egypt) due to perceived increase of threats from terrorist groups;

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[5] For technical reasons the additional capacity available from the 3rd airport is currently considered under LTBA.

- Winter boost of Canary Islands affected positively by the change in travel demand;
- Impact of the increased fee imposed by the Norwegian Government on all departing flights (domestic and international flights).

3.3.1 SPORT EVENTS

WORLDCUP 2018 (Worldwide football cup) to be held in Russia from 14 June to 15 July 2018 with the final in Moscow. We derived expected impact based on previous similar events.

EURO2020 (European football cup) to be held in 13 different European countries (Azerbaijan, Belgium, Denmark, Germany, Hungary, Ireland, Italy, Netherlands, Romania, Russia, Scotland, Spain, UK holding the final and semi-finals) during the middle of 2020 is likely to have a small impact on traffic in those countries. We used the EURO2008 (co-organised by Austria and Switzerland) historical data to estimate the boost for the different countries. Since most of the extra flights are generated during the final and semi-finals, 80% of the total impact was attributed to the UK. The rest of the impact was split between the other countries. The adjusted factor is too small to be noticed in Figure 21.

3.3.2 ADVERSE TRAVEL ADVICE FOR TURKEY AND NORTH-AFRICAN STATES (TUNISIA AND EGYPT)

The adverse travel advice for Turkey, Tunisia and Egypt following various terrorist attacks are affecting travel decision (both business and tourism). To account for this, an assumption has been made to reduce the growth of the arrivals/departures until the end of 2016 for Turkey, Tunisia and Egypt.

Based on previous experience, we expect the recovery in Egypt, Tunisia and Turkey to take about 18 months. The forecast model used to extrapolate the future traffic for these countries have been chosen accordingly.

3.3.3 WINTER BOOST DUE TO CHANGE IN TRAVEL DEMAND

Tourism affected by the previous event will be looking for alternatives during the winter period. Information received from tour operators as well as aircraft operators have been used to create local adjustment for the Winter 2016 in Canary Islands.

3.3.4 NORWEGIAN FEE

The Norwegian government has decided to (re-)introduce a fee for all passengers on flights departing from Norwegian airports (domestic and international flights). The size of the fee is 80 NOK on International and 88 NOK on domestic, transfer passengers excluded. The fee started on 1st of June with impact as of October.

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Considering an average ticket price of €180 and a price elasticity of -1, the negative impact is estimated to equal -5% on all departs and internal flights.

Figure 21 gives the annual events & trends assumption by Traffic Zone.

Figure 21: Events and Trends assumptions by Traffic Zone[6]
Source: STATFOR analysis and modelling Units: Growth index (Baseline Year=1.0). Data last updated: 29/09/2016

					2016	2017	2018	2019	2020	2021	2022
Armenia	Total: Arr/Dep	H			0.980	0.872	0.872	0.872	0.872	0.872	0.872
		B			0.980	0.872	0.872	0.872	0.872	0.872	0.872
		L			0.980	0.872	0.872	0.872	0.872	0.872	0.872
Azerbaijan	Total: Arr/Dep	H			.	.	.	.	1.000	.	.
		B			.	.	.	.	1.000	.	.
		L			.	.	.	.	1.000	.	.
Belgium/Luxembourg	Total: Arr/Dep	H			.	.	.	.	1.000	.	.
		B			.	.	.	.	1.000	.	.
		L			.	.	.	.	1.000	.	.
Bulgaria	Total: Arr/Dep	H			0.975	0.988	0.988	0.988	0.988	0.988	0.988
		B			0.975	0.988	0.988	0.988	0.988	0.988	0.988
		L			0.975	0.988	0.988	0.988	0.988	0.988	0.988
Canary Islands	Total: Arr/Dep	H			1.008	1.015	1.015	1.015	1.015	1.015	1.015
		B			1.005	1.010	1.010	1.010	1.010	1.010	1.010
		L			1.003	1.005	1.005	1.005	1.005	1.005	1.005
Denmark	Total: Arr/Dep	H			.	.	.	.	1.000	.	.
		B			.	.	.	.	1.000	.	.
		L			.	.	.	.	1.000	.	.
Egypt	Total: Arr/Dep	H			0.917	0.917	0.917	0.917	0.917	0.917	0.917
		B			0.833	0.833	0.833	0.833	0.833	0.833	0.833
		L			0.750	0.750	0.750	0.750	0.750	0.750	0.750
Germany	Total: Arr/Dep	H			.	.	.	.	1.000	.	.
		B			.	.	.	.	1.000	.	.
		L			.	.	.	.	1.000	.	.
Greece	Total: Arr/Dep	H			0.967	0.958	0.958	0.958	0.958	0.958	0.958
		B			0.967	0.958	0.958	0.958	0.958	0.958	0.958
		L			0.967	0.958	0.958	0.958	0.958	0.958	0.958
Hungary	Total: Arr/Dep	H			.	.	.	.	1.000	.	.
		B			.	.	.	.	1.000	.	.
		L			.	.	.	.	1.000	.	.
Ireland	Total: Arr/Dep	H			.	.	.	.	1.000	.	.
		B			.	.	.	.	1.000	.	.
		L			.	.	.	.	1.000	.	.
Italy	Total: Arr/Dep	H			.	.	.	.	1.000	.	.
		B			.	.	.	.	1.000	.	.
		L			.	.	.	.	1.000	.	.

[6] Values 1.000 hide adjustments significant for one or two months, but not at an annual level.

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					2016	2017	2018	2019	2020	2021	2022
Netherlands	**Total: Arr/Dep**	H			.	.	.	.	1.000	.	.
		B			.	.	.	.	1.000	.	.
		L			.	.	.	.	1.000	.	.
Norway	**Total: Internal**	H			1.000	0.950	0.950	0.950	0.950	0.950	0.950
		B			0.988	0.950	0.950	0.950	0.950	0.950	0.950
		L			0.988	0.950	0.950	0.950	0.950	0.950	0.950
	Total: Arr/Dep	H			1.000	1.000	1.000	1.000	1.000	1.000	1.000
		B			0.994	0.975	0.975	0.975	0.975	0.975	0.975
		L			0.994	0.975	0.975	0.975	0.975	0.975	0.975
Romania	**Total: Arr/Dep**	H			.	.	.	.	1.000	.	.
		B			.	.	.	.	1.000	.	.
		L			.	.	.	.	1.000	.	.
Russian Federation	**Total: Arr/Dep**	H			.	.	1.001	.	.	.	.
		B			.	.	1.001	.	.	.	.
		L			.	.	1.001	.	.	.	.
Spain	**Total: Internal**	H			1.006	1.006	1.006	1.006	1.006	1.006	1.006
		B			1.004	1.004	1.004	1.004	1.004	1.004	1.004
		L			1.002	1.002	1.002	1.002	1.002	1.002	1.002
	Total: Arr/Dep	H			0.983	0.970	0.970	0.970	0.970	0.970	0.970
		B			0.983	0.970	0.970	0.970	0.970	0.970	0.970
		L			0.983	0.970	0.970	0.970	0.970	0.970	0.970
Tunisia	**Total: Arr/Dep**	H			0.967	0.917	0.917	0.917	0.917	0.917	0.917
		B			0.933	0.833	0.833	0.833	0.833	0.833	0.833
		L			0.900	0.750	0.750	0.750	0.750	0.750	0.750
Turkey	**Total: Arr/Dep**	H			0.998	0.997	0.997	0.997	0.997	0.997	0.997
		B			0.995	0.994	0.994	0.994	0.994	0.994	0.994
		L			0.993	0.991	0.991	0.991	0.991	0.991	0.991
UK	**Total: Arr/Dep**	H			.	.	.	.	1.001	.	.
		B			.	.	.	.	1.000	.	.
		L			.	.	.	.	1.000	.	.

4 GROWTH IN IFR FLIGHTS TO 2022

The new forecast is for 11.5 million IFR flight movements (±1.2 million) in Europe in 2022, 16% more than in 2015. In 2016 we expect a growth in flights of 2.7% (±0.4pp), which is very close to the February forecast (slight upwards revision). For 2017, the forecast has been revised downwards to 1.4% (±2.0pp) due to the negative revision of the economic outlook in Europe.

From 2018 onwards, European flight growth is expected to remain stable at around 2.1% per year over the 2018-2022 period. The 2008 peak of 10.2 million flights is forecasted to be reached again by 2017; a 9-year hiatus.

Figure 22. Summary of the forecast for Europe.

ECAC		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	AAGR 2022/2015	RP2 2019/2014 AAGR
IFR Flight Movements (Thousands)	H	.	.	.	.	10,224	10,573	11,029	11,416	11,890	12,303	12,736	**3.6%**	**3.2%**
	B	9,710	9,603	9,770	9,923	10,187	10,329	10,544	10,760	11,016	11,221	11,456	**2.1%**	**1.9%**
	L	.	.	.	.	10,151	10,094	10,097	10,169	10,261	10,301	10,367	**0.6%**	**0.8%**
Annual Growth (compared to previous year unless otherwise mentioned)	H	.	.	.	.	3.0%	3.4%	4.3%	3.5%	4.2%	3.5%	3.5%	**3.6%**	**3.2%**
	B	-2.2%	-1.1%	1.7%	1.6%	2.7%	1.4%	2.1%	2.1%	2.4%	1.9%	2.1%	**2.1%**	**1.9%**
	L	.	.	.	.	2.3%	-0.6%	0.0%	0.7%	0.9%	0.4%	0.6%	**0.6%**	**0.8%**

Any user of the forecast is strongly advised to consider the low-to-high ranges. More detailed results are provided in Annex 2, Annex 3 and Annex 4. The forecast details per States for the 2-year horizon are shown in Figure 23 and Figure 24.

4.1 SHORT-TERM OUTLOOK (2016-2017)

2016 forecast for Europe is now for a 2.7% (±0.4pp) flight growth, see Figure 23. This represents a small upwards revision of 0.3pp versus the February forecast. This relatively high growth rate is not only due to the recent trends but also to the extra growth from the leap year effect.

2017 forecast for Europe is now for 1.4% (±2.0pp) flight growth (see Figure 24). This corresponds to a downwards revision of 0.7 percentage point compared to the February forecast due to a large Brexit-induced shock to the Euro area's economy, and larger uncertainty ±2%. We see both upside risks (e.g. revision of the economic outlook if the Brexit assumptions were too pessimistic) and downside risks (e.g. impact of terrorist attacks). These are captured in the ±2.0pp range. For more discussion of the risks see Section 6.

Removing the effect of the leap year (±0.3pp) means that we expect a growth of 2.4% for 2016 and 1.7% for 2017.

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Figure 23. Flight forecast details for 2016.

Figure 24. Flight forecast details for 2017.

North-West axis

Out of the busiest States, the forecasts of 2016 for UK and France have been revised upwards (compared to the previous forecast) to 5.5% and 4.4% thanks to strong international arrival/departures and overflights (see Section 2.1 for more details). On the other hand, the 2016 forecasts for Germany has slightly been revised downwards to 2.0%.

This sustained recorded growth in North Western Europe will be hindered by slower economic growth as of 2017.

South-West axis

For 2016, forecasts for Lisbon FIR, Canary Islands, Azores and Malta have been largely revised upwards due to higher traffic than expected. These countries are the main alternatives for European tourists aiming to avoid Egypt, Tunisia, and to a lesser extent Turkey. Malta's overflights have also been positively boosted by the increased traffic between Russia and Tunisia. The resulting respective growth for these countries are 11% for the first three countries and 9.3% for Malta (an increase of growth versus the February 2016 forecast of about 5pp). Spain and Italy flight growths have also been slightly revised upwards to 7.1% and 2.4% respectively.

Forecast for Greece has been negatively revised in 2016 down to -1.3% due to the pressure on their overflight linked to the reduction of traffic to Egypt and Turkey.

South-East Axis

The traffic patterns in South-Eastern Europe are still largely affected by the various airspace blockages in that region. On top of that, the ban on flights between Russia and Turkey, not only generated some additional traffic patterns changes in that region but also negatively impacted arrival and departures in Turkey.

Ukraine and Moldova have therefore been again revised downwards due to the negative impact on overflight of the ban imposed mutually by Russia and Ukraine. They are now respectively at -6% and -5.4% of growth for 2016. Other surrounding countries have also seen their forecast revised but to a lesser extent.

4.2 MEDIUM-TERM OUTLOOK (UP TO 2022)

In the 2018-2022 horizon, the annual growth rate is expected to remain stable at around 2.1%. The annual rate in 2020 is influenced by the extra growth from the leap

year effect[7], with a complementary downward effect in 2021.The 2008 peak of 10.2 million flights is forecasted to be reached again by 2017; a 9-year hiatus.

Any user of the forecast is strongly advised to use the forecast range (low-growth to high-growth) as an indicator of risk. This forecast includes downside risks (e.g. capacity reductions in response to weaker demand) and upside risks (e.g. Brexit effect on economic forecast, current high load factors might not be able to absorb the passenger demand when traffic begins to grow again). These are discussed in Section 6. By 2022, the high-growth scenario has 1.3 million more and low-growth scenario 1.1 million fewer flights than the base scenario.

As Figure 25 and Figure 26 show, while the growth (in percentage terms) is approximately uniform across Europe, it is still the busiest States (France, Germany followed by UK, Spain and Italy) which will see the greatest number of extra flights per day.

Figure 25. Average Annual Growth of Flights per State, 2022 v 2015.

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[7] As growth rates are based on total traffic counts per year, not average.

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Figure 26. Number of additional movements per day for each State (2022 v 2015).

Unlike previous forecast, Turkey will not see any more the fastest growth rates (3.6% as average annual growth rate over the 7 years). Its number of extra flights per day (1,032 additional flights per day in 2022) is still among the highest but it is not anymore the biggest contributor to the growth in Europe.

Figure 27 shows the corresponding Figure 25 at functional airspace block level (FAB). Baltic FAB is expected to have the highest average annual growth rate (3.7%) over the next seven years followed by Danube FAB (3.3%). BLUE MED FAB, South-West FAB, FABCE and UK-Ireland FABs are the busiest European FABs with average annual growth rates higher than 2%. All other FABs have AAGR lower than 2% with NEFAB having the lower growth with 0.7%.

Figure 27. Average Annual Growth in Flights per FAB, 2022 v 2015.

Annex 3 and Annex 4 give the details of forecast traffic and growth per State and areas (FAB, EU28,…).

4.3 COMPARISON WITH PREVIOUS FORECAST

As illustrated in Figure 28, the current forecast (MTF16b) for total Europe over the period 2017-2022 is slightly lower than the previous seven-year forecast issued in February 2016 (MTF16, see Ref. 1).

The first year of the forecast shows narrower low-to-high ranges because the uncertainty has now been reduced in the short-term.

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Figure 28. For total Europe, current forecast (MTF16b) is slightly revised downwards as of 2017 compared with previous one (MTF16).

ECAC - Grand Total

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5 SERVICE UNIT GROWTH TO 2022

Thanks to a combination of strong flight growth during the summer over West and South-West Europe despite some decline of mainly overflights in the South-East since the beginning of the summer schedule, a stronger growth in the service units is expected by the end of the year compared to February 2016 forecast. This revision is stronger than that of the flight, which follows the actual trends of service units that have also been boosted by increasing aircraft weights and often average distances.

In 2016, 143.4 million service units are expected to be produced in EUROCONTROL member States (CRCO14). This is a one percentage point revision upwards compared to the February 2016 forecast and represents a growth of 4.1% (±0.4pp).

For Terminal Navigation Service Units in the countries participating to the Performance Scheme in the Second Reference Period (RP2), the forecast for 2016 has been revised upwards by 1.5 percentage point and is expected to reach 7.8 million by the end of 2016, thus a growth of 4.6% (±0.4pp). Following similar trends as the en-route service units, growth will then slow and the average annual growth between 2015 and 2022 will stand at 2.9% to reach 9.1 million by 2022.

5.1 EN-ROUTE SERVICE UNITS (TSU)

Following the strong growth of flights over Western and South-West Europe whose service units growth has been further boosted by increasing aircraft weights and often distances, the total en-route service units forecast in the participating EUROCONTROL member states (CRCO14) has been revised upwards by 1pp compared to the February 2016 forecast (Ref. 1) to reach 143.4 million service units (TSU) in 2016, thus a growth of 4.1% (± 0.4pp).

This trend is not evenly observed across Europe as, if the revision is greater than the 1pp average for many Western and South-Western European countries, the change is in the opposite direction for Eastern European countries that have been affected by the decline of flights to Turkey and between Russia and Egypt or Turkey.

Amongst the greatest revision upwards in terms of volume of service units, we can find UK (+4.2pp), France (+2.9pp) and Ireland (+5.7pp). In total, the overall revision at FAB level is expected to be of +1.9pp for FABEC, +4.6pp for UK-Ireland and +3pp for South-West FAB.

On the opposite way, the greatest revisions downwards in terms of volume of service units are expected to happen in Turkey (-3.1pp), Greece (-6.9pp) and Ukraine (-12.1pp). Overall, a revision downwards for BLUE MED FAB is expected by -2.2pp and for the Danube FAB, the revision downwards should reach -1.7pp.

Despite of a revision downwards of the IFR movement forecast for 2017, the stronger growth trends observed in 2016 for TSU, in particular over UK, France and the South-West FAB, have led to a revision upwards of en-route service units by 0.4pp for 2017. Overall, for the CRCO14 grouping, TSU are expected to reach 148 million service units in 2017, thus a growth of 3.2% (±1.8pp). However, for the following years, the impact of these strong trends should fade out and service units growth has been revised downwards in line with the revision of the flight forecast. The total en-route service units in the participating EUROCONTROL member states (CRCO14) are expected to reach 168 million in 2022. This represents an average annual growth rate of 2.9% and a total growth of 22% compared to 2015, which are similar values to those forecasted in February 2016.

Figure 29 compares the evolution of the forecast between the February 2016 forecast and this new forecast release for the CRCO14 grouping. If in 2016 and 2017, TSU have been revised upwards, the reduction of TSU growth by 0.2 to 0.3pp from 2018 to 2020 results in a very similar TSU forecast for 2022.

Figure 29. Comparison 2016-2022 of the forecast between the current TSU forecast and February 2016 for CRCO14 Area.

Any user of this seven-year forecast should consult the entire forecast range (low-growth to high-growth) as an indicator of risk. This forecast includes downside risks (e.g. the economic indicators could worsen) and upside risks (e.g. fleet growth of LCC). Section 6 elaborates further on risks.

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For the TSU in CRCO14, by 2022, the high-growth scenario has 19 million more and low-growth scenario has 16 million fewer TSU than the base scenario (+14% and -12% in terms of growth respectively).

The average annual growth figures per State can be found in Figure 31. The detailed forecasts for each State are in Annex 6 and Annex 7.

Figure 30. Summary of forecast of total service units in Europe.

Total en-route service units (Thousands)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2022/ 2015 Total Growth	RP2 2019/ 2014 AAGR
CRCO14*	H	.	.	.	.	143,904	151,037	158,490	165,060	172,858	179,736	186,995	36%	4.6%
	B	122,298	124,910	132,130	137,689	143,389	147,952	151,762	155,630	160,011	163,745	167,902	22%	3.3%
	L	.	.	.	.	142,877	144,915	145,581	147,186	149,122	150,315	151,880	10%	2.2%
RP2Region†	H	.	.	.	.	120,901	126,742	132,514	137,487	143,511	148,686	154,094	34%	4.2%
	B	105,251	106,930	111,670	115,063	120,507	124,326	127,091	129,861	133,168	135,894	138,948	21%	3.1%
	L	.	.	.	.	120,116	121,937	122,138	123,096	124,351	125,036	126,045	10%	2.0%
Total en-route service units (Growth)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	AAGR 2022/ 2015	RP2 2019/ 2014 AAGR
CRCO14*	H	.	.	.	.	4.5%	5.0%	4.9%	4.1%	4.7%	4.0%	4.0%	4.5%	4.6%
	B	-1.3%	2.1%	5.8%	4.2%	4.1%	3.2%	2.6%	2.5%	2.8%	2.3%	2.5%	2.9%	3.3%
	L	.	.	.	.	3.8%	1.4%	0.5%	1.1%	1.3%	0.8%	1.0%	1.4%	2.2%
RP2Region†	H	.	.	.	.	5.1%	4.8%	4.6%	3.8%	4.4%	3.6%	3.6%	4.3%	4.2%
	B	-1.4%	1.6%	4.4%	3.0%	4.7%	3.2%	2.2%	2.2%	2.5%	2.0%	2.2%	2.7%	3.1%
	L	.	.	.	.	4.4%	1.5%	0.2%	0.8%	1.0%	0.6%	0.8%	1.3%	2.0%

* 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.

† RP1Region stands for the sum over all the 30 states that were involved in the EU-wide performance target setting minus Croatia until 2014 (28 EU member states plus Norway and Switzerland minus Croatia). RP2Region is RP1Region plus Croatia. RP1 and RP2 series include service units for flight segments performed as Operational Air Traffic (OAT) for Germany.

Figure 31. Average annual growth of en-route service units between 2015 and 2022.

5.2 TERMINAL NAVIGATION SERVICE UNITS (TNSU)

Underlying growth in TNSU is driven by the same factors which influence flight growth (see Section 2.1) with the trend for increasing average weight having an additional effect. This TNSU forecast is based on the 2016-2022 IFR flight forecast (Section 4) and uses the CRCO flight database for all States except for Estonia which provided STATFOR with its own data, to capture the necessary information about weight of the aircraft. More details about the TNSU forecast method can be found in Ref. 3. The definition of the terminal charging zones (TCZ) is based on the known list of airports per TCZ for RP2 provided by States as available in their RP2 performance plans submitted at the end of 2015 (see Annex 1 for RP2 region definition and TCZ list). The detailed results per TCZ are given in Annex 8 and Annex 9.

The expected AAGR for RP2 is 2.9% and by 2022, after the end of the reference period, 9.1 million TNSU are expected for the whole region (Figure 32). With the aim of improving the forecast for RP2, the history for RP1 was reconstructed as detailed in the September 2014 forecast report, including for 2014.

Figure 32. Total Terminal Navigation Service Units generated in the RP2Region area as defined.

RP2 Region		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	AAGR 2022/ 2015	AAGR RP2 2019/ 2014
TNSU Total (thousands)	H	.	.	.	.	7,856.3	8,174.5	8,557.7	8,914.0	9,369.1	9,762.1	10,121.5	**4.4%**	**4.2%**
	B	7,234.3	7,223.5	7,266.7	7,484.2	7,830.7	8,003.6	8,182.9	8,390.5	8,647.6	8,875.1	9,111.5	**2.9%**	**2.9%**
	L	.	.	.	.	7,804.2	7,826.5	7,861.5	7,954.7	8,059.5	8,136.1	8,234.7	**1.4%**	**1.8%**
TNSU Annual Growth (%)	H	.	.	.	.	5.0%	4.0%	4.7%	4.2%	5.1%	4.2%	3.7%	**4.4%**	**4.2%**
	B	-1.9%	-0.1%	0.6%	3.0%	4.6%	2.2%	2.2%	2.5%	3.1%	2.6%	2.7%	**2.9%**	**2.9%**
	L	.	.	.	.	4.3%	0.3%	0.4%	1.2%	1.3%	1.0%	1.2%	**1.4%**	**1.8%**

Figure 33. TNSU 7-year forecast February 2016 overview – Average annual growth and estimated additional daily TNSU generated between 2022 and 2015 per TCZ.

