



Open Geospatial Consortium (OGC)

**AAtS Harmonization Initiative - RFI Webinar
October 1st 2013**

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(interactive instruments / OGC)**



RELEVANCE TO AATS

OGC Standards - Interoperable Dissemination and Sharing of Geospatial Information



- Discovery - of information and services
- Access and dissemination – of geospatial information
 - Feature and coverage data
 - Tailored to user needs
 - Upon request or when available
- Processing – of geospatial information
- Security – for integrity and confidentiality of information

OGC Standards

Building Blocks for Multiple Domains



- Information Models - for example:

- General Feature Model (GFM)
- Geography Markup Language (GML)
- Observations & Measurements (O&M)
- Styled Layer Descriptor (SLD) / Symbology Encoding (SE)

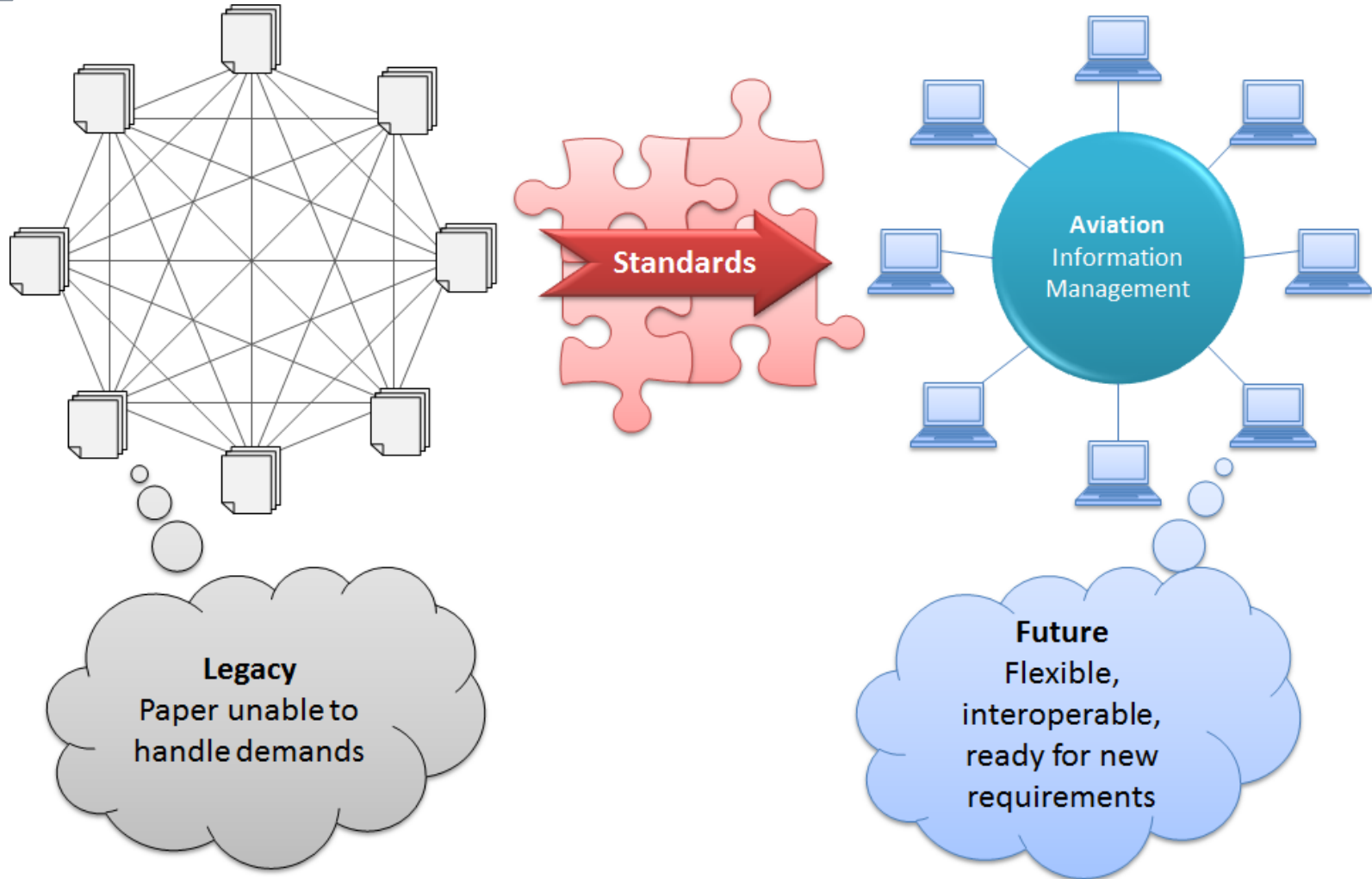
- Service Interfaces - for example:

