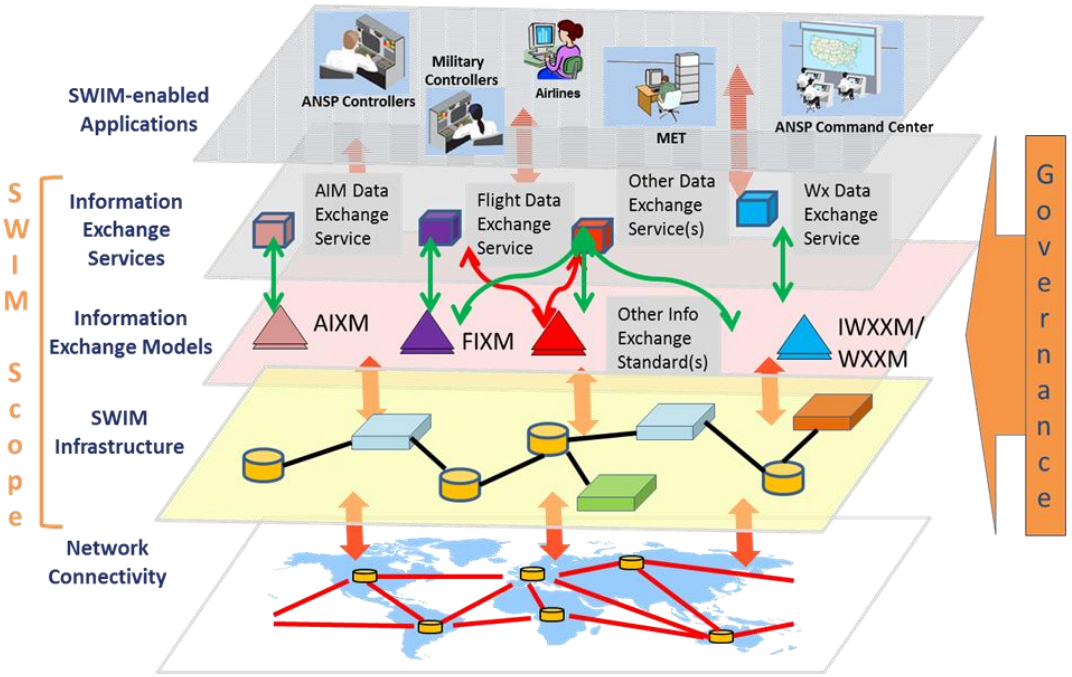
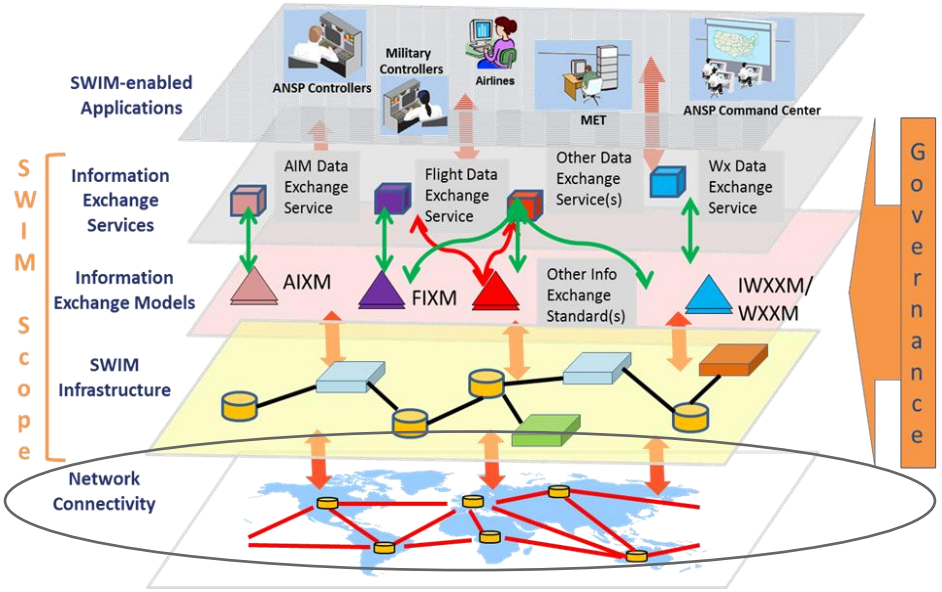
SWIM Layers

- SWIM Enabled Applications.
- Information Exchange Services.
- Information Exchange Models.
- SWIM Infrastructure.
- Network Connectivity.



