Introducing More Competition into ATM: Possible Institutional Designs – Qualitative assessment

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Delft 10 of November 2016

SESAR JOINT UNDERTAKING

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compair

Competition for Air Traffic Management

Outline

- Background
  - COMPAIR project
  - Goal of this work
- Four options
- Literature review
- Stakeholder input
- Qualitative assessment - conclusion

Background

COMPAIR – starting point

- Fragmented market
- Price regulation
- Network character ATM technologies
- Home-bias

- Problems of coordination
- Slow changes
- Inefficiencies
- Underinvestment

Different ways to increase overall efficiency of ATM

→ Focus on **competition** as a trigger for change

Background

We had 4 ideas on how to do introduce more competition into ATM

- Yardstick competition and Governance
- Unbundling
- Tendering of licenses
- Flight centric, sector-less operations

-> fine-tune

-> **qualitative assessment**

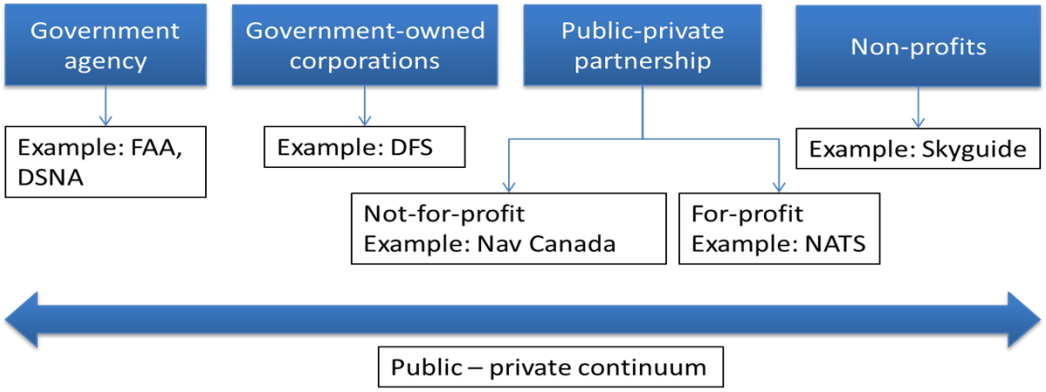
- literature review (theoretical & applications)
- stakeholder input (and hence opinions)

= setting the scene for further work

Four options

(1) Ownership models and yardstick competition

- Ownership and governance models
  - A large variety over countries
  - Increased involvement of ATM customers -> higher customer focus



- Yardstick competition
  - No effect on fragmentation
  - No real competition for ATM services
  - Charge depends on costs “similar” firms -> “as if competition”

Four options

(2) Unbundling

-> in phases

- Separation terminal air traffic services
- Unbundling of ATM support services which are not monopolistic in nature nor have large network effects (MET, AIS, CNS)

  -> competition **IN** market
- More specialised ATM activities, including contingency services

  -> closer cooperation -> increased interoperability

(3) Tendering of licenses

- Operate en-route air traffic services in a specific geographical area and for a certain time period

  -> competition FOR the market

  -> over time less fragmentation

  -> via contracts better enforcement of performance targets

  -> issue of long term investments…

Four options

(4) Sector less ATM operations

- Concept in R& D stage but some successful tests
  - En-route ATC without conventional sectors
  - One controller is assigned several aircrafts regardless of location
- Reduces need for monopolistic ATC

  -> competition between ANSPS

  -> competition for ODs, for network of airlines,…

Literature review

(1) Ownership models and yardstick competition
- Ownership model:
  - Literature mixed. No hard statistical evidence (cf. POSTER ☺)
- Yardstick competition:
  - In theory each firms chooses socially efficient cost reduction
  - Has been applied in regulation various utilities (hospital, water, busses, Japanese rail, airports*,…)
  - But generalisation to ATM with possible non-observable differences?

(2) Unbundling
- Tower control -> is seen as successful (but no public data)
- Centralised services
- Unbundling support -> some experience (eg. training, information)
- Examples in rail and electricity –> you need enough competition

(3) Tendering of ATC licenses
- Careful with design
- Two examples in ATC (centralised services & tower control)
- Long term if long term investments (or other ownership arrangements)

(4) Sector less ATM operations
- Literature focusses on technical aspects

Stakeholder input

COMPAIR Advisory board + 6 interviews

Survey (21 replies: 15% ANSPs, 30% research & consultancy, 15% airports, 10% airlines, 10% industry associations, 20% regulatory/government)

Main comments

- Unbundling
    - Seen as most feasible option
    - For/in the market -> depends on service
    - Are there real cost savings? -> cost of coordination
- Tendering
    - Seen as political not feasible (at least for en route)
    - Special care on advised length (cf. investments)
- Governance/yardstick will not lead to drastic changes
- Sectorless too far-fetched – some reluctance to reply

- Consider distributional effects carefully
- All concepts should be technological feasible
- Political acceptability will be different for different countries -> no EU solution?
- Share of support services is around 20-40%, no agreement on most logical candidates
- Tendering is already possible … at least in theory
- Some options do not directly affect fragmentation, which is a problem

Qualitative assessment

	Option 1: Perf. Reg.	Option 2: unbun-dling	Option 3: tendering*	Option 4: sector less
Technologically feasibility				
Is the technology there to realise it?				
Time scale necessary for implementation				
Economic feasibility				
Possible cost reductions				
Cost of introduction				
Effect on performance improvement incentives				
Potential negative side effects				
Regulatory feasibility				
Easy implementation				
Acceptability				
By nations				
By ATCO's				
By other ANSP personnel				
By airlines				
Impacts				
Impact on capacity				
Impact on safety				
Impact on environment				
Social welfare				
Distributional impacts				
Contribute to defragmentation/realisation of economies of scale				

Conclusions

- No dramatic performance impact of performance regulation
- But implementation might be feasible in the short run and at low costs

- Sectorless operations might have strong impacts and cost savings
- But faces many challenges

- Unbundling is seen as the most promising
- And has been relatively succesful in other sectors

- Tendering is already possible
- But political and social barriers
- And problem of need of collaboration versus competition

-> What happens next?

  - 4 options are still in the picture
  - Modelling work to analyse potential

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Thank you very much for your attention!

This project has received funding from the SESAR Joint Undertaking under the European Union's Horizon 2020 research and innovation programme under grant agreement No 699249

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