

# *Enabling Information Sharing thru Common Services*

## **Wrap-Up and An Enterprise View**

Presented By: Pierre Truter  
CISO & Manager IT Planning  
Airservices Australia

Date: 1 September 2011



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## **Air Transportation Information Exchange Conference - (featuring AIXM, WXXM and FIXM)**

August 30, 2011 - September 1, 2011  
NOAA Science Center & Auditorium  
Silver Spring, Maryland

# Introduction



Air Transportation Information  
Exchange Conference - (featuring  
AIXM, WXXM and FIXM)

- Wrap-Up
- Information Integration – An Enterprise View
- Closing



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# Welcome

350+ Registrants from over 12 Countries



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Exchange Conference - (featuring  
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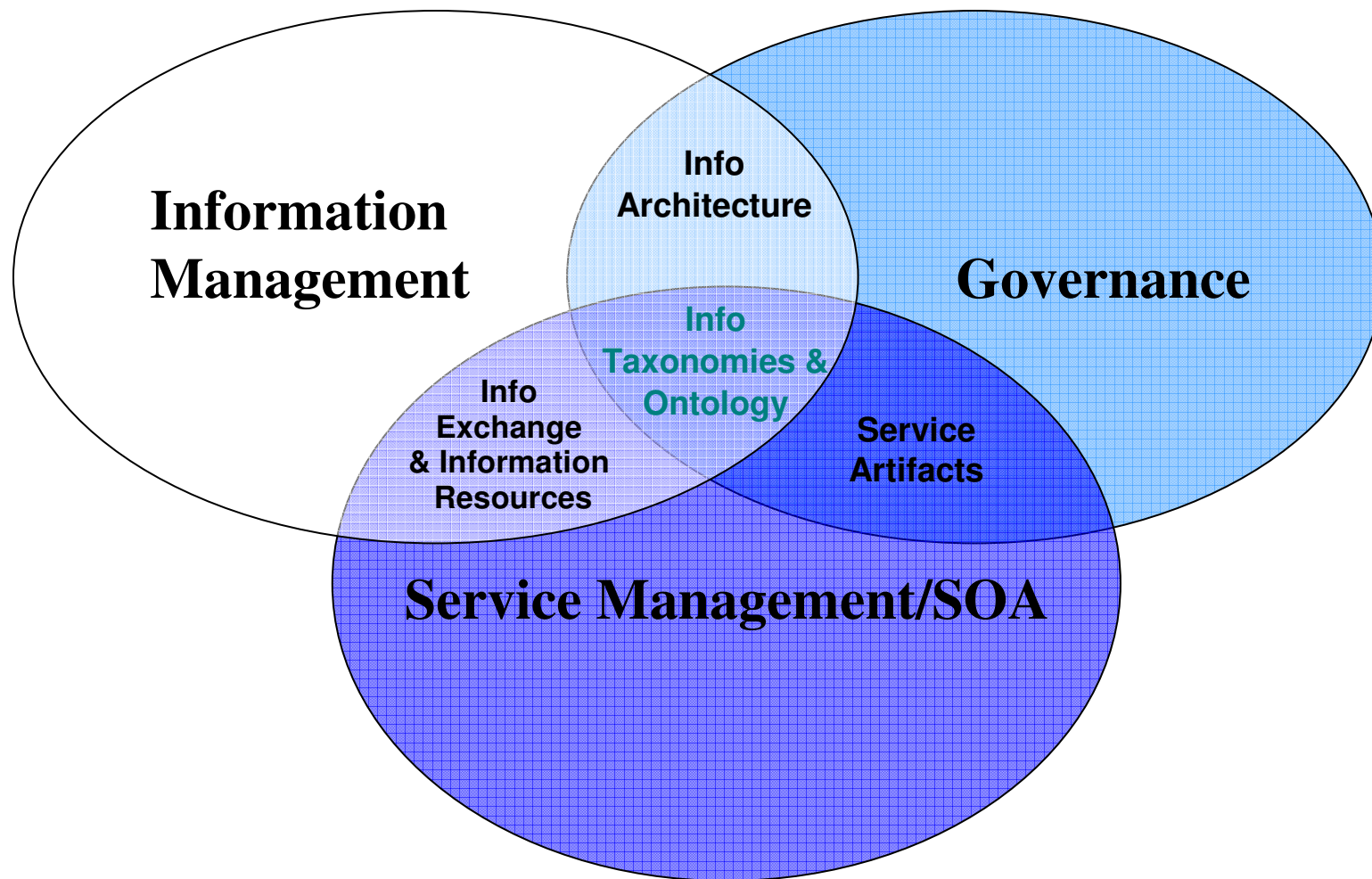


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# ...Another Struggle around Information and Service Management Components



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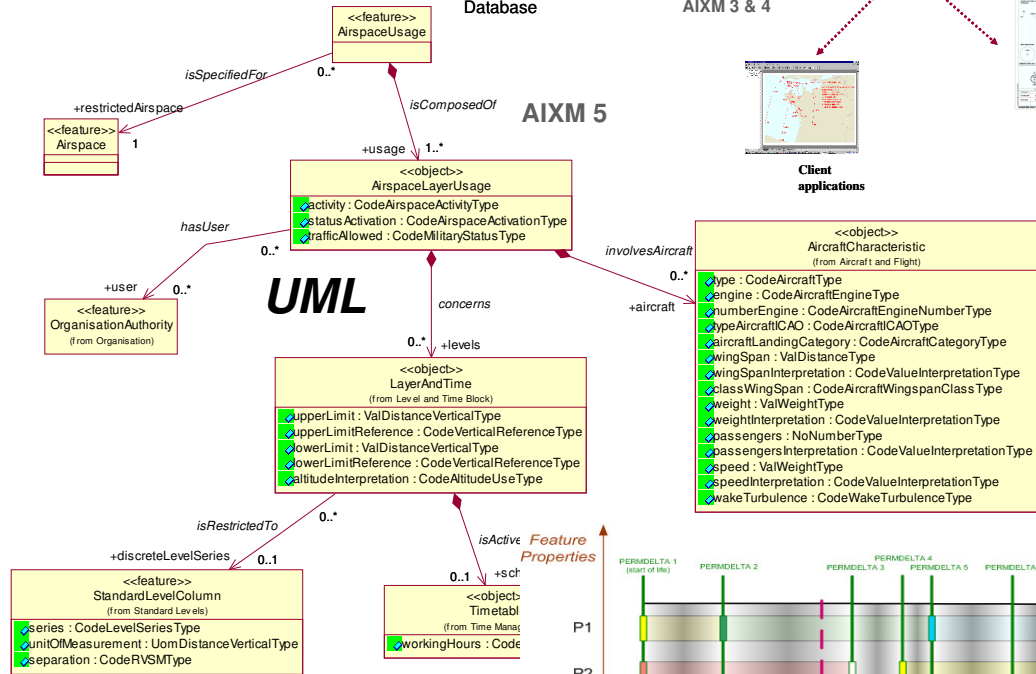
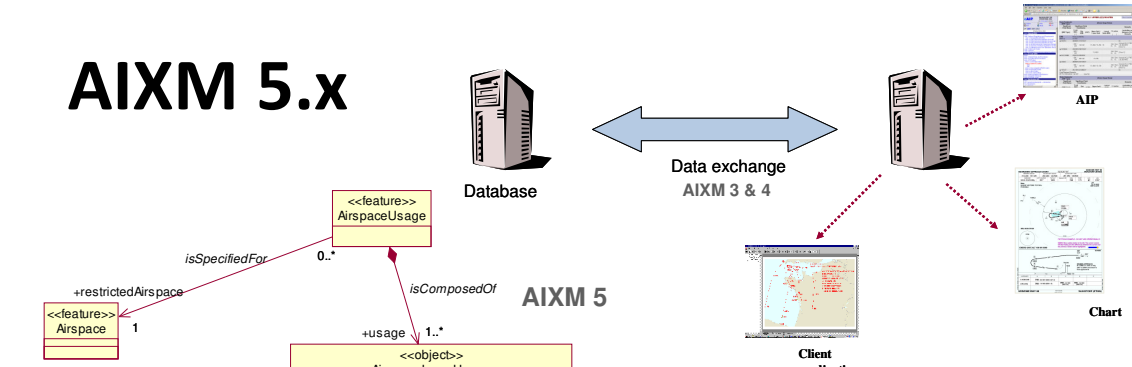