Network Connectivity

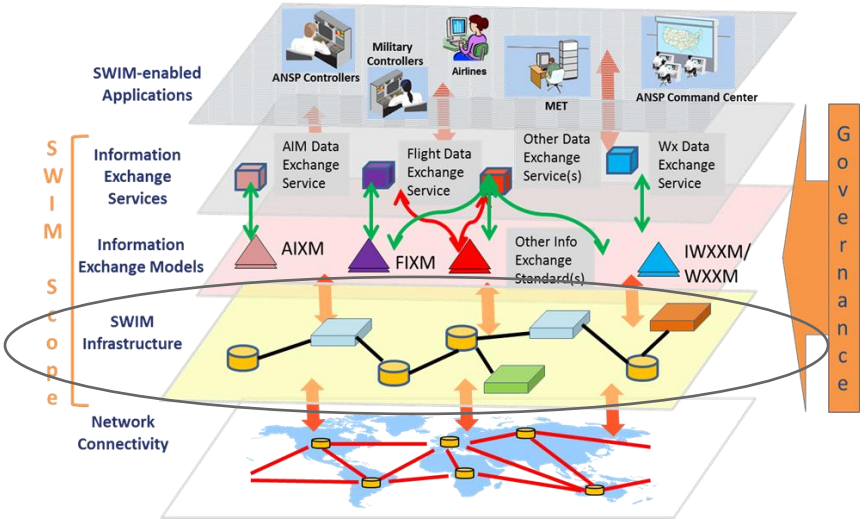
- Provides telecommunication services.
- Consist of a collection of interconnected network infrastructure of different stakeholders.
- Private or public Internet protocol (IP) networks.



SWIM Infrastructure

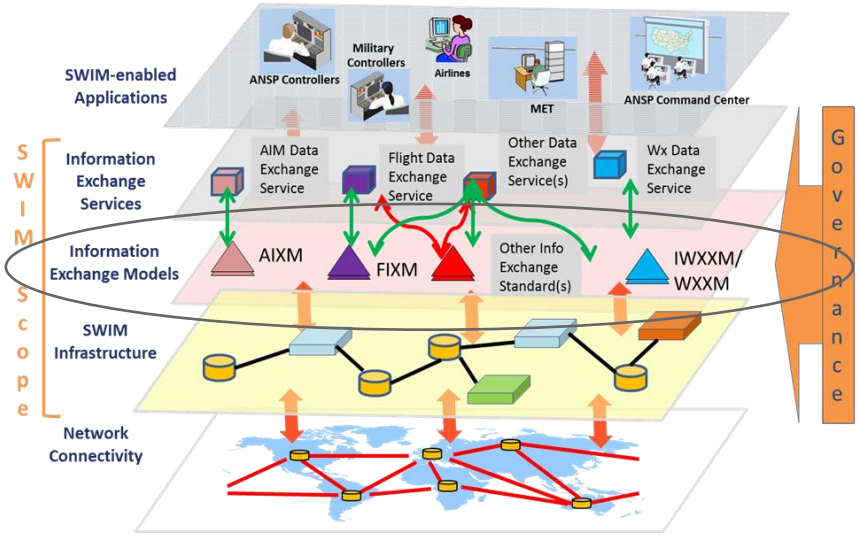
Infrastructure provides the core services, such as

- Interface management.
- Request reply and publish subscribe messaging.
- Service security.
- Enterprise services management



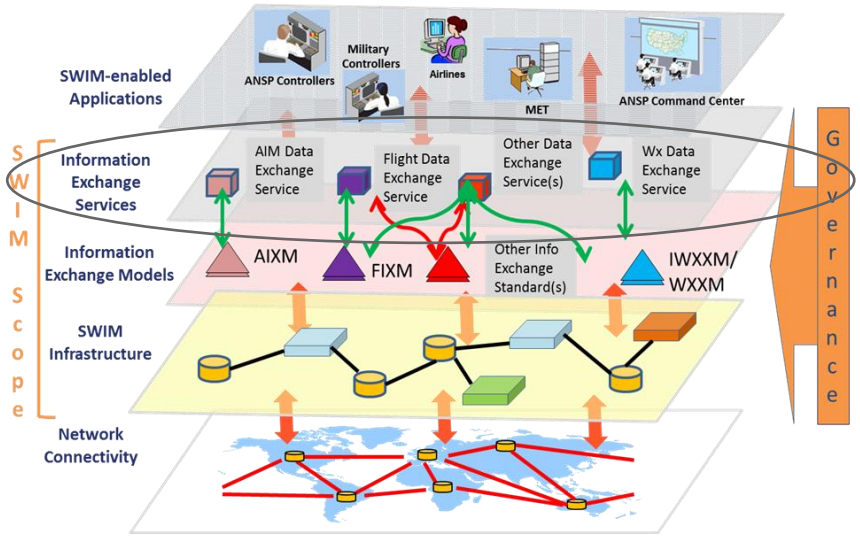
InformationExchange Models

- Using subject specific standards for sharing information for the information exchange services.
- The models define the syntax and semantics of the data exchanged by the applications.