- Catalogue Service for the Web (CSW)
- Web Feature Service (WFS)
- Web Coverage Service (WCS)
- Web Map Service (WMS)
- Feature Portrayal Service (FPS)
- Event Service

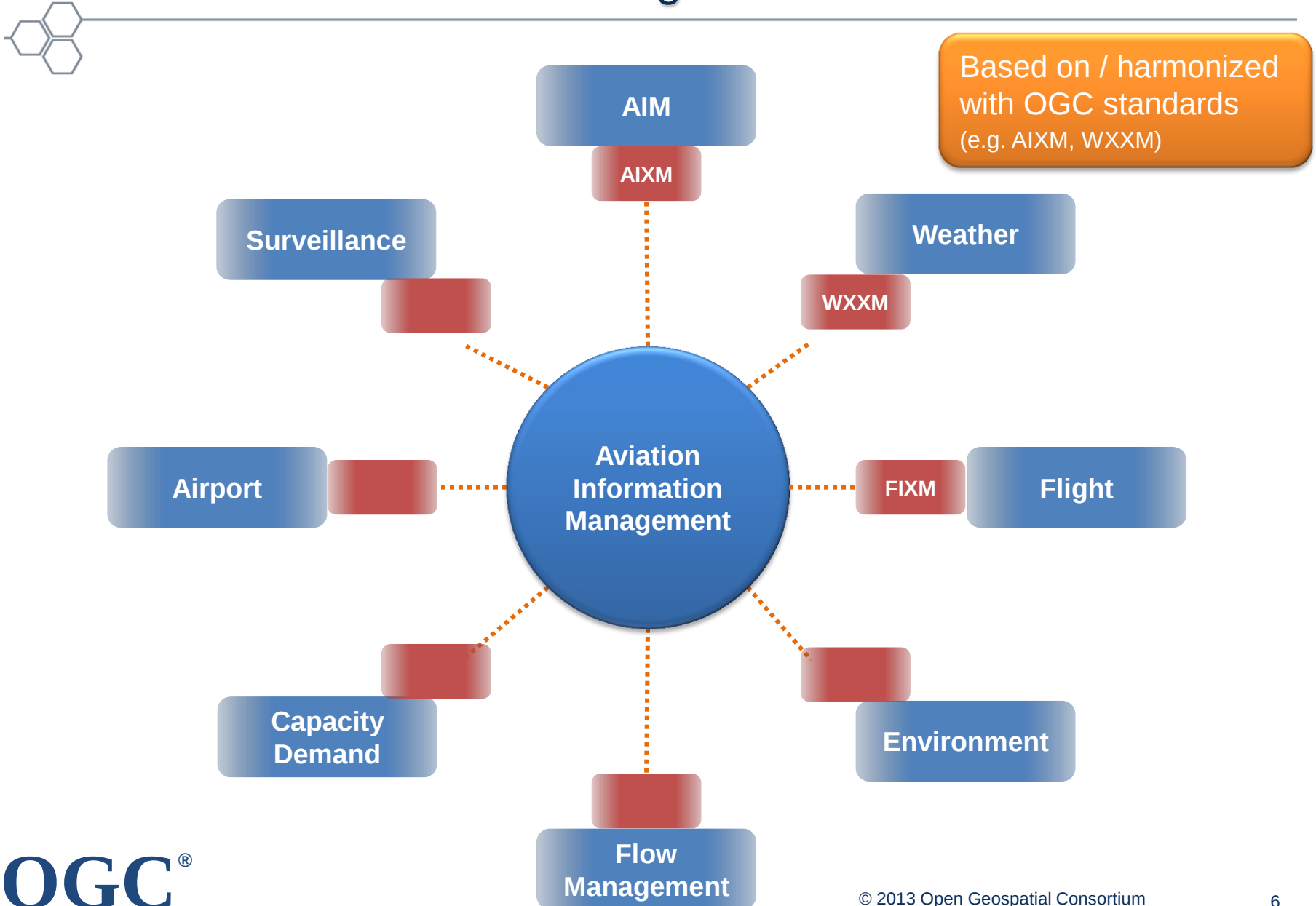
Domain specific profiles and extensions possible, for example:

- Guidance and Profile of GML for use with Aviation Data
- WFS Temporality Extension

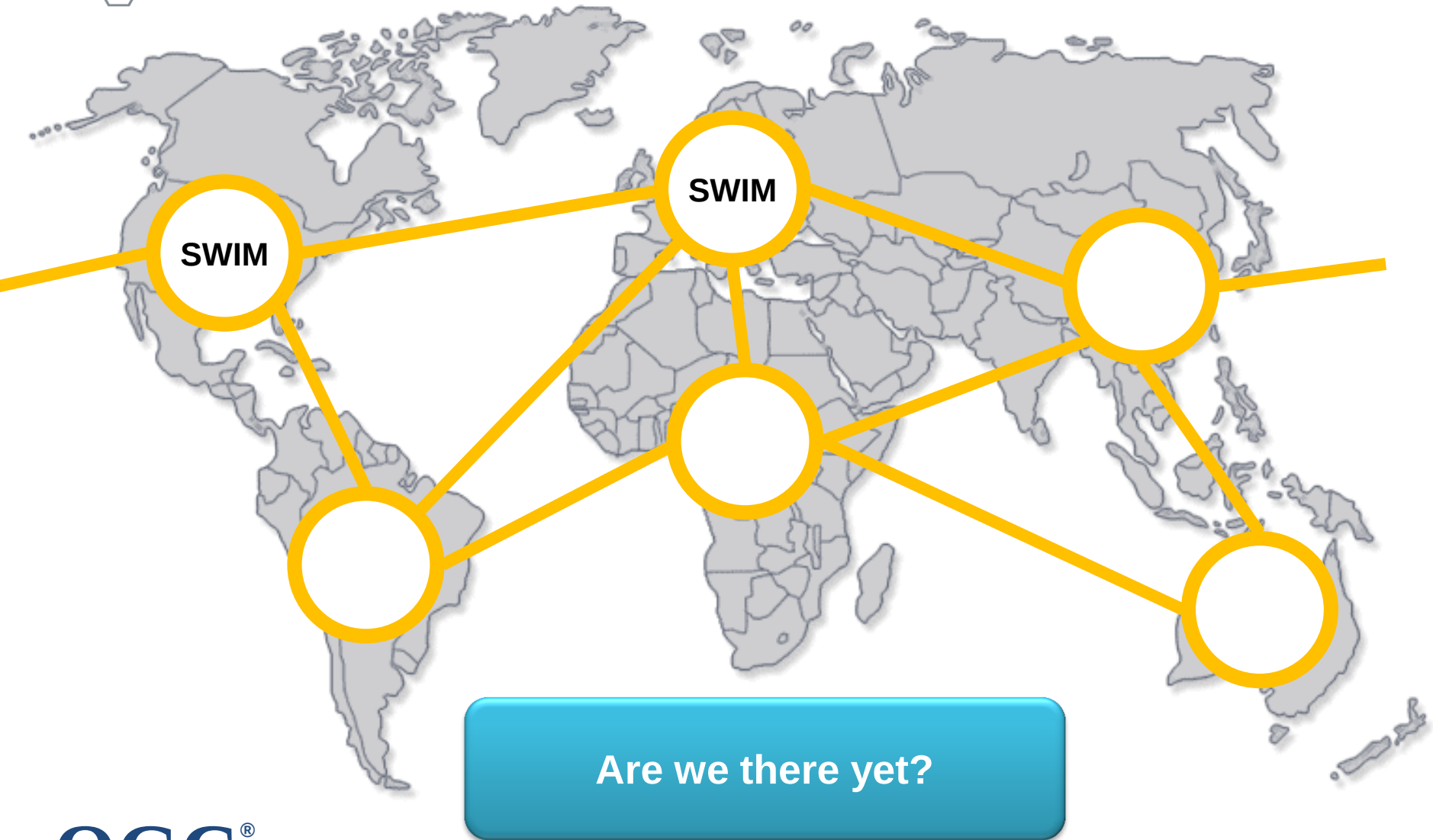
Towards a New Aviation Information Management Paradigm



