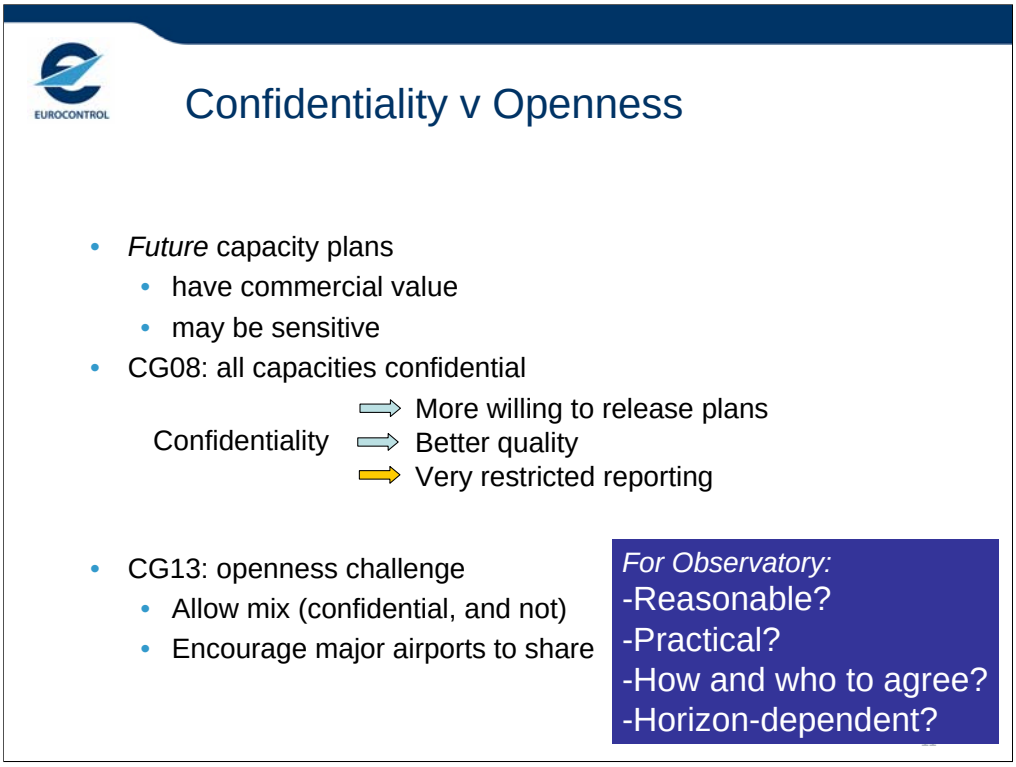


The future capacity plans of airports have commercial value (relative to competitors or suppliers) and may be sensitive depending on status of negotiations with local stakeholders.

