

Performance Planning Operations: Capacity

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Capacity indicators and target



- Indicator and target 1. Average ATFM en route delay:
Includes all IFR flights / all ATFM delay causes (whole calendar year)

- EU-wide target adopted by the EC:

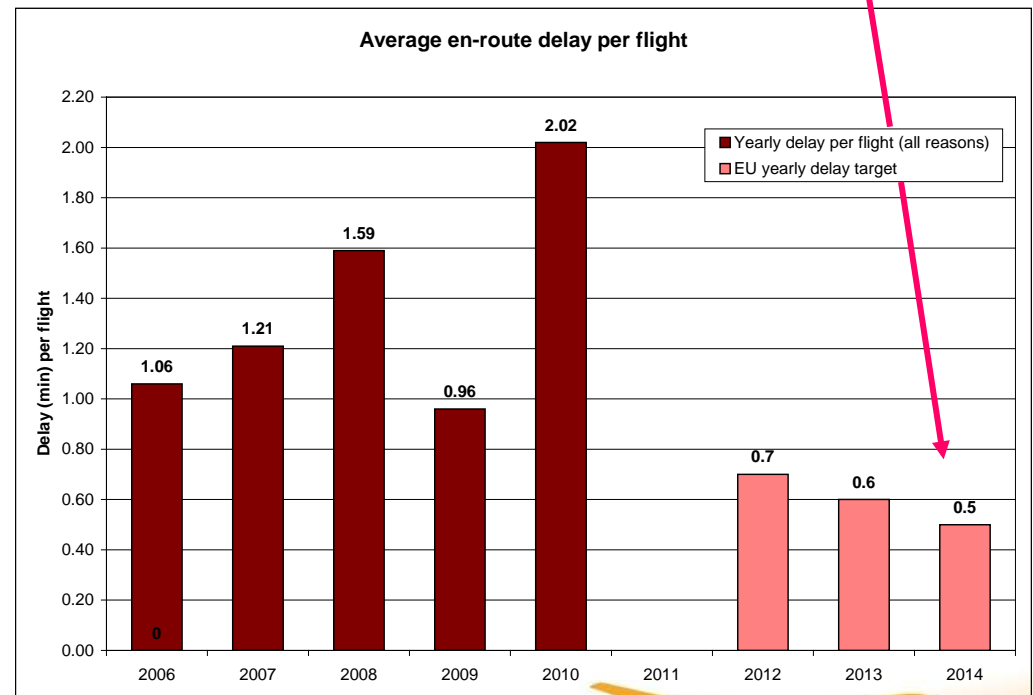
0.5 min/flight in 2014

- PRB « recommended »:

0.7 min/flight in 2012

0.6 min/flight in 2013

- Past Values in EU + 2
versus these targets



Capacity indicators and target



Setting target 1: “Top-down” vs. “Bottom-up” Approach

a) Top-Down approach

Eurocontrol CEF computed capacities and related delays (“reference values”) per ACC breaking down the EU-wide target (29 States) of 0.5 min / ft. with the traffic level from the STATFOR baseline forecast.

These result from a model and an iterative computation starting from “measured ACC capacities” 2010, where each step minimizes the overall cost of delays to ANSPs and users when increasing the capacity of the most penalizing ACC, and so on.

A Top-Down Approach would be to adopt Eurocontrol “reference values” as FABEC targets



Capacity indicators and targets



a) “Top-down approach” - (foll’d)

Eurocontrol “reference values” for FABEC:

Year	2012	2013	2014
FABEC « reference values » (min/ft)	0.52	0.47	0.40
EU-wide Delay (min.ft)	0.70	0.60	0.50

Limits of the model are mainly :

- Unavoidable Approximations (capacity taken at ACC level / not the sectors; direct capacity costs “long term” ; “representative” period for past capacity; APP units “outside” ; ...)
- Capacity increases “needed” are not checked whether practicable (in addition, these increases are not available)