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6 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.

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.

- 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 (see Section 2.1.4). 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 here were updated in August 2016. The economic outlook remains uncertain as we saw in Section 3.1. The low scenario provides some guidance here. Economic risks are to some extent synchronised, so do not balance out across Europe as routing risks do.

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**. 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 very high (Section 2.1.4). 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 Turkey, Egypt and Tunisia have led to more variability in tourism destinations. This is more likely a downside risk.

Terrorist attacks, bans of one country on another one, wars and natural disasters. Terrorist attacks, wars,... are impossible to predict. Their impact on air traffic could however be a temporary one, or more significant. Overall, this is a downside risk for the country impacted by the event.

7 GLOSSARY

AAGR	Average annual growth
AD, A/D	Arrivals/Departures
AIRAC	Aeronautical Information and Regulation and Control
AEA	Association of European Airlines
B	(in tables) Baseline Scenario
CRCO11	States participating to the Multilateral Route Charges System dated 2012. Namely, CRCO11 includes Albania, Armenia, Austria, Belgium/Luxembourg, Belgrade, 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, , Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, UK.
CRCO14	States participating to the Multilateral Route Charges System dated 2014. Namely CRCO14 includes the list of States within CRCO11 plus *Georgia*.
ECAC	European Civil Aviation Conference (see Annex 1)
ESRA	Eurocontrol Statistical Reference Area (see Annex 1)
EU27	European Union (27 States)
EU28	European Union (28 States): EU27 plus Croatia.
FAB	Functional Airspace Block
FIR	Flight Information Region
GDP	Gross Domestic Product
H	(in tables) High-Growth Scenario
I	Internals
ICAO	International Civil Aviation Organisation
IFR	Instrument Flight Rules
KFOR	Kosovo Force
L	(in tables) Low-Growth Scenario
LCC	Low Cost Carriers
MTF	Medium-Term (Seven-Year) Forecast
NM	Network Manager
O	Overflights
OE	Oxford Economics Ltd
pp	percentage point

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PScheme	States involved in the Performance scheme first period of reference (EU27, Norway and Switzerland – no longer used)
RP1	First Period of Reference (2012-2014) for the Performance Scheme of the SES
RP2	Second Period of Reference (2015-2019) for the Performance Scheme of the SES
RP1Region	See PScheme
RP2Region	States involved in the Performance scheme second period of reference (EU28, Norway and Switzerland)
SES Single	European Sky
SID	STATFOR Interactive Dashboard
STATFOR	Eurocontrol Statistics and Forecast Service
TCZ	Terminal Charging Zone (a grouping of airports)
TNSU	Terminal Navigation Service Units
TSU	Total En-Route Service Units
TZ	Traffic Zone (≈State, except for Spain, Portugal, Belgium and Luxembourg, Serbia and Montenegro)
UIR	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

ECAC

The European Civil Aviation Conference (ECAC) is an intergovernmental organization which was established by ICAO and the Council of Europe. ECAC now totals 44 members, including all 28 EU, 31 of the 32 European Aviation Safety Agency member states, and all 41 EUROCONTROL member states.

It is now used as a basis for comparison at European level in the forecasts.

Figure 34. Map of the European Civil Aviation Conference (ECAC) Area.

ESRA08

The EUROCONTROL Statistical Reference Area (ESRA) is designed to include as much as possible of the ECAC area for which data are available from a range of sources within the Agency 'ESRA08' was introduced in the MTF09 report. It was used as a basis for comparison at European level in the forecasts up to September 2015.

ESRA08 consists of 34 traffic zones. Traffic zones are defined by an aggregate of FIRs & UIR of States. These do not take delegation of airspace into account. For individual States, the differences between charging areas and ACCs can have a big impact on overflight counts (and thus on total counts where the total is dominated by

overflights). For the ESRA as a whole, there is only a small proportion of overflights, so that the difference between a FIR and an ACC definition is small.

Figure 35. The EUROCONTROL Statistical Reference Area.

EU28

This 7-year forecast report includes EU28, taking the accession of Croatia into account. The traffic counts exclude Canaries and Azores.

CRCO11

'CRCO11' refers to the sum of all the charging zones formed by the EUROCONTROL Member States participating in the Multilateral Route Charges System in 2012. This list comprises: Albania, Armenia, Austria, Belgium/Luxembourg (one single charging zone), 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 (one single charging zone), Slovakia, Slovenia, Spain (Spain continental only), Sweden, Switzerland, Turkey, UK.

CRCO14

'CRCO14' refers to the sum of all the charging zones formed by the EUROCONTROL Member States participating in the Multilateral Route Charges System in 2014. This list comprises: CRCO11 and Georgia, which joined EUROCONTROL in 2014.

Traffic regions

The traffic regions are defined for statistical convenience and do not reflect an official position of the EUROCONTROL Agency. As far as possible, these regions have been aligned with ICAO statistical and forecast regions. Traffic flows are described as being to or from one of a number of traffic regions listed in Figure 36. Each traffic region is made up of a number of traffic zones (=States), which are indicated by the first letters of the ICAO location codes for brevity.

Figure 36. Regions used in flow statistics as of 31 August 2012.

	ICAO region/country
ESRA North-West	EB, ED, EF, EG, EH, EI, EK, EL, EN, ES, ET, LF, LN, LO, LS
ESRA Mediterranean	GC, LC, LE, LG, LI, LM, LP, LT
ESRA East	BK, EP, LA, LB, LD, LH, LJ, LK, LQ, LR, LU, LW, LY, LZ, UK
Other Europe	BG, BI, EE, EK (Faroe Islands), ENSB (Bodo Oc.), EV, EY, GE, LX, UB, UD, UG, UH, UI, UL, UM, UN, UO, UR, US, UU, UW, Shanwick Oc., Santa Maria FIR
North Atlantic	C, K, P
Mid-Atlantic	M, T
South-Atlantic	S
North-Africa	DA, DT, GM, HE, HL
Southern Africa	D, F, G, H, (except DA, DT, HE, HL, GC, GM)
Middle-East	L, O (except OA, OP)
Asia/Pacific	A, N, P, Y, OA, OP, R, V, W, Z (except ZZZZ), U (except UK and areas in Other Europe)

As far as "Europe" is concerned, it is split into two regions: ESRA (defined in one of the previous section) and Other Europe. For flow purposes, ESRA is split into a "North-West" region mostly of mature air traffic markets, a "Mediterranean" region stretching from the Canaries to Turkey and with a significant tourist element, and an Eastern region. The 'Other Europe' region (i.e. non ESRA) includes the States along the border of ESRA and extends from Greenland to the Urals and Azerbaijan. The map of the nine traffic regions used in our statistics is displayed in Figure 37.

Figure 37. Map of the Traffic Regions used in flow statistics.

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 38). 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[8] 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)

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[8] Note that the PRU uses the FAB-ANSP definition.

- **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).

Figure 38. 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 39. 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.

Terminal Charging Zones

A "terminal charging zone" is an airport or a group of airports for which a cost-based unit rate is established.

The list of aerodromes forming the TCZs during RP2 for the 30 States participating in the SES performance scheme (RP2) can be found in Figure 40.

The main change in this forecast is the addition of UK _TCZ_C defined by the UK as a separate terminal charging zone, which covers the London Approach Service (LAS) for the five London airports (Heathrow, Gatwick, Stansted, Luton and London City). These five airports are also part of the nine airports forming the UK_TCZ_B.

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Figure 40. List of aerodromes forming the TCZ in RP2.

Country / TCZ	Aerodromes	Country / TCZ	Aerodromes	Country / TCZ	Aerodromes
Austria LO_TCZ	LOWG LOWI LOWK LOWL LOWS LOWW	**France** LF_TCZ	LFAQ LFBA LFBD LFBE LFBH LFBI LFBL LFBO LFBP LFBT LFBZ LFCR LFGJ LFJL LFJR LFKB LFKC LFKF LFKJ LFLB LFLC LFLL LFLP LFLS LFLX LFLY LFMD LFMH LFMI LFMK LFML LFMN LFMP LFMT LFMU LFMV LFOB LFOH LFOK LFOT LFPB LFPG LFPN LFPO LFQQ LFRB LFRD LFRG LFRH LFRK LFRN LFRO LFRQ LFRS LFRZ LFSB LFSD LFSL LFST LFTH LFTW	**Germany** ED_TCZ	EDDB EDDC EDDE EDDF EDDG EDDH EDDK EDDL EDDM EDDN EDDP EDDR EDDS EDDT EDDV EDDW
Belgium EB_TCZ_EBAW	EBAW			**Greece** LG_TCZ	LGAV
Belgium EB_TCZ_EBBR	EBBR			**Hungary** LH_TCZ	LHBP
Belgium EB_TCZ_EBCI	EBCI			**Ireland** EI_TCZ	EICK EIDW EINN
Belgium EB_TCZ_EBLG	EBLG			**Italy** LI_TCZ_1	LIRF
Belgium EB_TCZ_EBOS	EBOS			**Italy** LI_TCZ_2	LIMC LIME LIML LIPZ
Bulgaria LB_TCZ	LBSF			**Latvia** EV_TCZ	EVLA EVRA EVVA
Croatia LD_TCZ	LDZA LDZL			**Lithuania** EY_TCZ	EYKA EYPA EYSA EYVI
Cyprus LC_TCZ	LCLK LCPH			**Luxembourg** EL_TCZ	ELLX
Czech Republic LK_TCZ	LKKV LKMT LKPR LKTB			**Malta** LM_TCZ	LMML
Denmark EK_TCZ	EKCH			**Netherlands** EH_TCZ	EHAM EHBK EHGG EHRD
Estonia EE_TCZ	EETN EETU			**Norway** EN_TCZ	ENBR ENGM ENVA ENZV
Finland EF_TCZ	EFHK				

Country / TCZ	Aerodromes	Country / TCZ	Aerodromes
Poland EP_TCZ	EPBY EPGD EPKK EPKT EPLB EPLL EPMO EPPO EPRA EPRZ EPSC EPSY EPWA EPWR EPZG	
Portugal LP_TCZ	LPAZ LPFL LPFR LPHR LPMA LPPD LPPR LPPS LPPT	
Romania LR_TCZ	LRBS LROP	
Slovakia LZ_TCZ	LZIB	
Slovenia LJ_TCZ	LJLJ LJMB LJPZ	
Spain LE_TCZ	GCLP LEBL LEMD LEMG LEPA	
Sweden ES_TCZ_A	ESSA	
Switzerland LS_TCZ	LSGG LSZH	
UK EG_TCZ_B	EGBB EGCC EGGW EGKK EGLC EGLL EGPF EGPH EGSS	
UK EG_TCZ_C	EGGW EGKK EGLC EGLL EGSS	

ANNEX 2 SUMMARY OF FORECAST FOR ECAC

Figure 41. Growth in Europe (ECAC)

Forecast for ECAC

Curve label gives average annual growth 2022/2015

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Figure 42. Flights and growth on main flow categories in Europe (ECAC)

ECAC		IFR Flight Movements(000s)											Annual Growth											AAGR 2022/2015	RP2 2019/2014 AAGR
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
Total: Internal	H	.	.	.	.	8,167	8,417	8,739	8,997	9,315	9,585	9,864	.	.	.	.	4.0%	3.1%	3.8%	2.9%	3.5%	2.9%	2.9%	**3.3%**	**3.2%**
	B	7,751	7,576	7,681	7,856	8,138	8,226	8,365	8,502	8,671	8,796	8,942	-3.2%	-2.3%	1.4%	2.3%	3.6%	1.1%	1.7%	1.6%	2.0%	1.4%	1.7%	**1.9%**	**2.1%**
	L	.	.	.	.	8,110	8,042	8,016	8,049	8,096	8,100	8,126	.	.	.	.	3.2%	-0.8%	-0.3%	0.4%	0.6%	0.1%	0.3%	**0.5%**	**0.9%**
Total: Arr/Dep	H	.	.	.	.	1,881	1,972	2,094	2,212	2,353	2,482	2,619	.	.	.	.	-0.5%	4.8%	6.2%	5.6%	6.4%	5.5%	5.5%	**4.8%**	**3.0%**
	B	1,813	1,863	1,908	1,890	1,874	1,925	1,993	2,065	2,143	2,214	2,294	1.9%	2.7%	2.4%	-0.9%	-0.8%	2.7%	3.6%	3.6%	3.8%	3.3%	3.6%	**2.8%**	**1.6%**
	L	.	.	.	.	1,867	1,879	1,903	1,938	1,980	2,010	2,046	.	.	.	.	-1.2%	0.6%	1.3%	1.8%	2.1%	1.5%	1.8%	**1.1%**	**0.3%**
Total: Overflight	H	.	.	.	.	176	184	195	208	222	236	253	.	.	.	.	-0.9%	4.6%	6.4%	6.2%	6.8%	6.5%	7.1%	**5.2%**	**2.7%**
	B	145	165	181	177	174	179	186	193	202	210	220	6.6%	14%	9.9%	-2.2%	-1.6%	2.4%	3.9%	4.1%	4.6%	4.1%	4.5%	**3.1%**	**1.3%**
	L	.	.	.	.	173	174	177	181	186	191	196	.	.	.	.	-2.4%	0.3%	2.0%	2.4%	2.8%	2.3%	2.6%	**1.4%**	**0.0%**
Grand Total	H	.	.	.	.	10,224	10,573	11,029	11,416	11,890	12,303	12,736	.	.	.	.	3.0%	3.4%	4.3%	3.5%	4.2%	3.5%	3.5%	**3.6%**	**3.2%**
	B	9,710	9,603	9,770	9,923	10,187	10,329	10,544	10,760	11,016	11,221	11,456	-2.2%	-1.1%	1.7%	1.6%	2.7%	1.4%	2.1%	2.1%	2.4%	1.9%	2.1%	**2.1%**	**1.9%**
	L	.	.	.	.	10,151	10,094	10,097	10,169	10,261	10,301	10,367	.	.	.	.	2.3%	-0.6%	0.0%	0.7%	0.9%	0.4%	0.6%	**0.6%**	**0.8%**

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Figure 43. Busiest bi-directional region-to-region flows for ECAC

			IFR Movements(000s)											Annual Growth											AAGR 2022/2015
			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
1 ESRA North-W	ESRA North-W	H	.	.	.	.	3504.2	3546.5	3599.2	3626.0	3690.2	3727.9	3768.0	.	.	.	.	1.2%	1.2%	1.5%	0.7%	1.8%	1.0%	1.1%	**1.2%**
		B	3581.4	3491.4	3467.5	3462.4	3494.3	3489.6	3494.9	3500.4	3529.1	3538.6	3555.5	-2.7%	-2.5%	-0.7%	-0.1%	0.9%	-0.1%	0.2%	0.2%	0.8%	0.3%	0.5%	**0.4%**
		L	.	.	.	.	3484.8	3432.5	3392.3	3375.3	3363.4	3340.8	3327.7	.	.	.	.	0.6%	-1.5%	-1.2%	-0.5%	-0.4%	-0.7%	-0.4%	**-0.6%**
2 ESRA Mediter	ESRA North-W	H	.	.	.	.	1941.1	2024.7	2109.6	2173.8	2251.0	2312.7	2378.5	.	.	.	.	6.1%	4.3%	4.2%	3.0%	3.5%	2.7%	2.8%	**3.8%**
		B	1653.8	1680.2	1765.5	1828.8	1934.2	1976.8	2013.2	2045.9	2087.2	2119.2	2155.1	-1.3%	1.6%	5.1%	3.6%	5.8%	2.2%	1.8%	1.6%	2.0%	1.5%	1.7%	**2.4%**
		L	.	.	.	.	1927.3	1928.6	1922.0	1929.5	1937.7	1939.2	1946.0	.	.	.	.	5.4%	0.1%	-0.3%	0.4%	0.4%	0.1%	0.4%	**0.9%**
3 ESRA Mediter	ESRA Mediter	H	.	.	.	.	1428.5	1469.4	1559.0	1636.0	1717.8	1798.1	1883.1	.	.	.	.	4.1%	2.9%	6.1%	4.9%	5.0%	4.7%	4.7%	**4.6%**
		B	1350.0	1266.2	1313.4	1372.7	1422.6	1427.9	1479.4	1530.2	1577.3	1614.1	1656.2	-8.8%	-6.2%	3.7%	4.5%	3.6%	0.4%	3.6%	3.4%	3.1%	2.3%	2.6%	**2.7%**
		L	.	.	.	.	1417.5	1391.2	1404.8	1428.7	1457.8	1469.5	1483.6	.	.	.	.	3.3%	-1.9%	1.0%	1.7%	2.0%	0.8%	1.0%	**1.1%**
4 ESRA East	ESRA North-W	H	.	.	.	.	596.2	634.1	674.1	711.9	751.7	787.7	821.9	.	.	.	.	9.1%	6.4%	6.3%	5.6%	5.6%	4.8%	4.3%	**6.0%**
		B	520.4	525.8	515.5	546.5	593.4	614.9	633.9	654.1	676.2	695.6	716.9	0.0%	1.0%	-1.9%	6.0%	8.6%	3.6%	3.1%	3.2%	3.4%	2.9%	3.1%	**4.0%**
		L	.	.	.	.	590.7	596.7	598.9	606.2	614.9	620.5	627.5	.	.	.	.	8.1%	1.0%	0.4%	1.2%	1.4%	0.9%	1.1%	**2.0%**
5 ESRA North-W	North Atlant	H	.	.	.	.	329.2	341.0	348.5	354.3	365.6	372.5	378.6	.	.	.	.	5.8%	3.6%	2.2%	1.7%	3.2%	1.9%	1.6%	**2.8%**
		B	293.7	292.2	299.4	311.2	328.7	337.9	341.9	345.4	349.5	352.5	355.9	-2.7%	-0.5%	2.5%	3.9%	5.6%	2.8%	1.2%	1.0%	1.2%	0.9%	1.0%	**1.9%**
		L	.	.	.	.	328.1	334.3	335.5	336.7	338.1	338.3	339.1	.	.	.	.	5.4%	1.9%	0.3%	0.4%	0.4%	0.1%	0.2%	**1.2%**

ANNEX 3 SEVEN-YEAR FLIGHT FORECAST PER STATE (IFR MOVEMENTS)

This appendix presents the flight forecast details. On top of the average annual growth rates (AAGR) over the 7-year horizon, average annual growth rates over the first reference period (RP1) and the second reference period (RP2) of the Performance Scheme have been added to the tables.

Figure 44. Forecast of the number of IFR Movements (thousands) per State.

IFR Flight Movements (Thousands)														
IFR Movements (thousands)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	AAGR 2022/ 2015	RP2 2019/2014 AAGR
Albania	H	.	.	.	.	189	193	205	216	229	240	253	3.2%	.
	B	195	201	198	202	188	187	193	200	208	214	221	1.3%	.
	L	.	.	.	.	187	181	183	186	190	193	196	-0.4%	.
Armenia	H	.	.	.	.	39	47	50	53	57	60	64	6.2%	.
	B	56	52	51	42	39	46	48	50	52	54	56	4.2%	.
	L	.	.	.	.	39	45	45	46	48	49	50	2.4%	.
Austria	H	.	.	.	.	1,176	1,226	1,284	1,336	1,396	1,447	1,501	3.7%	3.0%
	B	1,133	1,114	1,152	1,168	1,171	1,195	1,223	1,250	1,282	1,308	1,338	2.0%	1.6%
	L	.	.	.	.	1,166	1,164	1,165	1,175	1,186	1,192	1,200	0.4%	0.4%
Azerbaijan	H	.	.	.	.	140	148	158	168	180	192	206	6.9%	.
	B	130	129	127	129	140	144	151	158	165	173	181	5.0%	.
	L	.	.	.	.	139	141	144	149	154	158	163	3.4%	.
Belarus	H	.	.	.	.	279	297	312	327	342	357	371	5.0%	.
	B	240	255	269	263	278	289	296	304	312	319	326	3.1%	.
	L	.	.	.	.	277	281	281	283	287	288	291	1.4%	.
Belgium/Luxembourg	H	.	.	.	.	1,190	1,250	1,298	1,339	1,390	1,422	1,455	3.2%	3.4%
	B	1,089	1,101	1,133	1,165	1,186	1,225	1,247	1,269	1,294	1,316	1,341	2.0%	2.3%
	L	.	.	.	.	1,182	1,199	1,198	1,204	1,213	1,217	1,223	0.7%	1.2%
Bosnia-Herzegovina	H	.	.	.	.	321	341	362	380	401	419	439	5.1%	.
	B	268	262	298	311	319	331	341	352	364	374	385	3.1%	.
	L	.	.	.	.	318	321	323	328	333	337	341	1.3%	.
Bulgaria	H	.	.	.	.	761	805	859	908	964	1,017	1,073	4.9%	5.8%
	B	540	551	683	767	758	783	812	842	873	901	932	2.8%	4.3%
	L	.	.	.	.	755	762	771	786	802	813	826	1.1%	2.8%
Canary Islands	H	.	.	.	.	314	334	349	361	374	387	401	5.2%	4.9%
	B	275	265	284	281	313	325	330	335	341	346	352	3.3%	3.4%
	L	.	.	.	.	311	316	314	314	314	313	313	1.5%	2.0%