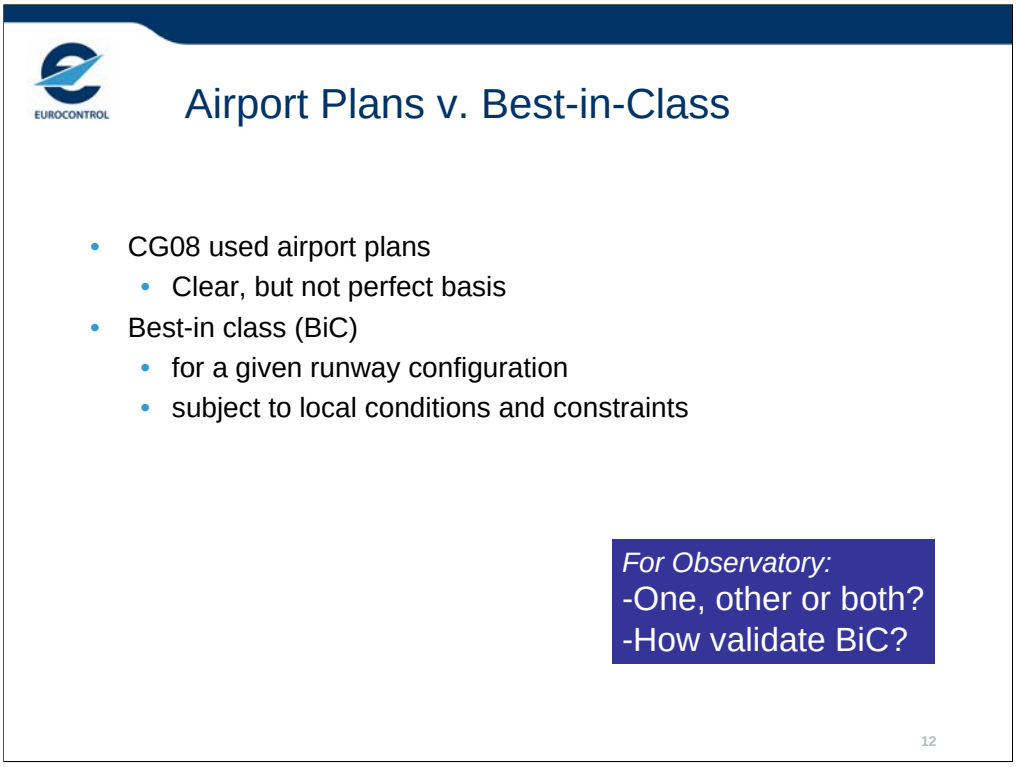
As a result, previously we kept all capacity plan data confidential, assuming that airports would then be more willing to release plans, and the quality would be better.

But the cost is that reporting becomes very restricted – we can say how many airports have problems but not which ones – which makes it hard to validate and discuss the results, and certainly difficult for you the stakeholders to use them.

So we propose to issue an openness challenge this time; to question whether the commercial value and sensitivity is really such an issue. We will adapt the forecasting tools to allow a mix of confidential and non-confidential data, but more importantly aim to **get a critical mass of major airports to be open with their plans**.

For the Observatory, the questions are:

- Is this reasonable (are we right to challenge the initial assumptions)?
- Is it practical (are the data available)?
- How do we get agreement, and who is needed to agree?
- Does the answer depend on whether we discuss 2020, 2035 or beyond?



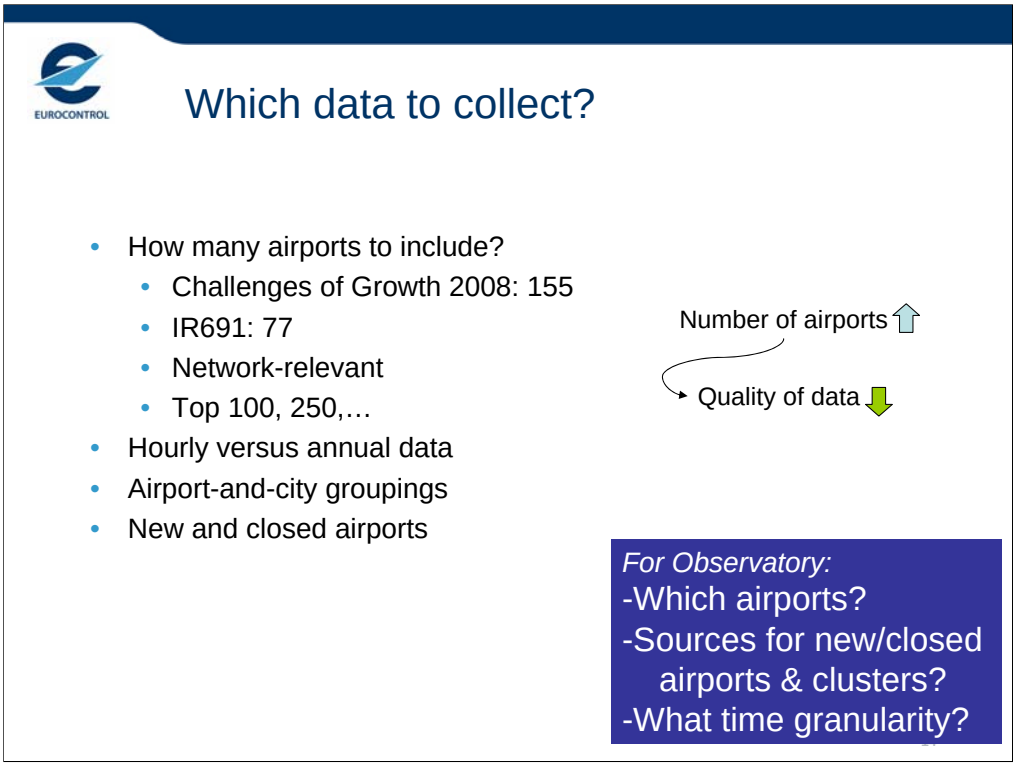
CG08 used airport plans as the source of future airport capacities. This enabled clear descriptions of what the input assumptions were. But these data are not perfect: for instance, clearly they are subject to change: Istanbul, London and Munich have all seen changes since the last update.