Capacity indicators and target



Setting target 1: “Top-down” vs. “Bottom-up” Approach

b) “Bottom-up” Approach

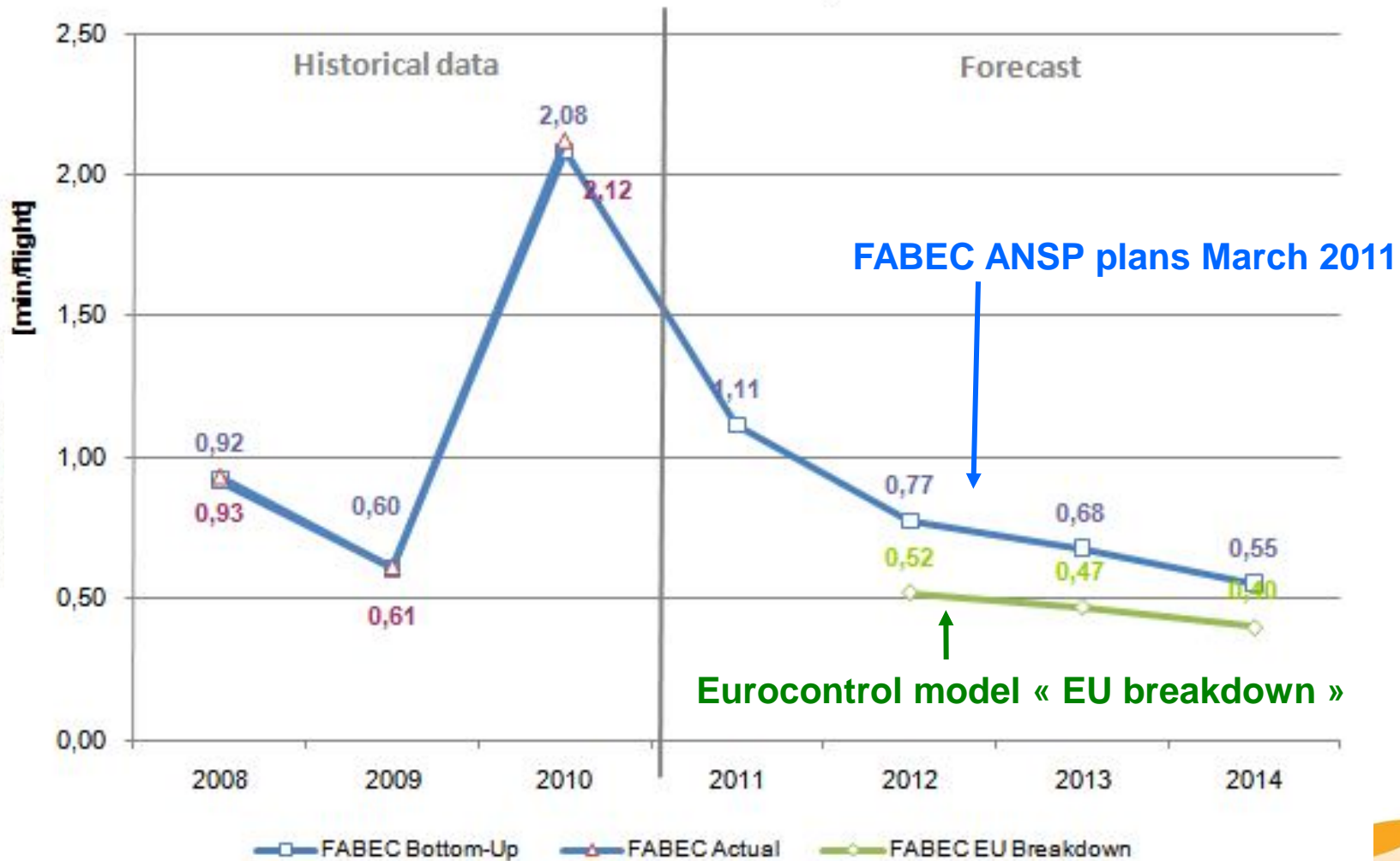
- ANSPs working structure for FABEC - have computed the delays from capacity forecasts based on a capacity-planning exercise of March 2011. Combining the delay forecasts by ANSPs taking into account the STATFOR traffic forecasts, the model provides the figures on next page.

The bottom-up data results show the most likely delay evolution, assuming ANSPs implement operational improvements and resources as they planned, in consistency with their cost forecasts. The results include a certain part of delays due to disturbances / abnormal situations, thus representing the most likely minimum delay achievable.