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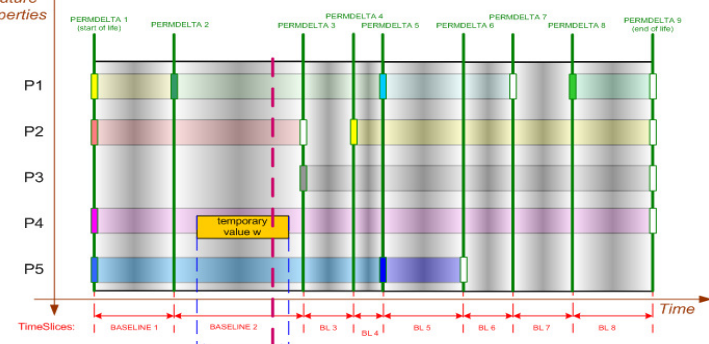
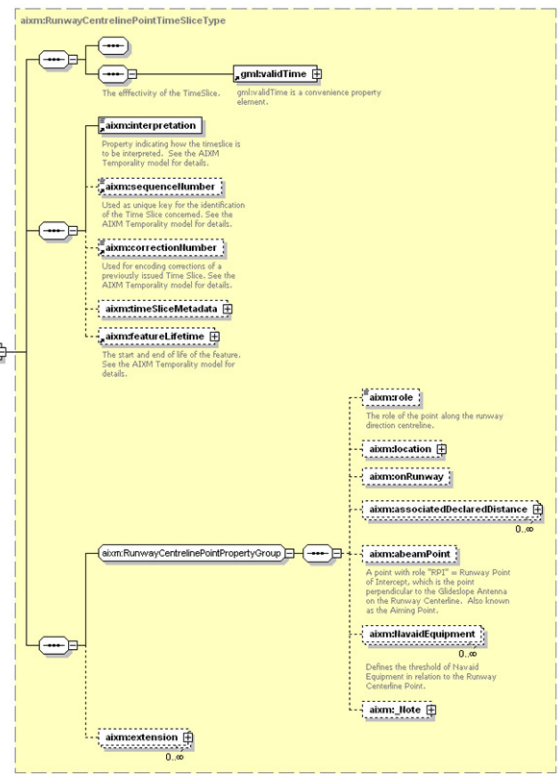
# Information Structures



## AIXM 5.x



## XSD (GML)



## Temporality Concept

Eddy Porosnicu

# Information Structures

## WXXM



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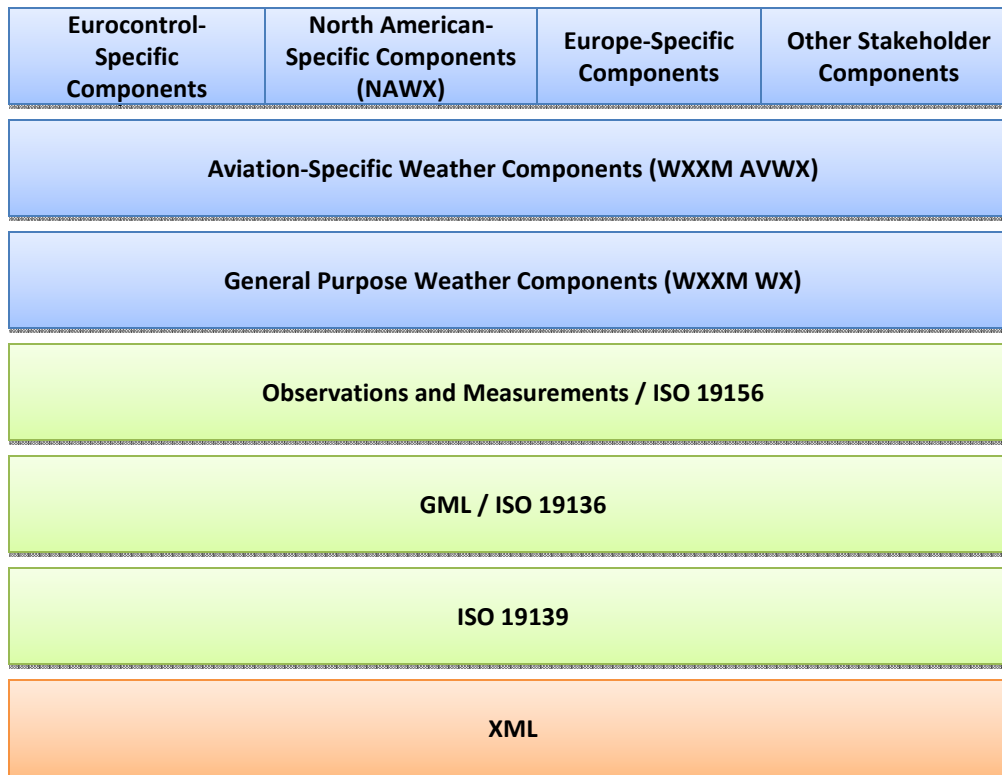
Data Model  
Component Agility

Standards Governance Body

High  
(months)



Low  
(years)

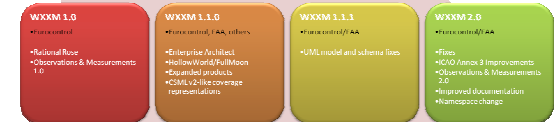


Individual Organizations

International Civil Aviation Organization (ICAO) (envisioned)

