DRIVING THE DEVELOPMENT OF THE REGIONS THROUGH EUROPEAN TARGETS FOR PERFORMANCE OF EUROPE'S AIR TRANSPORT SYSTEM

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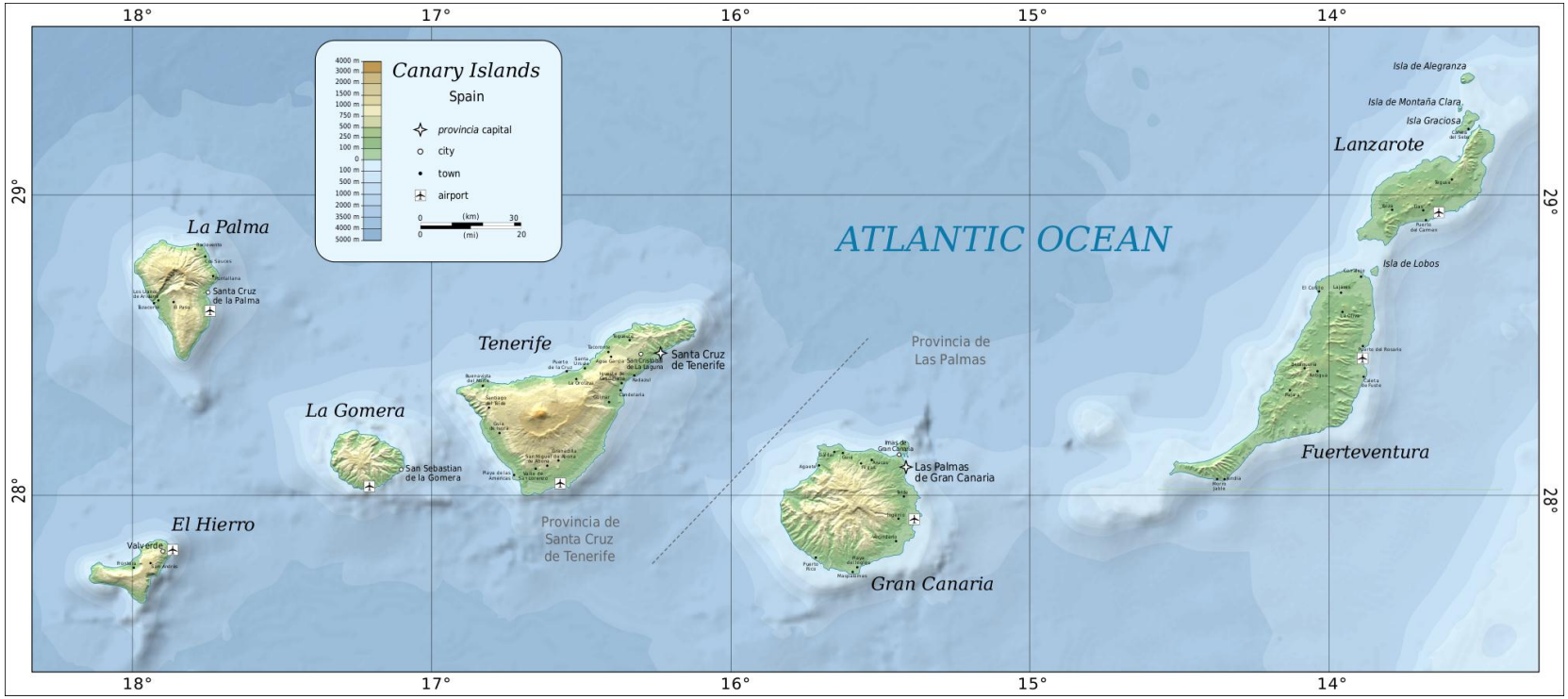
Regional Airline Conference 2012 – Regions at Risk: Protecting the future of European air transport and its regions

The Canary Islands: A test-bed for European regional air transport.



