EUROCONTROL
Short-Term Forecast

December 2011

Flight Movements
2011-2013

EUROCONTROL

EUROCONTROL Short-Term Forecast, December 2011. IFR Flight Movements 2011-2013.

Summary: **The recent traffic slow-down and weaker economic situation have led to a revision downwards of the forecast, with further downward revision likely next time.**

2011 is forecast to see 3.3% (±0.1%) growth in flights across Europe, a downwards revision on the last publication. Although Tunisia has recovered faster than expected, traffic to Egypt and over Libya are still severely disrupted. On the top of this, the recent economic slow-down as well as Winter flight schedule have led to a deceleration of the flight growth, including declines for some States.

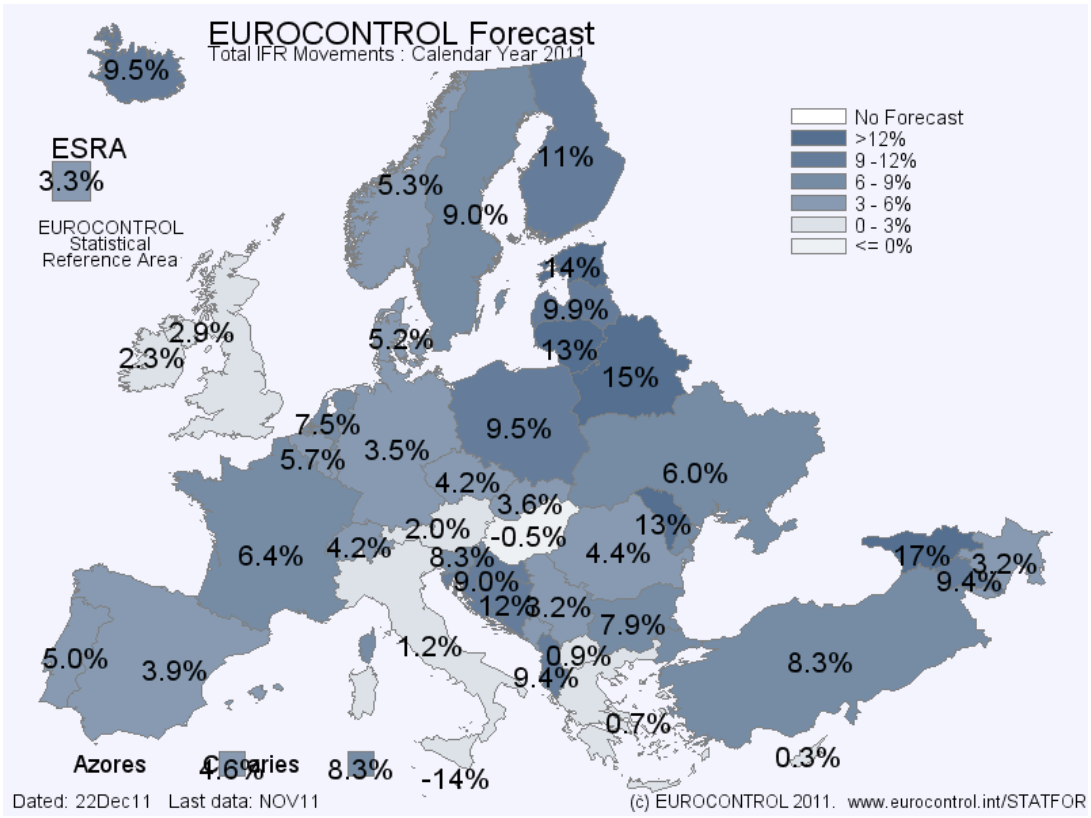
As a result, 2012 will see significantly fewer flights than expected in the September 2011 forecast (now 1.6% growth, ±1.5%) despite the leap year effect as well as major sporting events.

2013 is forecast to see 3.5% (±1%) growth in flights across Europe, showing some signs of recovery from the low forecast in 2012.

This forecast uses data to November 2011. The scenario chosen for the speed of traffic restoration in North Africa is just one out of many and the recovery could come earlier or later, especially as the political situation remains uncertain in the region and also likely to affect other countries in the region. Apart from this, there remain downside risks to the forecast: oil prices, and especially economic fragility in most European countries.

The forecast will next be updated in February 2012, together with the medium-term forecast, and on balance of these risks, we expect a further downward revision then.

Figure 1. Growth of IFR movements in 2011 (Uncertainty is typically ± 0.8 percentage points.)



1. INTRODUCTION

The Statistics and Forecast Service (STATFOR) of EUROCONTROL produces a short-term (two years) forecast of IFR flights in Europe. This is published four times per year: independently in May and December, and as an integral part of the medium-term forecast in February and September.

This update of the flight forecast uses the improved method that was first put into operation in February 2009 and enhanced in February 2010. This method is outlined in Annex B. For the current forecast, a number of adaptations according to the recent traffic evolution around the area were necessary to allow the local North African effects to be modeled.

Reporting of the forecast for this summary report remains focused on the main flows for each State, and for the EUROCONTROL Statistical Reference Area (ESRA08). The ESRA08[1] represents the whole of Europe. It is a large, stable subset of the Member States used for comparison purposes since 2009.

In the remainder of this document:

- Section 2 looks at what has changed since the last forecast, and what this says about trends in growth.
- Section 3 summarizes the forecast for 2011.
- Section 4 outlines the forecast for 2012 and 2013.

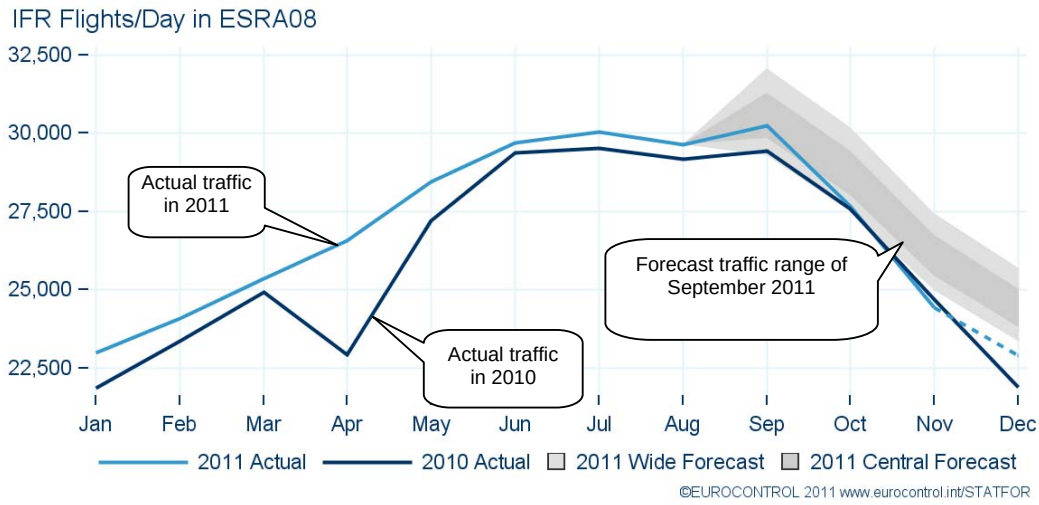
The next short-term forecast will be published at the end of February 2012 as part of the medium-term forecast update.