World Meteorological Organization (WMO) (envisioned)

ISO / OGC



Aaron Braeckel



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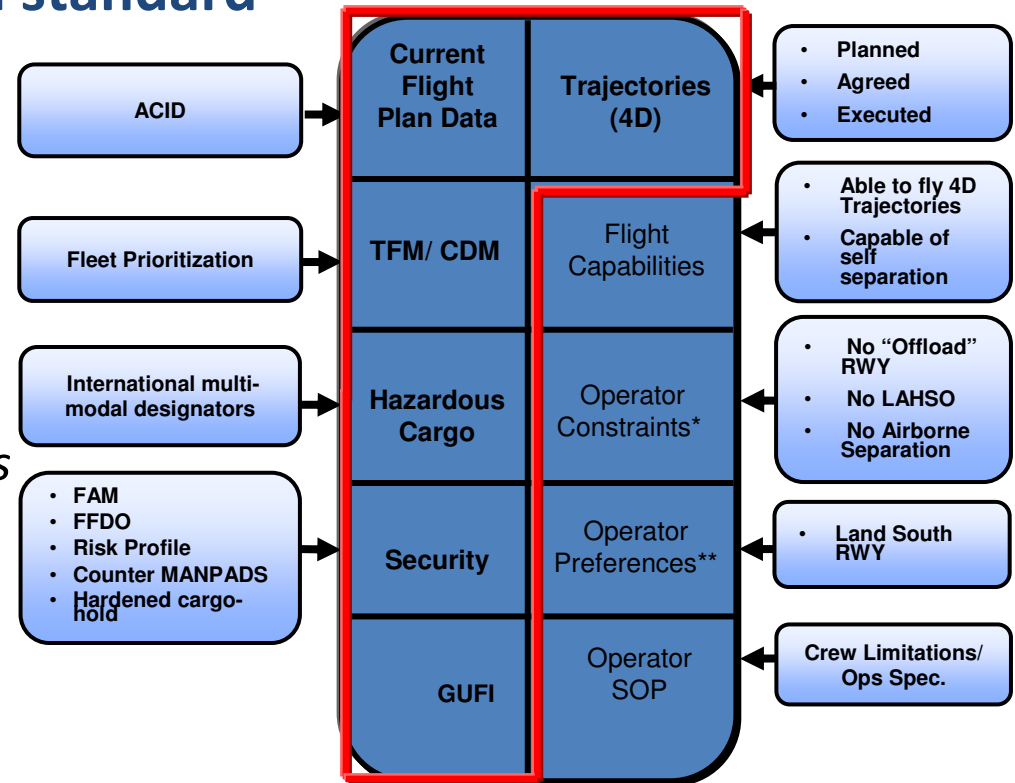
# Information Structures



## FIXM

FIXM will be the international standard used in the *Flight Object*...

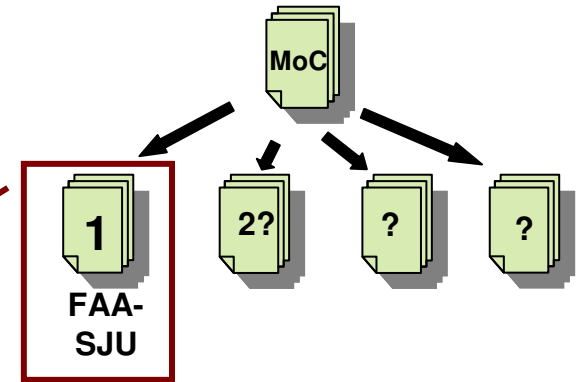
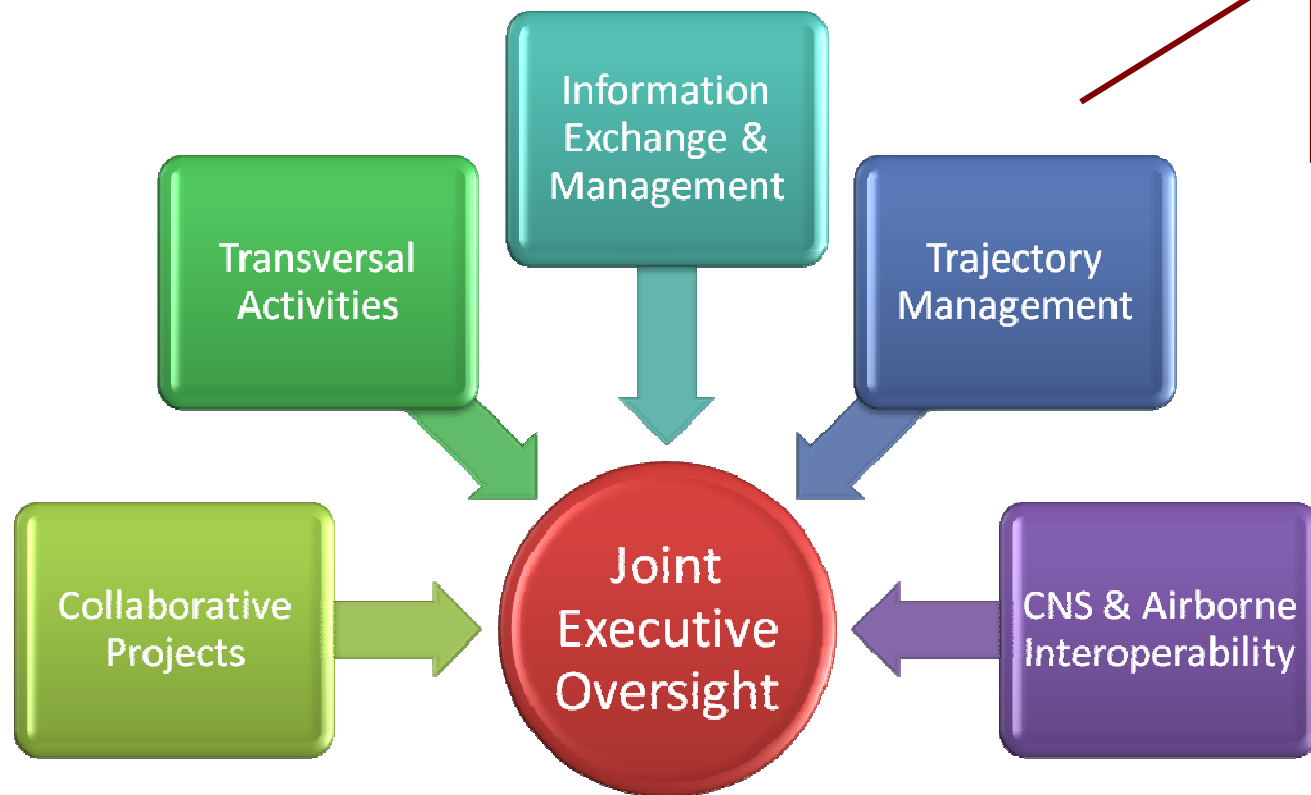
- Aircraft identifiers and parameters
- Current Flight Plan information (filed, cleared, flown)
- Operator preferences, constraints (limitations), SOPs
- Flight capabilities, preferences, constraints
- Security information