IFR Flight Movements (Thousands)														
IFR Movements (thousands)		**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**AAGR 2022/ 2015**	**RP2 2019/2014 AAGR**
Croatia	H	.	.	.	.	538	563	595	625	657	687	718	**4.3%**	**3.7%**
	B	495	492	520	535	535	545	562	578	597	612	630	**2.3%**	**2.2%**
	L	.	.	.	.	533	529	531	538	547	551	558	**0.6%**	**0.7%**
Cyprus	H	.	.	.	.	322	343	374	404	438	472	509	**6.9%**	**5.8%**
	B	270	277	304	319	320	331	349	368	388	408	429	**4.3%**	**3.9%**
	L	.	.	.	.	318	320	328	339	351	361	371	**2.2%**	**2.2%**
Czech Republic	H	.	.	.	.	803	861	907	943	988	1,030	1,073	**5.3%**	**6.1%**
	B	679	680	700	746	799	840	860	876	900	921	945	**3.4%**	**4.6%**
	L	.	.	.	.	796	818	819	825	830	835	842	**1.8%**	**3.3%**
Denmark	H	.	.	.	.	642	662	686	708	734	755	776	**3.1%**	**2.7%**
	B	605	618	619	626	639	648	658	668	680	688	699	**1.6%**	**1.5%**
	L	.	.	.	.	637	634	632	633	636	634	635	**0.2%**	**0.5%**
Estonia	H	.	.	.	.	203	212	224	234	247	259	271	**4.9%**	**4.1%**
	B	189	183	191	194	202	207	212	218	224	229	236	**2.8%**	**2.6%**
	L	.	.	.	.	201	202	202	204	206	207	209	**1.1%**	**1.3%**
FYROM	H	.	.	.	.	146	157	167	176	186	196	206	**4.5%**	.
	B	113	113	146	152	146	152	157	162	168	174	180	**2.4%**	.
	L	.	.	.	.	145	147	148	151	154	156	158	**0.6%**	.
Finland	H	.	.	.	.	245	248	256	264	273	280	288	**2.2%**	**1.3%**
	B	252	243	248	248	244	243	245	248	252	254	258	**0.6%**	**0.0%**
	L	.	.	.	.	243	237	235	234	234	233	232	**-0.9%**	**-1.1%**
France	H	.	.	.	.	3,133	3,273	3,393	3,491	3,618	3,707	3,796	**3.5%**	**3.4%**
	B	2,923	2,902	2,947	2,992	3,122	3,196	3,246	3,303	3,371	3,424	3,483	**2.2%**	**2.3%**
	L	.	.	.	.	3,111	3,123	3,109	3,123	3,144	3,148	3,162	**0.8%**	**1.2%**
Georgia	H	.	.	.	.	123	132	143	154	166	177	190	**6.5%**	.
	B	108	110	116	122	123	129	135	142	150	157	165	**4.3%**	.
	L	.	.	.	.	122	125	128	132	137	141	145	**2.5%**	.
Germany	H	.	.	.	.	3,153	3,267	3,393	3,491	3,616	3,721	3,828	**3.2%**	**2.9%**
	B	3,018	2,990	3,030	3,080	3,142	3,200	3,254	3,297	3,364	3,416	3,479	**1.8%**	**1.7%**
	L	.	.	.	.	3,132	3,132	3,126	3,139	3,149	3,155	3,170	**0.4%**	**0.7%**
Greece	H	.	.	.	.	706	725	769	814	866	916	970	**4.5%**	**3.7%**
	B	633	623	678	713	703	703	726	753	783	811	841	**2.4%**	**2.1%**
	L	.	.	.	.	700	683	689	700	717	728	742	**0.6%**	**0.6%**
Hungary	H	.	.	.	.	783	842	894	939	993	1,044	1,097	**5.7%**	**7.0%**
	B	589	600	670	744	780	819	845	871	899	925	954	**3.6%**	**5.4%**
	L	.	.	.	.	777	797	803	815	827	835	846	**1.9%**	**4.0%**

IFR Flight Movements (Thousands)														
IFR Movements (thousands)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	AAGR 2022/ 2015	RP2 2019/2014 AAGR
Iceland	H	.	.	.	.	182	196	204	212	222	231	240	**5.9%**	.
	B	123	131	145	160	182	192	197	201	207	212	217	**4.4%**	.
	L	.	.	.	.	181	189	190	193	195	197	199	**3.1%**	.
Ireland	H	.	.	.	.	618	659	681	693	710	724	737	**3.8%**	**5.2%**
	B	521	522	537	566	617	648	660	672	685	692	700	**3.1%**	**4.6%**
	L	.	.	.	.	615	637	639	644	651	655	661	**2.3%**	**3.7%**
Italy	H	.	.	.	.	1,743	1,827	1,920	1,999	2,090	2,169	2,253	**4.1%**	**3.5%**
	B	1,685	1,648	1,680	1,696	1,736	1,778	1,821	1,861	1,908	1,947	1,990	**2.3%**	**2.1%**
	L	.	.	.	.	1,730	1,730	1,731	1,742	1,754	1,759	1,770	**0.6%**	**0.7%**
Latvia	H	.	.	.	.	247	261	276	289	305	320	335	**4.6%**	**3.6%**
	B	233	236	243	244	246	253	259	265	272	278	285	**2.2%**	**1.8%**
	L	.	.	.	.	245	246	245	246	247	247	249	**0.2%**	**0.3%**
Lisbon FIR	H	.	.	.	.	561	602	628	651	675	697	721	**5.2%**	**6.3%**
	B	438	449	480	505	559	586	596	607	619	629	640	**3.5%**	**4.8%**
	L	.	.	.	.	557	571	567	568	570	570	572	**1.8%**	**3.4%**
Lithuania	H	.	.	.	.	261	272	287	301	316	329	343	**4.0%**	**3.2%**
	B	236	242	257	260	260	264	270	277	284	290	296	**1.9%**	**1.5%**
	L	.	.	.	.	259	256	255	257	258	259	260	**-0.0%**	**-0.0%**
Malta	H	.	.	.	.	113	122	133	143	155	168	182	**8.5%**	**7.0%**
	B	97	109	102	102	112	117	123	129	136	142	149	**5.5%**	**4.8%**
	L	.	.	.	.	111	113	115	118	121	124	127	**3.1%**	**3.0%**
Moldova	H	.	.	.	.	42	46	50	53	57	61	64	**5.1%**	.
	B	64	74	56	45	41	44	46	48	50	52	54	**2.6%**	.
	L	.	.	.	.	41	42	43	44	45	46	47	**0.4%**	.
Morocco	H	.	.	.	.	384	411	443	474	510	546	587	**7.2%**	.
	B	324	334	359	361	383	398	414	430	448	465	485	**4.3%**	.
	L	.	.	.	.	381	386	388	394	401	406	413	**1.9%**	.
Netherlands	H	.	.	.	.	1,252	1,311	1,345	1,370	1,409	1,449	1,491	**3.5%**	**3.8%**
	B	1,083	1,109	1,138	1,176	1,247	1,294	1,309	1,321	1,341	1,365	1,392	**2.4%**	**3.0%**
	L	.	.	.	.	1,243	1,268	1,267	1,273	1,280	1,284	1,291	**1.3%**	**2.3%**
Norway	H	.	.	.	.	599	601	617	633	653	669	686	**1.8%**	**0.5%**
	B	587	610	619	603	597	589	593	598	606	610	615	**0.3%**	**-0.7%**
	L	.	.	.	.	595	578	572	569	569	564	560	**-1.0%**	**-1.7%**
Poland	H	.	.	.	.	756	813	865	919	971	1,020	1,061	**6.1%**	**5.5%**
	B	684	692	702	699	752	787	811	839	866	890	916	**3.9%**	**3.7%**
	L	.	.	.	.	749	764	765	773	785	789	796	**1.9%**	**2.0%**

IFR Flight Movements (Thousands)														
IFR Movements (thousands)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	AAGR 2022/ 2015	RP2 2019/2014 AAGR
Romania	H	.	.	.	.	633	677	722	762	810	854	901	5.1%	5.0%
	B	487	513	598	635	630	658	682	706	732	756	782	3.0%	3.4%
	L	.	.	.	.	628	641	648	660	673	682	693	1.3%	2.0%
Santa Maria FIR	H	.	.	.	.	152	162	168	174	181	187	193	5.2%	6.9%
	B	118	121	125	136	151	159	162	166	170	174	178	3.9%	5.9%
	L	.	.	.	.	151	155	156	158	160	161	163	2.7%	4.9%
Serbia&Montenegro	H	.	.	.	.	624	657	698	735	777	815	855	5.1%	.
	B	535	518	554	605	622	638	659	681	705	725	748	3.1%	.
	L	.	.	.	.	619	621	625	635	647	654	662	1.3%	.
Slovakia	H	.	.	.	.	501	547	580	610	645	678	712	6.2%	6.9%
	B	381	397	436	468	499	531	548	564	582	599	618	4.0%	5.3%
	L	.	.	.	.	497	516	520	527	533	539	546	2.2%	3.8%
Slovenia	H	.	.	.	.	353	382	403	422	443	462	481	4.8%	3.9%
	B	346	329	348	347	352	371	382	393	404	414	425	2.9%	2.4%
	L	.	.	.	.	350	361	362	366	372	375	379	1.3%	1.0%
Spain	H	.	.	.	.	1,762	1,844	1,933	2,004	2,088	2,162	2,237	4.5%	4.8%
	B	1,557	1,528	1,587	1,640	1,756	1,797	1,836	1,872	1,919	1,954	1,993	2.8%	3.4%
	L	.	.	.	.	1,749	1,752	1,750	1,759	1,773	1,777	1,786	1.2%	2.1%
Sweden	H	.	.	.	.	772	797	828	857	890	918	947	3.4%	3.0%
	B	724	730	739	751	769	780	793	806	821	832	845	1.7%	1.8%
	L	.	.	.	.	767	764	761	762	766	764	764	0.3%	0.6%
Switzerland	H	.	.	.	.	1,078	1,132	1,179	1,215	1,261	1,295	1,327	3.5%	3.3%
	B	1,045	1,019	1,033	1,046	1,074	1,106	1,128	1,146	1,168	1,185	1,207	2.1%	2.1%
	L	.	.	.	.	1,070	1,080	1,080	1,085	1,087	1,088	1,093	0.6%	1.0%
Turkey	H	.	.	.	.	1,330	1,383	1,510	1,624	1,748	1,871	2,007	5.8%	.
	B	1,066	1,142	1,269	1,356	1,324	1,340	1,423	1,506	1,581	1,653	1,732	3.6%	.
	L	.	.	.	.	1,318	1,302	1,342	1,393	1,448	1,486	1,527	1.7%	.
Ukraine	H	.	.	.	.	197	236	252	269	285	301	316	5.8%	.
	B	466	494	320	213	195	226	235	245	254	262	271	3.5%	.
	L	.	.	.	.	194	218	220	224	230	233	237	1.5%	.
UK	H	.	.	.	.	2,456	2,550	2,625	2,680	2,767	2,831	2,896	3.2%	3.4%
	B	2,211	2,225	2,269	2,322	2,449	2,508	2,544	2,578	2,624	2,655	2,687	2.1%	2.6%
	L	.	.	.	.	2,442	2,464	2,460	2,468	2,485	2,490	2,499	1.1%	1.7%
ESRA02	H	.	.	.	.	9,972	10,289	10,727	11,098	11,553	11,947	12,362	3.6%	.
	B	9,388	9,297	9,495	9,667	9,935	10,054	10,261	10,469	10,715	10,910	11,134	2.0%	.
	L	.	.	.	.	9,901	9,828	9,829	9,898	9,988	10,025	10,087	0.6%	.

IFR Flight Movements (Thousands)														
IFR Movements (thousands)		**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**AAGR 2022/ 2015**	**RP2 2019/2014 AAGR**
EU27	H	.	.	.	.	9,239	9,562	9,943	10,265	10,665	11,006	11,358	**3.5%**	**3.2%**
	B	8,766	8,622	8,783	8,920	9,207	9,347	9,512	9,680	9,891	10,055	10,246	**2.0%**	**2.0%**
	L	.	.	.	.	9,174	9,137	9,118	9,160	9,222	9,241	9,286	**0.6%**	**0.8%**
ECAC	H	.	.	.	.	10,224	10,573	11,029	11,416	11,890	12,303	12,736	**3.6%**	**3.2%**
	B	9,710	9,603	9,770	9,923	10,187	10,329	10,544	10,760	11,016	11,221	11,456	**2.1%**	**1.9%**
	L	.	.	.	.	10,151	10,094	10,097	10,169	10,261	10,301	10,367	**0.6%**	**0.8%**
ESRA08	H	.	.	.	.	10,037	10,373	10,816	11,194	11,654	12,054	12,472	**3.6%**	**3.1%**
	B	9,548	9,447	9,604	9,752	10,000	10,134	10,343	10,555	10,802	11,000	11,227	**2.0%**	**1.9%**
	L	.	.	.	.	9,965	9,905	9,905	9,975	10,066	10,102	10,165	**0.6%**	**0.8%**
SES-SJU	H	.	.	.	.	9,640	9,962	10,358	10,694	11,114	11,472	11,845	**3.5%**	**3.1%**
	B	9,162	9,022	9,192	9,326	9,606	9,739	9,909	10,082	10,301	10,470	10,667	**1.9%**	**1.9%**
	L	.	.	.	.	9,573	9,522	9,499	9,540	9,602	9,618	9,661	**0.5%**	**0.7%**
Baltic FAB	H	.	.	.	.	855	907	965	1,025	1,083	1,137	1,184	**5.9%**	**5.4%**
	B	768	776	788	790	852	879	905	937	967	992	1,021	**3.7%**	**3.5%**
	L	.	.	.	.	848	853	854	862	876	880	888	**1.7%**	**1.8%**
BLUE MED FAB	H	.	.	.	.	2,422	2,526	2,669	2,801	2,951	3,088	3,238	**4.8%**	**4.2%**
	B	2,212	2,194	2,282	2,327	2,412	2,456	2,527	2,600	2,682	2,753	2,834	**2.9%**	**2.6%**
	L	.	.	.	.	2,402	2,389	2,399	2,426	2,459	2,480	2,509	**1.1%**	**1.2%**
Danube FAB	H	.	.	.	.	916	973	1,038	1,097	1,164	1,226	1,293	**5.4%**	**5.8%**
	B	746	758	829	895	912	947	981	1,017	1,054	1,087	1,124	**3.3%**	**4.2%**
	L	.	.	.	.	908	922	932	949	968	981	996	**1.5%**	**2.7%**
FAB CE	H	.	.	.	.	2,086	2,187	2,304	2,406	2,524	2,631	2,742	**4.6%**	**4.5%**
	B	1,865	1,854	1,928	2,001	2,077	2,130	2,185	2,238	2,302	2,356	2,417	**2.7%**	**3.0%**
	L	.	.	.	.	2,069	2,074	2,078	2,098	2,120	2,134	2,154	**1.1%**	**1.7%**
FABEC	H	.	.	.	.	5,879	6,072	6,285	6,454	6,676	6,851	7,029	**3.1%**	**3.0%**
	B	5,564	5,499	5,571	5,667	5,859	5,945	6,034	6,121	6,239	6,334	6,444	**1.9%**	**1.9%**
	L	.	.	.	.	5,840	5,816	5,797	5,819	5,847	5,856	5,881	**0.5%**	**0.9%**
NEFAB	H	.	.	.	.	1,012	1,021	1,056	1,091	1,132	1,166	1,202	**2.4%**	**1.1%**
	B	1,001	1,012	1,030	1,015	1,009	997	1,008	1,022	1,039	1,050	1,063	**0.7%**	**-0.2%**
	L	.	.	.	.	1,005	975	966	965	966	960	957	**-0.8%**	**-1.3%**
South West FAB	H	.	.	.	.	1,940	2,023	2,117	2,195	2,284	2,363	2,445	**4.6%**	**4.9%**
	B	1,702	1,663	1,727	1,782	1,933	1,972	2,012	2,050	2,099	2,134	2,174	**2.9%**	**3.5%**
	L	.	.	.	.	1,925	1,922	1,918	1,926	1,939	1,941	1,948	**1.3%**	**2.2%**
UK-Ireland FAB	H	.	.	.	.	2,510	2,601	2,678	2,733	2,821	2,885	2,952	**3.3%**	**3.5%**
	B	2,238	2,254	2,299	2,358	2,503	2,557	2,594	2,630	2,677	2,708	2,740	**2.2%**	**2.7%**
	L	.	.	.	.	2,496	2,512	2,508	2,516	2,535	2,539	2,549	**1.1%**	**1.8%**

**EUROCONTROL
NMD**

EUROCONTROL SEVEN-YEAR FORECAST SEPTEMBER 2016

IFR Flight Movements (Thousands)														
IFR Movements (thousands)		**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**AAGR 2022/ 2015**	**RP2 2019/2014 AAGR**
DK-SE FAB	**H**	.	.	.	.	1,043	1,070	1,110	1,146	1,188	1,222	1,258	**3.2%**	**2.7%**
	B	978	999	1,005	1,011	1,039	1,047	1,063	1,080	1,098	1,112	1,128	**1.6%**	**1.4%**
	L	.	.	.	.	1,036	1,025	1,021	1,022	1,026	1,024	1,023	**0.2%**	**0.3%**
EU28	**H**	.	.	.	.	9,255	9,578	9,960	10,282	10,683	11,025	11,378	**3.5%**	**3.2%**
	B	8,779	8,634	8,797	8,934	9,222	9,362	9,528	9,696	9,908	10,072	10,263	**2.0%**	**2.0%**
	L	.	.	.	.	9,189	9,152	9,133	9,175	9,237	9,256	9,302	**0.6%**	**0.8%**
SES-RP2	**H**	.	.	.	.	9,551	9,865	10,250	10,576	10,982	11,327	11,683	**3.4%**	**3.0%**
	B	9,087	8,946	9,114	9,243	9,517	9,645	9,809	9,977	10,189	10,352	10,541	**1.9%**	**1.8%**
	L	.	.	.	.	9,484	9,430	9,406	9,444	9,503	9,517	9,557	**0.5%**	**0.7%**

ANNEX 4 SEVEN-YEAR FLIGHT FORECAST PER STATE (GROWTH)

This appendix shows the same data as the previous, but presented as growth rather than counts of flights.

Figure 45. Forecast of the IFR Movements growth per State.

IFR Movements (Growth)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	AAGR 2022/ 2015	RP2 2019/2014 AAGR
Albania	H	.	.	.	.	-6.6%	2.3%	6.1%	5.6%	5.9%	5.0%	5.1%	**3.2%**	.
	B	-1.1%	2.8%	-1.1%	1.8%	-7.0%	-0.4%	3.2%	3.6%	3.7%	3.2%	3.4%	**1.3%**	.
	L	.	.	.	.	-7.4%	-3.0%	0.8%	1.7%	2.3%	1.4%	1.6%	**-0.4%**	.
Armenia	H	.	.	.	.	-6.8%	20%	6.5%	5.9%	6.8%	6.1%	6.3%	**6.2%**	.
	B	-2.0%	-6.6%	-3.4%	-17%	-7.3%	17%	3.9%	4.0%	4.6%	4.2%	4.4%	**4.2%**	.
	L	.	.	.	.	-7.9%	15%	1.5%	2.3%	2.7%	2.3%	2.5%	**2.4%**	.
Austria	H	.	.	.	.	0.7%	4.3%	4.8%	4.0%	4.5%	3.7%	3.7%	**3.7%**	3.0%
	B	-1.8%	-1.7%	3.4%	1.4%	0.3%	2.0%	2.3%	2.2%	2.5%	2.1%	2.3%	**2.0%**	1.6%
	L	.	.	.	.	-0.1%	-0.2%	0.1%	0.8%	1.0%	0.5%	0.7%	**0.4%**	0.4%
Azerbaijan	H	.	.	.	.	8.7%	5.5%	6.8%	6.5%	7.3%	6.6%	6.9%	**6.9%**	.
	B	5.4%	-1.3%	-1.2%	1.4%	8.3%	3.5%	4.3%	4.6%	5.0%	4.5%	4.9%	**5.0%**	.
	L	.	.	.	.	7.9%	1.6%	2.2%	3.1%	3.3%	2.8%	3.1%	**3.4%**	.
Belarus	H	.	.	.	.	6.1%	6.5%	5.1%	4.6%	4.8%	4.1%	4.2%	**5.0%**	.
	B	6.7%	6.2%	5.6%	-2.2%	5.6%	4.1%	2.4%	2.6%	2.6%	2.2%	2.5%	**3.1%**	.
	L	.	.	.	.	5.1%	1.6%	-0.0%	0.8%	1.3%	0.6%	0.8%	**1.4%**	.
Belgium/Luxembourg	H	.	.	.	.	2.2%	5.1%	3.8%	3.2%	3.8%	2.3%	2.3%	**3.2%**	3.4%
	B	-0.2%	1.0%	2.9%	2.8%	1.8%	3.3%	1.7%	1.8%	2.0%	1.7%	1.9%	**2.0%**	2.3%
	L	.	.	.	.	1.5%	1.5%	-0.1%	0.5%	0.8%	0.3%	0.5%	**0.7%**	1.2%
Bosnia-Herzegovina	H	.	.	.	.	3.2%	6.4%	6.0%	5.1%	5.3%	4.6%	4.8%	**5.1%**	.
	B	-2.6%	-2.2%	14%	4.2%	2.7%	3.6%	3.2%	3.2%	3.2%	2.8%	3.0%	**3.1%**	.
	L	.	.	.	.	2.2%	0.9%	0.7%	1.5%	1.8%	1.0%	1.2%	**1.3%**	.
Bulgaria	H	.	.	.	.	-0.7%	5.7%	6.7%	5.6%	6.2%	5.5%	5.5%	**4.9%**	5.8%
	B	0.2%	1.9%	24%	12%	-1.1%	3.3%	3.7%	3.7%	3.7%	3.2%	3.5%	**2.8%**	4.3%
	L	.	.	.	.	-1.6%	1.0%	1.2%	1.9%	2.1%	1.4%	1.6%	**1.1%**	2.8%
Canary Islands	H	.	.	.	.	12%	6.5%	4.2%	3.5%	3.8%	3.3%	3.6%	**5.2%**	4.9%
	B	-7.7%	-3.4%	6.9%	-0.9%	11%	3.9%	1.6%	1.6%	1.8%	1.4%	1.6%	**3.3%**	3.4%
	L	.	.	.	.	11%	1.5%	-0.7%	-0.1%	0.1%	-0.3%	-0.0%	**1.5%**	2.0%