1 See www.eurocontrol.int/statfor/faq for map of ESRA08.

2. RECENT TRAFFIC TRENDS

The end of 2011 shows signs of weak traffic growth in Europe. For the last 4 months of the year, the underlying traffic growth trend for Europe was around 1%, below the low-end of the previous forecast as shown in Figure 2. The traffic in November 2011 decreased by 1% below November 2010 levels for the ESRA08. This evolution can be associated to the application of the winter timetable that arrived distinctly more chilly than expected, with several airlines making last minute adjustments as the weakness of forward bookings became clear and as the outlook for the economic situation in 2012 became more pessimistic.

Figure 2. Traffic in the ESRA08



The economic outlook is also cooling rapidly, Europe has revised its GDP forecasts down again: 2011 may end with just 0.5% growth, compared to 1.8% expected back in May. For 2012, we were expecting EU economic growth of 2% one year ago, now that is only 0.6% and further downward revisions are likely with some talk of clear decline. No recovery is expected before the second half of 2012.

Figure 3. Passenger load factors have remained at 2010 levels in 2011 while they are weakening below 2010 levels since the Summer in the Far-East, Australasia and North America (Source: AEA)

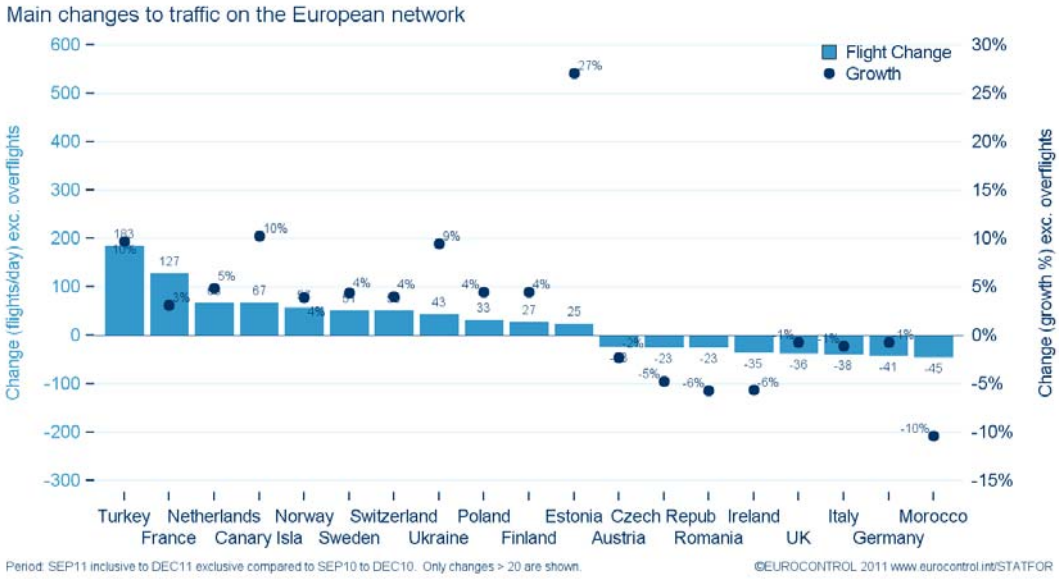
As for the weekly load factors, although they have overall stayed comparable to 2010 levels for the EU

cross-border traffic, as shown here in Figure 3, AEA reported declining load factors for traffic in the Far-East and Australasia and in North-America, showing an overall shrinking of demand during the period. IATA in its December 2011 report has also highlighted the weakening of premium travel, more evident in the October data. This does not strictly imply a reduction in business travel but many traditional premium class business users appear again to be down-grading to reduce costs in difficult times. This changing seat class mix will also undermine airlines yields, all the more as fuel prices have not fallen from Q3 levels (around 80 euros a barrel for the Brent, see Figure 4). This is likely further to constrain the plans of airlines in 2012.

Figure 4. Oil prices hikes put pressure on carriers' costs (Source: EIA, Eurostat, IATA, preliminary data for Dec).

As shown in Figure 5, the states which have added most flights to the European network between September and November 2011 have been Turkey, France and the Netherlands (with traffic growth respectively of 10%, 3% and 5%); for Turkey and the Netherlands, this continued a trend seen through the Summer. Elsewhere, there remains growth around the Baltic. Ukraine and the Canaries Islands have also continued to see growth in double figures, though this amounts to fewer flights for the network. On the other hand, Ireland, the UK, Italy and Germany have all lost traffic (-8% for Ireland, around -1% for the other 3 countries).

Figure 5. States contributing much in changing traffic flows in the European network in September-November 2011 period (threshold=|20| flight/Day).



But within this period, there has been a marked change with the new timetable. In geographical terms,

comparing growth either side of the timetable change on 30 October as shown in Figure 6, the deceleration was disproportionately large in Spain, Italy, Greece and Portugal, all of which saw falls in growth of 6-10% points, from slight growth at the end of the Summer into marked decline. It can be no coincidence that the economies of these States have been so much in the spotlight recently. Finland also saw a rapid deceleration, but started from a much stronger position so remains just growing.

Figure 6. Slower Growth in the first weeks of the Winter Schedule that during the least weeks of the Summer Schedule.

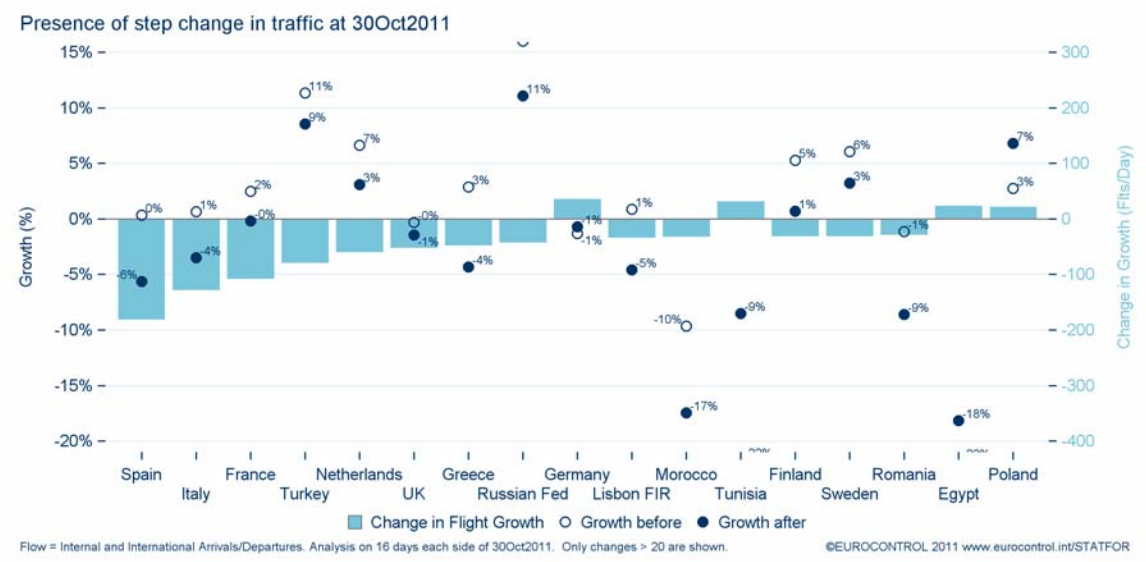


Figure 7 shows the growth per market segment since the beginning of August 2011 for Europe. Curiously November was the month charter finally ended its losing streak, managing – together with the traditional scheduled segment – just to match the November 2010 traffic. The other 3 segments were around 3.5% below 2010. The big change here is for the low-cost carriers, for which the schedule change at the beginning of November is clearly visible with a growth drop. In past years its double-digit growth rates meant it added more flights than the much larger traditional-scheduled segment. 2011 had already seen a significant change, with low-cost and traditional growing at about the same rate. For low-cost now to contract while the traditional segment is steady is almost unprecedented, but looks likely to continue at least for the Winter.