# International Development



## NextGen-SESAR Cooperation for Global Interoperability



Steve Bradford



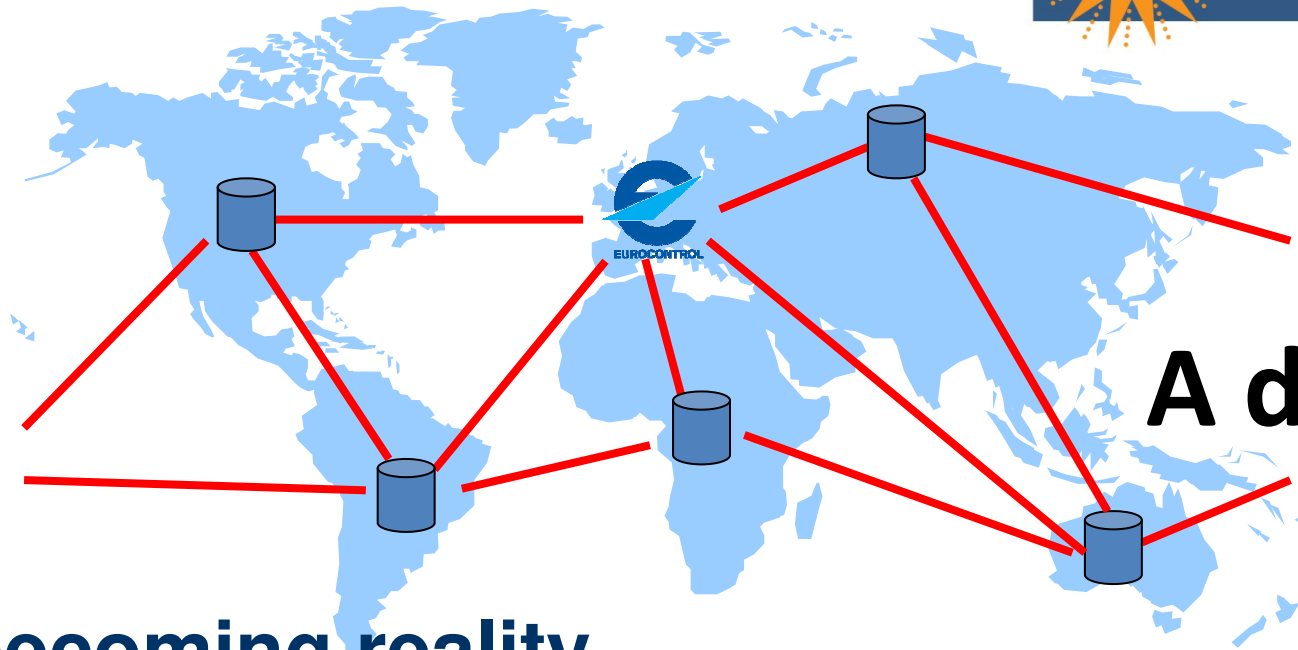
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# International Development



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## A dream ...

## ... becoming reality ...

Connected

Canada, Australia, New Zealand, Jordan,  
Philippines

Committed/testing

Belarus, Egypt, Japan, Kazakhstan,  
Morocco, Singapore, South Africa, Syria,  
Taiwan

Discussing

Tunisia, Algeria, FAA, NGA, ...

Developments

Brazil, Russia, India, South-Korea, ...

**Paul Bosman**



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# International Development



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## WXXM global standardisation

PROPOSED



*States in a position to exchange METAR, SPECI, TAF, SIGMET in a digital form under bilateral agreement should structure this information in accordance with WXXM and use XML/GML as the exchange format.*

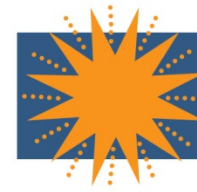


*METAR, SPECI, TAF and SIGMET are exchanged in a digital form, the information should be structured in accordance with WXXM and use XML/GML as the exchange format States in a position to do so, under bilateral agreement, should structure all meteorological information in accordance with WXXM.*



*METAR, SPECI, TAF and SIGMET are exchanged in a digital form, the information shall be structured in accordance with WXXM. All other MET information should be structured in accordance with WXXM.*

