AIM within SWIM

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Information Management Panel (IMP)

- The Information Management Panel (**IMP**) investigates and develops:
  - global interoperability information sharing framework for international air navigation
  - as well as investigating solutions to support the planning framework on information management contained in the Global Air Navigation Plan (GANP)

State
Australia
Brazil
Canada
China
France
Germany
India
Japan
Russian Federation
Saudi Arabia
Singapore
South Africa
Sweden
Turkey
United Arab Emirates
United States

Organization
ASECNA
CANSO
EUROCONTROL
IATA
ICCAIA

AIM Challenges & Opportunities

- Air Traffic Information Management and SWIM will complement:
  - human-to-human communication
  - machine-to-machine communication
  - improve data distribution and accessibility in terms of quality of the data exchanged
- Provisions on the collection, use and exchange of information:
  - MET - AIM
  - ATM - AIM
  - *Annex 15*
  - *Annex 4*
  - *SWIM Manual*
  - ***PANS - AIM***

AIM Challenges & Opportunities

- SWIM implementation will be the basis for an **information and Data-centric** environment
- SWIM implementation seeks to **provide quality information**
- SWIM Concept must address the **interoperability environment**
- SWIM information technology (IT) systems to cope with the full complexity of **operational information exchanges**

Cont…

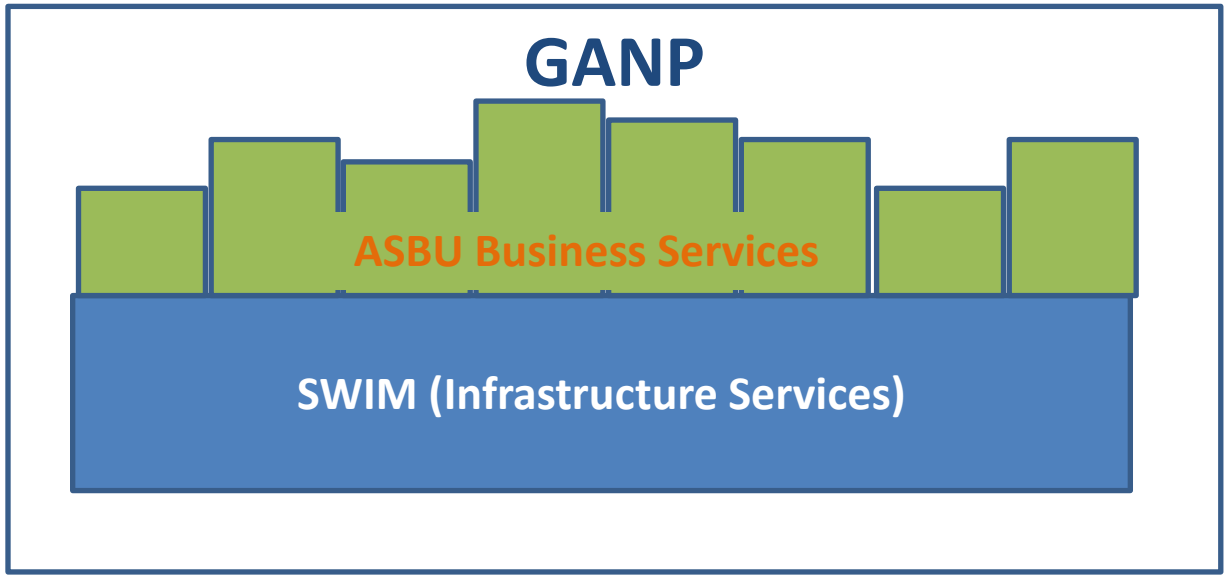
- WIM implementation seeks to **provide quality information**

- SWIM environment will shift the ATM information architecture paradigm from point-to point data exchanges to **system-wide interoperability**

Cont…

- New issues that require significant global development and co-ordination:
  - modernization of the **NOTAM** system
  - definition of a **global interoperability framework** for system architecture
  - identifying service requirements to maintain ATM information with:
    - Safety
    - Integrity
    - Confidentiality
    - Availability
    - Economy.

Simplified View

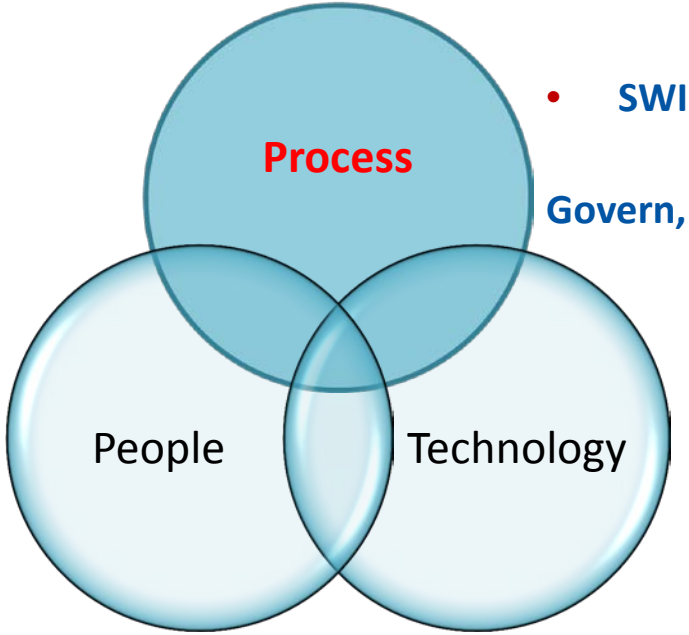


Infrastructure is useful as an enabler for the provision of customer valued business services Without the business services there is limited value