Figure 7. Growth per market segment since the beginning of August 2011. High growth at the beginning of December results from the compensation from the loss last year because of bad weather.

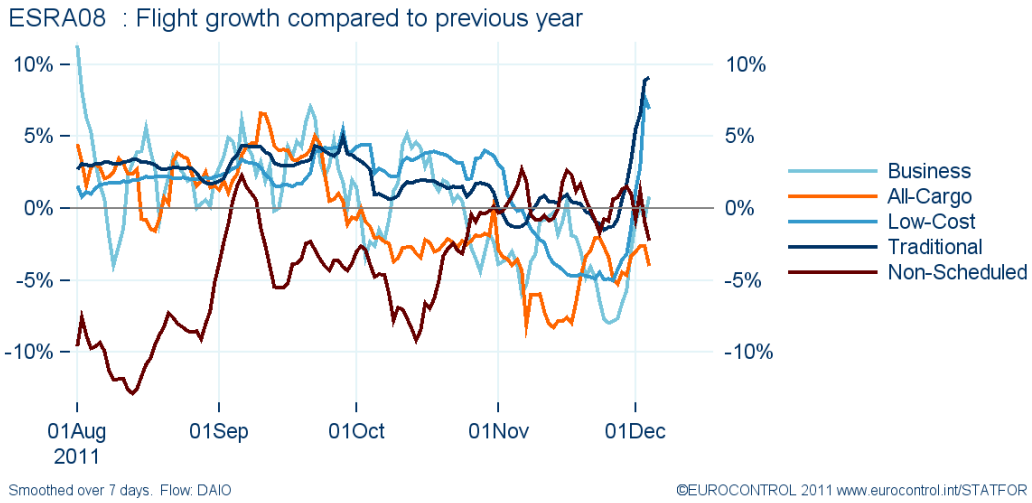


Figure 8 shows traffic growth to the top 6 destinations outside Europe. The United States bringing more than 400 departures per day to the network in April has seen its contribution shrink since this summer to drop recently even lower than that of 2010 . In general, the traffic growth to these top destinations has significantly slowed down since September. The recovery of the traffic to Egypt has also recently stalled in view of the recent troubles preceding the legislative elections of the 28th November and traffic to Morocco has also started to drop.

Figure 8. Main changes in flows from outside Europe in the last three months.

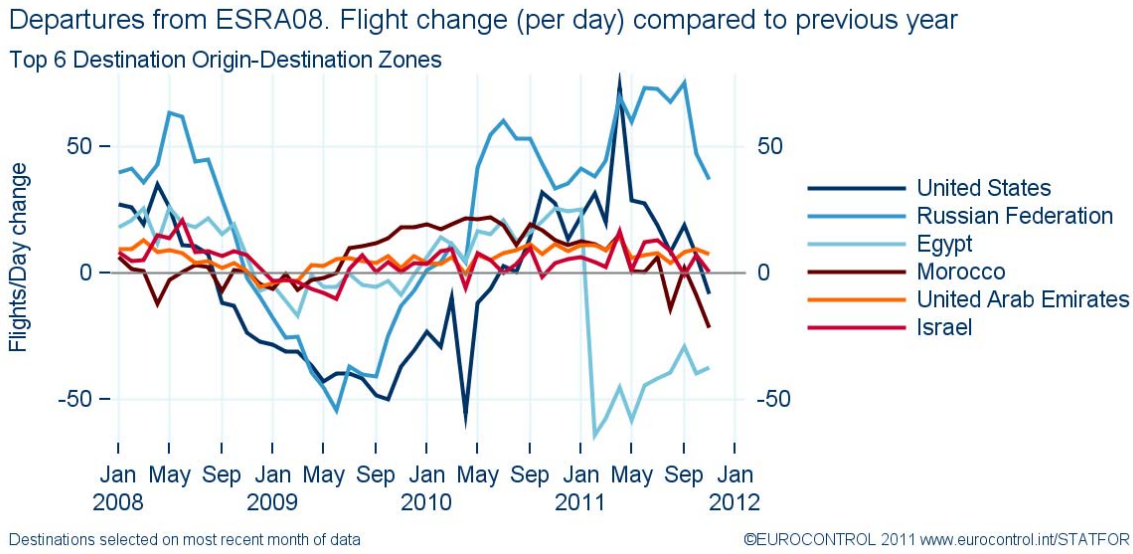
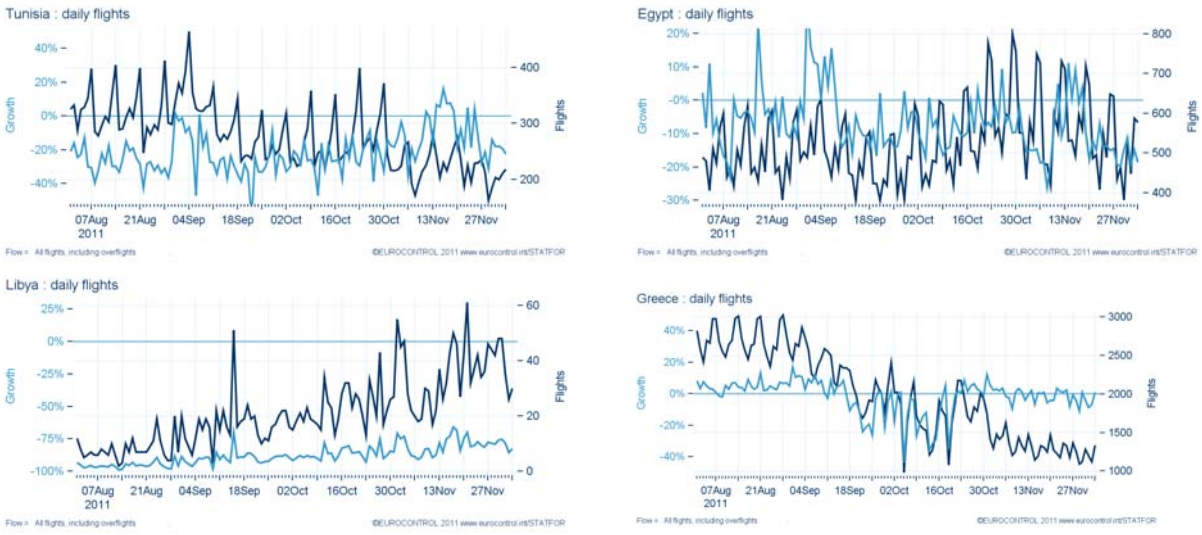


Figure 9 shows additional information about the recent traffic trends from Europe to Tunisia, Egypt and Libya that still have an impact on the overflights of many South European countries. It also provides information about the traffic evolution of Greece whose air-traffic has been severally impacted by social tension in September and October, which generated re-routings of overflights in the region transferring flights from Croatia, Bosnia-Herzegovina, Serbia-Montenegro, FYROM, Albania and Greece further East, towards an axis Hungary, Romania, Bulgaria and Turkey, bringing some sharp but temporary growth there.

Tunisia continues its recovery and finished in November 2011 around 13% below its November 2010 levels. Egypt also operates at around 12% below the same levels last year. Civil traffic over Libya is still halted and no date for its re-opening to overflights has been published yet. Greece has between mid September and mid October on some days lost more than 30% of its total traffic, this averaging over October to about 6% of its arrivals and departures.

Figure 9. Disruptions in North-Africa burden ESRA's traffic since January. Greece also saw disrupted traffic in September and October.