THE IMPORTANCE OF AIR TRANSPORT FOR EUROPE

Transport is fundamental to European economy and society. Mobility is vital for the internal market and for the quality of life of citizens.

Air transport contributes 370 b€ per annum to the EU economy, about 4% of GDP.

One airside job creates 5-7 non-airside related jobs.

90% of European citizens live in the regions.

European regional airlines operate 2m flights per annum and carry 87m passengers.

375 European airports are served only by regional airlines.

European airports provide a network of 150000 city pairs

THE IMPORTANCE OF AIR TRANSPORT FOR EUROPE

The future prosperity of our continent will depend on the ability of all of its regions to remain integrated in the world economy. Efficient transport is vital in making this happen.

A lot needs to be done to complete the internal market for transport, where considerable bottlenecks and other barriers remain.

Transeuropean transport networks have contributed to territorial cohesion. International ties and cooperation have been strengthened.

Public service obligations established by States are a significant contribution to economic and balanced development in the regions, especially in remote regions and islands.

Airports impact the success of local economies and play a mayor role in integration of European regions.

THE IMPORTANCE OF AIR TRANSPORT FOR EUROPE

No major change in transport will be possible without the support of an adequate network and more intelligence in using it. Transport infrastructure investments have a positive impact on economic growth, create wealth and jobs, and enhance trade, geographical accessibility and the mobility of people.

Congestion is a major concern and compromises accessibility. In addition, transport infrastructure is unequally developed in the eastern and western parts of the EU which need to be brought together.

The Single European Sky has been launched. New rules on working conditions and on passenger rights have been adopted. A lot has also been done to enhance transport's environmental performance.

European aviation safety is high but not the best in the world.

THE CAPACITY CRUNCH

In the coming years capacity will not be able to match demand and risks becoming the most constraining factor on air transport.

In 2003 ECAC-Eurocontrol predicted that in 2025 annual demand will have increased to 21m flights, growing by a factor of 2.5 compared to 2003.

Although European airports have a 60% potential capacity increase, only twice the volume of 2003 traffic can be accomodated in 2025.

17.6% of demand (3.7 flights per annum) cannot take place in 2025.

In 2025 more than 60 European airports will be congested, and the top-20 airports will be saturated at least 8-10 hours per day.