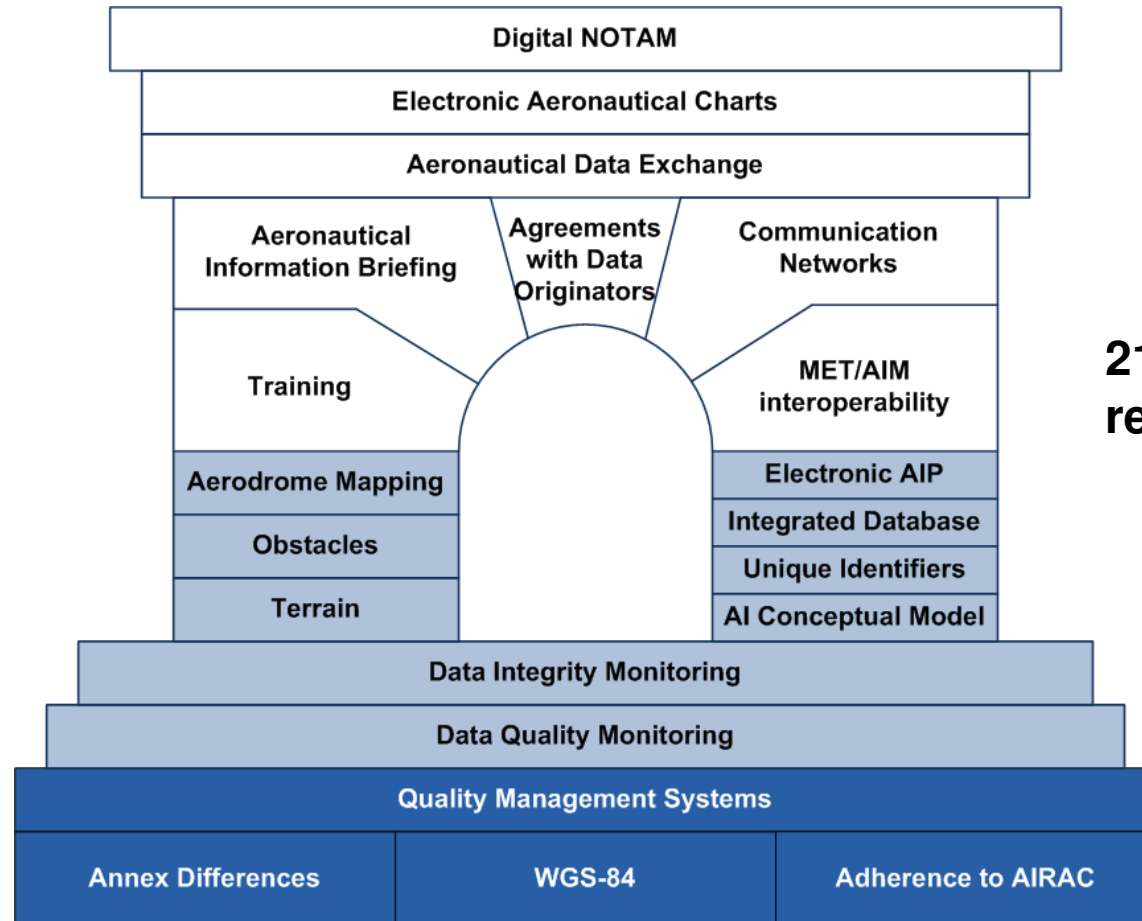
# International Development



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## AIS to AIM Roadmap

3 phases



21 inter-related steps

Michael Hohm



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# Applications

## Aircraft Access to SWIM



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## ✈ Data Content Manager Capabilities

✈ Extensive Commercial Data Management Experience for Mobility Services

Commercial Aviation

American Airlines, Delta Air Lines, cargoLux, TNT, BRITISH AIRWAYS, Emirates, UNITED AIRLINES, UPS, RYANAIR, easyJet, CANADA, U-S AIRWAYS, Lufthansa, JET AIRWAYS, KINGFISHER AIRLINES, TUI, First Choice, Continental

NEWMONT, Westinghouse, SAS, trodat, AIRFRANCE, THALYS, BAE SYSTEMS, anglianwater, CSC, Royal Mail, bp, bhpbilliton, BLUESCOPE STEEL

Royal Mail, DHL, Postbox/Map, CSC OmniMap, NHS, TWOS, G.P. Rennboard 2011, Padlock Press Issue, POWERING THE CAUSE WITH OMNILLOCATION

Gary Church



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# Applications NOTAM



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US Digital NOTAM System | Federal Aviation Administration

NOTAM Manager | Feature Manager | User Administration | My Profile | Preferences | Feedback | Help | Logout

Digital - AIM | NOTAM - Manager  
Shaelynn Hales | AUG 18 2011 THU 2357 UTC

Filters: Airports (ACY-Atlantic City Intl), Keyword (10/9), Status (All 30)

Keyword	Designator	Condition	Number	Start Date UTC	End Date UTC	Status
<b>Aerodrome</b>	<b>ACY</b>	<b>Beacon Status</b>	-	<b>07/15/2011 1726</b>	<b>07/30/2011 1726</b>	<b>Draft</b>
Communication	-	Free Form	07/055	07/22/2011 1929		Active
<b>Apron</b>	<b>FAA EXPERIMENTAL RAMP</b>	<b>Personnel and Equipment Working</b>	-	<b>07/25/2011 1312</b>	<b>07/29/2011 2100</b>	<b>Draft</b>
Obstruction	-	Tower Light Outage	-	07/28/2011 1836	08/12/2011 1836	Error Activating
Runway	13/31	Ground Lighting Status	-	08/01/2011 1404	08/04/2011 1210	Error Activating
<b>Taxiway</b>	<b>G</b>	<b>Construction Status</b>	-	<b>08/01/2011 1412</b>	<b>08/10/2011 1210</b>	<b>Draft</b>
Apron	FAA EXPERIMENTAL RAMP	Ground Lighting Status	-	08/01/2011 1926	08/31/2011 2100	Error Activating
<b>Taxiway</b>	<b>D</b>	<b>Construction Status</b>	-	<b>08/02/2011 1000</b>	<b>08/08/2011 1000</b>	<b>Draft</b>
Runway	4/22	Free Form	-	08/02/2011 1505	08/26/2011 1212	Activation In Progress
Apron	ANG ALERT RAMP	Free Form	-	08/02/2011 1517	08/11/2011 1212	Activation In Progress
Taxiway	B	Free Form	-	08/05/2011 2100	08/24/2011 1210	Activation In Progress
Runway	13/31	Free Form	-	08/05/2011 2101	08/17/2011 1210	Activation In Progress
Taxiway	N	Free Form	-	08/05/2011 2102	08/24/2011 1210	Activation In Progress
<b>Runway</b>	<b>4/22</b>	<b>Braking Action</b>	-	<b>08/08/2011 2019</b>	<b>08/09/2011 2019</b>	<b>Draft</b>
Apron	FAM RAMP	Closure	08/012	08/10/2011 1347	08/19/2011 1212	Active
Runway	13/31	Free Form	-	08/10/2011 1351	08/19/2011 1212	Activation In Progress
Runway	13/31	Ground Lighting Status	08/014	08/10/2011 2100	08/25/2011 2100	Active
Runway	4/22	Closure	08/015	08/10/2011 2300	08/19/2011 2300	Active
Taxiway	D	Designated Non-Movement Area	08/013	08/10/2011 2349	08/24/2011 1210	Active
Aerodrome	ACY	Free Form	-	08/11/2011 1843	08/24/2011 1210	Activation In Progress
Apron	ANG ALERT RAMP	Personnel and Equipment Working	08/030	08/16/2011 0238	08/25/2011 1210	Active
Apron	COMMERCIAL RAMP	Ground Markings Status	08/032	08/16/2011 0320	08/30/2011 2100	Active
Aerodrome	ACY	Free Form	-	08/16/2011 1620	08/30/2011 1210	Activation In Progress
Obstacle	-	Free Form	-	08/16/2011 1622	08/30/2011 1210	Activation In Progress
Obstruction	-	Free Form	-	08/16/2011 1638	08/23/2011 1210	Activation In Progress
<b>Obstruction</b>	<b>Tower Light Outage</b>	<b>Tower Light Outage</b>	-	<b>08/16/2011 1747</b>	<b>08/31/2011 1747</b>	<b>Draft</b>
<b>Obstruction</b>	<b>Tower Light Outage</b>	<b>Tower Light Outage</b>	-	<b>08/16/2011 2018</b>	<b>08/31/2011 2018</b>	<b>Draft</b>
Apron	FAA EXPERIMENTAL RAMP	Personnel and Equipment Working	08/031	08/17/2011 0317	08/25/2011 1012	Active
Obstruction	-	Tower Light Outage	08/036	08/17/2011 1000	09/01/2011 1000	Active
Apron	FAA EXPERIMENTAL RAMP	Free Form	-	08/17/2011 1200	08/25/2011 1210	System Error
<b>Apron</b>	<b>ALL RAMPS</b>	<b>Ground Lighting Status</b>	-	<b>08/17/2011 1942</b>	<b>08/31/2011 1210</b>	<b>Draft</b>
Apron	FAA RAMP	Ground Lighting Status	08/052	08/18/2011 0138	08/19/2011 1313	Active
<b>Taxiway</b>	<b>C</b>	<b>Designated Non-Movement Area</b>	-	<b>08/19/2011 1000</b>	<b>08/31/2011 1200</b>	<b>Draft</b>