3. THE FORECAST FOR 2011

Traffic to and from Egypt has also been recovering more slowly than expected, even stepping backwards following the recent instability around the legislative elections there. On the other hand, for Tunisia this recovery has been faster than planned in the September 2011 forecast. The no-fly zone over Libya is still active despite a minor number of flights can cross it and flights to/from Libya are operated again. Building on the previous scenario that has been used in the September 2011 forecast, we have based this forecast on a gradual recovery from today's levels until October 2012 of arrivals and departures from/to Tunisia and Libya, slightly delayed for Egypt with a full return to normal in December 2012. For the no-fly zone over the Libyan territory, we have assumed it to stay in place until the end of February 2012 whereas the recovery to normal conditions for the Libyan overflights would be happening much faster than for the traffic to and from Tunisia and Egypt, i.e. from June 2012.

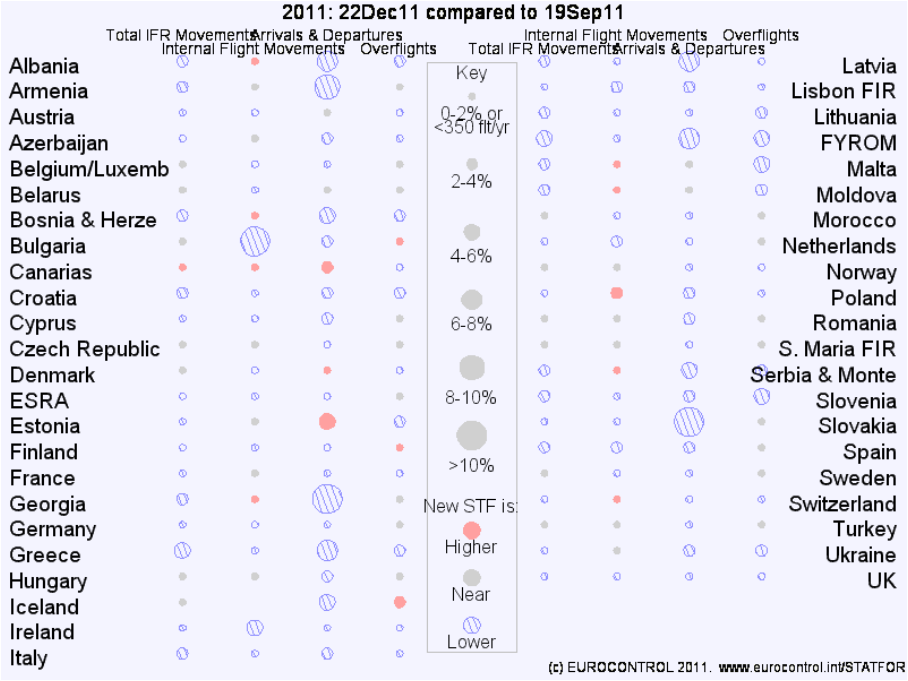
As a result of this and the changes discussed in the previous section, the December 2011 forecast has been revised down again to end up close to the May 2011 forecast for 2011, which had been revised upwards in September following a weak, but stronger-than-forecast Summer performance. The number of flights in European region in 2011 is likely to end around 3.3% above 2010 with an uncertainty of about of ±0.1%, a small uncertainty but linked to the fact that December is the only month left to be forecast in 2011. If the expected value for December does not appear to be lower compared to December 2010 values, it is because of the impact of bad weather in December 2010 that has generated cancellations.

Details per state and region are provided in Annex A as well as in the map in Figure 1.

Figure 10 compares the new short-term forecast for 2011 as a whole with the one published in September 2011. The numbers on the chart highlight the *differences* between the new forecast and the one made in September 2011, in terms of percentage point *change in growth* of IFR movements forecast for 2011. So for example, the forecast for Albania total flights has reduced by between 2 and 4 percentage points, which takes it below the narrow forecast range, so a medium blue circle is shown.

For the largest regions (France, Germany, UK), Figure 10 shows that all of the revisions are either downwards by less than 2% compared to the September 2011 forecast (blue) or within the forecast range (grey). In general, most of the revisions are downwards (blue) rather than upwards (red). At that time of the year, the revisions have remained limited as more actual data became available for 2011. However, total traffic for Greece has been revised downwards by almost 5%, from 5.5% to 0.7% as the country has been particularly affected by strikes during the last few months, impacting in particular its overflight and internal traffic in September and October. Note that for small flows, percentage changes can be large, which is why many of the largest circles are in the 'internal' column or in the "Arrivals and Departures" of small countries (e.g. Albania, Georgia).

Figure 10. Difference between the new forecast and the *previous* Short-Term Forecast, in terms of total growth in 2011.



4. THE OUTLOOK FOR 2012 AND 2013

The 25-month span of the forecast extends to the end of 2013. Figure 11 shows the forecast for the whole of 2012, which is for 1.6% growth across Europe (±1.5%, although this probably understates the downside risks, see below). It has been revised significantly downwards mainly in view of the recent evolution following the change of schedule and the current economic trends. Figure 12 also shows the range of the forecast for 2012 in the ESRA08 area compared to 2010 and 2011 traffic levels.

There are several factors included in the 2012 forecast, amongst which major sports events, leap-year effect. The uncertainty around these forecast values is already quite high, but considering the current uncertainty around the economic situation and the recovery of traffic to and from North Africa, the true range of this forecast is wider. The risks are discussed below. On balance, the downside risks appear rather stronger so we expect a further downward revision in February, based on updated economic forecasts and more information on the weak Winter schedule at that time.

Figure 11. Forecast for 2012. (Uncertainty is typically ±1.5 percentage points)