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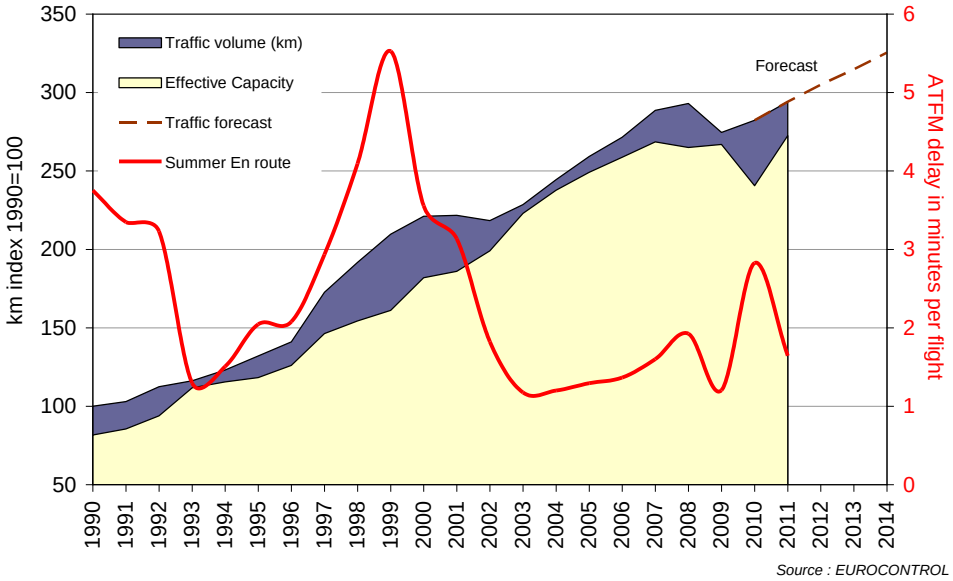
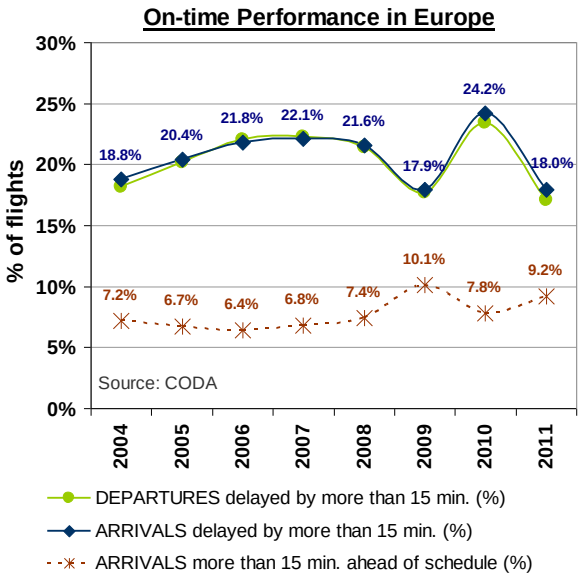
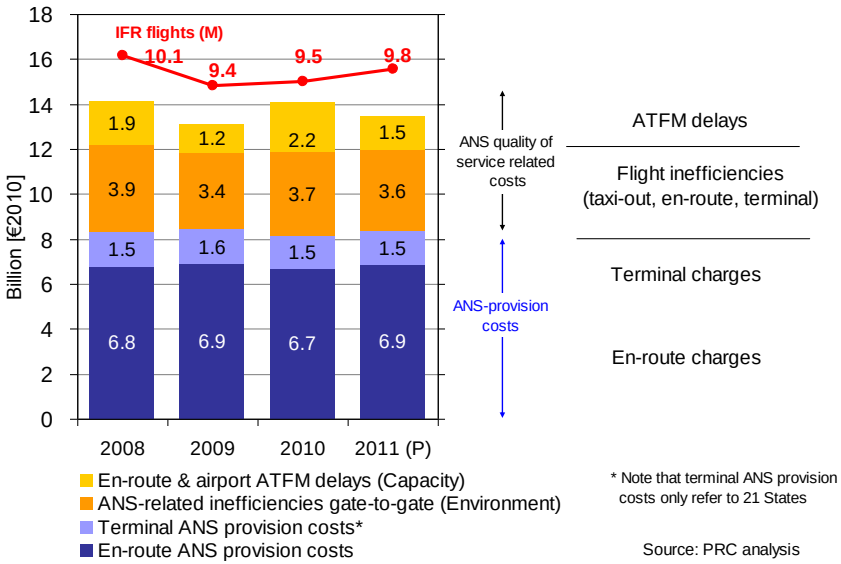




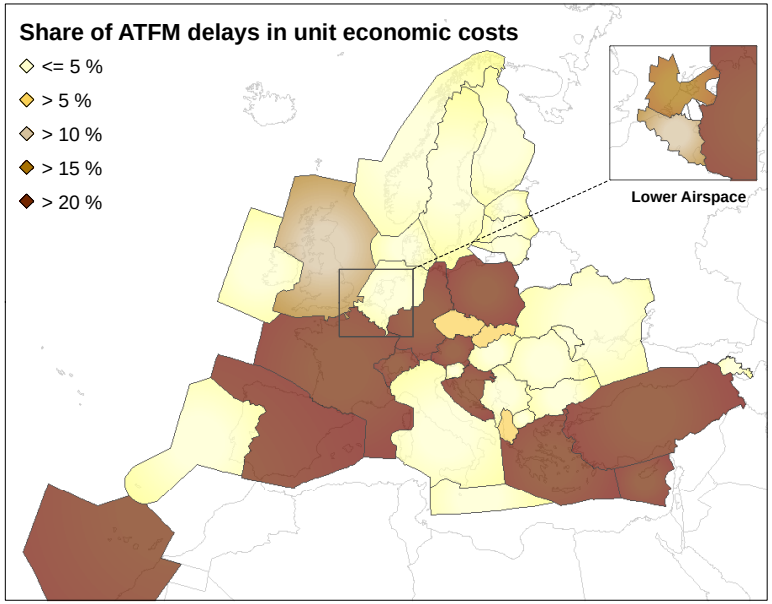
Poor on-time performance in Europe costs airlines 5 billion EUR per annum. In large parts of Europe ATFM delays account for more than 20% of the economic unit costs.

