



SES Performance Scheme

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The Single European Sky policy initiative

... to improve the overall performance of air traffic management (ATM) and air navigation services (ANS) ...

SES I approved in 2004

- ❖ Focus on capacity and safety
- ❖ Supervisory authorities, certification, Functional Airspace Blocks...

SES II approved in 2009

- ❖ Focus on performance and modernisation
- ❖ Binding performance targets, Network Manager, ..

How it all started

Analysis in 1997:

Lack of information on performance of the European ATM system, or fragmented and inconsistent data.

- ⇒ **Data inadequate, structured collation and dissemination lacking. More systematic approach to performance review needed, including quality of service and cost measures.**
- ⇒ **Objective: 'to introduce strong, transparent and **independent performance review**, also for better basis for investment analyses and economic regulation'**

Performance Scheme today

- ✓ **Implemented in 28 EU Member States plus Norway and Switzerland**
- ✓ **Fixed reference periods (RP1 2012-14, RP2 2015-19)**
- ✓ **Four key performance areas (safety, environment, capacity, cost-efficiency)**
- ✓ **Union-wide performance targets and binding national/FAB targets consistent with Union-wide targets**
- ✓ **Commission assessment, assisted by independent Performance Review Body (PRB)**
- ✓ **Ongoing monitoring and reporting of performance**

Setting of performance targets

Commission adopts before the start of the reference period Union-wide performance targets

N-1

Member States draw up performance plans including binding national or FAB targets

**+ 6
months**

Commission assesses consistency of national/FAB targets with Union-wide performance targets

**+ 5
months**

If targets are inconsistent, Member States have to revise targets in light of Commission recommendation

**+ 4
months**

Commission assesses consistency of revised targets and may impose corrective measures

**+ 5
months**

**Retroactive application
as of start of RP**

Four key performance areas

Safety

Cost-efficiency

Environment

Capacity

Setting of performance targets at different levels

- ❖ European Union-wide level
- ❖ Local level:
 - ❖ Level of Functional Airspace Blocks
 - ❖ Charging zone level
 - ❖ Airport level

Plus

System of Key Performance Indicators (**Target setting**)
and Performance Indicators (**Monitoring**)

Key performance area

Safety

Effectiveness of safety management

Application of severity classification

Application of automated safety data recording systems

Reporting on level of 'just culture'

Level of occurrence reporting

Number of SMI, RI, AI, ATM-occurrenc. *

*separation minima infringements, runway incursions, ATM-specific occurrences

Key performance area

Average Union-wide determined unit costs for *en route* services

Additional

- Cost of capital (level/composition asset base; return on equity)
- Inflation assumptions
- Traffic forecast assumptions
- Description/assumptions pension costs; loans financing provision of ANS
- ...

Cost-efficiency

Determined unit costs for terminal services

Cost of Eurocontrol, with breakdown various service provision activities

Key performance area

Horizontal en route flight efficiency of actual and planned trajectory

Remarks

- Distance flown outside 40NM of airport
- For extra-EU flights only part inside EU airspace measured

Additional time in taxi-out

Additional time in terminal airspace (ASMA)

Environment

Effectiveness of booking flexible use of airspace (FUA)

Rate of planning conditional routes (CDR)

Effective use of conditional routes (CDR)

Key performance area

Average en route ATFM delay per flight

Remarks

- Difference between estimated take-off time requested by aircraft operator in last submitted flight plan and calculated take off time allocated by central unit of ATFM
- All IFR flights within EU airspace and all delay causes, excluding exceptional events

Average arrival ATFM delay caused by landing restrictions (local target)