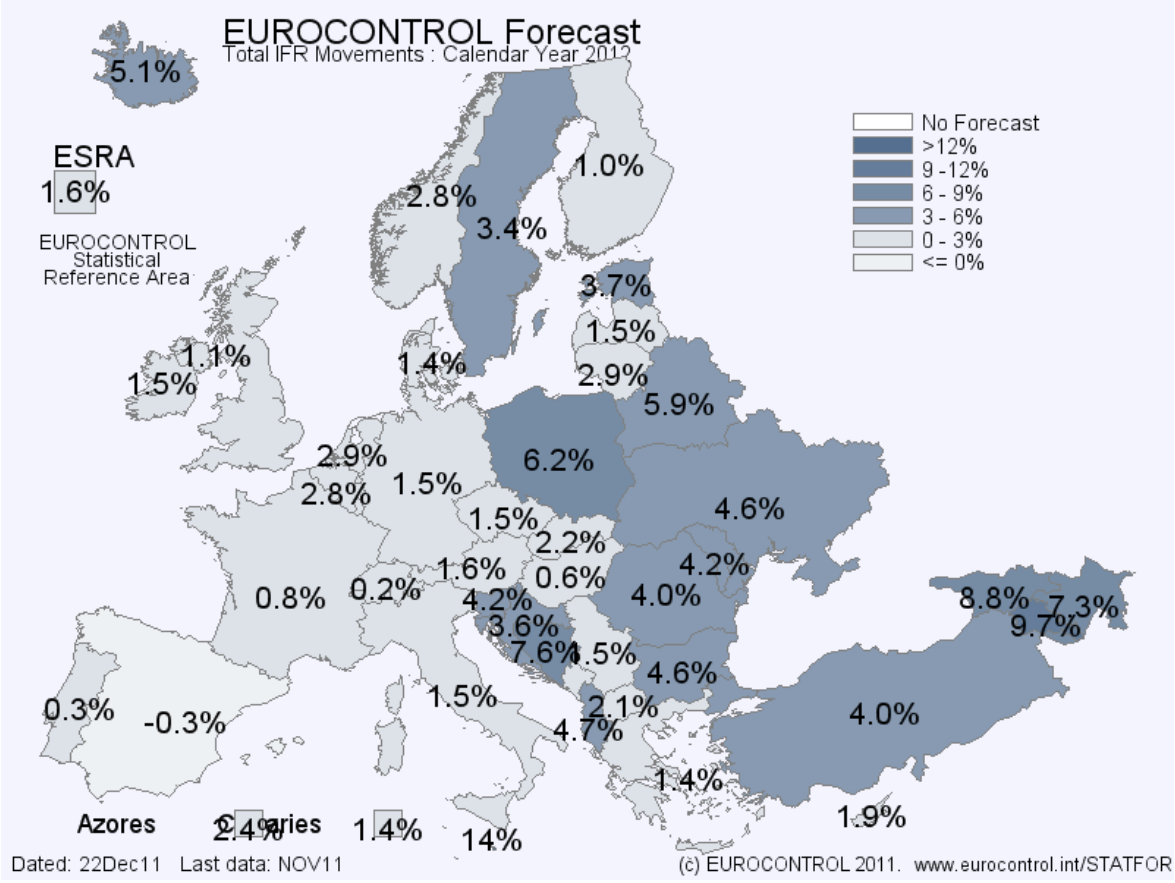
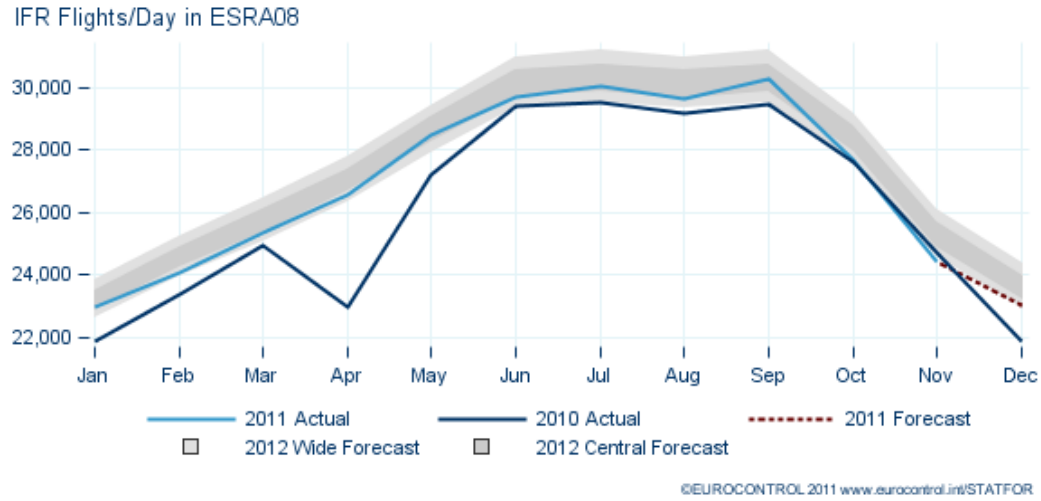


Figure 12. Traffic growth for the ESRA08 in 2012

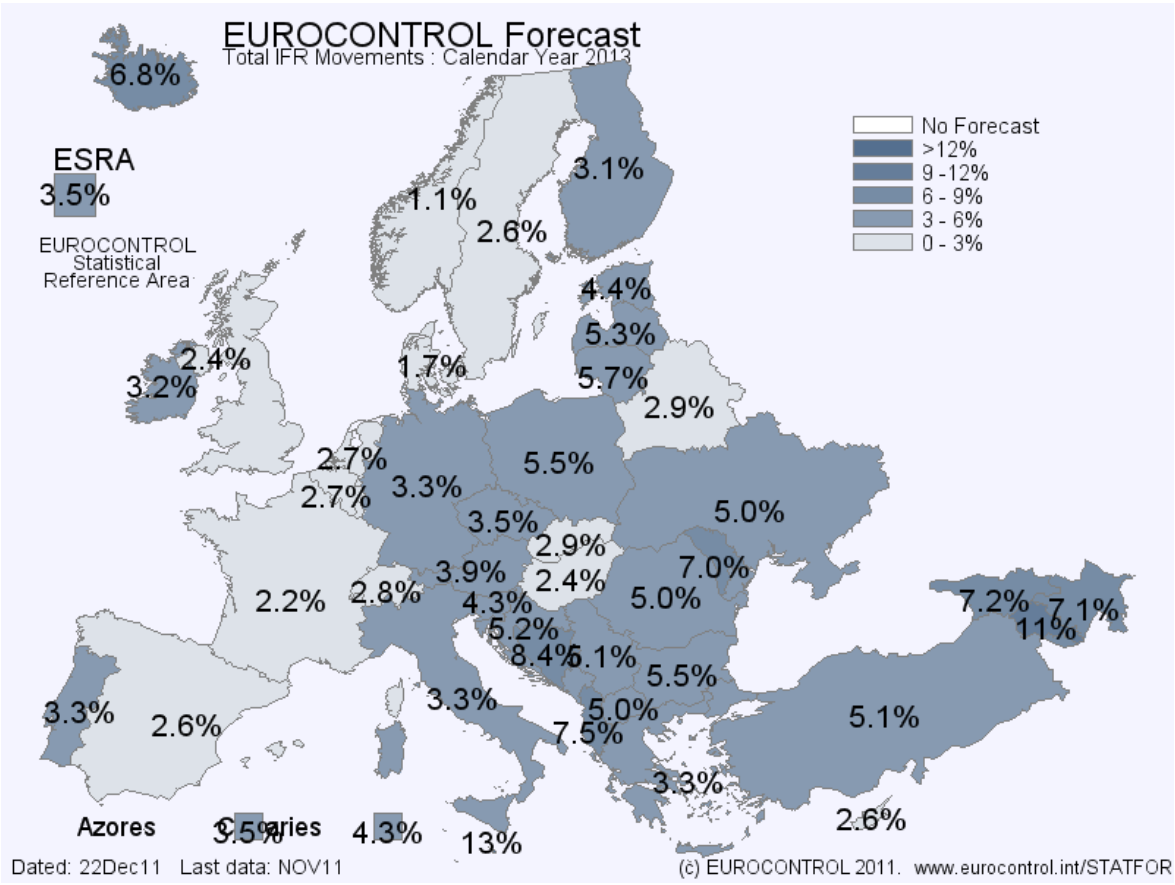


Risks to the forecast:

- The short-term forecast is influenced by recent trends in growth. Although these are obviously going downwards, the sharp downturn with the change of schedule has only happened recently (i.e. we only have a month of data available since it happened), which means the new trend is not fully clear to the forecast system.
- Economic forecasters continue to revise downwards their views on economic growth in 2012. This forecast is still using the medium-term flight forecast published in October, that in turn used economic forecasts from last Summer. Undoubtedly the economic data will be weaker when we update them in February 2012: Oxford Economics forecast of November significantly reduced GDP growth for the EU27 in 2012 to 0.6%, from 1.7% forecast in August.
- The scenario developed to adjust for traffic disruptions in North Africa implies a gradual and continuous restoration of traffic through to summer 2012 and the re-opening at some point of the Libyan overflight routes. Up to now, this scenario has been revised several times throughout 2011 to adapt to the latest trends of recovery in the concerned countries. Furthermore, over 2011 it was not possible to anticipate accurately the duration of the Libyan conflict nor to predict occurrences of more political instability in Egypt, as it happened recently. So far, no official date has been published for the Libyan overflight routes to be re-opened as Libyan air-traffic control still needs to be restored. Overall, the situation in the region remains uncertain and the only scenario we have been able to model and include within the forecast might still be revised upwards or downwards.
- The current changing seat class mix combined with the start of the Emissions Trading Scheme, which kicks off in January 2012 (the influence of its effect are estimated through the link to the medium-term forecast), and changes in the taxation of aircraft might further affect the strategies of the airlines in 2012.
- For technical reasons we have only been able to use OAG data of November and not of latest schedule update, which might affect our results.