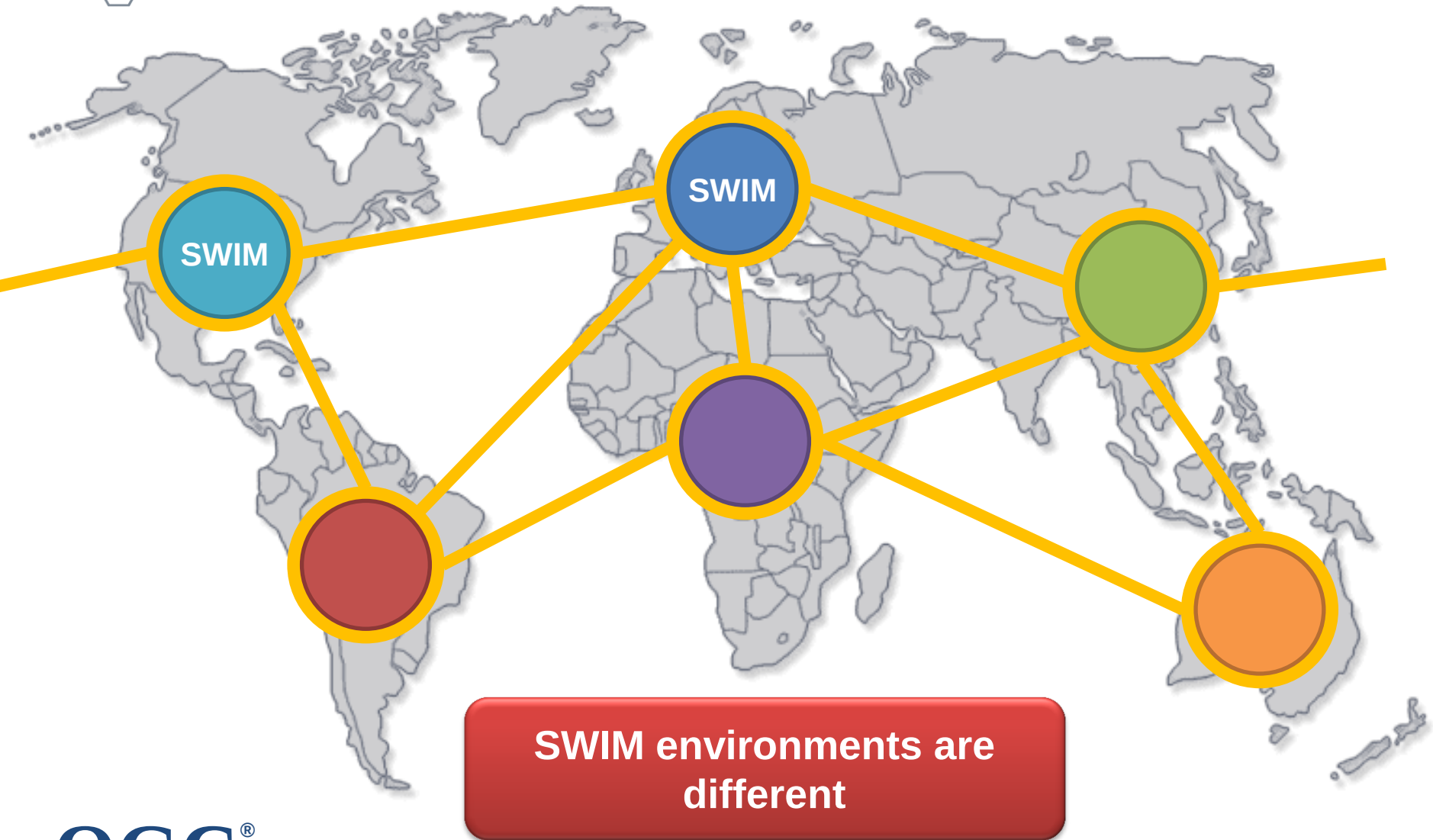
Information Exchange Models for Aviation domains – Aviation Information Management enablers