IFR Movements (Growth)														AAGR 2022/ 2015	RP2 2019/2014 AAGR
IFR Movements (Growth)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
Croatia	H	.	.	.	.	0.5%	4.6%	5.8%	4.9%	5.3%	4.4%	4.5%	**4.3%**	**3.7%**
	B	-0.4%	-0.6%	5.5%	3.0%	-0.0%	1.9%	3.0%	3.0%	3.1%	2.6%	2.8%	**2.3%**	**2.2%**
	L	.	.	.	.	-0.5%	-0.7%	0.5%	1.3%	1.6%	0.9%	1.1%	**0.6%**	**0.7%**
Cyprus	H	.	.	.	.	1.0%	6.5%	8.9%	8.1%	8.4%	7.7%	7.9%	**6.9%**	**5.8%**
	B	-4.1%	2.8%	9.7%	4.8%	0.3%	3.4%	5.4%	5.5%	5.5%	5.0%	5.3%	**4.3%**	**3.9%**
	L	.	.	.	.	-0.3%	0.6%	2.6%	3.3%	3.4%	2.8%	3.0%	**2.2%**	**2.2%**
Czech Republic	H	.	.	.	.	7.6%	7.3%	5.3%	4.0%	4.8%	4.3%	4.2%	**5.3%**	**6.1%**
	B	-2.3%	0.0%	3.1%	6.5%	7.2%	5.0%	2.4%	1.9%	2.8%	2.3%	2.6%	**3.4%**	**4.6%**
	L	.	.	.	.	6.8%	2.8%	0.0%	0.8%	0.6%	0.6%	0.8%	**1.8%**	**3.3%**
Denmark	H	.	.	.	.	2.4%	3.2%	3.6%	3.1%	3.7%	2.9%	2.8%	**3.1%**	**2.7%**
	B	-3.2%	2.3%	0.0%	1.3%	2.1%	1.4%	1.5%	1.5%	1.8%	1.3%	1.5%	**1.6%**	**1.5%**
	L	.	.	.	.	1.7%	-0.5%	-0.4%	0.3%	0.4%	-0.2%	0.0%	**0.2%**	**0.5%**
Estonia	H	.	.	.	.	4.8%	4.6%	5.4%	4.8%	5.5%	4.7%	4.7%	**4.9%**	**4.1%**
	B	6.1%	-3.1%	4.6%	1.2%	4.3%	2.3%	2.6%	2.6%	2.8%	2.5%	2.8%	**2.8%**	**2.6%**
	L	.	.	.	.	3.9%	0.1%	0.2%	0.9%	1.0%	0.6%	0.9%	**1.1%**	**1.3%**
FYROM	H	.	.	.	.	-3.7%	7.0%	6.2%	5.6%	6.0%	5.2%	5.4%	**4.5%**	**.**
	B	-9.6%	0.1%	30%	3.9%	-4.2%	4.2%	3.3%	3.5%	3.8%	3.2%	3.4%	**2.4%**	**.**
	L	.	.	.	.	-4.6%	1.5%	0.7%	1.6%	2.1%	1.4%	1.6%	**0.6%**	**.**
Finland	H	.	.	.	.	-1.2%	1.2%	3.3%	3.0%	3.5%	2.7%	2.9%	**2.2%**	**1.3%**
	B	-5.8%	-3.5%	2.0%	0.0%	-1.5%	-0.6%	1.1%	1.2%	1.5%	1.0%	1.2%	**0.6%**	**0.0%**
	L	.	.	.	.	-1.9%	-2.4%	-0.9%	-0.3%	-0.0%	-0.6%	-0.3%	**-0.9%**	**-1.1%**
France	H	.	.	.	.	4.7%	4.5%	3.7%	2.9%	3.6%	2.5%	2.4%	**3.5%**	**3.4%**
	B	-1.5%	-0.7%	1.6%	1.5%	4.4%	2.4%	1.6%	1.8%	2.1%	1.5%	1.7%	**2.2%**	**2.3%**
	L	.	.	.	.	4.0%	0.4%	-0.4%	0.4%	0.7%	0.1%	0.4%	**0.8%**	**1.2%**
Georgia	H	.	.	.	.	0.7%	7.5%	8.2%	7.4%	7.8%	7.0%	7.2%	**6.5%**	**.**
	B	-1.7%	2.1%	5.2%	5.5%	0.2%	4.9%	5.1%	5.3%	5.2%	4.7%	5.0%	**4.3%**	**.**
	L	.	.	.	.	-0.3%	2.5%	2.4%	3.3%	3.5%	2.8%	3.0%	**2.5%**	**.**
Germany	H	.	.	.	.	2.4%	3.6%	3.8%	2.9%	3.6%	2.9%	2.9%	**3.2%**	**2.9%**
	B	-1.9%	-0.9%	1.3%	1.7%	2.0%	1.8%	1.7%	1.3%	2.0%	1.6%	1.8%	**1.8%**	**1.7%**
	L	.	.	.	.	1.7%	0.0%	-0.2%	0.4%	0.3%	0.2%	0.5%	**0.4%**	**0.7%**
Greece	H	.	.	.	.	-0.9%	2.7%	6.1%	5.9%	6.4%	5.7%	5.9%	**4.5%**	**3.7%**
	B	-3.5%	-1.6%	8.8%	5.1%	-1.3%	0.0%	3.3%	3.7%	4.0%	3.5%	3.8%	**2.4%**	**2.1%**
	L	.	.	.	.	-1.7%	-2.4%	0.8%	1.7%	2.4%	1.6%	1.9%	**0.6%**	**0.6%**
Hungary	H	.	.	.	.	5.3%	7.5%	6.1%	5.1%	5.8%	5.1%	5.1%	**5.7%**	**7.0%**
	B	-4.4%	1.9%	12%	11%	4.8%	5.0%	3.2%	3.0%	3.3%	2.9%	3.1%	**3.6%**	**5.4%**
	L	.	.	.	.	4.4%	2.6%	0.7%	1.5%	1.5%	1.1%	1.3%	**1.9%**	**4.0%**

EUROCONTROL NMD

EUROCONTROL SEVEN-YEAR FORECAST SEPTEMBER 2016

IFR Movements (Growth)													AAGR 2022/ 2015	RP2 2019/2014 AAGR
IFR Movements (Growth)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
Iceland	H	.	.	.	.	14%	7.4%	4.3%	3.8%	4.7%	4.0%	4.1%	**5.9%**	.
	B	11%	6.8%	11%	11%	13%	5.7%	2.5%	2.3%	2.7%	2.3%	2.6%	**4.4%**	.
	L	.	.	.	.	13%	4.1%	0.9%	1.2%	1.2%	0.9%	1.2%	**3.1%**	.
Ireland	H	.	.	.	.	9.3%	6.6%	3.4%	1.7%	2.5%	1.8%	1.8%	**3.8%**	5.2%
	B	-0.4%	0.3%	2.8%	5.4%	9.0%	5.1%	1.8%	1.8%	2.0%	1.0%	1.1%	**3.1%**	4.6%
	L	.	.	.	.	8.7%	3.6%	0.3%	0.7%	1.1%	0.7%	0.9%	**2.3%**	3.7%
Italy	H	.	.	.	.	2.8%	4.8%	5.1%	4.1%	4.6%	3.8%	3.9%	**4.1%**	3.5%
	B	-2.3%	-2.2%	1.9%	1.0%	2.4%	2.4%	2.4%	2.2%	2.5%	2.0%	2.3%	**2.3%**	2.1%
	L	.	.	.	.	2.0%	0.0%	0.0%	0.7%	0.7%	0.3%	0.6%	**0.6%**	0.7%
Latvia	H	.	.	.	.	1.1%	5.6%	5.8%	4.8%	5.5%	4.7%	4.6%	**4.6%**	3.6%
	B	-1.0%	1.3%	2.8%	0.7%	0.6%	2.9%	2.4%	2.3%	2.6%	2.2%	2.4%	**2.2%**	1.8%
	L	.	.	.	.	0.2%	0.4%	-0.3%	0.5%	0.4%	0.2%	0.4%	**0.2%**	0.3%
Lisbon FIR	H	.	.	.	.	11%	7.3%	4.4%	3.5%	3.8%	3.3%	3.4%	**5.2%**	6.3%
	B	-2.7%	2.6%	6.8%	5.1%	11%	4.9%	1.8%	1.7%	2.1%	1.6%	1.8%	**3.5%**	4.8%
	L	.	.	.	.	10%	2.5%	-0.6%	0.1%	0.4%	-0.0%	0.2%	**1.8%**	3.4%
Lithuania	H	.	.	.	.	0.3%	4.0%	5.6%	4.8%	5.1%	4.3%	4.2%	**4.0%**	3.2%
	B	1.0%	2.8%	6.1%	1.2%	-0.2%	1.5%	2.4%	2.5%	2.5%	2.1%	2.3%	**1.9%**	1.5%
	L	.	.	.	.	-0.6%	-1.1%	-0.2%	0.6%	0.7%	0.2%	0.4%	**-0.0%**	-0.0%
Malta	H	.	.	.	.	10%	8.2%	8.7%	7.9%	8.5%	8.0%	8.4%	**8.5%**	7.0%
	B	20%	13%	-6.8%	0.7%	9.3%	4.8%	4.9%	4.7%	5.3%	4.7%	5.0%	**5.5%**	4.8%
	L	.	.	.	.	8.8%	1.8%	1.7%	2.5%	2.6%	2.2%	2.5%	**3.1%**	3.0%
Moldova	H	.	.	.	.	-8.3%	9.9%	8.4%	7.4%	7.0%	6.3%	6.4%	**5.1%**	.
	B	5.7%	16%	-24%	-19%	-9.0%	6.1%	4.7%	4.9%	4.4%	3.8%	4.0%	**2.6%**	.
	L	.	.	.	.	-9.6%	2.6%	1.6%	2.6%	2.4%	1.7%	2.0%	**0.4%**	.
Morocco	H	.	.	.	.	6.6%	7.0%	7.7%	7.0%	7.5%	7.1%	7.5%	**7.2%**	.
	B	-8.1%	3.3%	7.6%	0.3%	6.1%	4.0%	3.9%	3.9%	4.3%	3.9%	4.1%	**4.3%**	.
	L	.	.	.	.	5.6%	1.2%	0.8%	1.5%	1.8%	1.3%	1.6%	**1.9%**	.
Netherlands	H	.	.	.	.	6.5%	4.8%	2.5%	1.9%	2.9%	2.8%	2.9%	**3.5%**	3.8%
	B	-0.2%	2.4%	2.6%	3.4%	6.1%	3.7%	1.2%	0.9%	1.5%	1.8%	2.0%	**2.4%**	3.0%
	L	.	.	.	.	5.7%	2.0%	-0.1%	0.5%	0.5%	0.3%	0.6%	**1.3%**	2.3%
Norway	H	.	.	.	.	-0.7%	0.4%	2.7%	2.5%	3.2%	2.4%	2.5%	**1.8%**	0.5%
	B	4.2%	4.0%	1.4%	-2.5%	-1.0%	-1.4%	0.7%	0.9%	1.4%	0.7%	0.8%	**0.3%**	-0.7%
	L	.	.	.	.	-1.3%	-2.9%	-1.1%	-0.4%	-0.1%	-0.8%	-0.7%	**-1.0%**	-1.7%
Poland	H	.	.	.	.	8.0%	7.6%	6.4%	6.2%	5.7%	5.1%	4.0%	**6.1%**	5.5%
	B	4.6%	1.1%	1.4%	-0.3%	7.5%	4.7%	3.0%	3.5%	3.2%	2.7%	3.0%	**3.9%**	3.7%
	L	.	.	.	.	7.0%	2.0%	0.2%	1.0%	1.5%	0.6%	0.9%	**1.9%**	2.0%

IFR Movements (Growth)														
IFR Movements (Growth)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	AAGR 2022/ 2015	RP2 2019/2014 AAGR
Romania	H	.	.	.	.	-0.3%	6.9%	6.6%	5.6%	6.2%	5.5%	5.5%	**5.1%**	**5.0%**
	B	-0.0%	5.3%	17%	6.1%	-0.7%	4.4%	3.6%	3.6%	3.7%	3.2%	3.4%	**3.0%**	**3.4%**
	L	.	.	.	.	-1.1%	2.1%	1.2%	1.8%	1.9%	1.4%	1.6%	**1.3%**	**2.0%**
Santa Maria FIR	H	.	.	.	.	12%	6.6%	4.0%	3.6%	3.9%	3.3%	3.5%	**5.2%**	**6.9%**
	B	-3.9%	2.7%	2.7%	8.9%	11%	5.0%	2.3%	2.3%	2.5%	2.1%	2.3%	**3.9%**	**5.9%**
	L	.	.	.	.	11%	3.2%	0.7%	1.1%	1.3%	0.8%	1.1%	**2.7%**	**4.9%**
Serbia&Montenegro	H	.	.	.	.	3.2%	5.2%	6.2%	5.3%	5.7%	4.9%	5.0%	**5.1%**	**.**
	B	-4.1%	-3.1%	6.9%	9.3%	2.7%	2.7%	3.3%	3.4%	3.4%	2.9%	3.1%	**3.1%**	**.**
	L	.	.	.	.	2.3%	0.3%	0.7%	1.6%	1.9%	1.1%	1.3%	**1.3%**	**.**
Slovakia	H	.	.	.	.	7.2%	9.2%	6.1%	5.0%	5.8%	5.2%	5.0%	**6.2%**	**6.9%**
	B	-0.3%	4.4%	9.8%	7.2%	6.7%	6.5%	3.1%	2.9%	3.3%	2.9%	3.1%	**4.0%**	**5.3%**
	L	.	.	.	.	6.2%	3.9%	0.6%	1.3%	1.3%	1.0%	1.2%	**2.2%**	**3.8%**
Slovenia	H	.	.	.	.	1.8%	8.2%	5.4%	4.7%	5.0%	4.2%	4.2%	**4.8%**	**3.9%**
	B	-2.0%	-4.8%	5.8%	-0.3%	1.3%	5.6%	2.8%	2.8%	3.0%	2.5%	2.7%	**2.9%**	**2.4%**
	L	.	.	.	.	0.9%	3.1%	0.4%	1.2%	1.5%	0.8%	1.0%	**1.3%**	**1.0%**
Spain	H	.	.	.	.	7.5%	4.6%	4.8%	3.7%	4.2%	3.5%	3.5%	**4.5%**	**4.8%**
	B	-6.5%	-1.9%	3.9%	3.3%	7.1%	2.4%	2.2%	2.0%	2.5%	1.8%	2.0%	**2.8%**	**3.4%**
	L	.	.	.	.	6.7%	0.2%	-0.1%	0.6%	0.8%	0.2%	0.5%	**1.2%**	**2.1%**
Sweden	H	.	.	.	.	2.8%	3.3%	3.9%	3.5%	3.8%	3.1%	3.2%	**3.4%**	**3.0%**
	B	-0.1%	0.9%	1.2%	1.6%	2.5%	1.4%	1.6%	1.7%	1.8%	1.3%	1.6%	**1.7%**	**1.8%**
	L	.	.	.	.	2.1%	-0.4%	-0.4%	0.2%	0.4%	-0.2%	0.0%	**0.3%**	**0.6%**
Switzerland	H	.	.	.	.	3.0%	5.0%	4.1%	3.1%	3.8%	2.7%	2.5%	**3.5%**	**3.3%**
	B	-1.7%	-2.4%	1.4%	1.2%	2.7%	3.0%	2.0%	1.6%	2.0%	1.5%	1.8%	**2.1%**	**2.1%**
	L	.	.	.	.	2.3%	1.0%	-0.0%	0.5%	0.2%	0.0%	0.4%	**0.6%**	**1.0%**
Turkey	H	.	.	.	.	-1.9%	4.0%	9.2%	7.5%	7.7%	7.0%	7.2%	**5.8%**	**.**
	B	2.6%	7.1%	11%	6.8%	-2.4%	1.2%	6.2%	5.8%	5.0%	4.5%	4.8%	**3.6%**	**.**
	L	.	.	.	.	-2.8%	-1.2%	3.1%	3.8%	3.9%	2.7%	2.7%	**1.7%**	**.**
Ukraine	H	.	.	.	.	-7.6%	20%	7.0%	6.6%	6.0%	5.5%	5.2%	**5.8%**	**.**
	B	2.9%	6.0%	-35%	-33%	-8.4%	16%	3.9%	4.4%	3.7%	3.2%	3.5%	**3.5%**	**.**
	L	.	.	.	.	-9.1%	12%	1.1%	2.0%	2.4%	1.4%	1.6%	**1.5%**	**.**
UK	H	.	.	.	.	5.7%	3.9%	2.9%	2.1%	3.2%	2.3%	2.3%	**3.2%**	**3.4%**
	B	-1.4%	0.6%	2.0%	2.4%	5.5%	2.4%	1.4%	1.4%	1.8%	1.2%	1.2%	**2.1%**	**2.6%**
	L	.	.	.	.	5.2%	0.9%	-0.1%	0.3%	0.7%	0.2%	0.4%	**1.1%**	**1.7%**
ESRA02	H	.	.	.	.	3.2%	3.2%	4.3%	3.5%	4.1%	3.4%	3.5%	**3.6%**	**.**
	B	-2.6%	-1.0%	2.1%	1.8%	2.8%	1.2%	2.1%	2.0%	2.3%	1.8%	2.1%	**2.0%**	**.**
	L	.	.	.	.	2.4%	-0.7%	0.0%	0.7%	0.9%	0.4%	0.6%	**0.6%**	**.**

Flight Movements and Service Units 2016-2022

EUROCONTROL SEVEN-YEAR FORECAST SEPTEMBER 2016

IFR Movements (Growth)														
IFR Movements (Growth)		**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**AAGR 2022/ 2015**	**RP2 2019/2014 AAGR**
EU27	H	.	.	.	.	3.6%	3.5%	4.0%	3.2%	3.9%	3.2%	3.2%	**3.5%**	**3.2%**
	B	-3.0%	-1.6%	1.9%	1.6%	3.2%	1.5%	1.8%	1.8%	2.2%	1.7%	1.9%	**2.0%**	**2.0%**
	L	.	.	.	.	2.9%	-0.4%	-0.2%	0.5%	0.7%	0.2%	0.5%	**0.6%**	**0.8%**
ECAC	H	.	.	.	.	3.0%	3.4%	4.3%	3.5%	4.2%	3.5%	3.5%	**3.6%**	**3.2%**
	B	-2.2%	-1.1%	1.7%	1.6%	2.7%	1.4%	2.1%	2.1%	2.4%	1.9%	2.1%	**2.1%**	**1.9%**
	L	.	.	.	.	2.3%	-0.6%	0.0%	0.7%	0.9%	0.4%	0.6%	**0.6%**	**0.8%**
ESRA08	H	.	.	.	.	2.9%	3.3%	4.3%	3.5%	4.1%	3.4%	3.5%	**3.6%**	**3.1%**
	B	-2.4%	-1.1%	1.7%	1.5%	2.5%	1.3%	2.1%	2.0%	2.3%	1.8%	2.1%	**2.0%**	**1.9%**
	L	.	.	.	.	2.2%	-0.6%	0.0%	0.7%	0.9%	0.4%	0.6%	**0.6%**	**0.8%**
SES-SJU	H	.	.	.	.	3.4%	3.3%	4.0%	3.2%	3.9%	3.2%	3.2%	**3.5%**	**3.1%**
	B	-2.6%	-1.5%	1.9%	1.5%	3.0%	1.4%	1.7%	1.8%	2.2%	1.6%	1.9%	**1.9%**	**1.9%**
	L	.	.	.	.	2.6%	-0.5%	-0.2%	0.4%	0.6%	0.2%	0.4%	**0.5%**	**0.7%**
Baltic FAB	H	.	.	.	.	8.2%	6.1%	6.4%	6.2%	5.6%	5.0%	4.1%	**5.9%**	**5.4%**
	B	3.6%	1.0%	1.5%	0.3%	7.7%	3.2%	3.0%	3.5%	3.1%	2.6%	2.9%	**3.7%**	**3.5%**
	L	.	.	.	.	7.3%	0.6%	0.2%	1.0%	1.5%	0.6%	0.8%	**1.7%**	**1.8%**
BLUE MED FAB	H	.	.	.	.	4.1%	4.3%	5.7%	4.9%	5.3%	4.7%	4.8%	**4.8%**	**4.2%**
	B	-2.4%	-0.8%	4.0%	2.0%	3.7%	1.8%	2.9%	2.9%	3.2%	2.7%	2.9%	**2.9%**	**2.6%**
	L	.	.	.	.	3.2%	-0.6%	0.4%	1.2%	1.4%	0.9%	1.2%	**1.1%**	**1.2%**
Danube FAB	H	.	.	.	.	2.3%	6.3%	6.7%	5.7%	6.1%	5.4%	5.4%	**5.4%**	**5.8%**
	B	-1.5%	1.5%	9.5%	8.0%	1.8%	3.8%	3.7%	3.7%	3.6%	3.1%	3.4%	**3.3%**	**4.2%**
	L	.	.	.	.	1.4%	1.5%	1.1%	1.8%	2.0%	1.3%	1.5%	**1.5%**	**2.7%**
FAB CE	H	.	.	.	.	4.3%	4.8%	5.4%	4.4%	4.9%	4.2%	4.2%	**4.6%**	**4.5%**
	B	-2.6%	-0.6%	4.0%	3.8%	3.8%	2.5%	2.6%	2.4%	2.8%	2.4%	2.6%	**2.7%**	**3.0%**
	L	.	.	.	.	3.4%	0.2%	0.2%	1.0%	1.1%	0.7%	0.9%	**1.1%**	**1.7%**
FABEC	H	.	.	.	.	3.8%	3.3%	3.5%	2.7%	3.4%	2.6%	2.6%	**3.1%**	**3.0%**
	B	-1.9%	-1.2%	1.3%	1.7%	3.4%	1.5%	1.5%	1.4%	1.9%	1.5%	1.7%	**1.9%**	**1.9%**
	L	.	.	.	.	3.1%	-0.4%	-0.3%	0.4%	0.5%	0.1%	0.4%	**0.5%**	**0.9%**
NEFAB	H	.	.	.	.	-0.2%	0.8%	3.5%	3.2%	3.8%	3.0%	3.1%	**2.4%**	**1.1%**
	B	1.3%	1.1%	1.8%	-1.5%	-0.6%	-1.2%	1.2%	1.4%	1.7%	1.1%	1.3%	**0.7%**	**-0.2%**
	L	.	.	.	.	-0.9%	-3.0%	-0.9%	-0.2%	0.1%	-0.6%	-0.4%	**-0.8%**	**-1.3%**
South West FAB	H	.	.	.	.	8.9%	4.3%	4.6%	3.6%	4.1%	3.5%	3.5%	**4.6%**	**4.9%**
	B	-6.6%	-2.3%	3.9%	3.1%	8.5%	2.0%	2.0%	1.9%	2.4%	1.7%	1.9%	**2.9%**	**3.5%**
	L	.	.	.	.	8.1%	-0.2%	-0.2%	0.4%	0.7%	0.1%	0.4%	**1.3%**	**2.2%**
UK-Ireland FAB	H	.	.	.	.	6.5%	3.6%	3.0%	2.1%	3.2%	2.3%	2.3%	**3.3%**	**3.5%**
	B	-1.5%	0.7%	2.0%	2.5%	6.2%	2.2%	1.4%	1.4%	1.8%	1.2%	1.2%	**2.2%**	**2.7%**
	L	.	.	.	.	5.9%	0.6%	-0.1%	0.3%	0.7%	0.2%	0.4%	**1.1%**	**1.8%**

**EUROCONTROL
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EUROCONTROL SEVEN-YEAR FORECAST SEPTEMBER 2016

IFR Movements (Growth)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	AAGR 2022/ 2015	RP2 2019/2014 AAGR
DK-SE FAB	H	.	.	.	.	3.1%	2.6%	3.7%	3.3%	3.6%	2.9%	2.9%	**3.2%**	**2.7%**
	B	-3.0%	2.2%	0.6%	0.6%	2.8%	0.7%	1.5%	1.6%	1.7%	1.2%	1.5%	**1.6%**	**1.4%**
	L	.	.	.	.	2.5%	-1.0%	-0.5%	0.2%	0.4%	-0.3%	-0.0%	**0.2%**	**0.3%**
EU28	H	.	.	.	.	3.6%	3.5%	4.0%	3.2%	3.9%	3.2%	3.2%	**3.5%**	**3.2%**
	B	-3.0%	-1.7%	1.9%	1.6%	3.2%	1.5%	1.8%	1.8%	2.2%	1.7%	1.9%	**2.0%**	**2.0%**
	L	.	.	.	.	2.9%	-0.4%	-0.2%	0.5%	0.7%	0.2%	0.5%	**0.6%**	**0.8%**
SES-RP2	H	.	.	.	.	3.3%	3.3%	3.9%	3.2%	3.8%	3.1%	3.1%	**3.4%**	**3.0%**
	B	-2.7%	-1.6%	1.9%	1.4%	3.0%	1.3%	1.7%	1.7%	2.1%	1.6%	1.8%	**1.9%**	**1.8%**
	L	.	.	.	.	2.6%	-0.6%	-0.3%	0.4%	0.6%	0.2%	0.4%	**0.5%**	**0.7%**