A Bottom-up Approach would be to adopt targets derived from the ANSPs proposals as FABEC targets



FABEC Capacity Target : « Bottom Up » vs. « Top Down »



Capacity indicators and targets



Choosing top-down vs. bottom-up approach

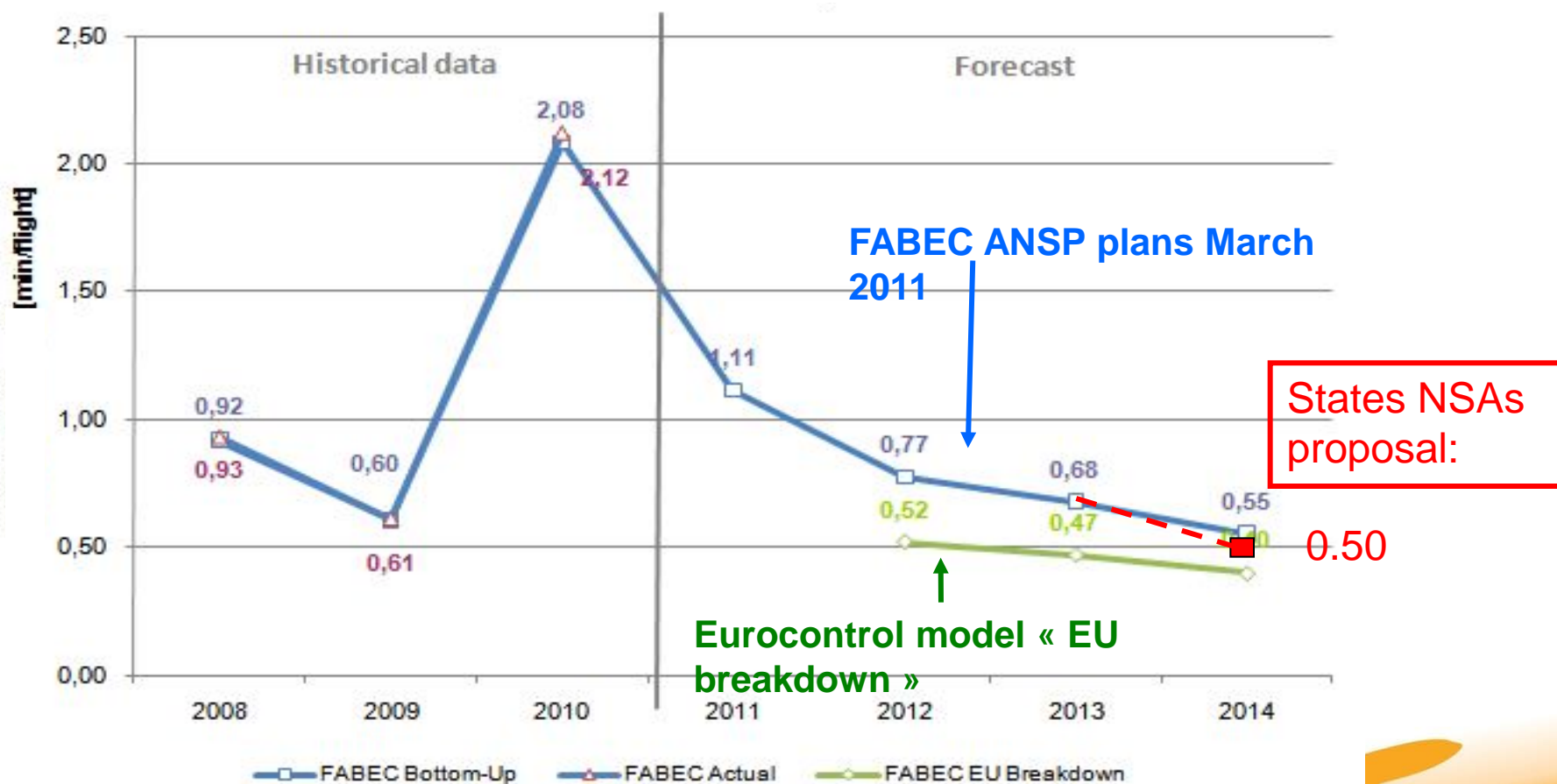
	T/D: “CEF reference values”	B/Up approach: ANSP plans
PROs	<ul style="list-style-type: none">- Supports “consistency” with the EU target <i>if all local plans do</i> (by definition of the model)- Airlines support because put “more pressure” on ANSPs	<ul style="list-style-type: none">- Better consistency between capacity and national cost-efficiency targets,- Avoids “hasty” additional means that would push costs upwards while no effect within period
CONs	<p>Unclear whether they are:</p> <ul style="list-style-type: none">- achievable (time / means)- consistent with lower costs (<i>staff organizations challenged EU targets as unachievable</i>)	<ul style="list-style-type: none">- Eurocontrol reference values are lower