Estimated ANS-related economic costs to airspace users (gate-to-gate)

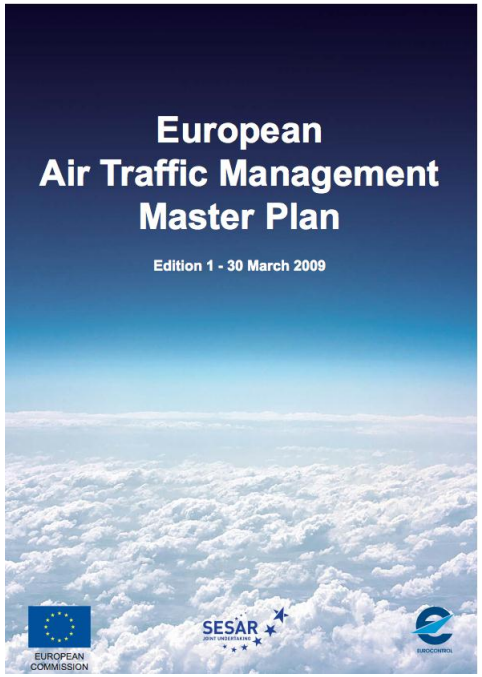


* Note that terminal ANS provision costs only refer to 21 States

Source: PRC analysis



Solving these inefficiencies requires a radical reform of European ATM enabled by the regulations and technological innovations provided by SES legislative package and SESAR.



The European ATM Master Plan and the SES Performance Scheme (Commission Regulation (EU) 691/2010) are based on a performance-based approach that focuses on results through adoption of performance objectives and targets, stresses the importance of collaborative decision making driven by the results and reliance on facts and data.

SES PERFORMANCE SCHEME

The SES Performance Scheme sets binding performance targets at national or FAB level in the areas of Safety, Capacity, Environment and Cost-Efficiency in which Key Performance Indicators (KPI) are identified.

Safety remains a priority, SES aims to ensure its improvement through the reduction of ATM related safety occurrences and the implementation of uniform safety standards.

In the Capacity area the main goal is to ensure that Air Navigation Service capacity meets demand for en-route and at airports.

The objective for Environment is to ensure that users use the most efficient (shortest) routes, focussing on the horizontal flight-efficiency.

Cost-effectiveness focuses on productivity, its primary goal is to optimise the costs for air navigation services.

For the First Reference Period (RP-1: 2012-2014) SES legislation identifies 14 KPIs.

	ANS PERFORMANCE INDICATORS	2012-2014
SAFETY	Effectiveness of safety management	monitoring
	Application of severity classification scheme	monitoring
	Separation infringements	monitoring
	Runway incursions	monitoring
	ATM special technical events	monitoring
	Application of Just Culture	monitoring
CAPACITY/ENVIRONMENT	En-route ATFM delay	target
	Horizontal flight efficiency	target
	Effective use of civil/military airspace structures	monitoring
	Airport ATFM delays	monitoring
	Additional time in taxi-out phase	monitoring
	Additional time in arrival sequencing and metering area	monitoring
COST-EFFICIENCY	Determined unit rate for en route ANS	target
	Terminal costs and unit rates	monitoring

SES PERFORMANCE SCHEME: CAPACITY

For the First Reference Period (2012-2014) three binding targets in the Key Performance Areas (KPA) of Capacity, Environment and Cost-Efficiency have been proposed by the Performance Review Body (PRB) and accepted by the European Commission (EC).