**EUROCONTROL
NMD**

EUROCONTROL SEVEN-YEAR FORECAST SEPTEMBER 2016

ANNEX 5 TWO-YEAR EN-ROUTE SERVICE UNIT FORECAST PER STATE

Figure 46. 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	2,505,466	2.1%	2,590,318	3.4%	2,510,000	-0.2%
ED	Germany [A]	12,976,261	13,549,103	4.4%	13,797,773	1.8%	13,057,000	3.8%
LF	France	18,867,771	19,879,270	5.4%	20,499,063	3.1%	19,177,000	3.7%
EG	UK	10,153,907	10,904,235	7.4%	11,183,699	2.6%	10,435,000	4.5%
EH	Netherlands	2,892,654	3,123,670	8.0%	3,270,444	4.7%	2,825,835	10.5%
EI	Ireland	4,182,450	4,528,688	8.3%	4,780,056	5.6%	4,049,624	11.8%
LS	Switzerland	1,454,786	1,523,402	4.7%	1,601,107	5.1%	1,470,066	3.6%
LP	Lisbon FIR	3,150,186	3,503,794	11.2%	3,717,892	6.1%	3,104,536	12.9%
LO	Austria	2,739,285	2,737,318	-0.1%	2,792,598	2.0%	2,777,000	-1.4%
LE	Spain	8,997,417	9,772,990	8.6%	10,075,831	3.1%	8,936,000	9.4%
GC	Canary Islands	1,402,349	1,513,769	7.9%	1,593,254	5.3%	1,528,000	-0.9%
AZ	Santa Maria FIR	4,661,620	5,079,255	9.0%	5,400,807	6.3%	4,336,772	17.1%
LG	Greece	4,898,818	4,712,998	-3.8%	4,733,432	0.4%	4,318,281	9.1%
LT	Turkey	14,181,607	14,022,107	-1.1%	14,324,707	2.2%	15,002,648	-6.5%
LM	Malta	823,344	933,313	13.4%	952,530	2.1%	621,000	50.3%
LI	Italy	8,171,509	8,352,494	2.2%	8,615,083	3.1%	8,866,051	-5.8%
LC	Cyprus	1,547,646	1,518,639	-1.9%	1,554,776	2.4%	1,425,773	6.5%
LH	Hungary	2,695,133	2,803,391	4.0%	2,955,515	5.4%	2,364,165	18.6%
EN	Norway	2,313,891	2,497,354	7.9%	2,578,539	3.3%	2,367,954	5.5%
EK	Denmark	1,583,445	1,630,179	3.0%	1,664,087	2.1%	1,571,000	3.8%
LJ	Slovenia	466,264	499,035	7.0%	528,253	5.9%	499,637	-0.1%
LR	Romania	4,570,684	4,528,771	-0.9%	4,707,615	3.9%	4,117,019	10.0%
LK	Czech Republic	2,531,815	2,743,189	8.3%	2,870,078	4.6%	2,637,000	4.0%
ES	Sweden	3,354,938	3,396,459	1.2%	3,440,452	1.3%	3,303,000	2.8%
LZ	Slovakia	1,071,382	1,146,529	7.0%	1,227,855	7.1%	1,126,000	1.8%
LD	Croatia	1,790,210	1,781,950	-0.5%	1,835,798	3.0%	1,783,000	-0.1%
LB	Bulgaria	3,222,750	3,382,640	5.0%	3,475,767	2.8%	2,667,000	26.8%
LW	FYROM	263,988	250,906	-5.0%	263,142	4.9%	282,000	-11.0%
LU	Moldova	73,816	61,040	-17.3%	65,238	6.9%	77,000	-20.7%
EF	Finland	760,383	758,321	-0.3%	776,485	2.4%	812,000	-6.6%
LA	Albania	484,426	447,503	-7.6%	444,730	-0.6%	522,080	-14.3%
LQ	Bosnia-Herzegovina	870,175	871,450	0.1%	911,092	4.5%	917,937	-5.1%
UD	Armenia	125,671	106,332	-15.4%	128,438	20.8%	135,000	-21.2%
LY	Serbia-Montenegro-	1,974,864	2,116,910	7.2%	2,157,346	1.9%	2,017,944	4.9%
EP	Poland	3,880,013	4,137,738	6.6%	4,299,929	3.9%	4,544,000	-8.9%
EY	Lithuania	492,283	507,161	3.0%	520,052	2.5%	508,601	-0.3%
EE	Estonia	815,648	844,244	3.5%	865,926	2.6%	801,575	5.3%
EV	Latvia [C]	801,836	791,331	-1.3%	821,655	3.8%	824,000	-4.0%
UK	Ukraine [D]	1,285,878	1,008,366	-21.6%	1,159,854	15.0%	.	.
UG	Georgia	805,195	769,835	-4.4%	796,911	3.5%	840,510	-8.4%

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
CRCO88	73,932,866	78,620,959	6.3%	81,302,841	3.4%	74,206,834	5.9%
ESRA02	128,254,489	133,640,276	4.2%	137,872,19	3.2%	128,047,360	4.4%
CRCO11	136,883,757	142,618,701	4.2%	147,155,43	3.2%	137,516,922	3.7%
CRCO14	137,688,952	143,388,536	4.1%	147,952,34	3.2%	138,357,432	3.6%
RP1 Region [A]	113,273,027	118,725,492	4.8%	122,490,06	3.2%	113,244,116	4.8%
RP2 Region [A]	115,063,237	120,507,442	4.7%	124,325,86	3.2%	115,027,116	4.8%
Total [D]	139,790,478	145,241,146	3.9%	149,978,12	3.3%	139,159,007	4.4%

(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 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

Figure 47. 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	2.505.466	2.590.318	0.8%	99.2%	2.485.300	2.569.400
ED	Germany [A]	12,976,261	13,549,103	13,797,773	1.0%	99.0%	13,412,600	13,658,800
LF	France	18,867,771	19,879,270	20,499,063	1.0%	99.0%	19,684,400	20,298,100
EG	UK	10,153,907	10,904,235	11,183,699	1.6%	98.4%	10,735,100	11,010,200
EH	Netherlands	2,892,654	3,123,670	3,270,444	1.3%	98.7%	3,084,500	3,229,500
EI	Ireland	4,182,450	4,528,688	4,780,056	1.3%	98.7%	4,470,000	4,718,100
LS	Switzerland	1,454,786	1,523,402	1,601,107	0.3%	99.7%	1,518,900	1,596,400
LP	Lisbon FIR	3,150,186	3,503,794	3,717,892	1.1%	98.9%	3,464,000	3,675,700
LO	Austria	2,739,285	2,737,318	2,792,598	0.5%	99.5%	2,724,400	2,779,400
LE	Spain	8,997,417	9,772,990	10,075,831	1.1%	98.9%	9,668,600	9,968,200
GC	Canary Islands	1,402,349	1,513,769	1,593,254	0.9%	99.1%	1,500,700	1,579,500
AZ	Santa Maria FIR	4,661,620	5,079,255	5,400,807	2.0%	98.0%	4,975,500	5,290,400
LG	Greece	4,898,818	4,712,998	4,733,432	2.5%	97.5%	4,595,900	4,615,800
LT	Turkey	14,181,607	14,022,107	14,324,707	0.7%	99.3%	13,929,300	14,229,900
LM	Malta	823,344	933,313	952,530	3.6%	96.4%	899,400	917,900
LI	Italy	8,171,509	8,352,494	8,615,083	1.9%	98.1%	8,195,800	8,453,400
LC	Cyprus	1,547,646	1,518,639	1,554,776	1.7%	98.3%	1,493,500	1,529,000
LH	Hungary	2,695,133	2,803,391	2,955,515	1.3%	98.7%	2,767,600	2,917,800
EN	Norway	2,313,891	2,497,354	2,578,539	0.9%	99.1%	2,475,400	2,555,900
EK	Denmark	1,583,445	1,630,179	1,664,087	0.7%	99.3%	1,619,000	1,652,700
LJ	Slovenia	466,264	499,035	528,253	0.5%	99.5%	496,600	525,600
LR	Romania	4,570,684	4,528,771	4,707,615	1.0%	99.0%	4,481,500	4,658,400
LK	Czech Republic	2,531,815	2,743,189	2,870,078	1.9%	98.1%	2,691,800	2,816,300
ES	Sweden	3,354,938	3,396,459	3,440,452	0.5%	99.5%	3,379,200	3,423,000
LZ	Slovakia	1,071,382	1,146,529	1,227,855	1.5%	98.5%	1,129,700	1,209,900
LD	Croatia	1,790,210	1,781,950	1,835,798	0.3%	99.7%	1,777,000	1,830,700
LB	Bulgaria	3,222,750	3,382,640	3,475,767	1.1%	98.9%	3,345,400	3,437,500
LW	FYROM	263,988	250,906	263,142	0.1%	99.9%	250,800	263,000
LU	Moldova	73,816	61,040	65,238	0.1%	99.9%	61,000	65,200
EF	Finland	760,383	758,321	776,485	0.5%	99.5%	754,500	772,600
LA	Albania	484,426	447,503	444,730	0.7%	99.3%	444,300	441,600
LQ	Bosnia-Herzegovina	870,175	871,450	911,092	0.1%	99.9%	870,800	910,400
UD	Armenia	125,671	106,332	128,438	0.1%	99.9%	106,200	128,300
LY	Serbia-Montenegro-KFOR [B]	1,974,864	2,116,910	2,157,346	0.1%	99.9%	2,115,000	2,155,400
EP	Poland	3,880,013	4,137,738	4,299,929	0.6%	99.4%	4,111,200	4,272,300
EY	Lithuania	492,283	507,161	520,052	0.8%	99.2%	503,000	515,700
EE	Estonia	815,648	844,244	865,926	0.0%	100.0%	844,100	865,800
EV	Latvia	801,836	791,331	821,655	0.8%	99.2%	785,000	815,100
UK	Ukraine	1,285,878	1,008,366	1,159,854	0.5%	99.5%	1,003,400	1,154,100
UG	Georgia	805,195	769,835	796,911	1.3%	98.7%	759,500	786,200
	CRCO88	**73.932.866**	**78.620.959**	**81.302.841**	**1.1%**	**98.9%**	**77.727.700**	**80.379.100**
	ESRA02	**128,254,489**	**133,640,276**	**137,872,193**	**1.2%**	**98.8%**	**132,072,500**	**136,254,700**
	CRCO11	**136,883,757**	**142,618,701**	**147,155,435**	**1.1%**	**98.9%**	**141,007,900**	**145,493,400**
	CRCO14	**137,688,952**	**143,388,536**	**147,952,345**	**1.1%**	**98.9%**	**141,767,300**	**146,279,500**
	RP1 Region [A]	**113,273,027**	**118,725,492**	**122,490,062**	**1.2%**	**98.8%**	**117,314,900**	**121,034,800**
	RP2 Region [A]	**115,063,237**	**120,507,442**	**124,325,860**	**1.2%**	**98.8%**	**119,092,700**	**122,866,300**
	Total	**139,790,478**	**145,241,146**	**149,978,126**	**1.1%**	**98.9%**	**143,616,900**	**148,300,900**

(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).

ANNEX 6 SEVEN-YEAR EN-ROUTE SERVICE UNITS FORECAST PER STATE

Figure 48. Forecast of the total number of en-route service units (thousands) per State.

Total service units (thousands)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2022/ 2015 Total Growth	RP2 2019/ 2014 AAGR
Albania	H	.	.	.	.	449	453	480	507	537	564	592	22%	.
	B	443	456	469	484	448	445	460	476	494	510	527	9%	.
	L	.	.	.	.	446	437	441	448	459	466	473	-2%	.
Armenia	H	.	.	.	.	108	135	141	150	160	169	180	43%	.
	B	154	149	142	126	106	128	132	138	144	150	156	25%	.
	L	.	.	.	.	105	122	123	127	130	133	137	9%	.
Austria	H	.	.	.	.	2,748	2,857	2,996	3,119	3,260	3,381	3,509	28%	3.3%
	B	2,469	2,456	2,645	2,739	2,737	2,793	2,860	2,926	3,003	3,066	3,138	15%	2.0%
	L	.	.	.	.	2,727	2,728	2,733	2,759	2,788	2,803	2,825	3%	0.8%
Belgium /Luxembourg	H	.	.	.	.	2,513	2,633	2,741	2,838	2,953	3,031	3,111	27%	3.7%
	B	2,232	2,277	2,362	2,454	2,505	2,590	2,644	2,699	2,762	2,818	2,880	17%	2.7%
	L	.	.	.	.	2,498	2,546	2,553	2,575	2,604	2,620	2,642	8%	1.7%
Bosnia-Herzegovina	H	.	.	.	.	876	938	994	1,045	1,100	1,150	1,205	38%	.
	B	680	654	783	870	871	911	942	972	1,003	1,031	1,062	22%	.
	L	.	.	.	.	867	885	893	907	923	933	944	9%	.
Bulgaria	H	.	.	.	.	3,395	3,551	3,750	3,936	4,163	4,379	4,612	43%	7.5%
	B	2,020	2,058	2,744	3,223	3,383	3,476	3,571	3,681	3,801	3,914	4,043	25%	6.1%
	L	.	.	.	.	3,370	3,403	3,414	3,460	3,521	3,563	3,615	12%	4.7%
Canary Islands	H	.	.	.	.	1,521	1,639	1,706	1,764	1,829	1,889	1,956	39%	3.4%
	B	1,599	1,516	1,492	1,402	1,514	1,593	1,617	1,641	1,671	1,694	1,721	23%	1.9%
	L	.	.	.	.	1,507	1,549	1,537	1,535	1,536	1,532	1,531	9%	0.6%
Croatia	H	.	.	.	.	1,791	1,888	1,997	2,097	2,207	2,305	2,410	35%	3.6%
	B	1,679	1,695	1,760	1,790	1,782	1,836	1,892	1,951	2,012	2,066	2,125	19%	2.1%
	L	.	.	.	.	1,773	1,784	1,795	1,820	1,851	1,868	1,890	6%	0.7%
Cyprus	H	.	.	.	.	1,524	1,590	1,728	1,876	2,034	2,197	2,374	53%	5.2%
	B	1,303	1,327	1,454	1,548	1,519	1,555	1,637	1,735	1,832	1,929	2,034	31%	3.6%
	L	.	.	.	.	1,513	1,521	1,560	1,620	1,678	1,731	1,788	16%	2.2%
Czech Republic	H	.	.	.	.	2,751	2,921	3,062	3,176	3,323	3,460	3,598	42%	5.8%
	B	2,305	2,374	2,393	2,532	2,743	2,870	2,930	2,981	3,062	3,131	3,210	27%	4.5%
	L	.	.	.	.	2,735	2,820	2,815	2,836	2,852	2,869	2,894	14%	3.4%

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Total en-route Service Units (Thousands)														
Total service units (thousands)		**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2022/ 2015 Total Growth**	**RP2 2019/ 2014 AAGR**
Denmark	H	.	.	.	.	1,635	1,691	1,754	1,808	1,877	1,933	1,989	26%	3.4%
	B	1,429	1,524	1,532	1,583	1,630	1,664	1,693	1,720	1,753	1,779	1,810	14%	2.3%
	L	.	.	.	.	1,625	1,637	1,637	1,644	1,654	1,654	1,659	5%	1.4%
Estonia	H	.	.	.	.	847	884	936	981	1,034	1,082	1,132	39%	4.4%
	B	725	741	790	816	844	866	893	917	944	967	994	22%	3.0%
	L	.	.	.	.	841	848	855	864	873	879	888	9%	1.8%
FYROM	H	.	.	.	.	252	271	287	303	321	338	356	35%	.
	B	174	178	246	264	251	263	272	281	292	301	311	18%	.
	L	.	.	.	.	250	256	258	262	267	271	276	4%	.
Finland	H	.	.	.	.	762	792	820	849	883	912	944	24%	1.3%
	B	790	770	796	760	758	776	789	804	822	835	851	12%	0.2%
	L	.	.	.	.	755	761	760	764	770	772	775	2%	-0.8%
France	H	.	.	.	.	19,918	20,780	21,616	22,317	23,172	23,816	24,474	30%	3.8%
	B	17,515	17,900	18,497	18,868	19,879	20,499	20,887	21,297	21,781	22,161	22,577	20%	2.9%
	L	.	.	.	.	19,841	20,224	20,204	20,333	20,505	20,572	20,692	10%	1.9%
Georgia	H	.	.	.	.	780	833	899	965	1,040	1,112	1,192	48%	.
	B	709	747	752	805	770	797	839	883	929	973	1,022	27%	.
	L	.	.	.	.	760	761	783	810	838	862	889	10%	.
Germany[9]	H	.	.	.	.	13,578	13,989	14,565	15,008	15,583	16,051	16,532	27%	3.1%
	B	12,513	12,570	12,881	12,976	13,549	13,798	14,067	14,277	14,584	14,831	15,120	17%	2.1%
	L	.	.	.	.	13,520	13,603	13,613	13,675	13,756	13,793	13,872	7%	1.2%
Greece	H	.	.	.	.	4,733	4,869	5,192	5,525	5,897	6,251	6,639	36%	3.7%
	B	4,358	4,216	4,618	4,899	4,713	4,733	4,908	5,110	5,330	5,531	5,753	17%	2.0%
	L	.	.	.	.	4,693	4,601	4,654	4,748	4,874	4,964	5,067	3%	0.6%
Hungary	H	.	.	.	.	2,817	3,023	3,212	3,375	3,571	3,751	3,941	46%	7.0%
	B	2,023	2,101	2,406	2,695	2,803	2,956	3,054	3,148	3,253	3,347	3,451	28%	5.5%
	L	.	.	.	.	2,790	2,889	2,916	2,961	3,006	3,040	3,080	14%	4.2%
Ireland	H	.	.	.	.	4,544	4,862	5,015	5,102	5,230	5,324	5,419	30%	5.4%
	B	3,806	3,813	3,922	4,182	4,529	4,780	4,860	4,948	5,044	5,096	5,153	23%	4.8%
	L	.	.	.	.	4,514	4,698	4,711	4,745	4,797	4,830	4,874	17%	3.9%

[9] 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 service units (thousands)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2022/ 2015 Total Growth	RP2 2019/ 2014 AAGR
Total en-route Service Units (Thousands)														
Italy	H	.	.	.	.	8,385	8,835	9,277	9,644	10,079	10,449	10,849	33%	3.0%
	B	8,139	8,117	8,314	8,172	8,352	8,615	8,825	9,008	9,236	9,415	9,624	18%	1.6%
	L	.	.	.	.	8,320	8,397	8,408	8,456	8,516	8,540	8,593	5%	0.3%
Latvia	H	.	.	.	.	795	847	893	934	984	1,029	1,076	34%	4.0%
	B	707	734	767	802	791	822	839	857	878	897	918	15%	2.2%
	L	.	.	.	.	787	796	792	795	798	799	803	0%	0.7%
Lisbon FIR	H	.	.	.	.	3,514	3,785	3,959	4,105	4,266	4,413	4,572	45%	6.3%
	B	2,782	2,877	3,020	3,150	3,504	3,718	3,794	3,866	3,954	4,026	4,106	30%	5.1%
	L	.	.	.	.	3,494	3,652	3,645	3,658	3,682	3,690	3,707	18%	3.9%
Lithuania	H	.	.	.	.	509	534	563	590	619	646	672	37%	3.9%
	B	430	451	487	492	507	520	532	545	559	570	583	18%	2.3%
	L	.	.	.	.	505	506	504	507	510	511	514	4%	0.8%
Malta	H	.	.	.	.	939	987	1,074	1,163	1,268	1,377	1,501	82%	9.8%
	B	641	735	727	823	933	953	1,003	1,057	1,119	1,179	1,246	51%	7.8%
	L	.	.	.	.	928	919	941	969	1,002	1,032	1,066	30%	5.9%
Moldova	H	.	.	.	.	63	75	81	86	92	98	104	41%	.
	B	206	240	131	74	61	65	68	71	74	77	80	8%	.
	L	.	.	.	.	59	56	56	58	59	60	61	-17%	.
Netherlands	H	.	.	.	.	3,135	3,335	3,431	3,504	3,624	3,731	3,841	33%	4.8%
	B	2,587	2,702	2,767	2,893	3,124	3,270	3,313	3,348	3,406	3,467	3,535	22%	3.9%
	L	.	.	.	.	3,112	3,202	3,198	3,213	3,228	3,242	3,262	13%	3.0%
Norway	H	.	.	.	.	2,508	2,637	2,725	2,809	2,915	3,007	3,104	34%	4.8%
	B	1,846	2,051	2,221	2,314	2,497	2,579	2,617	2,657	2,711	2,749	2,793	21%	3.7%
	L	.	.	.	.	2,487	2,522	2,519	2,528	2,541	2,541	2,546	10%	2.6%
Poland	H	.	.	.	.	4,149	4,374	4,629	4,888	5,145	5,380	5,601	44%	4.5%
	B	3,854	3,984	3,931	3,880	4,138	4,300	4,419	4,560	4,694	4,808	4,937	27%	3.0%
	L	.	.	.	.	4,127	4,230	4,237	4,277	4,336	4,360	4,395	13%	1.7%
Romania	H	.	.	.	.	4,552	4,852	5,118	5,380	5,704	6,011	6,335	39%	5.2%
	B	3,575	3,752	4,182	4,571	4,529	4,708	4,832	4,984	5,156	5,316	5,496	20%	3.6%
	L	.	.	.	.	4,505	4,566	4,580	4,647	4,731	4,793	4,867	6%	2.1%
Santa Maria FIR	H	.	.	.	.	5,104	5,504	5,709	5,936	6,179	6,400	6,636	42%	7.3%
	B	3,874	4,021	4,166	4,662	5,079	5,401	5,518	5,668	5,821	5,964	6,116	31%	6.3%
	L	.	.	.	.	5,054	5,297	5,336	5,419	5,499	5,562	5,636	21%	5.4%

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Total en-route Service Units (Thousands)														
Total service units (thousands)		**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2022/ 2015 Total Growth**	**RP2 2019/ 2014 AAGR**
Serbia-Montenegro-KFOR [10]	H	.	.	.	.	2,125	2,202	2,335	2,453	2,588	2,709	2,839	44%	.
	B	1,719	1,639	1,752	1,975	2,117	2,157	2,227	2,298	2,375	2,442	2,516	27%	.
	L	.	.	.	.	2,109	2,113	2,130	2,161	2,202	2,226	2,255	14%	.
Slovakia	H	.	.	.	.	1,151	1,259	1,333	1,400	1,480	1,556	1,633	52%	6.0%
	B	922	985	1,044	1,071	1,147	1,228	1,265	1,302	1,344	1,383	1,425	33%	4.5%
	L	.	.	.	.	1,142	1,197	1,205	1,221	1,238	1,251	1,267	18%	3.2%
Slovenia	H	.	.	.	.	501	541	572	599	629	655	682	46%	5.5%
	B	425	411	459	466	499	528	545	561	578	592	608	30%	4.1%
	L	.	.	.	.	497	516	520	527	535	540	545	17%	2.8%
Spain	H	.	.	.	.	9,801	10,280	10,770	11,171	11,646	12,062	12,493	39%	5.0%
	B	8,444	8,447	8,768	8,997	9,773	10,076	10,296	10,503	10,770	10,974	11,201	24%	3.7%
	L	.	.	.	.	9,745	9,875	9,869	9,925	10,005	10,036	10,093	12%	2.5%
Sweden	H	.	.	.	.	3,409	3,519	3,658	3,800	3,962	4,100	4,245	27%	3.0%
	B	3,126	3,209	3,285	3,355	3,396	3,440	3,499	3,571	3,649	3,710	3,781	13%	1.7%
	L	.	.	.	.	3,384	3,364	3,354	3,372	3,398	3,402	3,414	2%	0.5%
Switzerland	H	.	.	.	.	1,528	1,634	1,701	1,755	1,824	1,877	1,929	33%	4.2%
	B	1,399	1,385	1,427	1,455	1,523	1,601	1,633	1,659	1,697	1,726	1,761	21%	3.1%
	L	.	.	.	.	1,518	1,569	1,569	1,578	1,585	1,590	1,600	10%	2.0%
Turkey	H	.	.	.	.	14,093	14,769	15,986	17,108	18,365	19,592	20,929	48%	.
	B	9,813	10,637	12,809	14,182	14,022	14,325	15,107	15,899	16,654	17,370	18,158	28%	.
	L	.	.	.	.	13,952	13,899	14,277	14,761	15,266	15,645	16,052	13%	.
UK	H	.	.	.	.	10,947	11,352	11,723	11,974	12,349	12,632	12,921	27%	3.7%
	B	9,608	9,755	9,979	10,154	10,904	11,184	11,378	11,548	11,766	11,916	12,074	19%	3.0%
	L	.	.	.	.	10,862	11,012	11,038	11,087	11,181	11,217	11,279	11%	2.1%
Ukraine	H	.	.	.	.	1,029	1,271	1,359	1,447	1,533	1,616	1,700	32%	.
	B	4,588	4,931	2,771	1,286	1,008	1,160	1,204	1,255	1,301	1,343	1,389	8%	.
	L	.	.	.	.	987	1,050	1,062	1,083	1,109	1,124	1,142	-11%	.
ESRA02	H	.	.	.	.	134,113	140,722	147,556	153,527	160,686	166,977	173,637	35%	.
	B	113,602	116,097	123,048	128,254	133,640	137,872	141,373	144,900	148,935	152,364	156,181	22%	.
	L	.	.	.	.	133,172	135,064	135,676	137,153	138,924	140,024	141,470	10%	.