Capacity

Adherence to ATFM slots

Average minutes of ATC pre-departure delay

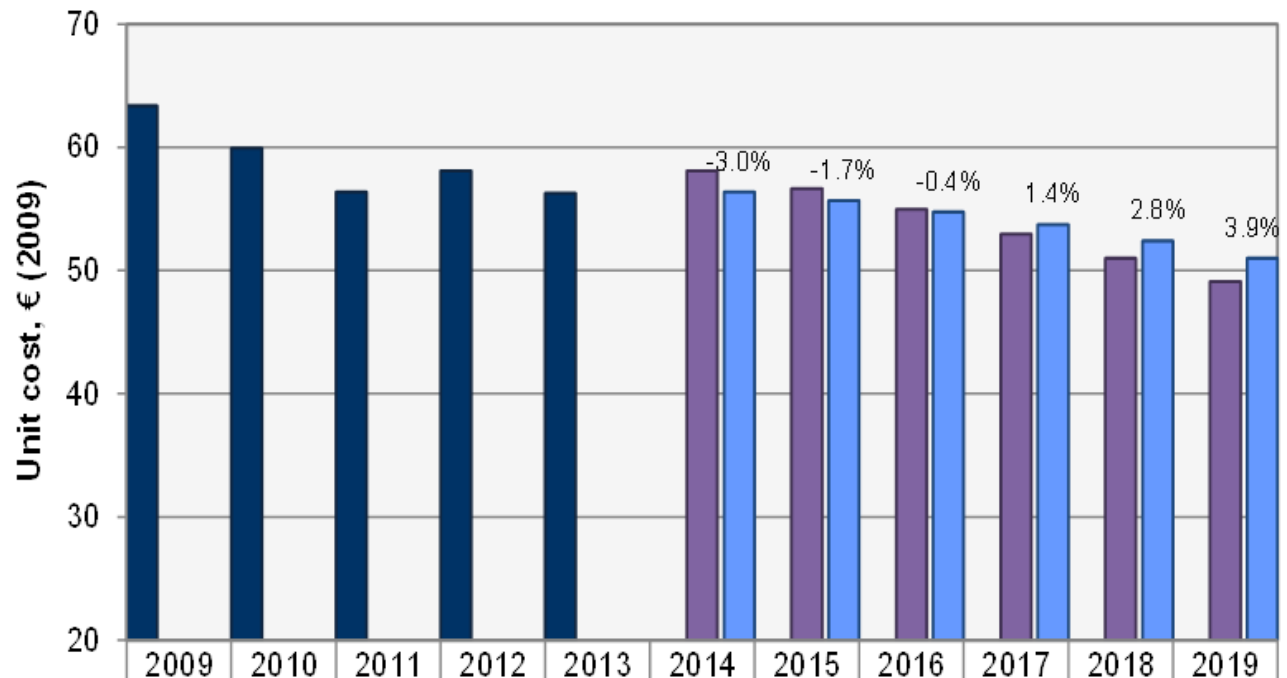
Some selected monitoring results

Cost-efficiency

Environment

Capacity

Cost-efficiency – evolution of *en route* unit costs



■ Actual	63.36	59.94	56.37	58.09	56.29						
■ RP2 cost-efficiency target						58.09	56.64	54.95	52.98	51.00	49.10
■ RP2 aggregated PPs						56.38	55.70	54.76	53.74	52.42	51.00