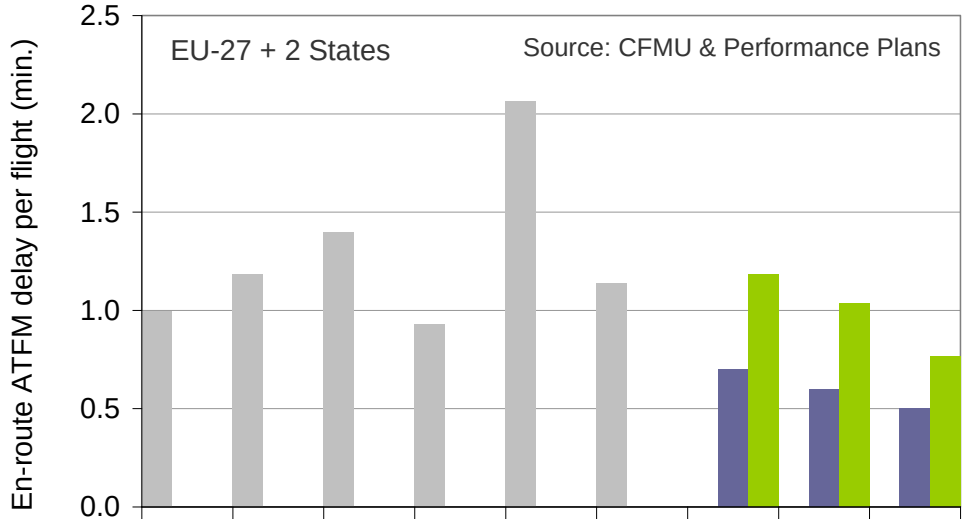
The Capacity KPI is the minutes of en route ATFM delay per flight expressed as the difference between the take off time requested in the last submitted flight plan and the take off time allocated by the central unit of ATFM.

The KPI is calculated for the whole calendar year and includes all IFR flights within European airspace.

The Capacity Target calls for an annual average en route ATFM delay of 0.5 minutes per flight in 2014, this will reduce delays bringing them closer to the economic optimum and make capacity more resilient to unexpected traffic growth

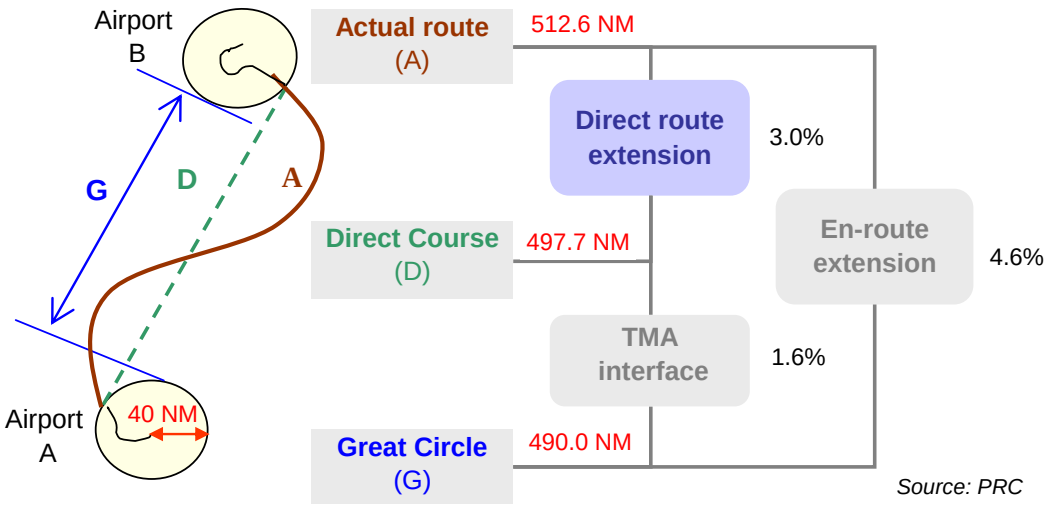
SES PERFORMANCE SCHEME: CAPACITY

To achieve the 2014 Capacity Target Eurocontrol acting as the Network Manager will help States/FABs in managing their airspaces, capacities and traffic flows so that the gap between the en route delays forecast in their National Performance Plans submitted in 2011 (0.76 min per flight in 2014) and the Capacity Target (0.5 min per flight in 2014) is narrowed.