[10] 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**	**2018**	**2019**	**2020**	**2021**	**2022**	**2022/ 2015 Total Growth**	**RP2 2019/ 2014 AAGR**
BLUE MED FAB	H	.	.	.	.	15,581	16,282	17,271	18,209	19,279	20,274	21,363	38%	3.8%
	B	14,441	14,395	15,113	15,441	15,517	15,856	16,373	16,910	17,517	18,054	18,657	21%	2.3%
	L	.	.	.	.	15,454	15,439	15,562	15,793	16,071	16,268	16,514	7%	0.9%
Baltic FAB	H	.	.	.	.	4,658	4,908	5,192	5,478	5,764	6,026	6,274	43%	4.4%
	B	4,284	4,434	4,418	4,372	4,645	4,820	4,951	5,105	5,253	5,378	5,520	26%	2.9%
	L	.	.	.	.	4,631	4,736	4,742	4,784	4,847	4,872	4,909	12%	1.6%
Danube FAB	H	.	.	.	.	7,948	8,403	8,868	9,316	9,867	10,390	10,947	40%	6.1%
	B	5,595	5,810	6,925	7,793	7,911	8,183	8,403	8,664	8,957	9,230	9,539	22%	4.6%
	L	.	.	.	.	7,876	7,968	7,994	8,106	8,252	8,355	8,482	9%	3.2%
FAB CE	H	.	.	.	.	12,634	13,426	14,166	14,811	15,570	16,259	16,978	40%	5.2%
	B	10,503	10,676	11,492	12,164	12,583	13,121	13,487	13,840	14,255	14,617	15,019	23%	3.8%
	L	.	.	.	.	12,532	12,820	12,878	13,030	13,193	13,304	13,446	11%	2.5%
FABEC	H	.	.	.	.	40,673	42,371	44,053	45,422	47,156	48,505	49,886	29%	3.7%
	B	36,246	36,834	37,934	38,646	40,581	41,759	42,545	43,281	44,231	45,003	45,873	19%	2.7%
	L	.	.	.	.	40,489	41,144	41,137	41,373	41,677	41,817	42,069	9%	1.8%
NEFAB	H	.	.	.	.	4,912	5,162	5,373	5,573	5,816	6,030	6,256	33%	4.0%
	B	4,068	4,296	4,573	4,692	4,891	5,043	5,138	5,235	5,354	5,448	5,556	18%	2.7%
	L	.	.	.	.	4,870	4,927	4,926	4,951	4,983	4,992	5,012	7%	1.6%
South West FAB	H	.	.	.	.	14,836	15,704	16,435	17,040	17,742	18,364	19,021	40%	5.1%
	B	12,825	12,840	13,279	13,550	14,791	15,387	15,707	16,010	16,394	16,694	17,027	26%	3.8%
	L	.	.	.	.	14,746	15,076	15,051	15,118	15,223	15,258	15,331	13%	2.6%
UK-Ireland FAB	H	.	.	.	.	15,490	16,214	16,737	17,076	17,579	17,956	18,340	28%	4.2%
	B	13,414	13,568	13,902	14,336	15,433	15,964	16,238	16,496	16,809	17,012	17,227	20%	3.5%
	L	.	.	.	.	15,376	15,711	15,750	15,832	15,978	16,047	16,153	13%	2.6%
DK-SE FAB	H	.	.	.	.	5,044	5,210	5,413	5,608	5,839	6,033	6,234	26%	3.1%
	B	4,555	4,732	4,817	4,938	5,027	5,105	5,192	5,291	5,402	5,489	5,591	13%	1.9%
	L	.	.	.	.	5,009	5,001	4,991	5,015	5,052	5,056	5,073	3%	0.8%
CRCO88	H	.	.	.	.	78,851	82,650	85,930	88,592	91,915	94,606	97,392	32%	4.3%
	B	68,828	69,718	71,927	73,933	78,621	81,303	82,868	84,380	86,258	87,739	89,382	21%	3.2%
	L	.	.	.	.	78,392	79,955	80,007	80,501	81,164	81,487	82,015	11%	2.3%
CRCO11	H	.	.	.	.	143,124	150,204	157,591	164,094	171,818	178,624	185,804	36%	4.5%
	B	121,589	124,162	131,379	136,884	142,619	147,155	150,924	154,747	159,082	162,772	166,881	22%	3.3%
	L	.	.	.	.	142,117	144,153	144,798	146,376	148,283	149,452	150,991	10%	2.2%

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Total en-route Service Units (Thousands)														
Total service units (thousands)		**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2022/ 2015 Total Growth**	**RP2 2019/ 2014 AAGR**
CRCO14	**H**	.	.	.	.	143,904	151,037	158,490	165,060	172,858	179,736	186,995	**36%**	**4.6%**
	B	122,298	124,910	132,130	137,689	143,389	147,952	151,762	155,630	160,011	163,745	167,902	**22%**	**3.3%**
	L	.	.	.	.	142,877	144,915	145,581	147,186	149,122	150,315	151,880	**10%**	**2.2%**
RP1Region [9]	**H**	.	.	.	.	119,110	124,854	130,516	135,390	141,304	146,381	151,684	**34%**	**4.3%**
	B	103,572	105,235	109,910	113,273	118,725	122,490	125,200	127,910	131,156	133,828	136,823	**21%**	**3.1%**
	L	.	.	.	.	118,343	120,152	120,343	121,276	122,501	123,168	124,155	**10%**	**2.0%**
RP2Region [9]	**H**	.	.	.	.	120,901	126,742	132,514	137,487	143,511	148,686	154,094	**34%**	**4.2%**
	B	105,251	106,930	111,670	115,063	120,507	124,326	127,091	129,861	133,168	135,894	138,948	**21%**	**3.1%**
	L	.	.	.	.	120,116	121,937	122,138	123,096	124,351	125,036	126,045	**10%**	**2.0%**
Total	**H**	.	.	.	.	145,781	153,193	160,785	167,488	175,426	182,434	189,827	**36%**	**4.3%**
	B	127,611	130,582	135,692	139,790	145,241	149,978	153,859	157,803	162,256	166,055	170,285	**22%**	**3.1%**
	L	.	.	.	.	144,706	146,813	147,497	149,133	151,104	152,318	153,910	**10%**	**1.9%**

ANNEX 7 SEVEN YEAR EN-ROUTE SERVICE UNITS FORECAST PER STATE (GROWTH)

Figure 49. Forecast of the total en-route service units growth per State.

Growth in Total En Route Service Units														
Annual growth		**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**AAGR 2022/ 2015**	**RP2 2019/ 2014 AAGR**
Albania	H	.	.	.	.	-7.3%	0.9%	6.1%	5.5%	5.9%	4.9%	5.1%	2.9%	.
	B	-1.0%	2.9%	2.9%	3.3%	-7.6%	-0.6%	3.4%	3.6%	3.7%	3.2%	3.4%	1.2%	.
	L	.	.	.	.	-7.9%	-2.1%	1.0%	1.7%	2.4%	1.4%	1.7%	-0.3%	.
Armenia	H	.	.	.	.	-14.1%	24.6%	4.8%	6.4%	6.4%	6.2%	6.2%	5.3%	.
	B	-9.5%	-2.9%	-4.5%	-11.8%	-15.4%	20.8%	2.6%	4.5%	4.4%	4.3%	4.4%	3.2%	.
	L	.	.	.	.	-16.7%	16.9%	0.6%	2.9%	2.5%	2.5%	2.6%	1.2%	.
Austria	H	.	.	.	.	0.3%	4.0%	4.9%	4.1%	4.5%	3.7%	3.8%	3.6%	3.3%
	B	-2.0%	-0.5%	7.7%	3.5%	-0.1%	2.0%	2.4%	2.3%	2.6%	2.1%	2.3%	2.0%	2.0%
	L	.	.	.	.	-0.5%	0.1%	0.2%	0.9%	1.1%	0.5%	0.8%	0.4%	0.8%
Belgium/Luxembourg	H	.	.	.	.	2.4%	4.8%	4.1%	3.5%	4.1%	2.6%	2.6%	3.4%	3.7%
	B	0.9%	2.0%	3.7%	3.9%	2.1%	3.4%	2.1%	2.1%	2.3%	2.0%	2.2%	2.3%	2.7%
	L	.	.	.	.	1.8%	1.9%	0.2%	0.9%	1.1%	0.6%	0.8%	1.1%	1.7%
Bosnia-Herzegovina	H	.	.	.	.	0.6%	7.1%	6.0%	5.1%	5.3%	4.6%	4.8%	4.8%	.
	B	-5.1%	-3.8%	19.7%	11.2%	0.1%	4.5%	3.3%	3.2%	3.2%	2.8%	3.0%	2.9%	.
	L	.	.	.	.	-0.3%	2.1%	0.9%	1.5%	1.8%	1.0%	1.2%	1.2%	.
Bulgaria	H	.	.	.	.	5.4%	4.6%	5.6%	5.0%	5.8%	5.2%	5.3%	5.3%	7.5%
	B	0.1%	1.9%	33.3%	17.5%	5.0%	2.8%	2.7%	3.1%	3.3%	3.0%	3.3%	3.3%	6.1%
	L	.	.	.	.	4.6%	1.0%	0.3%	1.3%	1.8%	1.2%	1.5%	1.7%	4.7%
Canary Islands	H	.	.	.	.	8.5%	7.8%	4.1%	3.4%	3.7%	3.3%	3.5%	4.9%	3.4%
	B	-4.0%	-5.2%	-1.6%	-6.0%	7.9%	5.3%	1.5%	1.5%	1.8%	1.4%	1.6%	3.0%	1.9%
	L	.	.	.	.	7.4%	2.8%	-0.7%	-0.2%	0.1%	-0.3%	-0.0%	1.3%	0.6%
Croatia	H	.	.	.	.	0.0%	5.4%	5.8%	5.0%	5.2%	4.4%	4.5%	4.3%	3.6%
	B	2.7%	0.9%	3.9%	1.7%	-0.5%	3.0%	3.0%	3.1%	3.2%	2.7%	2.9%	2.5%	2.1%
	L	.	.	.	.	-0.9%	0.6%	0.6%	1.4%	1.7%	1.0%	1.2%	0.8%	0.7%
Cyprus	H	.	.	.	.	-1.5%	4.3%	8.7%	8.6%	8.5%	8.0%	8.1%	6.3%	5.2%
	B	-3.3%	1.8%	9.6%	6.4%	-1.9%	2.4%	5.3%	6.0%	5.6%	5.3%	5.4%	4.0%	3.6%
	L	.	.	.	.	-2.2%	0.5%	2.5%	3.9%	3.6%	3.2%	3.3%	2.1%	2.2%
Czech Republic	H	.	.	.	.	8.7%	6.2%	4.8%	3.7%	4.6%	4.1%	4.0%	5.1%	5.8%
	B	-0.0%	3.0%	0.8%	5.8%	8.3%	4.6%	2.1%	1.8%	2.7%	2.3%	2.5%	3.4%	4.5%
	L	.	.	.	.	8.0%	3.1%	-0.2%	0.7%	0.6%	0.6%	0.8%	1.9%	3.4%

EUROCONTROL SEVEN-YEAR FORECAST SEPTEMBER 2016

Growth in Total En Route Service Units														
Annual growth		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	AAGR 2022/ 2015	RP2 2019/ 2014 AAGR
Denmark	H	.	.	.	.	3.3%	3.4%	3.7%	3.0%	3.8%	3.0%	2.9%	**3.3%**	**3.4%**
	B	-2.8%	6.6%	0.5%	3.4%	3.0%	2.1%	1.7%	1.6%	1.9%	1.5%	1.7%	**1.9%**	**2.3%**
	L	.	.	.	.	2.6%	0.7%	-0.0%	0.4%	0.6%	0.0%	0.3%	**0.7%**	**1.4%**
Estonia	H	.	.	.	.	3.9%	4.3%	5.8%	4.9%	5.4%	4.6%	4.6%	**4.8%**	**4.4%**
	B	2.9%	2.3%	6.6%	3.3%	3.5%	2.6%	3.1%	2.7%	2.9%	2.5%	2.8%	**2.9%**	**3.0%**
	L	.	.	.	.	3.1%	0.8%	0.8%	1.1%	1.1%	0.7%	0.9%	**1.2%**	**1.8%**
FYROM	H	.	.	.	.	-4.5%	7.5%	6.1%	5.6%	5.9%	5.2%	5.3%	**4.4%**	.
	B	-10.2%	1.9%	38.8%	7.1%	-5.0%	4.9%	3.2%	3.5%	3.7%	3.2%	3.4%	**2.4%**	.
	L	.	.	.	.	-5.4%	2.3%	0.8%	1.7%	2.1%	1.4%	1.6%	**0.6%**	.
Finland	H	.	.	.	.	0.2%	4.0%	3.4%	3.6%	4.0%	3.3%	3.5%	**3.1%**	**1.3%**
	B	-5.1%	-2.5%	3.3%	-4.4%	-0.3%	2.4%	1.6%	2.0%	2.2%	1.7%	1.9%	**1.6%**	**0.2%**
	L	.	.	.	.	-0.7%	0.8%	-0.1%	0.6%	0.8%	0.2%	0.5%	**0.3%**	**-0.8%**
France	H	.	.	.	.	5.6%	4.3%	4.0%	3.2%	3.8%	2.8%	2.8%	**3.8%**	**3.8%**
	B	-1.0%	2.2%	3.3%	2.0%	5.4%	3.1%	1.9%	2.0%	2.3%	1.7%	1.9%	**2.6%**	**2.9%**
	L	.	.	.	.	5.2%	1.9%	-0.1%	0.6%	0.8%	0.3%	0.6%	**1.3%**	**1.9%**
Georgia	H	.	.	.	.	-3.2%	6.8%	8.0%	7.3%	7.7%	7.0%	7.1%	**5.8%**	.
	B	-2.5%	5.4%	0.6%	7.1%	-4.4%	3.5%	5.2%	5.3%	5.3%	4.7%	5.0%	**3.5%**	.
	L	.	.	.	.	-5.6%	0.2%	2.8%	3.4%	3.6%	2.9%	3.1%	**1.4%**	.
Germany[9]	H	.	.	.	.	4.6%	3.0%	4.1%	3.0%	3.8%	3.0%	3.0%	**3.5%**	**3.1%**
	B	-1.8%	0.5%	2.5%	0.7%	4.4%	1.8%	2.0%	1.5%	2.2%	1.7%	2.0%	**2.2%**	**2.1%**
	L	.	.	.	.	4.2%	0.6%	0.1%	0.4%	0.6%	0.3%	0.6%	**1.0%**	**1.2%**
Greece	H	.	.	.	.	-3.4%	2.9%	6.6%	6.4%	6.7%	6.0%	6.2%	**4.4%**	**3.7%**
	B	-4.2%	-3.3%	9.5%	6.1%	-3.8%	0.4%	3.7%	4.1%	4.3%	3.8%	4.0%	**2.3%**	**2.0%**
	L	.	.	.	.	-4.2%	-2.0%	1.1%	2.0%	2.7%	1.8%	2.1%	**0.5%**	**0.6%**
Hungary	H	.	.	.	.	4.5%	7.3%	6.2%	5.1%	5.8%	5.1%	5.0%	**5.6%**	**7.0%**
	B	-2.1%	3.8%	14.5%	12.0%	4.0%	5.4%	3.3%	3.1%	3.4%	2.9%	3.1%	**3.6%**	**5.5%**
	L	.	.	.	.	3.5%	3.5%	0.9%	1.6%	1.5%	1.1%	1.3%	**1.9%**	**4.2%**
Ireland	H	.	.	.	.	8.6%	7.0%	3.1%	1.7%	2.5%	1.8%	1.8%	**3.8%**	**5.4%**
	B	0.9%	0.2%	2.9%	6.6%	8.3%	5.6%	1.7%	1.8%	1.9%	1.0%	1.1%	**3.0%**	**4.8%**
	L	.	.	.	.	7.9%	4.1%	0.3%	0.7%	1.1%	0.7%	0.9%	**2.2%**	**3.9%**
Italy	H	.	.	.	.	2.6%	5.4%	5.0%	4.0%	4.5%	3.7%	3.8%	**4.1%**	**3.0%**
	B	-2.8%	-0.3%	2.4%	-1.7%	2.2%	3.1%	2.4%	2.1%	2.5%	1.9%	2.2%	**2.4%**	**1.6%**
	L	.	.	.	.	1.8%	0.9%	0.1%	0.6%	0.7%	0.3%	0.6%	**0.7%**	**0.3%**

Growth in Total En Route Service Units														
Annual growth		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	**AAGR 2022/ 2015**	**RP2 2019/ 2014 AAGR**
Latvia	H	.	.	.	.	-0.8%	6.5%	5.3%	4.6%	5.4%	4.6%	4.6%	**4.3%**	**4.0%**
	B	0.7%	3.8%	4.5%	4.6%	-1.3%	3.8%	2.1%	2.1%	2.5%	2.1%	2.4%	**2.0%**	**2.2%**
	L	.	.	.	.	-1.8%	1.2%	-0.5%	0.4%	0.4%	0.1%	0.4%	**0.0%**	**0.7%**
Lisbon FIR	H	.	.	.	.	11.5%	7.7%	4.6%	3.7%	3.9%	3.4%	3.6%	**5.5%**	**6.3%**
	B	-1.4%	3.4%	5.0%	4.3%	11.2%	6.1%	2.0%	1.9%	2.3%	1.8%	2.0%	**3.9%**	**5.1%**
	L	.	.	.	.	10.9%	4.5%	-0.2%	0.4%	0.6%	0.2%	0.5%	**2.4%**	**3.9%**
Lithuania	H	.	.	.	.	3.5%	4.9%	5.4%	4.7%	5.0%	4.3%	4.1%	**4.6%**	**3.9%**
	B	2.3%	4.9%	8.1%	1.0%	3.0%	2.5%	2.3%	2.4%	2.5%	2.0%	2.3%	**2.4%**	**2.3%**
	L	.	.	.	.	2.6%	0.1%	-0.3%	0.5%	0.7%	0.2%	0.4%	**0.6%**	**0.8%**
Malta	H	.	.	.	.	14.1%	5.2%	8.7%	8.3%	9.0%	8.5%	9.0%	**9.0%**	**9.8%**
	B	26.8%	14.7%	-1.1%	13.2%	13.4%	2.1%	5.3%	5.4%	5.9%	5.4%	5.7%	**6.1%**	**7.8%**
	L	.	.	.	.	12.7%	-0.9%	2.3%	3.0%	3.5%	3.0%	3.3%	**3.8%**	**5.9%**
Moldova	H	.	.	.	.	-14.7%	18.9%	7.7%	7.0%	6.7%	6.1%	6.3%	**5.0%**	**.**
	B	5.7%	16.8%	-45.5%	-43.7%	-17.3%	6.9%	4.2%	4.5%	4.2%	3.6%	3.9%	**1.1%**	**.**
	L	.	.	.	.	-19.9%	-5.7%	1.3%	2.3%	2.3%	1.6%	1.8%	**-2.7%**	**.**
Netherlands	H	.	.	.	.	8.4%	6.4%	2.9%	2.1%	3.4%	2.9%	3.0%	**4.1%**	**4.8%**
	B	-0.3%	4.4%	2.4%	4.5%	8.0%	4.7%	1.3%	1.0%	1.7%	1.8%	2.0%	**2.9%**	**3.9%**
	L	.	.	.	.	7.6%	2.9%	-0.1%	0.5%	0.5%	0.4%	0.6%	**1.7%**	**3.0%**
Norway	H	.	.	.	.	8.4%	5.2%	3.3%	3.1%	3.8%	3.1%	3.2%	**4.3%**	**4.8%**
	B	7.8%	11.1%	8.3%	4.2%	7.9%	3.3%	1.5%	1.5%	2.0%	1.4%	1.6%	**2.7%**	**3.7%**
	L	.	.	.	.	7.5%	1.4%	-0.1%	0.3%	0.5%	0.0%	0.2%	**1.4%**	**2.6%**
Poland	H	.	.	.	.	6.9%	5.4%	5.8%	5.6%	5.2%	4.6%	4.1%	**5.4%**	**4.5%**
	B	4.8%	3.4%	-1.3%	-1.3%	6.6%	3.9%	2.8%	3.2%	2.9%	2.4%	2.7%	**3.5%**	**3.0%**
	L	.	.	.	.	6.4%	2.5%	0.2%	0.9%	1.4%	0.6%	0.8%	**1.8%**	**1.7%**
Romania	H	.	.	.	.	-0.4%	6.6%	5.5%	5.1%	6.0%	5.4%	5.4%	**4.8%**	**5.2%**
	B	1.2%	4.9%	11.5%	9.3%	-0.9%	3.9%	2.6%	3.2%	3.5%	3.1%	3.4%	**2.7%**	**3.6%**
	L	.	.	.	.	-1.4%	1.3%	0.3%	1.5%	1.8%	1.3%	1.6%	**0.9%**	**2.1%**
Santa Maria FIR	H	.	.	.	.	9.5%	7.8%	3.7%	4.0%	4.1%	3.6%	3.7%	**5.2%**	**7.3%**
	B	-2.7%	3.8%	3.6%	11.9%	9.0%	6.3%	2.2%	2.7%	2.7%	2.5%	2.5%	**4.0%**	**6.3%**
	L	.	.	.	.	8.4%	4.8%	0.7%	1.6%	1.5%	1.1%	1.3%	**2.7%**	**5.4%**
Serbia-Montenegro-KFOR [10]	H	.	.	.	.	7.6%	3.6%	6.0%	5.1%	5.5%	4.7%	4.8%	**5.3%**	**.**
	B	-6.1%	-4.7%	6.9%	12.7%	7.2%	1.9%	3.2%	3.2%	3.3%	2.8%	3.0%	**3.5%**	**.**
	L	.	.	.	.	6.8%	0.2%	0.8%	1.5%	1.9%	1.1%	1.3%	**1.9%**	**.**