Figure 13 shows the forecast for the whole of 2013, which is for 3.5% growth across Europe (±1%) with some signs of recovery from the low figures expected for 2012.

Figure 13. Forecast for 2013. (Uncertainty is typically ± 1 percentage points)



A. FORECAST FOR 2011, 2012 AND 2013

Note that, from the February 2011 forecast, the mid range (25th-75th percentile) of the short-term forecast are aligned with the low-high scenarios in the medium-term forecast.

Table 1. Summary of forecast total IFR flight growth per traffic zone.

		2007	2008	2009	2010	2011	2012	2013	AAGR 2013/ 2010
Albania	H	.	.	.	.	9.6%	6.9%	8.3%	**8.2%**
	B	19%	4.5%	8.9%	12%	9.4%	4.7%	7.5%	**7.2%**
	L	.	.	.	.	9.3%	2.9%	7.3%	**6.5%**
Armenia	H	.	.	.	.	9.4%	12%	12%	**11.0%**
	B	11%	8.0%	-6.7%	9.3%	9.4%	9.7%	11%	**10.0%**
	L	.	.	.	.	9.3%	7.9%	10%	**9.2%**
Austria	H	.	.	.	.	2.1%	3.5%	5.1%	**3.5%**
	B	8.1%	2.0%	-7.6%	2.2%	2.0%	1.6%	3.9%	**2.5%**
	L	.	.	.	.	1.9%	0.2%	3.5%	**1.9%**
Azerbaijan	H	.	.	.	.	3.3%	9.1%	8.2%	**6.8%**
	B	4.3%	13%	0.5%	11%	3.2%	7.3%	7.1%	**5.9%**
	L	.	.	.	.	3.2%	5.8%	6.5%	**5.2%**
Belarus	H	.	.	.	.	15%	8.0%	4.2%	**8.9%**
	B	18%	16%	-8.6%	7.7%	15%	5.9%	2.9%	**7.7%**
	L	.	.	.	.	14%	4.5%	2.3%	**7.0%**
Belgium/Luxembourg	H	.	.	.	.	5.8%	4.3%	3.4%	**4.5%**
	B	4.2%	0.7%	-7.9%	1.5%	5.7%	2.8%	2.7%	**3.7%**
	L	.	.	.	.	5.6%	1.6%	2.4%	**3.2%**
Bosnia-Herzegovina	H	.	.	.	.	12%	9.9%	9.5%	**10.3%**
	B	19%	8.5%	3.1%	11%	12%	7.6%	8.4%	**9.2%**
	L	.	.	.	.	11%	5.9%	7.9%	**8.4%**
Bulgaria	H	.	.	.	.	8.0%	6.6%	6.7%	**7.1%**
	B	11%	7.7%	-0.2%	5.6%	7.9%	4.6%	5.5%	**6.0%**
	L	.	.	.	.	7.8%	3.1%	5.0%	**5.3%**
Canary Islands	H	.	.	.	.	8.4%	3.2%	5.5%	**5.7%**
	B	1.7%	-0.2%	-13%	3.2%	8.3%	1.4%	4.3%	**4.6%**
	L	.	.	.	.	8.2%	0.2%	3.6%	**4.0%**
Croatia	H	.	.	.	.	9.1%	5.8%	6.4%	**7.1%**
	B	17%	6.0%	0.1%	8.7%	9.0%	3.6%	5.2%	**5.9%**
	L	.	.	.	.	8.9%	1.9%	4.8%	**5.2%**
Cyprus	H	.	.	.	.	0.5%	4.4%	3.5%	**2.8%**
	B	12%	12%	-1.7%	6.4%	0.3%	1.9%	2.6%	**1.6%**
	L	.	.	.	.	0.1%	-0.2%	2.1%	**0.7%**
Czech Republic	H	.	.	.	.	4.3%	3.5%	4.7%	**4.2%**
	B	5.6%	5.5%	-5.0%	3.2%	4.2%	1.5%	3.5%	**3.1%**
	L	.	.	.	.	4.1%	0.2%	3.2%	**2.5%**
Denmark	H	.	.	.	.	5.3%	2.7%	2.4%	**3.5%**
	B	4.8%	-0.3%	-8.5%	3.3%	5.2%	1.4%	1.7%	**2.7%**
	L	.	.	.	.	5.1%	0.3%	1.4%	**2.3%**
Estonia	H	.	.	.	.	14%	5.5%	5.4%	**8.4%**
	B	12%	13%	-12%	2.1%	14%	3.7%	4.4%	**7.4%**
	L	.	.	.	.	14%	2.4%	4.1%	**6.8%**

		2007	2008	2009	2010	2011	2012	2013	AAGR 2013/ 2010
FYROM	H	.	.	.	.	1.0%	4.5%	6.1%	**3.9%**
	B	3.9%	2.0%	-0.1%	-0.1%	0.9%	2.1%	5.0%	**2.6%**
	L	.	.	.	.	0.8%	0.2%	4.6%	**1.9%**
Finland	H	.	.	.	.	11%	2.4%	3.9%	**5.5%**
	B	-0.3%	6.3%	-7.7%	0.6%	11%	1.0%	3.1%	**4.8%**
	L	.	.	.	.	10%	-0.1%	2.9%	**4.3%**
France	H	.	.	.	.	6.5%	2.3%	3.1%	**4.0%**
	B	6.0%	-0.2%	-7.3%	-0.2%	6.4%	0.8%	2.2%	**3.1%**
	L	.	.	.	.	6.3%	-0.4%	1.7%	**2.5%**
Georgia	H	.	.	.	.	18%	11%	8.3%	**12.2%**
	B	9.7%	-0.0%	-3.6%	22%	17%	8.8%	7.2%	**11.1%**
	L	.	.	.	.	17%	7.1%	6.7%	**10.3%**
Germany	H	.	.	.	.	3.6%	3.2%	4.2%	**3.7%**
	B	4.6%	1.4%	-7.0%	1.7%	3.5%	1.5%	3.3%	**2.8%**
	L	.	.	.	.	3.4%	0.3%	3.0%	**2.2%**
Greece	H	.	.	.	.	0.8%	3.4%	4.2%	**2.8%**
	B	9.9%	3.4%	-0.8%	2.6%	0.7%	1.4%	3.3%	**1.8%**
	L	.	.	.	.	0.6%	-0.2%	3.0%	**1.1%**
Hungary	H	.	.	.	.	-0.4%	2.6%	3.6%	**1.9%**
	B	1.8%	1.1%	-2.3%	2.4%	-0.5%	0.6%	2.4%	**0.8%**
	L	.	.	.	.	-0.6%	-0.8%	2.0%	**0.2%**
Iceland	H	.	.	.	.	9.6%	6.7%	7.7%	**8.0%**
	B	5.7%	4.2%	-7.8%	0.6%	9.5%	5.1%	6.8%	**7.1%**
	L	.	.	.	.	9.4%	3.7%	6.5%	**6.5%**
Ireland	H	.	.	.	.	2.4%	3.0%	4.4%	**3.3%**
	B	5.9%	0.5%	-12%	-3.1%	2.3%	1.5%	3.2%	**2.3%**
	L	.	.	.	.	2.3%	0.3%	2.9%	**1.8%**
Italy	H	.	.	.	.	1.2%	3.2%	4.6%	**3.0%**
	B	8.4%	-2.4%	-5.1%	3.9%	1.2%	1.5%	3.3%	**2.0%**
	L	.	.	.	.	1.1%	0.0%	2.6%	**1.2%**
Latvia	H	.	.	.	.	10%	3.3%	6.5%	**6.6%**
	B	15%	11%	-8.4%	4.0%	9.9%	1.5%	5.3%	**5.5%**
	L	.	.	.	.	9.8%	0.1%	5.0%	**4.9%**
Lisbon FIR	H	.	.	.	.	5.1%	1.9%	4.3%	**3.7%**
	B	6.3%	2.7%	-7.2%	5.6%	5.0%	0.3%	3.3%	**2.8%**
	L	.	.	.	.	4.9%	-1.0%	2.2%	**2.0%**
Lithuania	H	.	.	.	.	13%	4.7%	6.8%	**8.2%**
	B	13%	12%	-12%	7.3%	13%	2.9%	5.7%	**7.2%**
	L	.	.	.	.	13%	1.6%	5.3%	**6.6%**
Malta	H	.	.	.	.	-14%	16%	14%	**4.8%**
	B	8.1%	3.4%	0.7%	12%	-14%	14%	13%	**3.6%**
	L	.	.	.	.	-14%	11%	13%	**2.8%**
Moldova	H	.	.	.	.	13%	6.3%	8.0%	**9.0%**
	B	25%	18%	6.7%	24%	13%	4.2%	7.0%	**7.9%**
	L	.	.	.	.	12%	2.6%	6.4%	**7.1%**

