

AVIALLIANCE

4th TAM Symposium „Science2Business“ ATM Performance: TAM As an Enabler

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Unit performance/system performance

The dangers of the pursuit of narrow performance objectives

Too often the performance paradigm in use relies heavily on narrowly focused interventions that address only a narrow aspect of performance

Reporting broad performance measures to a trusted, central entity that analyses and synthesises results is step in the right direction; qualified feedback to data providers is additionally helpful

$$P = \frac{K \times S}{Re} \times A$$

The performance equation

from

Unifying Theory of
Human Performance

by Douglas Peters

- P Performance
- K Knowledge: e.g. data collection by the PRB
Analysis → Information → Feedback to stakeholder
- S Skill
Practitioners apply fed-back information
Results of application show up in new data
- Re Resistance
Privacy concerns, Inability or simply unwillingness
to make the effort
- A Attitude or desire to perform

Barriers to sharing and transparency of data

Aviation actors should be sharing more—arguments for secrecy need to be re-examined

Reasons for resistance to share data

Legitimate privacy concerns
Protection of competitive position

Lack of understanding of data relevance, inability of entity to collect relevant data, or relatedly, technical inability to share; or a combination of the above

Lack of resources to deal with extensive operational information

Inertia

$$P = \frac{K \times S}{\text{Re}} \times A$$

Resistance in
the
environment



Just because we can improve performance, should we?

Trade-offs

Some features

Safety

Mobility

Environmental protection

Trade/economics

Public nuisance

Human interaction

Local/regional/national/global
impact

Objective function

Location specific

Based on rational measurement

Flexible

Transparent

A ground coordinator would be ideally positioned to formulate an objective function

Aspects of performance

From the performance regulation CIR (EU) No 390/2013:

- With the new performance regulation the Commission has stipulated that each aviation service provider must report its performance in detail and regularly to the Performance Review Body (PRB)
- The regulation applies to the coming reference period, RP2, beginning in 2015
- The scope of information collection is similar to that of an A-CDM information sharing system, in other words, it is very comprehensive
- If the compiled information is faithfully analysed and reported, there should be no question open with regard to aviation performance
- However, the amount of information is enormous and neither the necessary analytical tools nor an appropriate system of human-machine interfaces have yet been developed
- To deal with this, a collaboration of aviation actors across Europe need to swarm over the task
- For this to happen, the value of information needs to become apparent

The value of information

- As with A-CDM, increasing best use of information would be its own reward.
- However, as with A-CDM, a deeper and more widespread information initiative requires industry leaders and probably, in many cases, financial support.
- Financial support is justifiable because the initiators of information initiatives as suggested, will bear the costs, but will not enjoy the entire benefit. The largest benefit will likely be external, that is, it will accrue to other stakeholders and society in general.
- A major challenge is to determine the value of information at every level of aviation activity

The greatest threat/the most attractive opportunity

The greatest **threat** is action or inaction through ignorance

The most attractive **opportunity** is the achievement of true collaboration in general and with it, the determination of what we, as travellers, truly need in a constantly changing environment

The spread of A-CDM has introduced the benefit of information sharing—TAM will extend its scope