EUROCONTROL SEVEN-YEAR FORECAST SEPTEMBER 2016

Growth in Total En Route Service Units														
Annual growth		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	**AAGR 2022/ 2015**	**RP2 2019/ 2014 AAGR**
Slovakia	H	.	.	.	.	7.4%	9.4%	5.9%	5.0%	5.7%	5.1%	5.0%	**6.2%**	**6.0%**
	B	2.4%	6.9%	6.0%	2.6%	7.0%	7.1%	3.0%	2.9%	3.3%	2.9%	3.1%	**4.2%**	**4.5%**
	L	.	.	.	.	6.6%	4.9%	0.6%	1.4%	1.3%	1.1%	1.3%	**2.4%**	**3.2%**
Slovenia	H	.	.	.	.	7.5%	7.9%	5.8%	4.7%	5.0%	4.1%	4.2%	**5.6%**	**5.5%**
	B	0.1%	-3.3%	11.7%	1.5%	7.0%	5.9%	3.2%	2.9%	3.0%	2.5%	2.7%	**3.9%**	**4.1%**
	L	.	.	.	.	6.6%	3.8%	0.9%	1.3%	1.6%	0.8%	1.1%	**2.3%**	**2.8%**
Spain	H	.	.	.	.	8.9%	4.9%	4.8%	3.7%	4.3%	3.6%	3.6%	**4.8%**	**5.0%**
	B	-7.2%	0.0%	3.8%	2.6%	8.6%	3.1%	2.2%	2.0%	2.5%	1.9%	2.1%	**3.2%**	**3.7%**
	L	.	.	.	.	8.3%	1.3%	-0.1%	0.6%	0.8%	0.3%	0.6%	**1.7%**	**2.5%**
Sweden	H	.	.	.	.	1.6%	3.2%	4.0%	3.9%	4.3%	3.5%	3.5%	**3.4%**	**3.0%**
	B	-1.8%	2.6%	2.4%	2.1%	1.2%	1.3%	1.7%	2.1%	2.2%	1.7%	1.9%	**1.7%**	**1.7%**
	L	.	.	.	.	0.9%	-0.6%	-0.3%	0.5%	0.8%	0.1%	0.4%	**0.3%**	**0.5%**
Switzerland	H	.	.	.	.	5.1%	6.9%	4.1%	3.2%	4.0%	2.9%	2.8%	**4.1%**	**4.2%**
	B	-2.3%	-1.0%	3.0%	1.9%	4.7%	5.1%	2.0%	1.6%	2.3%	1.8%	2.0%	**2.8%**	**3.1%**
	L	.	.	.	.	4.4%	3.3%	-0.0%	0.6%	0.4%	0.3%	0.7%	**1.4%**	**2.0%**
Turkey	H	.	.	.	.	-0.6%	4.8%	8.2%	7.0%	7.3%	6.7%	6.8%	**5.7%**	.
	B	2.0%	8.4%	20.4%	10.7%	-1.1%	2.2%	5.5%	5.2%	4.7%	4.3%	4.5%	**3.6%**	.
	L	.	.	.	.	-1.6%	-0.4%	2.7%	3.4%	3.4%	2.5%	2.6%	**1.8%**	.
UK	H	.	.	.	.	7.8%	3.7%	3.3%	2.1%	3.1%	2.3%	2.3%	**3.5%**	**3.7%**
	B	-2.6%	1.5%	2.3%	1.7%	7.4%	2.6%	1.7%	1.5%	1.9%	1.3%	1.3%	**2.5%**	**3.0%**
	L	.	.	.	.	7.0%	1.4%	0.2%	0.4%	0.8%	0.3%	0.6%	**1.5%**	**2.1%**
Ukraine	H	.	.	.	.	-20.0%	23.5%	6.9%	6.5%	5.9%	5.4%	5.2%	**4.1%**	.
	B	2.8%	7.5%	-43.8%	-53.6%	-21.6%	15.0%	3.8%	4.3%	3.6%	3.2%	3.5%	**1.1%**	.
	L	.	.	.	.	-23.2%	6.3%	1.1%	2.0%	2.3%	1.4%	1.6%	**-1.7%**	.
ESRA02	H	.	.	.	.	4.6%	4.9%	4.9%	4.0%	4.7%	3.9%	4.0%	**4.4%**	.
	B	-1.4%	2.2%	6.0%	4.2%	4.2%	3.2%	2.5%	2.5%	2.8%	2.3%	2.5%	**2.9%**	.
	L	.	.	.	.	3.8%	1.4%	0.5%	1.1%	1.3%	0.8%	1.0%	**1.4%**	.
BLUE MED FAB	H	.	.	.	.	0.9%	4.5%	6.1%	5.4%	5.9%	5.2%	5.4%	**4.7%**	**3.8%**
	B	-2.2%	-0.3%	5.0%	2.2%	0.5%	2.2%	3.3%	3.3%	3.6%	3.1%	3.3%	**2.7%**	**2.3%**
	L	.	.	.	.	0.1%	-0.1%	0.8%	1.5%	1.8%	1.2%	1.5%	**1.0%**	**0.9%**
Baltic FAB	H	.	.	.	.	6.5%	5.4%	5.8%	5.5%	5.2%	4.5%	4.1%	**5.3%**	**4.4%**
	B	4.6%	3.5%	-0.4%	-1.0%	6.2%	3.8%	2.7%	3.1%	2.9%	2.4%	2.6%	**3.4%**	**2.9%**
	L	.	.	.	.	5.9%	2.2%	0.1%	0.9%	1.3%	0.5%	0.8%	**1.7%**	**1.6%**

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Growth in Total En Route Service Units														
Annual growth		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	**AAGR 2022/2015**	**RP2 2019/2014 AAGR**
Danube FAB	H	.	.	.	.	2.0%	5.7%	5.5%	5.1%	5.9%	5.3%	5.4%	**5.0%**	**6.1%**
	B	0.8%	3.8%	19.2%	12.5%	1.5%	3.4%	2.7%	3.1%	3.4%	3.0%	3.4%	**2.9%**	**4.6%**
	L	.	.	.	.	1.1%	1.2%	0.3%	1.4%	1.8%	1.3%	1.5%	**1.2%**	**3.2%**
FAB CE	H	.	.	.	.	3.9%	6.3%	5.5%	4.6%	5.1%	4.4%	4.4%	**4.9%**	**5.2%**
	B	-0.6%	1.6%	7.6%	5.9%	3.4%	4.3%	2.8%	2.6%	3.0%	2.5%	2.8%	**3.1%**	**3.8%**
	L	.	.	.	.	3.0%	2.3%	0.4%	1.2%	1.2%	0.8%	1.1%	**1.4%**	**2.5%**
FABEC	H	.	.	.	.	5.2%	4.2%	4.0%	3.1%	3.8%	2.9%	2.8%	**3.7%**	**3.7%**
	B	-1.2%	1.6%	3.0%	1.9%	5.0%	2.9%	1.9%	1.7%	2.2%	1.7%	1.9%	**2.5%**	**2.7%**
	L	.	.	.	.	4.8%	1.6%	-0.0%	0.6%	0.7%	0.3%	0.6%	**1.2%**	**1.8%**
NEFAB	H	.	.	.	.	4.7%	5.1%	4.1%	3.7%	4.4%	3.7%	3.8%	**4.2%**	**4.0%**
	B	2.9%	5.6%	6.5%	2.6%	4.3%	3.1%	1.9%	1.9%	2.3%	1.8%	2.0%	**2.4%**	**2.7%**
	L	.	.	.	.	3.8%	1.2%	-0.0%	0.5%	0.6%	0.2%	0.4%	**0.9%**	**1.6%**
South West FAB	H	.	.	.	.	9.5%	5.9%	4.7%	3.7%	4.1%	3.5%	3.6%	**5.0%**	**5.1%**
	B	-5.6%	0.1%	3.4%	2.0%	9.2%	4.0%	2.1%	1.9%	2.4%	1.8%	2.0%	**3.3%**	**3.8%**
	L	.	.	.	.	8.8%	2.2%	-0.2%	0.4%	0.7%	0.2%	0.5%	**1.8%**	**2.6%**
UK-Ireland FAB	H	.	.	.	.	8.0%	4.7%	3.2%	2.0%	2.9%	2.1%	2.1%	**3.6%**	**4.2%**
	B	-1.6%	1.1%	2.5%	3.1%	7.6%	3.4%	1.7%	1.6%	1.9%	1.2%	1.3%	**2.7%**	**3.5%**
	L	.	.	.	.	7.2%	2.2%	0.2%	0.5%	0.9%	0.4%	0.7%	**1.7%**	**2.6%**
DK-SE FAB	H	.	.	.	.	2.1%	3.3%	3.9%	3.6%	4.1%	3.3%	3.3%	**3.4%**	**3.1%**
	B	-2.1%	3.9%	1.8%	2.5%	1.8%	1.5%	1.7%	1.9%	2.1%	1.6%	1.9%	**1.8%**	**1.9%**
	L	.	.	.	.	1.4%	-0.2%	-0.2%	0.5%	0.7%	0.1%	0.3%	**0.4%**	**0.8%**
CRCO88	H	.	.	.	.	6.7%	4.8%	4.0%	3.1%	3.8%	2.9%	2.9%	**4.0%**	**4.3%**
	B	-2.2%	1.3%	3.2%	2.8%	6.3%	3.4%	1.9%	1.8%	2.2%	1.7%	1.9%	**2.7%**	**3.2%**
	L	.	.	.	.	6.0%	2.0%	0.1%	0.6%	0.8%	0.4%	0.6%	**1.5%**	**2.3%**
CRCO11	H	.	.	.	.	4.6%	4.9%	4.9%	4.1%	4.7%	4.0%	4.0%	**4.5%**	**4.5%**
	B	-1.3%	2.1%	5.8%	4.2%	4.2%	3.2%	2.6%	2.5%	2.8%	2.3%	2.5%	**2.9%**	**3.3%**
	L	.	.	.	.	3.8%	1.4%	0.4%	1.1%	1.3%	0.8%	1.0%	**1.4%**	**2.2%**
CRCO14	H	.	.	.	.	4.5%	5.0%	4.9%	4.1%	4.7%	4.0%	4.0%	**4.5%**	**4.6%**
	B	-1.3%	2.1%	5.8%	4.2%	4.1%	3.2%	2.6%	2.5%	2.8%	2.3%	2.5%	**2.9%**	**3.3%**
	L	.	.	.	.	3.8%	1.4%	0.5%	1.1%	1.3%	0.8%	1.0%	**1.4%**	**2.2%**
RP1Region [9]	H	.	.	.	.	5.2%	4.8%	4.5%	3.7%	4.4%	3.6%	3.6%	**4.3%**	**4.3%**
	B	-1.5%	1.6%	4.4%	3.1%	4.8%	3.2%	2.2%	2.2%	2.5%	2.0%	2.2%	**2.7%**	**3.1%**
	L	.	.	.	.	4.5%	1.5%	0.2%	0.8%	1.0%	0.5%	0.8%	**1.3%**	**2.0%**

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Growth in Total En Route Service Units														
Annual growth		**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**AAGR 2022/ 2015**	**RP2 2019/ 2014 AAGR**
RP2Region [9]	**H**	.	.	.	.	5.1%	4.8%	4.6%	3.8%	4.4%	3.6%	3.6%	**4.3%**	**4.2%**
	B	-1.4%	1.6%	4.4%	3.0%	4.7%	3.2%	2.2%	2.2%	2.5%	2.0%	2.2%	**2.7%**	**3.1%**
	L	.	.	.	.	4.4%	1.5%	0.2%	0.8%	1.0%	0.6%	0.8%	**1.3%**	**2.0%**
Total	**H**	.	.	.	.	4.3%	5.1%	5.0%	4.2%	4.7%	4.0%	4.1%	**4.5%**	**4.3%**
	B	-1.2%	2.3%	3.9%	3.0%	3.9%	3.3%	2.6%	2.6%	2.8%	2.3%	2.5%	**2.9%**	**3.1%**
	L	.	.	.	.	3.5%	1.5%	0.5%	1.1%	1.3%	0.8%	1.0%	**1.4%**	**1.9%**

ANNEX 8 TERMINAL NAVIGATION SERVICE UNITS FORECAST PER STATE

This appendix presents the forecast of the terminal navigation service units based on the terminal charging zones definition for RP2 and the use of a 0.7 exponent in the terminal service unit definition (to be used as of 2015). The definition of the charging zones is in line with their latest definitions available as agreed in their performance plans for RP2 (Summer 2015).

The historical values up to 2015 have been reconstructed based on CRCO data with the TCZ definitions and the exponent used to compute the TNSU as applicable by states according to their RP1 performance plans up to 2014 and to the definition of RP2 from 2015 with a 0.7 exponent. For this forecast, the TCZ definitions available in January 2016 were used (see Figure 40).

Figure 50. Forecast of the total number of Terminal service units (thousands) per Terminal Charging Zone.

Terminal Navigation Service Units (Thousands)														AAGR 2022/ 2015
Terminal Navigation Service Units (thousands)			**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	
Austria	LO_TCZ	High	.	.	.	.	179.7	187.3	196.8	206.0	216.7	226.4	237.1	**4.0%**
		Base	179.1	175.5	178.4	180.7	179.1	182.9	187.4	192.0	198.1	203.5	209.3	**2.1%**
		Low	.	.	.	.	178.5	178.7	179.2	181.3	184.1	185.0	186.9	**0.5%**
Belgium	EB_TCZ_EBAW	High	.	.	.	.	3.0	3.0	3.1	3.3	3.3	3.4	3.6	**4.4%**
		Base	1.9	1.9	1.7	2.6	2.9	3.0	3.0	3.1	3.2	3.2	3.3	**3.2%**
		Low	.	.	.	.	2.9	2.9	2.9	2.9	3.0	3.0	3.0	**2.0%**
	EB_TCZ_EBBR	High	.	.	.	.	146.8	153.9	162.9	171.7	180.8	182.7	184.4	**2.5%**
		Base	150.8	142.3	146.6	154.6	146.2	150.1	154.8	158.6	164.1	168.5	173.6	**1.7%**
		Low	.	.	.	.	145.7	146.1	146.8	148.7	150.6	152.1	154.0	**-0.1%**
	EB_TCZ_EBCI	High	.	.	.	.	29.5	31.0	33.3	35.5	37.9	40.2	42.7	**5.6%**
		Base	27.9	30.2	28.1	29.1	29.4	30.2	31.5	32.7	34.1	35.4	36.8	**3.4%**
		Low	.	.	.	.	29.3	29.4	29.8	30.4	31.2	31.7	32.3	**1.5%**
	EB_TCZ_EBLG	High	.	.	.	.	27.4	29.1	31.3	33.4	35.7	38.0	40.9	**5.8%**
		Base	23.5	22.9	24.7	27.6	27.3	28.4	29.9	31.5	33.2	34.9	36.6	**4.1%**
		Low	.	.	.	.	27.2	27.7	28.6	29.6	30.8	31.9	33.2	**2.7%**
	EB_TCZ_EBOS	High	.	.	.	.	2.1	2.3	2.6	2.8	2.9	3.1	3.4	**6.0%**
		Base	3.4	3.2	2.4	2.3	2.1	2.2	2.3	2.4	2.4	2.8	2.9	**3.4%**
		Low	.	.	.	.	2.1	2.1	2.2	2.2	2.3	2.3	2.3	**0.3%**
Bulgaria	LB_TCZ	High	.	.	.	.	27.1	29.5	32.2	34.3	37.0	39.2	41.8	**8.2%**
		Base	41.5	41.7	44.2	24.1	26.9	28.6	29.6	31.1	32.9	34.4	36.1	**6.0%**
		Low	.	.	.	.	26.8	27.8	28.0	28.7	29.3	30.4	31.3	**3.8%**
Croatia	LD_TCZ	High	.	.	.	.	19.7	20.6	21.7	22.3	23.5	24.3	25.9	**5.9%**
		Base	16.0	15.8	16.3	17.4	19.6	20.0	20.5	21.0	21.6	21.9	22.5	**3.8%**
		Low	.	.	.	.	19.5	19.3	19.2	19.4	19.6	19.8	20.0	**2.1%**

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Terminal Navigation Service Units (Thousands)														AAGR 2022/ 2015
Terminal Navigation Service Units (thousands)			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Cyprus	LC_TCZ	High	.	.	.	.	51.4	58.4	62.7	66.9	72.7	77.9	83.6	10.9%
		Base	42.5	39.0	40.0	40.4	51.1	56.2	58.2	60.5	62.8	65.7	68.3	7.8%
		Low	.	.	.	.	50.7	54.1	54.5	55.3	56.4	57.1	58.0	5.3%
Czech Republic	LK_TCZ	High	.	.	.	.	81.9	89.6	96.1	104.7	113.8	121.5	131.1	8.2%
		Base	75.3	73.7	72.9	75.5	81.6	86.8	90.2	94.2	99.0	103.3	107.8	5.2%
		Low	.	.	.	.	81.2	84.1	85.1	86.7	89.0	90.5	92.0	2.9%
Denmark	EK_TCZ	High	.	.	.	.	167.4	173.5	181.2	190.3	199.5	206.8	213.7	4.4%
		Base	143.7	148.1	154.5	158.2	166.8	169.3	172.3	177.9	182.9	185.9	190.0	2.7%
		Low	.	.	.	.	166.2	165.4	165.8	165.9	168.9	169.4	170.6	1.1%
Estonia	EE_TCZ	High	.	.	.	.	15.8	16.8	18.3	21.4	23.8	25.7	27.8	8.3%
		Base	18.9	14.6	15.1	15.9	15.7	15.8	17.3	18.1	18.9	21.1	22.2	4.8%
		Low	.	.	.	.	15.6	15.6	15.8	16.2	16.7	16.9	17.2	1.1%
Finland	EF_TCZ	High	.	.	.	.	101.0	103.4	108.5	115.6	121.5	126.8	133.3	4.1%
		Base	97.6	97.9	99.4	100.5	100.7	100.9	103.3	106.1	109.5	112.1	115.6	2.0%
		Low	.	.	.	.	100.3	98.5	98.8	99.9	101.1	102.0	103.3	0.4%
France	LF_TCZ	High	.	.	.	.	1,067.1	1,100.2	1,141.2	1,176.1	1,231.5	1,264.5	1,292.1	3.0%
		Base	1,092.7	1,090.7	1,031.1	1,048.9	1,063.7	1,069.9	1,085.8	1,113.5	1,147.3	1,173.8	1,206.7	2.0%
		Low	.	.	.	.	1,060.3	1,045.6	1,040.4	1,053.5	1,066.3	1,073.8	1,086.5	0.5%
Germany	ED_TCZ	High	.	.	.	.	1,386.9	1,435.1	1,494.7	1,551.4	1,616.9	1,678.7	1,745.3	3.9%
		Base	1295.5	1282.3	1311.6	1338.8	1,382.6	1,407.7	1,436.5	1,463.2	1,509.4	1,545.7	1,587.1	2.5%
		Low	.	.	.	.	1,377.8	1,380.2	1,387.8	1,401.0	1,417.5	1,433.0	1,455.3	1.2%
Greece	LG_TCZ	High	.	.	.	.	108.8	113.8	121.1	128.9	139.5	149.5	160.7	7.0%
		Base	83.0	74.5	86.0	100.1	108.6	110.5	114.6	118.8	124.7	130.5	136.9	4.6%
		Low	.	.	.	.	108.2	107.5	108.5	111.1	114.2	117.0	120.2	2.6%
Hungary	LH_TCZ	High	.	.	.	.	59.8	64.3	69.8	76.7	83.1	89.5	97.2	8.4%
		Base	49.6	49.2	50.7	55.2	59.4	61.8	64.4	67.1	70.1	73.7	77.4	4.9%
		Low	.	.	.	.	59.0	59.5	59.8	61.0	61.9	62.9	64.2	2.2%
Ireland	EI_TCZ	High	.	.	.	.	169.1	182.6	191.9	193.8	197.0	201.5	204.7	4.6%
		Base	129.5	136.7	137.5	149.6	168.5	178.2	183.4	188.8	194.3	196.4	198.3	4.1%
		Low	.	.	.	.	167.9	174.0	175.4	178.0	182.2	185.1	187.1	3.2%
Italy	LI_TCZ_1	High	.	.	.	.	231.5	240.0	254.6	268.0	283.6	297.8	305.9	4.7%
		Base	217.7	210.0	218.5	221.9	230.7	234.0	240.6	247.0	254.2	260.8	269.0	2.8%
		Low	.	.	.	.	229.9	227.8	227.9	229.6	231.3	232.3	233.7	0.7%
	LI_TCZ_2	High	.	.	.	.	299.3	311.5	329.7	347.7	366.8	384.9	404.5	5.1%
		Base	285.7	275.3	275.1	286.0	298.2	303.1	312.6	321.6	331.7	340.6	350.7	3.0%
		Low	.	.	.	.	297.2	294.8	295.5	298.9	302.0	304.0	307.4	1.0%
Latvia	EV_TCZ	High	.	.	.	.	32.6	34.7	38.3	40.9	44.2	47.5	50.8	6.6%
		Base	31.5	32.4	31.4	32.4	32.3	32.6	34.0	35.1	36.6	37.3	38.5	2.5%
		Low	.	.	.	.	32.1	30.7	30.3	29.8	29.7	29.6	29.7	-1.2%