		2007	2008	2009	2010	2011	2012	2013	AAGR 2013/ 2010
Morocco[2]	H	.	.	.	.	4.3%	2.4%	6.5%	**4.4%**
	B	6.6%	2.5%	-5.8%	8.6%	4.2%	1.0%	5.8%	**3.6%**
	L	.	.	.	.	4.1%	-0.3%	5.3%	**3.0%**
Netherlands	H	.	.	.	.	7.6%	4.2%	3.3%	**5.0%**
	B	4.9%	-1.6%	-8.6%	1.7%	7.5%	2.9%	2.7%	**4.3%**
	L	.	.	.	.	7.4%	1.7%	2.5%	**3.8%**
Norway	H	.	.	.	.	5.4%	4.0%	2.1%	**3.8%**
	B	4.5%	2.6%	-4.4%	2.2%	5.3%	2.8%	1.1%	**3.0%**
	L	.	.	.	.	5.3%	1.8%	0.9%	**2.6%**
Poland	H	.	.	.	.	9.6%	8.1%	6.5%	**8.0%**
	B	13%	10%	-7.6%	5.8%	9.5%	6.2%	5.5%	**7.0%**
	L	.	.	.	.	9.4%	4.9%	5.1%	**6.4%**
Romania	H	.	.	.	.	4.5%	6.1%	6.5%	**5.7%**
	B	4.0%	2.7%	-2.3%	8.2%	4.4%	4.0%	5.0%	**4.5%**
	L	.	.	.	.	4.3%	2.5%	4.4%	**3.7%**
Santa Maria FIR	H	.	.	.	.	4.7%	4.2%	4.6%	**4.5%**
	B	1.7%	6.5%	-2.6%	4.5%	4.6%	2.4%	3.5%	**3.5%**
	L	.	.	.	.	4.5%	1.0%	3.0%	**2.8%**
Serbia&Montenegro	H	.	.	.	.	3.3%	3.6%	6.2%	**4.3%**
	B	16%	8.6%	3.3%	5.9%	3.2%	1.5%	5.1%	**3.2%**
	L	.	.	.	.	3.1%	-0.1%	4.7%	**2.5%**
Slovakia	H	.	.	.	.	3.7%	4.2%	4.0%	**3.9%**
	B	-1.6%	6.4%	-2.4%	9.9%	3.6%	2.2%	2.9%	**2.9%**
	L	.	.	.	.	3.5%	0.7%	2.5%	**2.2%**
Slovenia	H	.	.	.	.	8.4%	6.3%	5.4%	**6.7%**
	B	15%	6.8%	-4.2%	4.8%	8.3%	4.2%	4.3%	**5.6%**
	L	.	.	.	.	8.2%	2.5%	3.9%	**4.8%**
Spain	H	.	.	.	.	4.0%	1.4%	3.7%	**3.0%**
	B	8.4%	-1.8%	-9.5%	1.8%	3.9%	-0.3%	2.6%	**2.0%**
	L	.	.	.	.	3.8%	-1.7%	1.7%	**1.2%**
Sweden	H	.	.	.	.	9.0%	4.8%	3.3%	**5.7%**
	B	2.8%	3.9%	-11%	1.5%	9.0%	3.4%	2.6%	**5.0%**
	L	.	.	.	.	8.9%	2.4%	2.4%	**4.5%**
Switzerland	H	.	.	.	.	4.3%	1.9%	3.7%	**3.3%**
	B	5.9%	0.3%	-7.1%	0.7%	4.2%	0.2%	2.8%	**2.4%**
	L	.	.	.	.	4.1%	-1.1%	2.4%	**1.8%**
Turkey	H	.	.	.	.	8.4%	5.8%	6.4%	**6.9%**
	B	9.2%	8.6%	4.2%	13%	8.3%	4.0%	5.1%	**5.8%**
	L	.	.	.	.	8.2%	2.7%	4.6%	**5.1%**
Ukraine	H	.	.	.	.	6.1%	6.3%	6.0%	**6.2%**
	B	8.2%	8.7%	-6.9%	14%	6.0%	4.6%	5.0%	**5.2%**
	L	.	.	.	.	5.9%	3.3%	4.5%	**4.6%**
UK	H	.	.	.	.	3.0%	2.3%	3.2%	**2.8%**
	B	3.5%	-1.4%	-9.4%	-4.3%	2.9%	1.1%	2.4%	**2.1%**

[2] The forecast for Morocco shall be treated with more than for countries for which we have better understanding of the local markets and longer experience in forecasting. Traffic counts used here are also those recorded in the CFMU system of Eurocontrol – some internal flights may be missing, flights departing from Ceuta-Melilla are considered as Moroccan overflights. Work is in progress to clarify the data.