Capacity indicators and targets



Choosing top-down vs. bottom-up approach (fol'd)



Capacity indicators and targets



Choosing top-down vs. bottom-up approach (foll'd)

- States / NSAs proposal: setting 2014 target at 0.50 minutes/flight

Year	2012	2013	2014
FABEC targets (min/flt)	0.77	0.68	0.50

- Puts some more pressure on ANSPs on the end of the period, while leaving some time on ANSPs to adjust.
- Aligned on EU-wide average target.
- Avoids excessive pressure on capacity that may have adverse effects on costs by looking for additional means, while no effect on performance within the first period.
- Should avoid entering into permanent and inefficient « non-financial incentives », i.e. « corrective » action plans.
(which would discourage actors and question the system)

Capacity indicators and targets



Performance Indicator #2 (not mandatory)

- Percentage of flights with an en-route ATFM delay of more than 15 minutes.

⇒ Aircraft arrival delays of more than 15 minutes (for any cause) are acknowledged to have disruptive effects in hubbing operations

⇒ Past Data at FABEC and EU levels for en-route ATFM delays:

Year	2006	2007	2008	2009	2010
% FABEC flts \ $D_r > 15$ min	1.9	2.3	2.6	1.7	5.2
% EU flts \ $D_r > 15$ min	2.8	3.3	4.0	2.6	5.2

⇒ Follow as an indicator

Capacity indicators and targets



Performance Indicator #3 (not mandatory)

- Percentage of flights with an en-route ATFM delay (any duration)

⇒ Answering airlines' request in workshop on 4 April

Year	2006	2007	2008	2009	2010
% FABEC flts \ $D_r > 0$	4.0	4.9	5.4	3.6	8.9
% EU flts \ $D_r > 0$	5.5	6.7	7.7	5.1	8.9

⇒ Follow as an indicator



Capacity indicators and targets



Monitoring

- ⇒ FPC will ensure monitoring + information/consultation of relevant stakeholders
- ⇒ ANSP organized collectively to report, to take action and to inform States / NSAs (Financial and Performance Committee : FPC) and users.
- ⇒ Reporting twice a year as a minimum
- ⇒ In case a target is threatened (though not yet infringed), the FPC shall review with the ANSPs the identified problems and the actions they deem appropriate to solve them, either collectively at FABEC level, or at ANSP level. Possibility to involve experts only from the concerned ANSPs and States.
- ⇒ Without prejudice of more discussion / work on details directly between ANSPs and users



Capacity indicators and targets



Monitoring (followed)

- 7 ANSPs “collectively accountable”:
 - An ANSP coordinator is entitled to interface with Finance and Performance Committee, and to trigger:
 - An ANSP process ensuring “internal” monitoring, reporting and, as appropriate, actions (*) up to specific ANSPs, or at FABEC level
(*) *either spontaneously or on FPC / NSAs’ request (see next slide)*
 - This process is managed by a body designated by the ANSPs, “the accountable entity” (in the absence of a legal entity representing the ANSPs at FABEC level)
- ANSPs agree on a process among themselves to address delay issues identified at local and FABEC level, whether part of the corrective action plans imposed by NSAs, or as own improvement actions.
- During 2nd half 2011:
 - ⇒ TF SP to refine the Monitoring process along these lines and to include it in the Performance Process Description Document
 - ⇒ ANSPs to detail their process in a document communicated to the FPC/NSAs.

Capacity indicators and targets



Incentive (when the FABEC target is exceeded)

More work remains to be done on financial incentives, e.g. :

- economic value of delays,
- finding a “value sharing” acceptable to all parties

⇒ Proposal to set non-financial incentives for RP1

⇒ Incentives = Corrective action plans with timelines on identified local and FAB-level problems: NSAs trigger ANSPs and agree on the action plan.

Concretely : Finance and Performance Committee / NSAs require the ANSP coordinator to trigger the ANSPs process to identify, as appropriate, corrective actions up to specific ANSPs and/or at FABEC level.



Other indicators to be monitored during RP1



Consistently with future capacity indicators, according to the regulation (EU) n°691/2010, the following indicators shall be monitored at FABEC level, subject to refining definitions with PRB as may be necessary:

- total of ATFM delays attributable to terminal and airport ANS,
- additional time in the taxi-out phase,
- additional time for arrival, sequencing and metering area (ASMA) for airports with more than 100.000 commercial movements per year.



- END -