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Terminal Navigation Service Units (Thousands)														AAGR 2022/ 2015
Terminal Navigation Service Units (thousands)			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Lisbon FIR	LP_TCZ	High	.	.	.	.	236.8	251.8	264.7	275.6	288.6	299.6	313.8	6.2%
		Base	175.7	180.3	191.8	205.6	235.9	245.5	251.6	257.6	263.9	269.3	275.2	4.3%
		Low	.	.	.	.	235.1	239.0	238.8	240.9	243.0	243.3	244.9	2.5%
Lithuania	EY_TCZ	High	.	.	.	.	25.7	28.1	30.6	33.3	35.9	38.8	42.0	7.7%
		Base	19.2	21.0	23.6	25.1	25.5	26.6	28.4	29.8	30.9	32.2	33.7	4.3%
		Low	.	.	.	.	25.4	25.8	26.2	26.8	27.4	27.9	28.5	1.8%
Luxembourg	EL_TCZ	High	.	.	.	.	44.2	47.0	51.2	53.9	57.2	60.2	63.3	6.4%
		Base	34.9	37.3	39.0	41.1	44.0	45.8	47.5	49.3	51.3	53.1	55.1	4.3%
		Low	.	.	.	.	43.9	44.7	45.2	46.2	47.6	48.7	49.9	2.8%
Malta	LM_TCZ	High	.	.	.	.	27.6	31.8	34.9	37.5	40.5	43.6	47.6	9.4%
		Base	20.7	22.7	23.9	25.4	27.6	30.5	32.0	33.5	35.2	36.7	38.2	6.0%
		Low	.	.	.	.	27.3	29.4	29.8	30.3	30.8	31.3	31.9	3.3%
Netherlands	EH_TCZ	High	.	.	.	.	392.2	404.6	409.9	416.6	422.2	436.0	444.1	2.7%
		Base	339.2	345.0	356.6	369.2	390.6	404.4	409.6	415.5	420.1	433.0	447.9	2.8%
		Low	.	.	.	.	389.0	396.9	400.2	406.2	414.0	419.4	425.9	2.1%
Norway	EN_TCZ	High	.	.	.	.	247.6	247.9	255.8	264.2	275.4	284.3	295.6	2.9%
		Base	242.4	255.4	247.9	241.7	246.7	242.9	245.8	249.6	254.8	258.6	262.4	1.2%
		Low	.	.	.	.	246.0	238.2	237.4	238.3	239.3	238.4	238.7	-0.2%
Poland	EP_TCZ	High	.	.	.	.	185.9	207.0	226.5	249.5	274.1	296.7	312.2	9.3%
		Base	148.9	149.9	156.4	167.1	185.0	199.4	209.1	220.3	232.1	243.7	256.3	6.3%
		Low	.	.	.	.	184.1	192.2	195.1	199.9	205.5	208.9	213.3	3.5%
Romania	LR_TCZ	High	.	.	.	.	63.9	70.4	77.5	83.7	90.9	97.0	103.3	9.5%
		Base	45.1	47.3	50.3	54.6	63.6	67.5	70.7	74.6	79.2	83.5	87.5	7.0%
		Low	.	.	.	.	63.4	65.7	67.0	68.8	70.7	72.3	75.1	4.7%
Slovakia	LZ_TCZ	High	.	.	.	.	10.4	11.5	12.7	14.2	15.6	17.5	19.1	10.8%
		Base	8.7	8.6	8.3	9.4	10.3	11.0	11.6	12.3	13.4	14.1	14.8	6.8%
		Low	.	.	.	.	10.3	10.5	10.8	11.1	11.5	11.8	12.2	3.9%
Slovenia	LJ_TCZ	High	.	.	.	.	11.8	13.4	14.4	15.3	16.3	17.6	18.5	6.4%
		Base	11.1	11.3	11.1	12.0	11.7	13.0	13.5	14.1	14.7	15.3	16.0	4.2%
		Low	.	.	.	.	11.7	11.8	12.0	13.0	13.3	13.5	13.8	2.0%
Spain	LE_TCZ	High	.	.	.	.	733.5	747.4	788.5	817.7	859.1	892.7	910.5	4.2%
		Base	725.6	700.4	651.2	680.5	730.7	741.5	747.1	766.0	791.2	811.5	819.9	2.7%
		Low	.	.	.	.	728.0	722.8	726.8	735.0	738.4	744.8	745.5	1.3%
Sweden	ES_TCZ_A	High	.	.	.	.	142.6	148.1	154.0	161.1	167.4	173.4	181.3	4.1%
		Base	121.7	128.6	135.6	137.1	142.5	145.4	147.9	151.1	154.7	158.5	160.8	2.3%
		Low	.	.	.	.	142.1	142.0	142.2	142.8	144.2	144.6	145.4	0.8%
Switzerland	LS_TCZ	High	.	.	.	.	275.4	287.3	302.0	316.2	332.8	346.4	357.6	4.3%
		Base	254.4	252.1	262.2	266.6	274.5	279.7	288.3	297.2	305.2	311.7	321.0	2.7%
		Low	.	.	.	.	273.4	273.3	276.1	279.4	282.5	284.1	287.5	1.1%

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Terminal Navigation Service Units (Thousands)			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	AAGR 2022/ 2015
Terminal Navigation Service Units (thousands)														
UK	**EG_TCZ_B**	**High**	.	.	.	.	1,250.5	1,297.6	1,342.9	1,383.5	1,461.3	1,528.5	1,582.2	**4.2%**
		Base	1,079.6	1,106.0	1,142.7	1,187.0	1,248.4	1,278.2	1,307.5	1,335.3	1,369.8	1,402.2	1,433.2	**2.7%**
		Low	.	.	.	.	1,246.0	1,262.1	1,271.8	1,285.8	1,303.3	1,317.2	1,333.9	**1.7%**
	EG_TCZ_C[11]	**High**	.	.	.	.	940.9	972.8	1,003.9	1,031.4	1,091.1	1,139.8	1,176.9	**3.8%**
		Base	826.5	843.8	877.1	907.6	939.7	960.4	982.6	1,003.1	1,028.1	1,049.5	1,067.8	**2.3%**
		Low	.	.	.	.	938.3	951.0	960.0	972.4	985.7	996.8	1009.9	**1.5%**

[11] The UK has defined the UK _TCZ_C as a separate terminal charging zone, which covers the London Approach Service (LAS) for the five London airports (Heathrow, Gatwick, Stansted, Luton and London City). These five airports are also part of the nine airports forming the UK_TCZ_B.

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ANNEX 9 TERMINAL NAVIGATION SERVICE UNITS FORECAST PER STATE (GROWTH)

This appendix presents the same data as the previous, but presented as growth rather than counts of terminal navigation service units. The low growth observed for Bulgaria in 2015 can be attributed to the suppression of 4 airports in 2015 compared to what was considered in 2014. The rest of the TCZ changes does not have a significant impact.

Figure 51. Forecast of the total number of Terminal service units (growth) per Terminal Charging Zone.

Growth in Terminal Navigation Service Units													
Annual Growth			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Austria	LO_TCZ	High	.	.	.	.	-0.5%	4.3%	5.0%	4.7%	5.2%	4.5%	4.7%
		Base	-2.7%	-2.0%	1.6%	1.3%	-0.9%	2.1%	2.5%	2.5%	3.2%	2.7%	2.9%
		Low	.	.	.	.	-1.2%	0.1%	0.3%	1.2%	1.6%	0.5%	1.0%
Belgium	EB_TCZ_EBAW	High	.	.	.	.	12%	2.2%	3.8%	3.9%	2.8%	2.9%	3.4%
		Base	-9.6%	-1.5%	-11%	56%	12%	0.7%	1.9%	2.1%	2.4%	2.4%	1.4%
		Low	.	.	.	.	12%	-0.9%	0.6%	0.4%	1.3%	0.6%	1.0%
	EB_TCZ_EBBR	High	.	.	.	.	-5.1%	4.9%	5.9%	5.4%	5.3%	1.0%	0.9%
		Base	-4.7%	-5.6%	3.0%	5.5%	-5.4%	2.6%	3.1%	2.5%	3.5%	2.7%	3.0%
		Low	.	.	.	.	-5.7%	0.2%	0.5%	1.2%	1.3%	1.0%	1.2%
	EB_TCZ_EBCI	High	.	.	.	.	1.3%	5.1%	7.2%	6.7%	6.8%	6.0%	6.3%
		Base	12%	8.3%	-7.0%	3.8%	1.0%	2.7%	4.2%	4.0%	4.3%	3.6%	3.9%
		Low	.	.	.	.	0.6%	0.2%	1.4%	2.2%	2.4%	1.7%	2.0%
	EB_TCZ_EBLG	High	.	.	.	.	-0.5%	6.1%	7.5%	6.7%	6.9%	6.4%	7.7%
		Base	-14%	-2.6%	8.1%	11%	-0.8%	4.1%	5.0%	5.3%	5.5%	5.1%	5.1%
		Low	.	.	.	.	-1.2%	1.9%	3.1%	3.5%	4.2%	3.6%	3.9%
	EB_TCZ_EBOS	High	.	.	.	.	-6.8%	7.6%	16%	4.4%	4.6%	5.7%	12%
		Base	-2.6%	-7.5%	-26%	-3.3%	-7.2%	5.2%	2.9%	3.0%	3.4%	13%	4.7%
		Low	.	.	.	.	-7.7%	2.0%	1.4%	1.6%	2.1%	1.5%	1.8%
Bulgaria[12]	LB_TCZ	High	.	.	.	.	12%	8.9%	9.4%	6.4%	7.9%	5.9%	6.7%
		Base	0.9%	0.5%	6.1%	-46%	12%	6.1%	3.6%	5.1%	5.8%	4.4%	4.8%
		Low	.	.	.	.	11%	3.6%	0.9%	2.6%	1.9%	3.9%	2.8%
Croatia	LD_TCZ	High	.	.	.	.	14%	4.4%	5.2%	3.1%	5.3%	3.4%	6.3%
		Base	-4.5%	-1.0%	3.5%	6.2%	13%	1.9%	2.5%	2.5%	3.0%	1.4%	2.6%
		Low	.	.	.	.	12%	-1.2%	-0.3%	1.1%	1.0%	0.9%	1.1%

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[12] The definition of the Terminal Charging Zone for Bulgaria takes into account the definition available for the February 2015 forecast: 4 airports have been taken out from 2016, which explains the low growth for 2016

Growth in Terminal Navigation Service Units														
Annual Growth			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Cyprus	LC_TCZ	High	.	.	.	.	27%	14%	7.3%	6.8%	8.6%	7.2%	7.2%
		Base	-3.1%	-8.3%	2.5%	1.0%	26%	9.9%	3.7%	3.9%	3.7%	4.6%	3.9%
		Low	.	.	.	.	25%	6.6%	0.8%	1.5%	1.9%	1.3%	1.7%
Czech Republic	LK_TCZ	High	.	.	.	.	8.5%	9.3%	7.3%	8.9%	8.7%	6.8%	7.9%
		Base	-11%	-2.1%	-1.0%	3.6%	8.0%	6.4%	4.0%	4.4%	5.1%	4.4%	4.4%
		Low	.	.	.	.	7.5%	3.6%	1.2%	1.8%	2.7%	1.7%	1.7%
Denmark	EK_TCZ	High	.	.	.	.	5.8%	3.7%	4.4%	5.0%	4.8%	3.7%	3.3%
		Base	-1.1%	3.1%	4.3%	2.4%	5.4%	1.5%	1.7%	3.3%	2.8%	1.6%	2.2%
		Low	.	.	.	.	5.1%	-0.5%	0.2%	0.1%	1.8%	0.3%	0.7%
Estonia	EE_TCZ	High	.	.	.	.	-0.8%	6.2%	9.2%	17%	11%	8.0%	8.2%
		Base	18%	-23%	3.4%	5.6%	-1.5%	0.9%	9.4%	4.3%	4.7%	12%	4.8%
		Low	.	.	.	.	-2.2%	0.1%	1.2%	2.7%	2.7%	1.4%	1.7%
Finland	EF_TCZ	High	.	.	.	.	0.5%	2.3%	4.9%	6.6%	5.1%	4.3%	5.2%
		Base	-8.9%	0.4%	1.5%	1.1%	0.2%	0.2%	2.4%	2.6%	3.3%	2.4%	3.1%
		Low	.	.	.	.	-0.2%	-1.8%	0.3%	1.1%	1.2%	0.9%	1.3%
France	LF_TCZ	High	.	.	.	.	1.7%	3.1%	3.7%	3.1%	4.7%	2.7%	2.2%
		Base	-4.6%	-0.2%	-5.5%	1.7%	1.4%	0.6%	1.5%	2.6%	3.0%	2.3%	2.8%
		Low	.	.	.	.	1.1%	-1.4%	-0.5%	1.3%	1.2%	0.7%	1.2%
Germany	ED_TCZ	High	.	.	.	.	3.6%	3.5%	4.2%	3.8%	4.2%	3.8%	4.0%
		Base	-1.2%	-1.0%	2.3%	2.1%	3.3%	1.8%	2.0%	1.9%	3.2%	2.4%	2.7%
		Low	.	.	.	.	2.9%	0.2%	0.5%	1.0%	1.2%	1.1%	1.6%
Greece	LG_TCZ	High	.	.	.	.	8.7%	4.6%	6.4%	6.4%	8.2%	7.2%	7.5%
		Base	-14%	-10%	15%	16%	8.5%	1.7%	3.7%	3.7%	4.9%	4.7%	4.9%
		Low	.	.	.	.	8.1%	-0.7%	0.9%	2.4%	2.8%	2.4%	2.7%
Hungary	LH_TCZ	High	.	.	.	.	8.2%	7.6%	8.6%	9.8%	8.3%	7.7%	8.6%
		Base	-16%	-0.9%	3.1%	9.0%	7.6%	4.0%	4.2%	4.2%	4.4%	5.2%	5.0%
		Low	.	.	.	.	6.8%	0.9%	0.4%	2.0%	1.6%	1.6%	2.0%
Ireland	EI_TCZ	High	.	.	.	.	13%	8.0%	5.1%	1.0%	1.6%	2.3%	1.6%
		Base	-4.7%	5.5%	0.6%	8.8%	13%	5.7%	2.9%	2.9%	2.9%	1.1%	1.0%
		Low	.	.	.	.	12%	3.6%	0.8%	1.5%	2.4%	1.6%	1.1%
Italy	LI_TCZ_1	High	.	.	.	.	4.3%	3.7%	6.1%	5.3%	5.8%	5.0%	2.7%
		Base	-3.6%	-3.5%	4.0%	1.6%	3.9%	1.4%	2.8%	2.7%	2.9%	2.6%	3.1%
		Low	.	.	.	.	3.6%	-0.9%	0.1%	0.7%	0.7%	0.4%	0.6%
	LI_TCZ_2	High	.	.	.	.	4.6%	4.1%	5.9%	5.5%	5.5%	4.9%	5.1%
		Base	-2.2%	-3.7%	-0.1%	4.0%	4.3%	1.7%	3.1%	2.9%	3.1%	2.7%	3.0%
		Low	.	.	.	.	3.9%	-0.8%	0.2%	1.2%	1.0%	0.6%	1.1%
Latvia	EV_TCZ	High	.	.	.	.	0.5%	6.5%	11%	6.6%	8.1%	7.5%	7.1%
		Base	-2.3%	2.9%	-3.2%	3.3%	-0.2%	0.8%	4.2%	3.3%	4.3%	1.9%	3.1%
		Low	.	.	.	.	-0.8%	-4.4%	-1.4%	-1.7%	-0.2%	-0.3%	0.2%

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Growth in Terminal Navigation Service Units														
Annual Growth			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Lisbon FIR	LP_TCZ	High	.	.	.	.	15%	6.3%	5.1%	4.1%	4.7%	3.8%	4.7%
		Base	-1.0%	2.6%	6.4%	7.2%	15%	4.1%	2.5%	2.4%	2.4%	2.0%	2.2%
		Low	.	.	.	.	14%	1.7%	-0.1%	0.9%	0.9%	0.1%	0.7%
Lithuania	EY_TCZ	High	.	.	.	.	2.7%	9.3%	8.8%	8.9%	7.6%	8.3%	8.3%
		Base	8.0%	9.5%	12%	6.2%	1.8%	4.3%	7.0%	4.9%	3.5%	4.2%	4.6%
		Low	.	.	.	.	1.2%	1.6%	1.5%	2.5%	2.3%	1.9%	1.9%
Luxembourg	EL_TCZ	High	.	.	.	.	7.6%	6.3%	9.0%	5.1%	6.3%	5.1%	5.2%
		Base	-1.0%	6.8%	4.4%	5.5%	7.2%	4.0%	3.8%	3.6%	4.1%	3.5%	3.8%
		Low	.	.	.	.	6.7%	2.0%	1.0%	2.3%	3.0%	2.3%	2.5%
Malta	LM_TCZ	High	.	.	.	.	8.9%	15%	9.8%	7.3%	8.2%	7.5%	9.2%
		Base	.	9.7%	5.6%	6.1%	8.5%	11%	4.8%	4.9%	4.8%	4.4%	4.2%
		Low	.	.	.	.	7.7%	7.6%	1.2%	1.9%	1.6%	1.5%	2.0%
Netherlands	EH_TCZ	High	.	.	.	.	6.2%	3.2%	1.3%	1.6%	1.3%	3.3%	1.9%
		Base	0.0%	1.7%	3.4%	3.5%	5.8%	3.5%	1.3%	1.4%	1.1%	3.1%	3.4%
		Low	.	.	.	.	5.4%	2.0%	0.8%	1.5%	1.9%	1.3%	1.5%
Norway	EN_TCZ	High	.	.	.	.	2.4%	0.1%	3.2%	3.3%	4.2%	3.2%	3.9%
		Base	5.6%	5.4%	-2.9%	-2.5%	2.1%	-1.6%	1.2%	1.5%	2.1%	1.5%	1.5%
		Low	.	.	.	.	1.8%	-3.2%	-0.3%	0.4%	0.4%	-0.4%	0.1%
Poland	EP_TCZ	High	.	.	.	.	11%	11%	9.5%	10%	9.9%	8.2%	5.2%
		Base	11%	0.7%	4.4%	6.8%	11%	7.8%	4.8%	5.4%	5.4%	5.0%	5.2%
		Low	.	.	.	.	10%	4.4%	1.5%	2.5%	2.8%	1.6%	2.1%
Romania	LR_TCZ	High	.	.	.	.	17%	10%	10%	8.0%	8.6%	6.7%	6.5%
		Base	22%	4.8%	6.4%	8.6%	17%	6.1%	4.8%	5.4%	6.2%	5.4%	4.9%
		Low	.	.	.	.	16%	3.6%	2.1%	2.7%	2.6%	2.3%	3.9%
Slovakia	LZ_TCZ	High	.	.	.	.	11%	11%	10%	12%	10%	12%	9.2%
		Base	-12%	-1.7%	-3.4%	13%	11%	6.4%	5.7%	5.9%	8.7%	5.2%	5.2%
		Low	.	.	.	.	9.6%	2.8%	2.1%	3.3%	3.4%	2.7%	3.4%
Slovenia	LJ_TCZ	High	.	.	.	.	-1.6%	13%	7.2%	6.8%	6.5%	7.7%	5.0%
		Base	-11%	1.4%	-1.7%	8.0%	-2.2%	11%	4.1%	4.2%	4.2%	4.5%	4.4%
		Low	.	.	.	.	-2.7%	0.9%	2.0%	7.9%	2.9%	1.1%	2.5%
Spain	LE_TCZ	High	.	.	.	.	7.8%	1.9%	5.5%	3.7%	5.1%	3.9%	2.0%
		Base	-6.6%	-3.5%	-7.0%	4.5%	7.4%	1.5%	0.8%	2.5%	3.3%	2.6%	1.0%
		Low	.	.	.	.	7.0%	-0.7%	0.6%	1.1%	0.5%	0.9%	0.1%
Sweden	ES_TCZ_A	High	.	.	.	.	4.0%	3.8%	4.0%	4.6%	3.9%	3.5%	4.5%
		Base	-0.2%	5.7%	5.5%	1.1%	4.0%	2.0%	1.7%	2.2%	2.4%	2.4%	1.5%
		Low	.	.	.	.	3.7%	-0.1%	0.1%	0.4%	1.0%	0.2%	0.6%
Switzerland	LS_TCZ	High	.	.	.	.	3.3%	4.3%	5.1%	4.7%	5.3%	4.1%	3.2%
		Base	1.2%	-0.9%	4.0%	1.7%	2.9%	1.9%	3.1%	3.1%	2.7%	2.1%	3.0%
		Low	.	.	.	.	2.6%	-0.0%	1.0%	1.2%	1.1%	0.6%	1.2%

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Growth in Terminal Navigation Service Units														
Annual Growth			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
UK	EG_TCZ_B	**High**	.	.	.	.	5.4%	3.8%	3.5%	3.0%	5.6%	4.6%	3.5%
		Base	-0.1%	2.5%	3.3%	3.9%	5.2%	2.4%	2.3%	2.1%	2.6%	2.4%	2.2%
		Low	.	.	.	.	5.0%	1.3%	0.8%	1.1%	1.4%	1.1%	1.3%
UK	EG_TCZ_C[13]	**High**	.	.	.	.	3.7%	3.4%	3.2%	2.7%	5.8%	4.5%	3.3%
		Base	-0.4%	2.1%	3.9%	3.5%	3.5%	2.2%	2.3%	2.1%	2.5%	2.1%	1.7%
		Low	.	.	.	.	3.4%	1.4%	0.9%	1.3%	1.4%	1.1%	1.3%

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[13] The UK has defined the UK _TCZ_C as a separate terminal charging zone, which covers the London Approach Service (LAS) for the five London airports (Heathrow, Gatwick, Stansted, Luton and London City). These five airports are also part of the nine airports forming the UK_TCZ_B.

ANNEX 10 REFERENCES

[1] *EUROCONTROL Seven-Year IFR Flight Movements and Service Units Forecast: 2016-2022*, STATFOR Document 579, February 2016.

[2] STATFOR Interactive Dashboard at www.eurocontrol.int/statfor/sid

[3] *Methods of the STATFOR Seven-Year Forecast*, STATFOR Document 518, v0.8, July 2016

[4] *GDP Elasticities for the STATFOR Forecast,* STATFOR Document 499, Draft v0.4, November 2013.

[5] *High-Speed Train Model Recalibration*, STATFOR Document 551, Draft v0.1, November 2014.

[6] EUROCONTROL Intermediate Two-Year Service Units Forecast: 2016-2017, STATFOR Document 592, May 2016.