Active filters: Keywords = Keyword, Status = All [33 Records]

Connected to NOTAM Manager | Page 1 of 1

## Shaelynn Hales



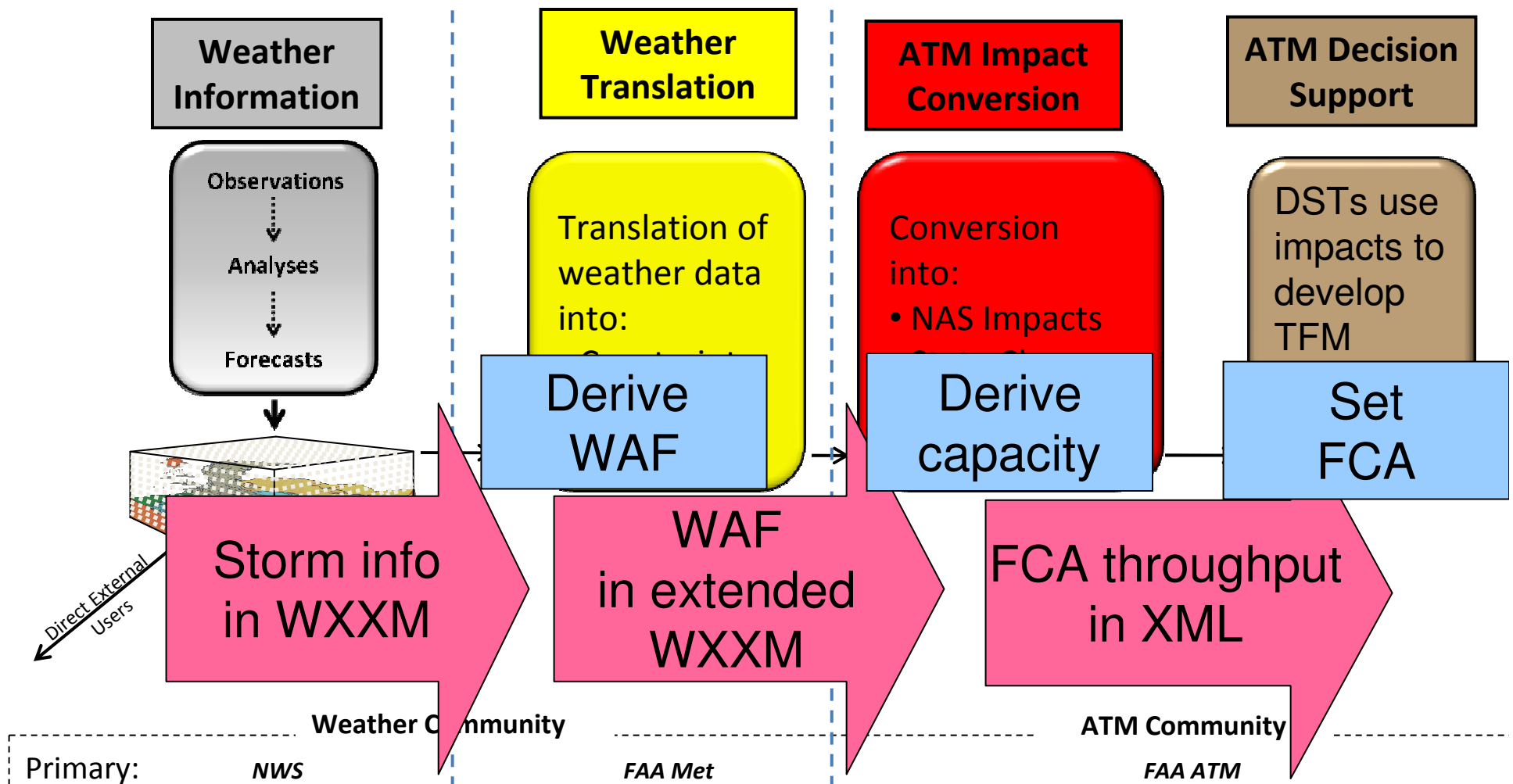
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# Applications

## MET Products



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Dave Pace



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# Information Integration An Enterprise View



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# Information Integration

## An Enterprise View



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- **We all work within a company structure**
  - **income, expenditure, resources, deliver services**
- **We need to measure our performance**
  - **“if you can’t measure it, you can’t manage it”**
- **As ANSP’s we should move to a Performance Based Approach (PBA)**
- **Structured operational info will enable PBA**



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# Advantages of PBA



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- **Result oriented – customer focus**
- **Goals are publically stated, thus drives performance outcomes**
- **Decision making based on results of quantitative and qualitative methods**
- **Focus on desired results help set priorities**

ICAO Doc 9883



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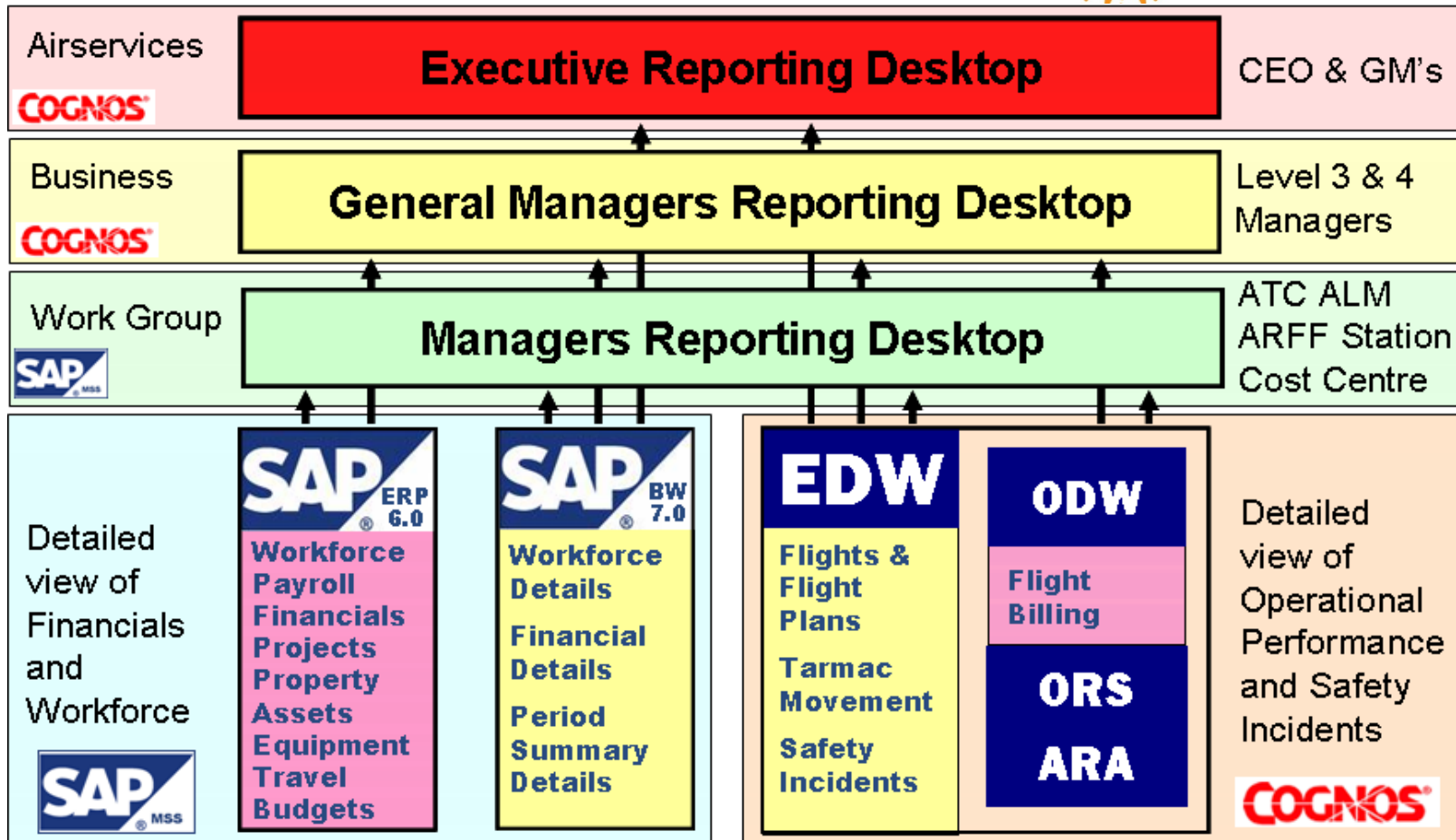