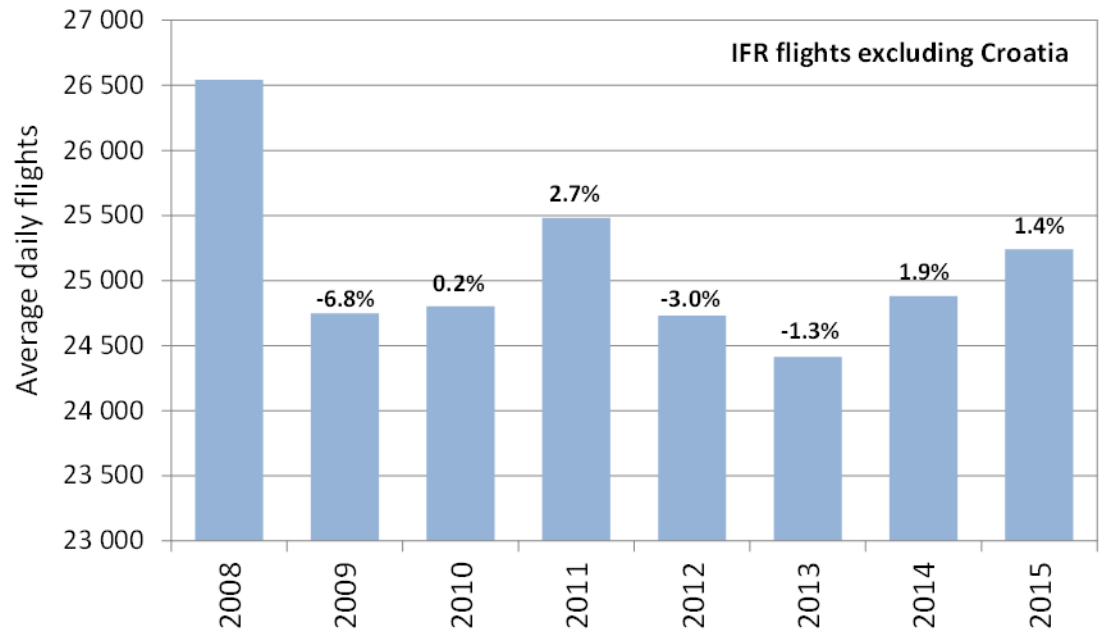
European
Commission

Cost-efficiency – *en route* unit costs and charges

	Det. unit costs 2015 in EUR2009	% vs. EU average	2015 unit rate in EUR
Germany	80.99	43%	90.15
<i>Switzerland</i>	72.00	27%	98.53
Italy	69.39	23%	78.80
Austria	65.12	15%	73.34
United Kingdom	63.61	12%	92.45
France	63.56	12%	70.00
Spain Cont.	63.46	12%	71.69
Belgium	63.17	12%	70.68
Luxembourg	63.17	12%	70.68
Slovenia	59.56	5%	68.36
Netherlands	58.98	4%	66.57
Spain Canarias	58.21	3%	58.36
EU average	56.64		
Denmark	56.12	-1%	63.29
Sweden	53.36	-6%	66.29
Finland	49.70	-12%	56.23
Slovak Republic	49.34	-13%	55.38
Croatia	47.42	-16%	46.05
<i>Norway</i>	45.76	-19%	52.19
Lithuania	42.10	-26%	46.84
Czech Republic	40.28	-29%	43.68
Hungary	34.32	-39%	35.79
Cyprus	33.46	-41%	36.91
Portugal	32.55	-43%	37.13
Greece	32.36	-43%	38.38
Romania	32.13	-43%	37.35
Poland	30.14	-47%	34.36
Bulgaria	29.49	-48%	30.88
Ireland	28.45	-50%	29.60
Malta	25.89	-54%	22.33
Latvia	25.79	-54%	27.58
Estonia	24.19	-57%	31.10

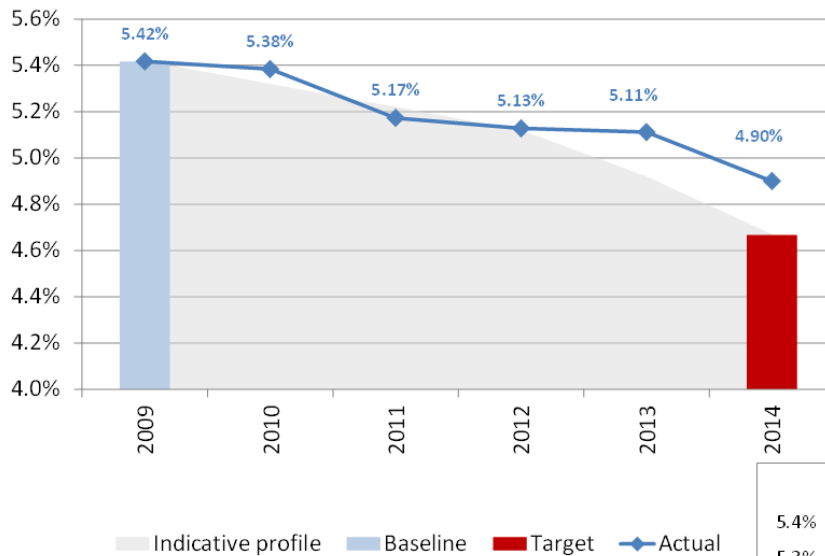
Traffic in 2015

**Weak traffic
growth of
+1.4%
compared to
2014**



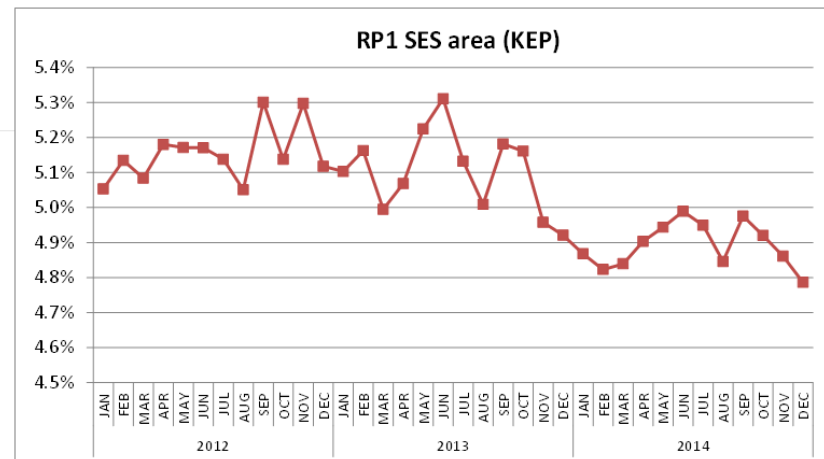
Croatia adds some 0.3% of traffic to SES RP1 area in 2015