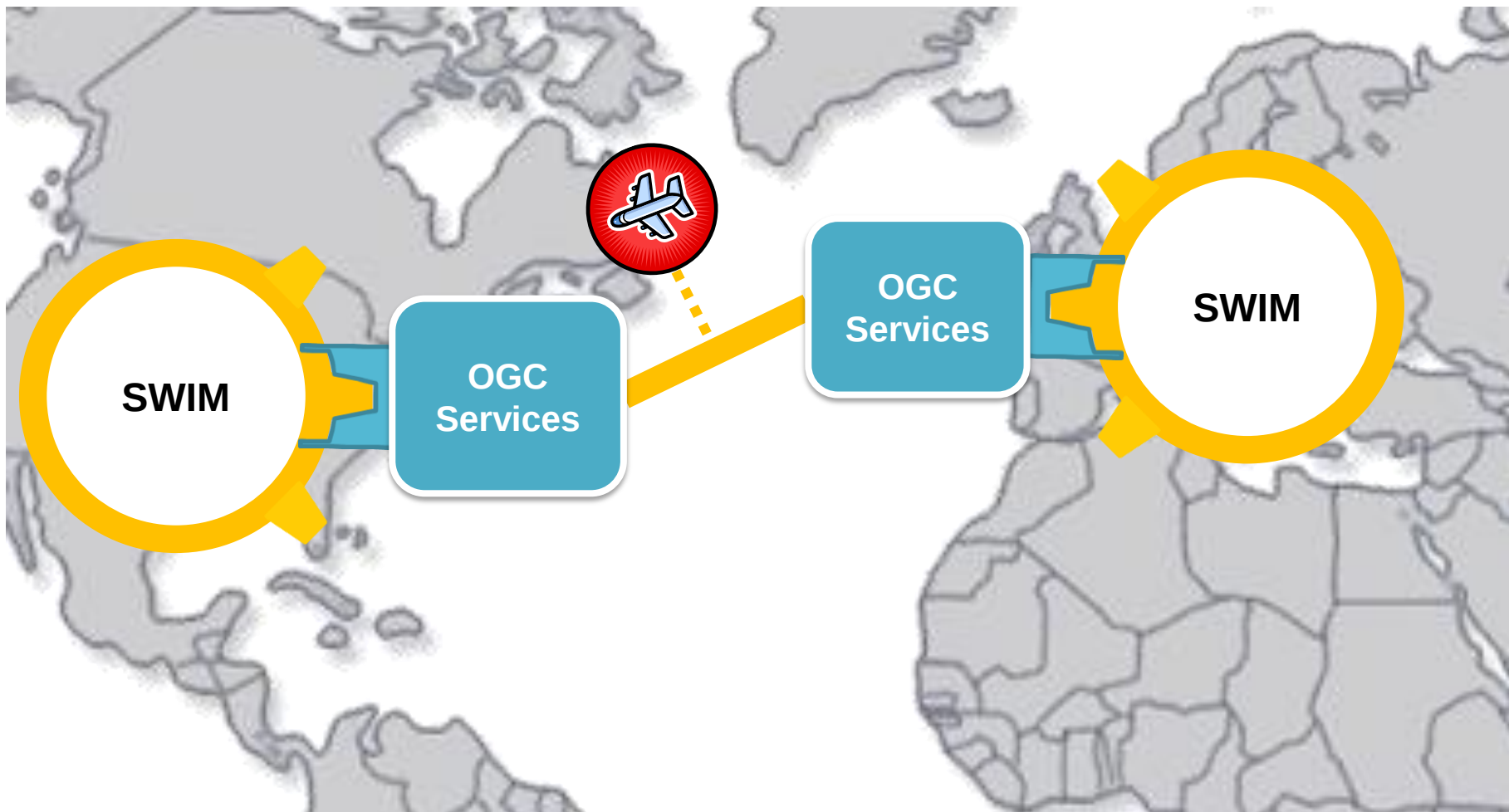
Globally connected SWIM environments



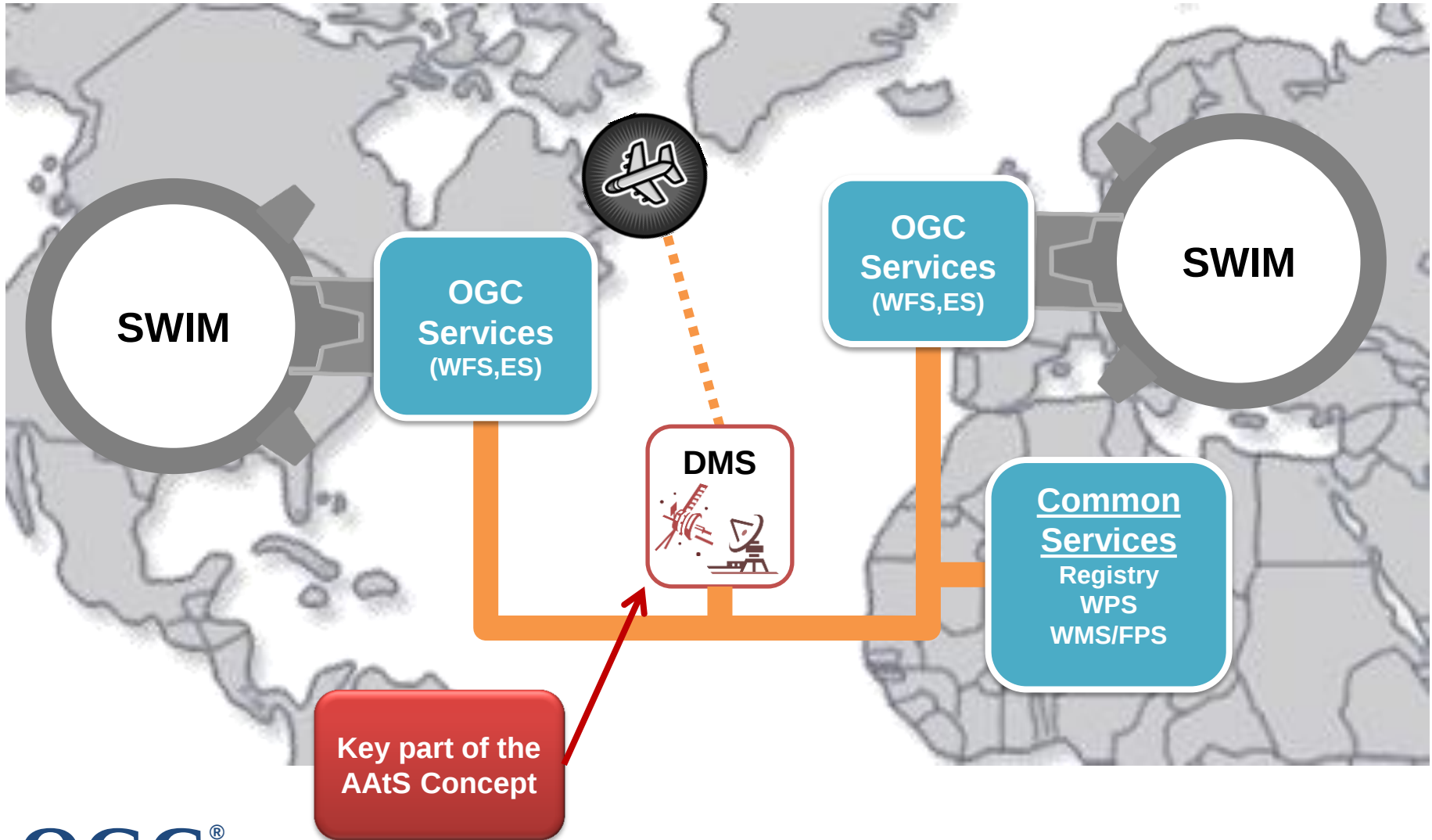
Globally connected SWIM environments



Interoperable dissemination of Aviation information from multiple SWIM environments - facilitated by OGC service interfaces