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# Business Reporting Initiatives

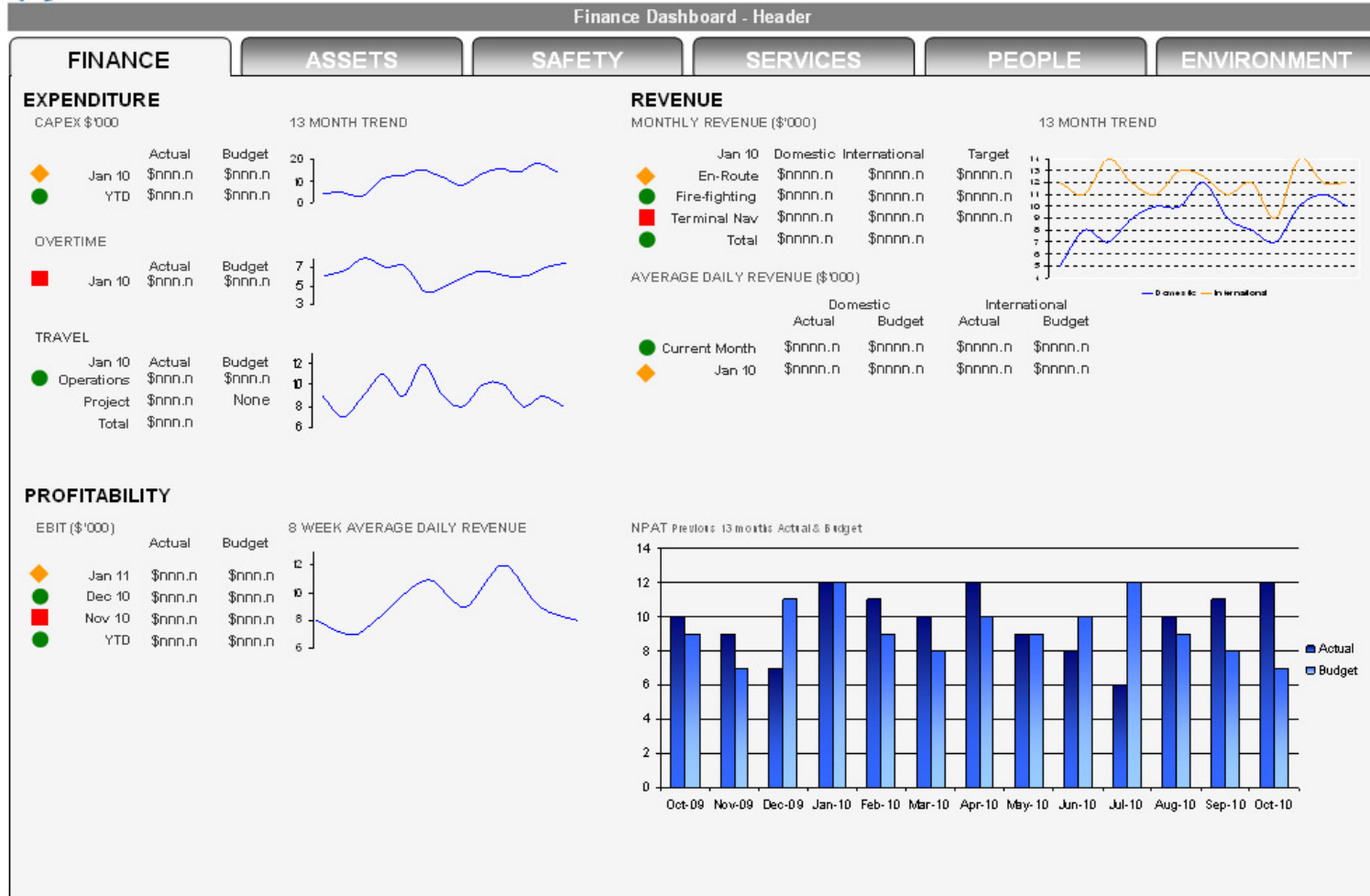


Air Transportation Information Exchange Conference - (featuring AIXM, WXXM and FIXM)