Environment 2009-2014



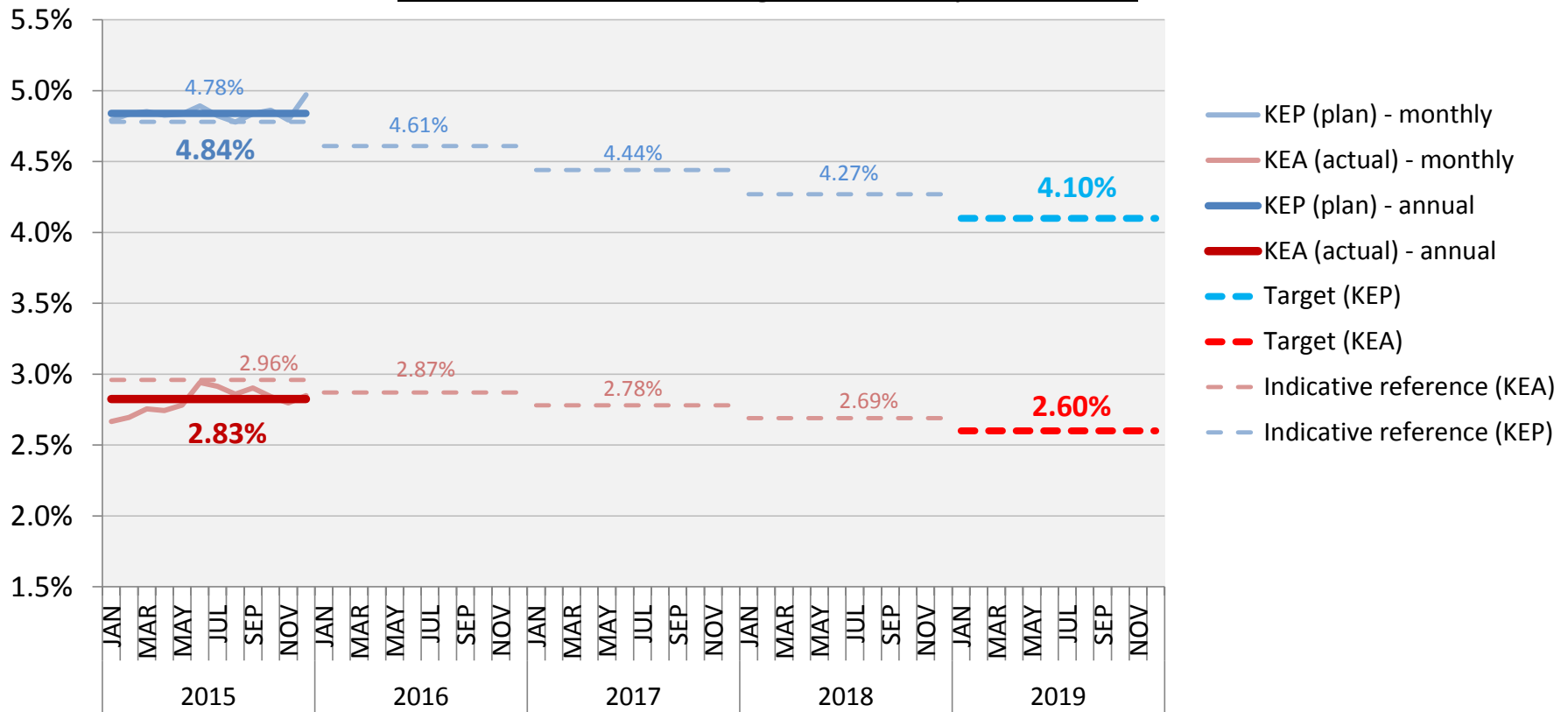
The Horizontal en-route flight efficiency [KEP] KPI shows notable improvement in 2014

Detailed reasons for not meeting the target under analysis.