		2007	2008	2009	2010	2011	2012	2013	AAGR 2013/ 2010
	L	.	.	.	.	2.8%	0.0%	2.1%	**1.6%**
ESRA02	H	.	.	.	.	3.3%	3.3%	4.6%	**3.7%**
	B	5.1%	0.4%	-6.6%	0.7%	3.2%	1.8%	3.6%	**2.8%**
	L	.	.	.	.	3.1%	0.6%	3.1%	**2.2%**
EU27	H	.	.	.	.	3.0%	3.1%	4.6%	**3.6%**
	B	5.6%	0.3%	-7.2%	0.2%	2.9%	1.6%	3.6%	**2.7%**
	L	.	.	.	.	2.8%	0.3%	3.1%	**2.1%**
ESRA08	H	.	.	.	.	3.3%	3.2%	4.5%	**3.7%**
	B	5.0%	0.4%	-6.6%	0.8%	3.3%	1.6%	3.5%	**2.8%**
	L	.	.	.	.	3.2%	0.4%	3.1%	**2.2%**
SES	H	.	.	.	.	2.9%	3.2%	4.5%	**3.5%**
	B	4.9%	0.4%	-6.9%	0.2%	2.8%	1.6%	3.5%	**2.7%**
	L	.	.	.	.	2.7%	0.4%	3.1%	**2.1%**
Baltic	H	.	.	.	.	11%	5.5%	5.7%	**7.4%**
	B	.	.	-8.6%	5.5%	11%	3.7%	4.6%	**6.4%**
	L	.	.	.	.	11%	2.4%	4.3%	**5.8%**
Blue Med	H	.	.	.	.	1.0%	5.1%	6.4%	**4.1%**
	B	.	.	-3.7%	3.7%	0.9%	3.2%	5.3%	**3.2%**
	L	.	.	.	.	0.9%	1.7%	4.7%	**2.4%**
Danube	H	.	.	.	.	6.6%	5.5%	8.0%	**6.7%**
	B	.	.	-0.4%	6.7%	6.5%	3.5%	6.6%	**5.5%**
	L	.	.	.	.	6.4%	2.0%	6.1%	**4.8%**
FAB CE	H	.	.	.	.	4.5%	4.7%	6.3%	**5.2%**
	B	.	.	-5.1%	3.2%	4.4%	2.8%	5.2%	**4.1%**
	L	.	.	.	.	4.3%	1.4%	4.7%	**3.5%**
FAB EC	H	.	.	.	.	4.8%	3.0%	4.3%	**4.0%**
	B	.	.	-7.0%	0.5%	4.7%	1.5%	3.4%	**3.2%**
	L	.	.	.	.	4.7%	0.3%	3.1%	**2.7%**
NEFAB	H	.	.	.	.	7.6%	3.6%	3.3%	**4.8%**
	B	.	.	-8.0%	2.2%	7.5%	2.3%	2.5%	**4.1%**
	L	.	.	.	.	7.5%	1.2%	2.2%	**3.6%**
SW Portugal - Spai	H	.	.	.	.	4.3%	1.6%	4.5%	**3.4%**
	B	.	.	-9.3%	1.9%	4.2%	-0.2%	3.3%	**2.4%**
	L	.	.	.	.	4.1%	-1.6%	2.5%	**1.7%**
UK-Ireland	H	.	.	.	.	3.1%	2.5%	3.6%	**3.0%**
	B	.	.	-9.5%	-4.3%	3.0%	1.3%	2.9%	**2.4%**
	L	.	.	.	.	2.9%	0.1%	2.6%	**1.9%**
DK-SE	H	.	.	.	.	6.8%	3.9%	3.2%	**4.6%**
	B	.	.	-9.7%	2.4%	6.7%	2.6%	2.5%	**3.9%**
	L	.	.	.	.	6.7%	1.5%	2.2%	**3.5%**

B. NEW SHORT-TERM FORECAST METHOD

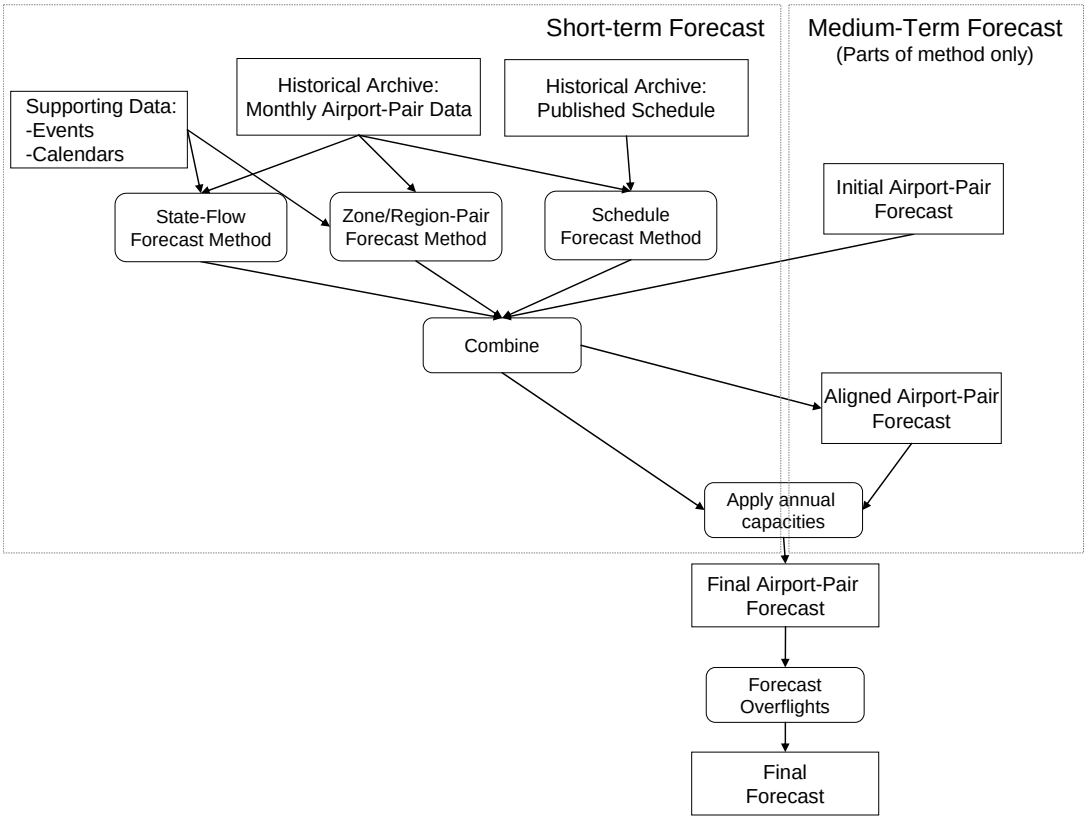
The new short-term forecast method combines inputs from several forecasts. Time-series modeling plays a large part. Final traffic is capped to match airport capacities.

The short-term forecast focuses on time-series modeling of traffic trends month-by-month. The final result is in terms of numbers of flights per month per pair of zones or regions: within Europe origin-destination zones are used (groups of airports often smaller than States); outside of Europe, large regions are used (groups of States). Four separate forecasts (with differing horizons and time and geographical resolution) contribute to the forecast as a whole (see Figure 14):

1. The State-flow forecast method is the previous method. It has been used for several years for published short-term forecasts. It forecasts each State separately, and within the State, separate forecasts for a few main 'flows': internals, overflights etc.
2. The zone or region-pair forecast is largely based on time-series methods for some 8000 series.
3. The schedule method uses data from published schedules for future months, and comparisons of previous schedules with actual flights.
4. The first years of the medium-term forecast also contribute a view of future traffic.

The combined forecast is then capped by airport capacities, using the same method as used in the medium- and long-term forecasts. Overflights are calculated using both the trends identified in the short-term forecast, and the base-year flight patterns used previously in the medium-term forecast. The result is a single forecast from which short- and medium-term views can be reported.

Figure 14. Summary of short-term forecast method.



The forecast method is continuously being refined to improve the quality of the outputs. The main change in the previous release was:

- Introduction of an economic indicator (quarterly GDP) used as an explanatory variable in the time-series forecast (item 2 in the list above).

For further information, please contact:

STATFOR, the EUROCONTROL Statistics and Forecast Service
statfor.info@eurocontrol.int
http://www.eurocontrol.int/statfor

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The Statistics and Forecasts Service (STATFOR) is ISO 9001:2008 certified