Demonstration Setup in OGC Web Services Testbed Phase 9



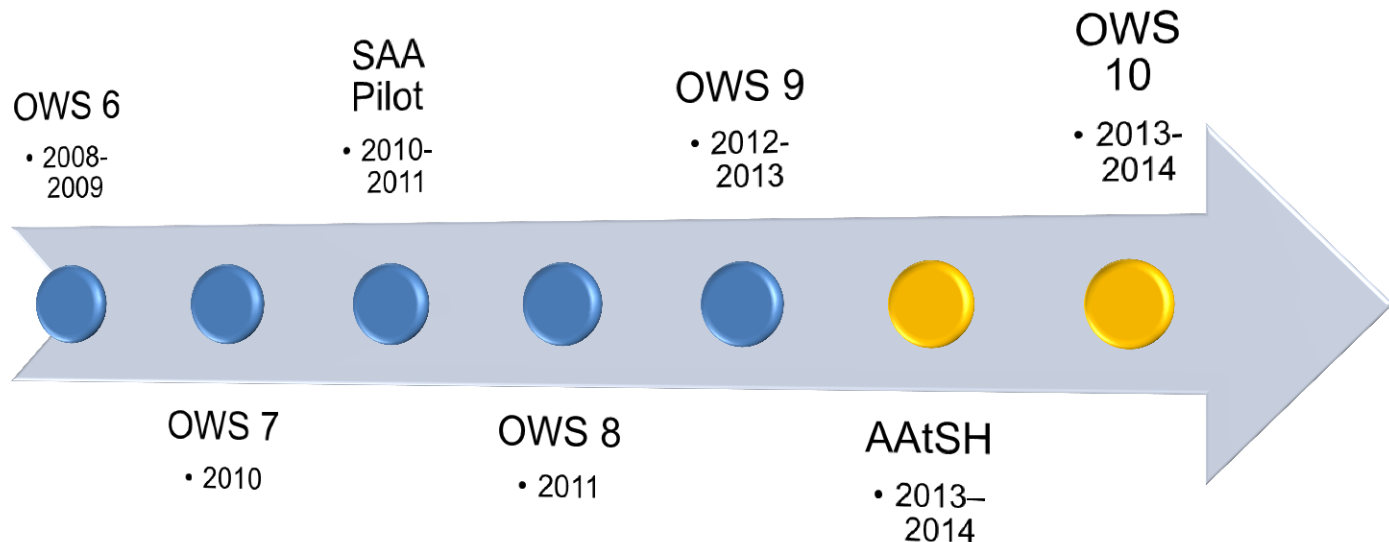


RELEVANT CURRENT ACTIVITIES

Current Activities – OGC Interoperability Program (IP)



- AAtS Harmonization Initiative
- OGC Web Services Testbed Phase 10 (OWS-10)
 - Aviation Thread: exchange of aeronautical, weather and flight information, etc.



Current Activities – OGC Standards Program



- OGC Aviation Domain Working Group (DWG)
 - „Provide an **open forum** for work on aviation-related data interoperability and access, and a route to publication through OGC's standards ladder (Discussion paper / Best Practice / Standard, and, if appropriate, to ISO status)”
 - Examples of work:
 - Requirements for Aviation metadata / Guidance on Aviation metadata profile
 - Guidance and profile of GML for use with Aviation data
- OGC Meteorology & Oceanography (Met Ocean) DWG
 - Members participating in development of AvXML-1.0
 - Joint project by WMO and ICAO
 - Basis for WXXM
 - Consists of aviation-specific information model elements, underpinned by generic weather model elements, based on OGC/ISO models



REFERENCES

References



- OGC Documents: <http://www.opengeospatial.org/standards>
 - OWS-9 Aviation Architecture Report
 - https://portal.opengeospatial.org/files/?artifact_id=51823
 - OWS-9 Data Transmission Management Report
 - https://portal.opengeospatial.org/files/?artifact_id=51812
- Demonstrations: <http://www.opengeospatial.org/resource/demos>
 - OWS-9 Aviation:
 - <http://www.opengeospatial.org/pub/www/ows9/aviation.html>
 - OWS-8 Aviation:
 - <http://www.opengeospatial.org/pub/www/ows8/aviation.html>
 - FAA SAA Dissemination OGC Pilot
 - <http://www.opengeospatial.org/pub/www/saa/index.html>



OGC Aviation

Agenda



- Introduction – Nadine Alameh, OGC
- AAtS Context – Lockett Yee, North Star Group (on behalf of FAA)
- SC 206 Overview – Matt de Ris, Panasonic/SC-206 representative
- AGIE Overview – Rick Wilber, Boeing/ARINC 830/839 AGIE/MAGIC Co-Chair
- OGC Standards Overview – Johannes Echterhoff, Interactive Instruments/OGC
- Recap – Nadine Alameh, OGC
- Q&A