Effective service creation is supported by **Processes**

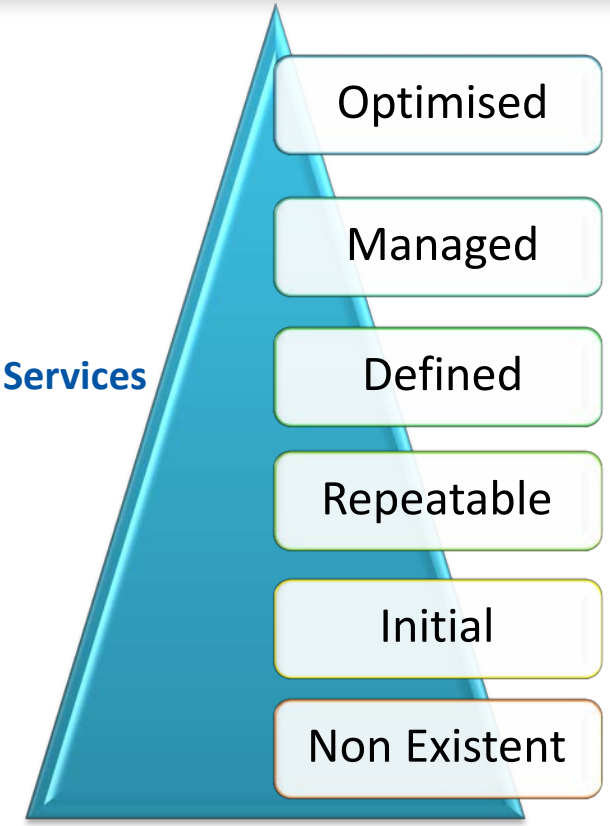
Why Process?

Processes provide standard methods for the co-ordination of people and technology to deliver business valued services.



- **SWIM relies on processes to:**

Govern, Design, Build & Operate Services



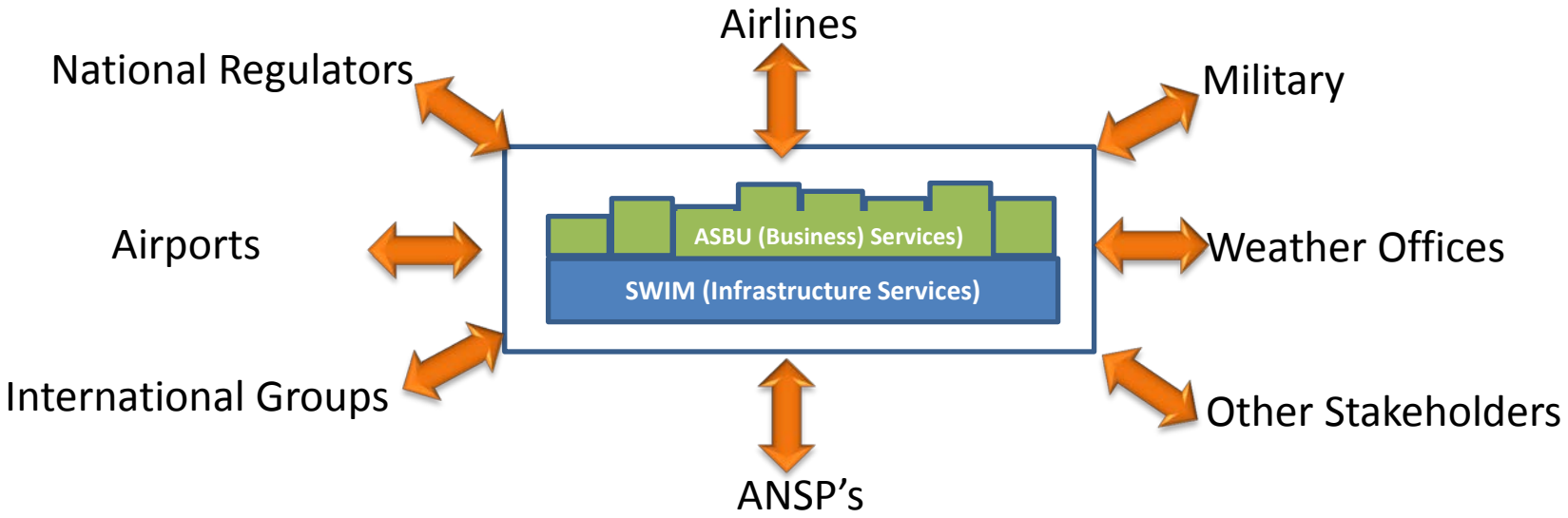
Further Discussion Raised Concerns

Investment in SWIM infrastructure could be impacted by:

- Slow adoption by different parties
- Business service applicability
- Replacement Cycles (when we get funding)
- Scale of infrastructure required
- Risk appetite for adopting new ways of working
- Cost as a barrier to adoption

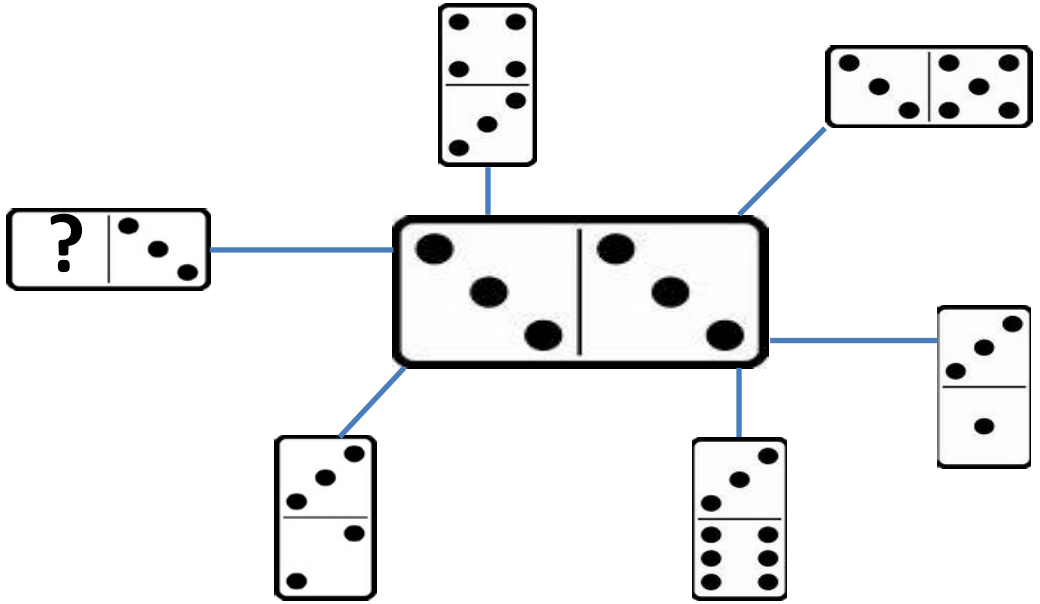
Slow Adoption

If no-one is prepared to adopt SWIM and use the services, why offer them?



SWIM - Interoperability

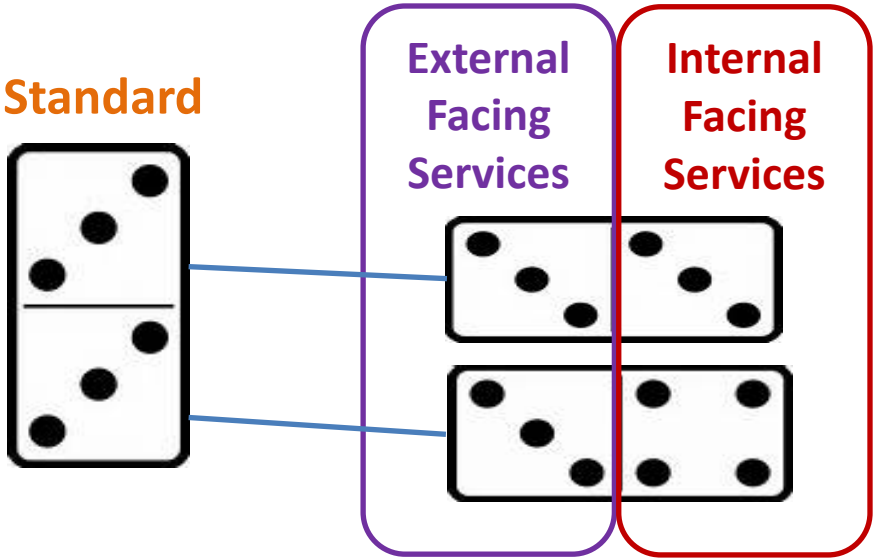
Interoperable services through standards



What really matters is interoperability …

Interoperability Models

Fully compliant or Externally compliant



Full SWIM

External Facing SWIM

Recommendations

- Note the differences between ANSP current and target maturity
- Note the lack of respondent readiness to adopt Web Services
- Use the proposed maturity model to assess a wider sample of ANSP current and future maturity across all ICAO regions
- Modify the model to assess current and future maturity for other groups including airlines, regulators, vendors etc.
- Adopt the building block and domino interoperability models

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