For a study such as this, equally problematic is the relationship between demand and capacity plans. An airport will plan according to its expected demand; if these plans are based on lower forecasts, or don't go as far into the future as our study, then the 'capacity' limit provided by the airport can be lower than what the airport *could* achieve if the demand were there. If we have a higher forecast, then we see unaccommodated demand which could in reality be accommodated by the time we get there.

"Best-in-class" is an approach we've used in the past to get around this: airports are grouped according to their runway configuration and then assigned the highest capacity in the group. Some allowance needs to be made for local conditions and constraints.

If we use best-in-class we have to consider how we validate these numbers with airports.

The Observatory's views on these is invited.



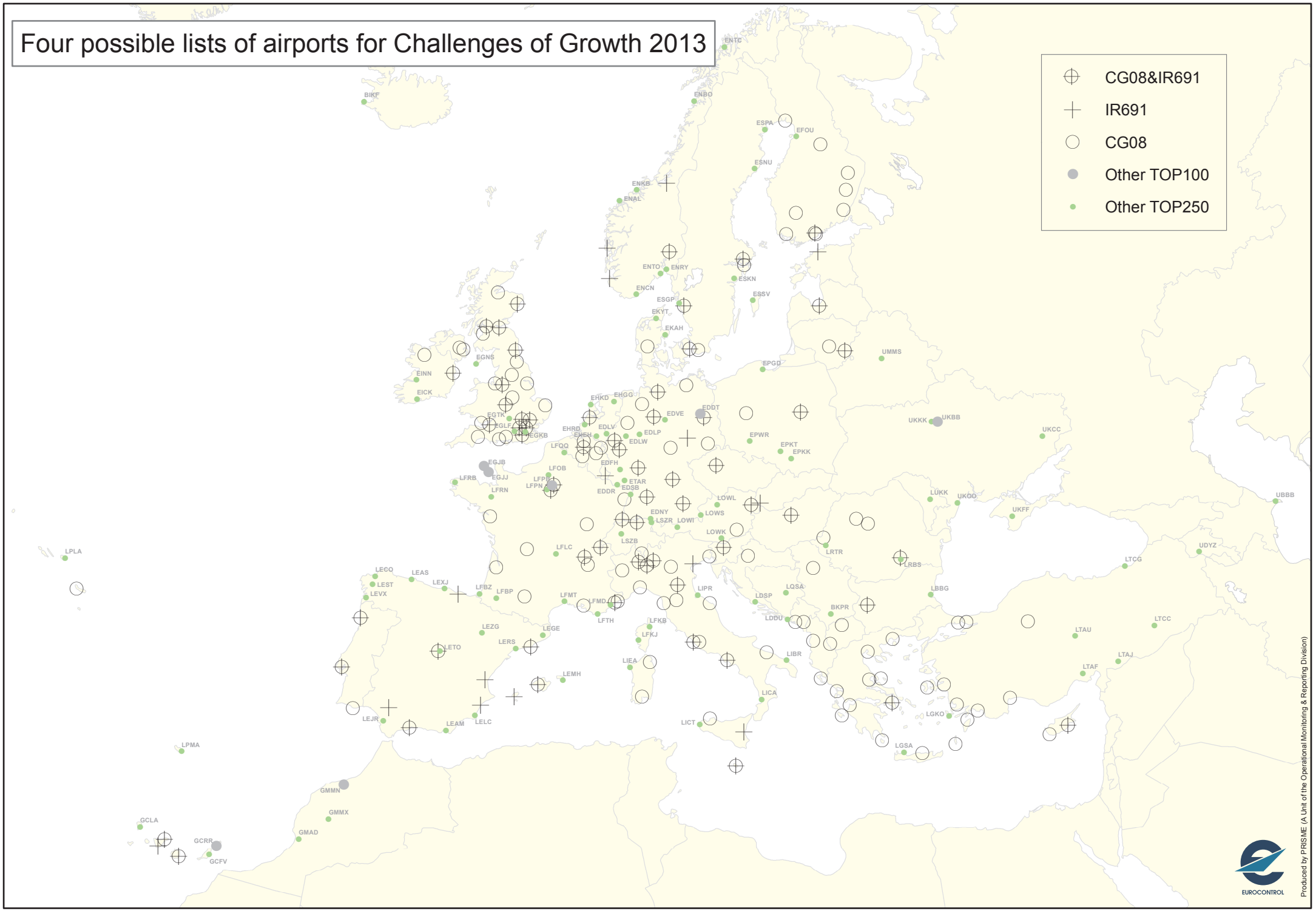
We've seen that the quality of capacity plans diminishes for smaller airports. So, in deciding how many airports to collect data from, or model as BiC, or both, it's not necessarily a question of more-is-better. **How many airports should we target, and which ones?**