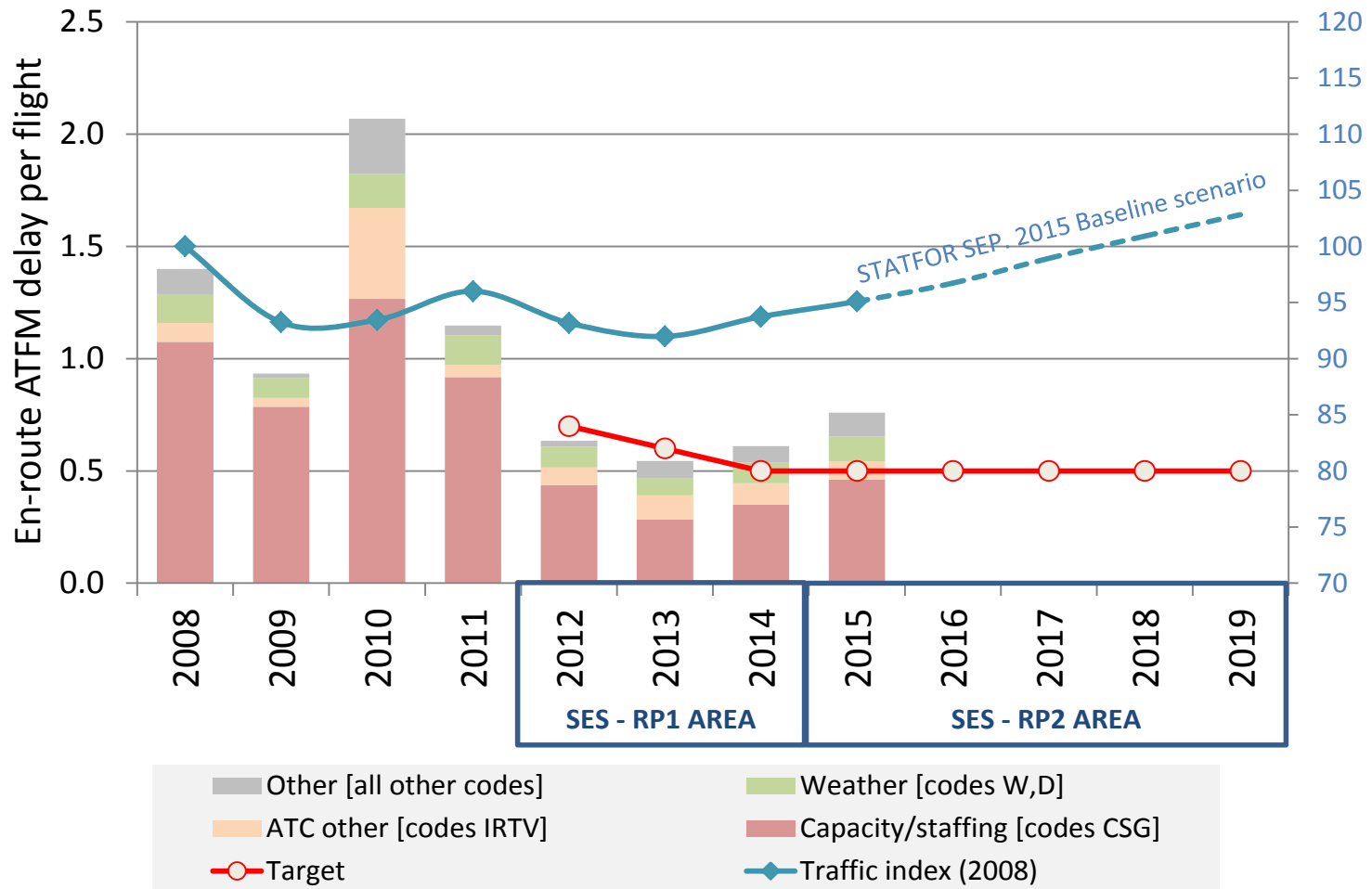


Environment 2015

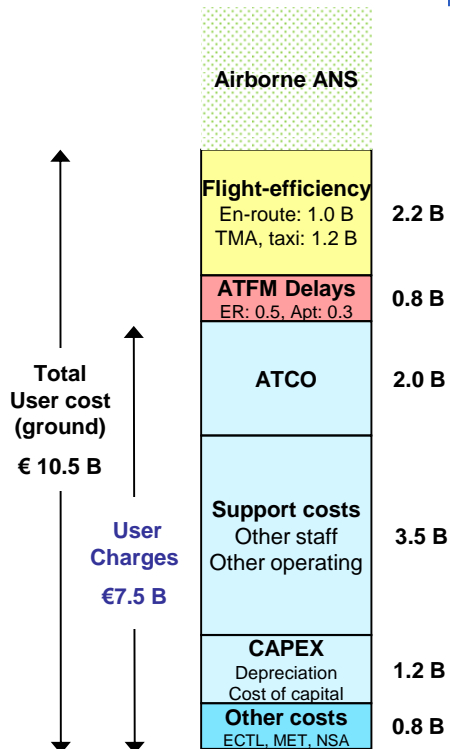
Horizontal en-route flight efficiency (SES RP 2)



Capacity situation



Opportunities for further improvements



Estimated TEC 2012 (SES)

- Efficiency gains in individual ANSPs
- Airspace improvements (e.g. free routes)
- More flexible management of capacity to match demand
- New Technology (PCP, etc)
- Rationalisation of service provision and oversight
- **Significant further performance improvements achievable**