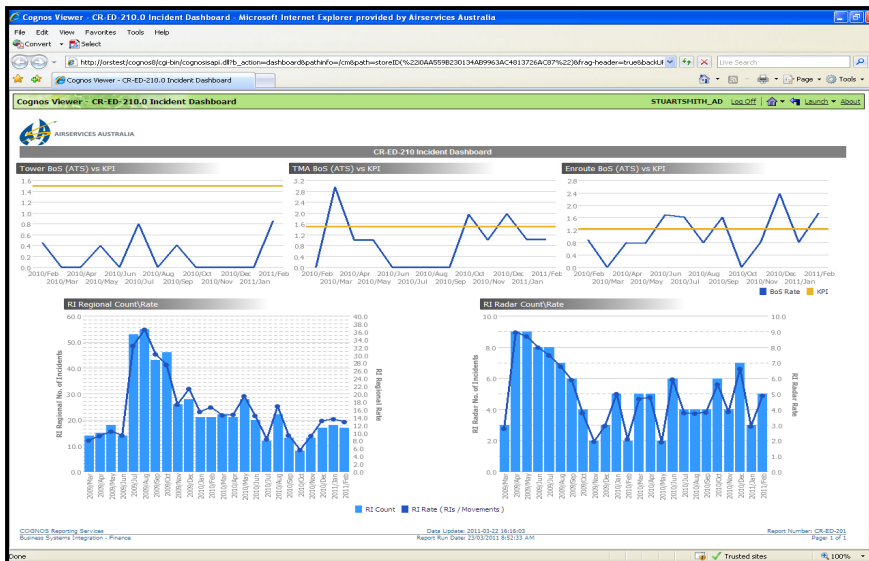
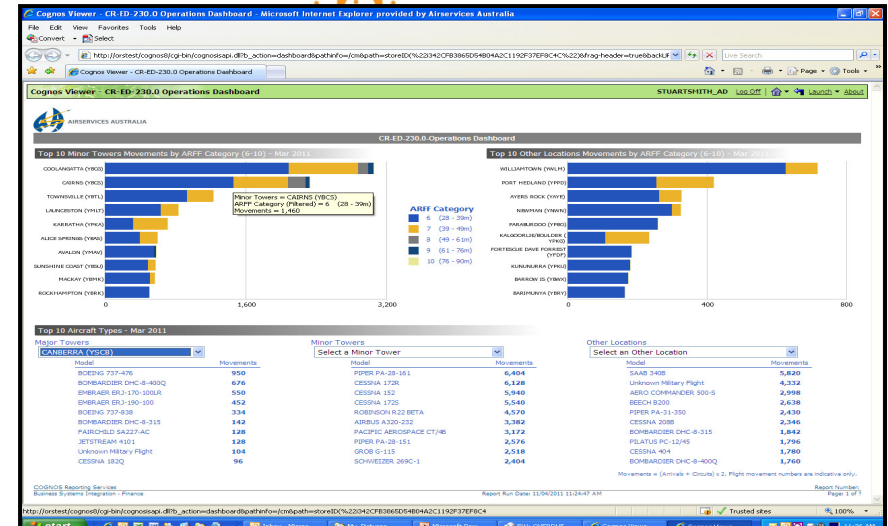


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# Business Reporting Initiatives



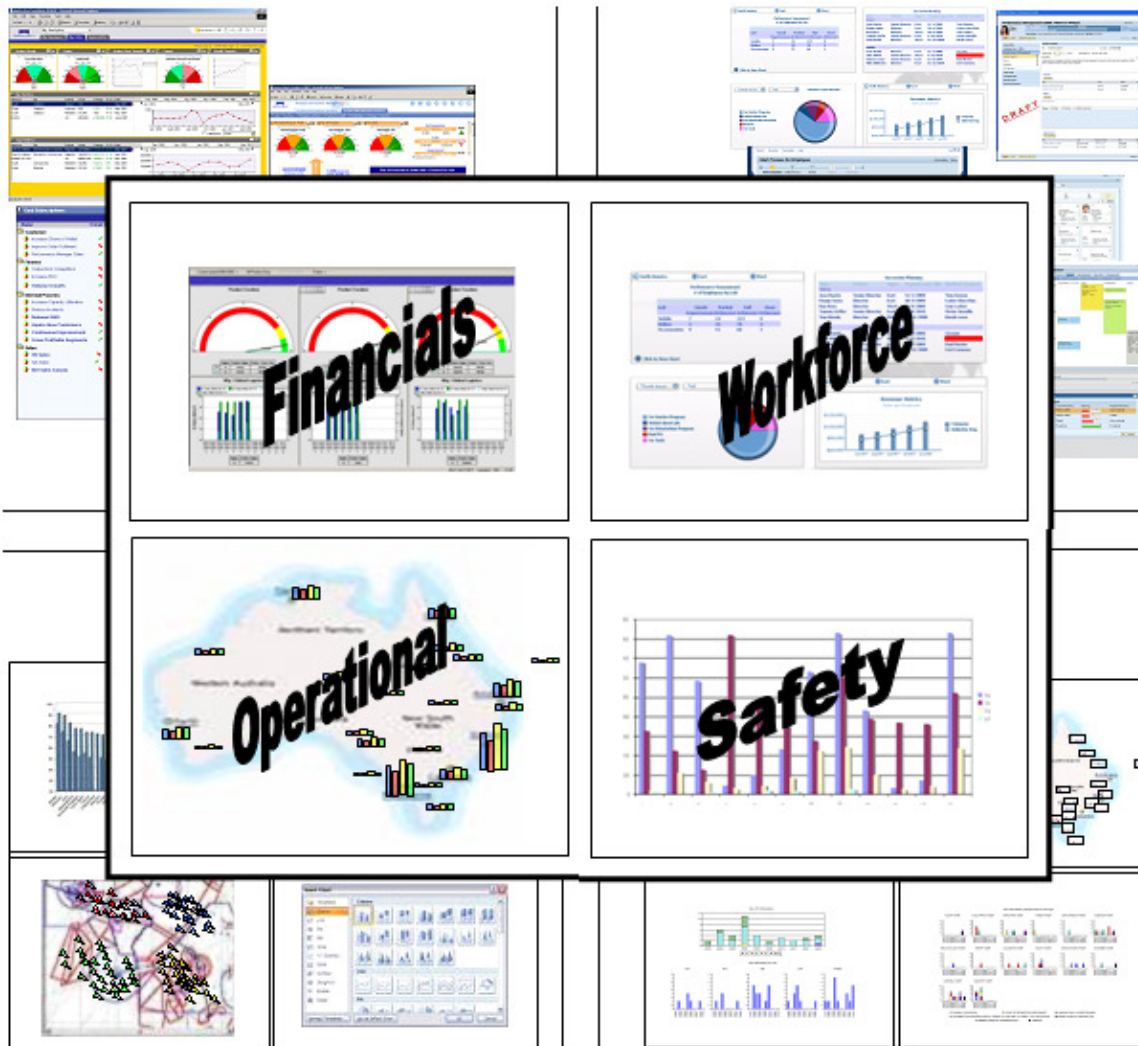
# Business Reporting Initiatives



# Business Reporting Initiatives



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## • Safety

- Aged Investigations
  - Detail

## • Operational

- Flight data
- Reference Data
- Weather and restricted area
- NFPMRS – Noise data

## • Workforce

- Operational Workforce
  - Rostering
  - Overtime

## • Financial

- Revenue and Billing
  - Revenue
  - FCS – Billable events



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# Conclusion



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- **Standards are maturing**
  - **AIXM (13) / WXXM (5)**
- **New standard**
  - **FIXM (3)**
- **Speeding up of service delivery**
- **Reduction in time to market for new services**
- **Additional challenge**
  - **“Two-Speed” Implementation**



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# Questions



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