Nor is it necessarily just the largest which are of interest. Especially for congestion and delay modelling, there are plenty of airports which are congested on certain days in certain seasons only. These may still be relevant for the overall delays of the year. This points both to the need to include *some* smaller airports, and to consider hourly rather than annual data *at least in some cases.* But should we try to stick completely to hourly analysis? The existing EURCONTROL survey of airports suggests not all can provide plans in this format.

For the updated study, we would like to look in more detail at clusters of airports around cities – perhaps in the mitigation (secondary airports), or in the forecast scenarios directly. We have some information, but would welcome suggestions of previous studies, or suggestions of how to associate airports with a city.

Finally, there is a slow turn-over of airports (airports that open, or close, or shift from significant commercial traffic to minimal). Advice on how to include these, or how to get data on them, would be useful to the study.

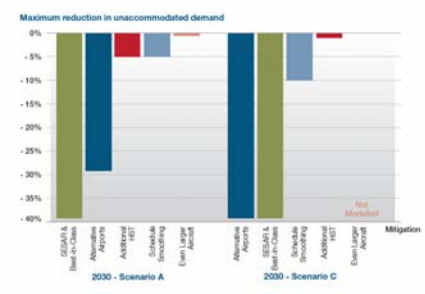
Four possible lists of airports for Challenges of Growth 2013



Mitigation

- What more can be done?
  - What-if? around a scenario
- Options
  - Secondary airports
  - Larger aircraft/congestion charging
  - Schedule smoothing
  - Air-rail intermodality
  - Others?
    - Focused long-haul hubs?
    - Beyond SESAR
- Which measurements?
  - Unaccommodated demand
  - Delay?
  - Emissions?
  - Effects on different market segments?

From CG08:



For Observatory:
-Priorities?
-Others?
-Validation & consultation?
-Measurements?

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There is a balance to be struck between what is built into one of the (limited number of) forecast scenarios, and the number of effects which we want to evaluate. Mitigation is about exploring more responses to the challenges of growth than can be encapsulated in the forecast scenarios.

Here we describe examples of the mitigation actions that could be modelled and evaluated: usually by comparing the most-likely scenario with and without a particular mitigation.

In the past, this comparison has been in terms of differences in unaccommodated demand. Perhaps this time we could also look at delay and emissions issues, or the interactions between market segments (eg network carriers v business aviation). However these imply additional cost and effort, especially for delay modelling, so we would like to understand what stakeholders' priorities are.

The views of the Observatory are invited on

-priorities amongst these

-other mitigation activities we might consider

-the process we might follow for consulting on and validating the results

-the priorities for the measurements that we should use.