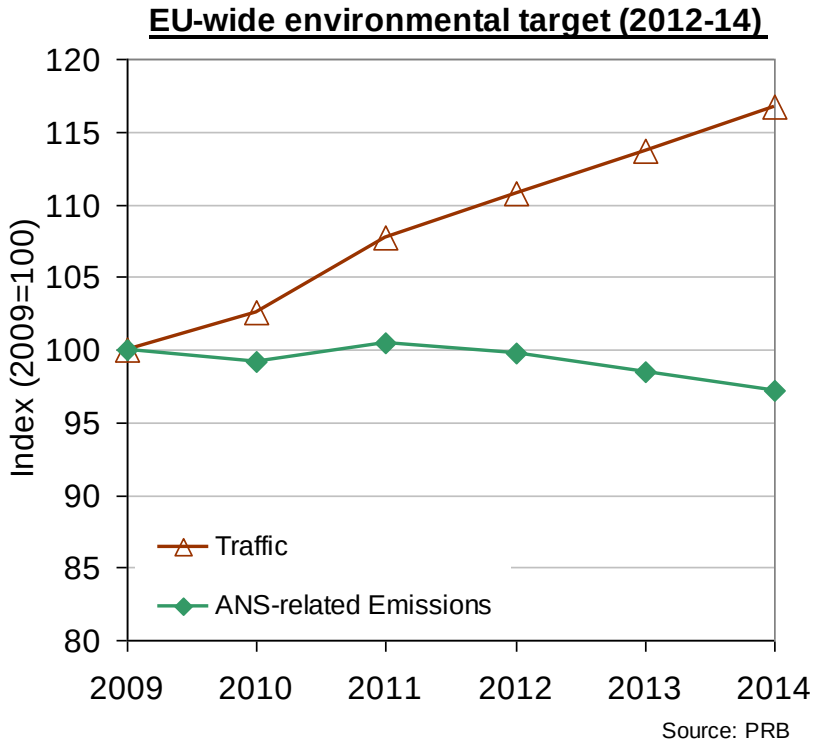
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Historic values	1.0	1.18	1.4	0.93	2.06	1.14			
Reference values							0.70	0.60	0.50
Aggregated plans							1.18	1.04	0.76

The Environment KPI is the average en route flight efficiency defined as the difference between the distance, measured outside the TMAs, between the actual trajectory and the length of the great circle. The TMA is assumed to be a 40 nm radius circle centred at the airport.



The Environment KPI is calculated for all commercial IFR flights within European airspace excluding circular flights and flights with a great circle distance outside the TMAs shorter than 80 nm.

The Environment Target shortens the horizontal flight extension by 0.75 % versus 2009 baseline, resulting in nearly constant ANS-related emissions over RP-1 decoupling emissions from traffic growth and ensuring a carbon-neutral growth of aviation as far as ANS is concerned, well before the 2020 IATA target.



SES PERFORMANCE SCHEME: COST-EFFICIENCY

For the First Reference Period (2012-2014) three binding targets in the KPAs of Capacity, Environment and Cost-Efficiency have been proposed by the PRB and accepted by the EC.

The Cost-Efficiency KPI is the ratio between the determined costs and the forecast traffic expected for the period at European Union level.

The KPI is calculated for each year and expressed in euros.

The Cost-Efficiency Target sets the determined unit rate for 2014 at €53.92. This target coupled with the charging regime ensures that en-route charges will remain near constant during RP-1 while traffic is expected to grow some 16.7%. The estimated cumulated savings versus 2009 unit rates are some 2.3 billion euro over RP1.