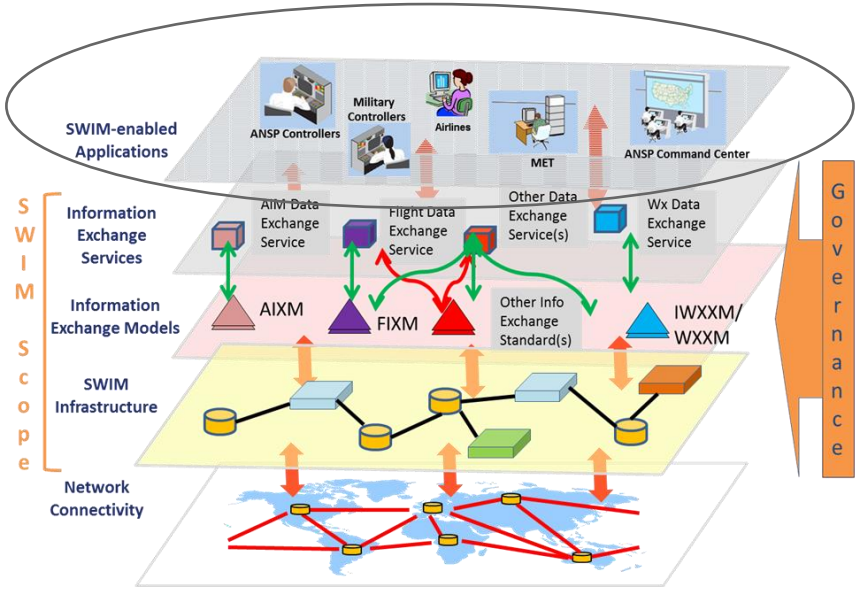
Information Exchange Services

- Will be defined for each ATM information domain and for cross domain purposes.
- Governance specifications must be defined and agreed.
- SWIM enabled applications will use information exchange services for interaction.



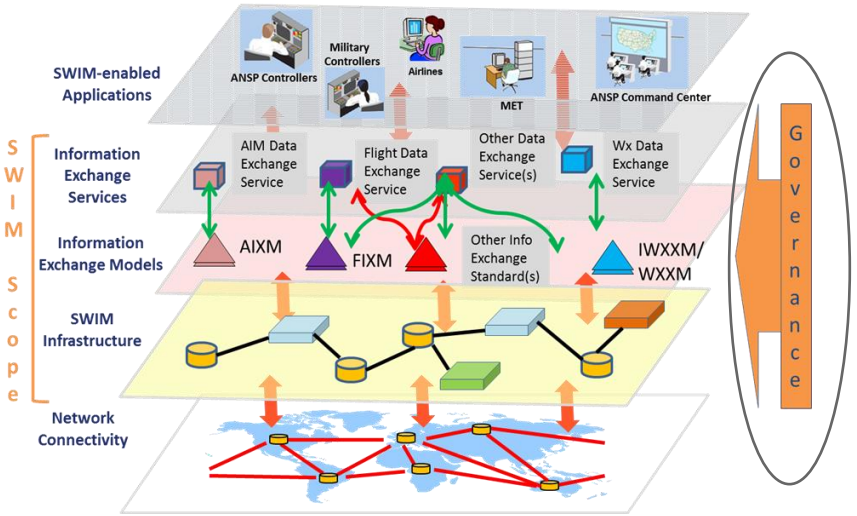
SWIM enabled applications

Applications that interoperate through SWIM, can be information providers and consumers from around the globe.



SWIM Governance
SWIM Registry

- Achieving interoperability across all ATM areas requires governance.
- Registry is the key to bring SWIM related artifacts together, and enable policy enforcement where required.
- It allows information providers to publish services and consumers to find appropriate services.
- Registry allows collaborative lifecycle management.



Interoperability

Logical

Technical

Organisation A

Organisation B

Real World System

Organisational Alignment

Process Alignment

Semantic Alignment

Real World System

Information System

Syntax (XML,…)

Interaction (SOAP,REST, OGC…)

Transport (HTTP, TCP/IP,…)

Information System