



Aviation Expertise For a Better and Sustainable Modern World

Digital Information and Data Management Considerations

Dr. Leo JEOH, fte.
Founder and CEO

AAM SG – Explore WG, Subgroup 2





Aeronautical Data (Annex 15)

Data essential for safety and efficiency of modern air navigation

Potential Paradigm Shift for AAM



Data

Regulatory
Authoritative
Trusted Sources

Non-aeronautical

(urban planning / business / marketing, etc.)
Sources where quality / reliability not managed

Challenge

The **safe** but extensive usage of available data

from

heterogeneous sources of variable quality and format,

including

non-consolidated and non-aeronautical data,

along with aeronautically engineered or certified data.



Data Taxonomy

Data Stakeholders

Data Categories

- Business
- Technical
- Operational

Economics of Data Management

- Cost of data
- Service Levels
- Economic regulation

Data Security and Cybersecurity

Potential data architecture (e.g. adaptation of SWIM?)

Data Taxonomy

- Accuracy
- Resolution
- Integrity
- Traceability
- Format
- Timeliness
- Env. Impact
- Security and cybersecurity
- Availability
- Interoperability

ICAO Annex 15

Open Questions

- *Cost of AAM Data*
- *Data Exch Service Level*
- *AAM data security*
- *AAM Cybersecurity*
- **Data volume and infrastructure (e.g. spectrum)**
- **Lifecycle**
- **Data Governance**