



# Virtual Meeting COM AMHS/2 (Teleconference, 25 – 27 May 2021)

**Second (Virtual) Workshop/Meeting of the  
Supervisors/Operators of COM AMHS  
Centers of the SAM Region**





# Virtual Meeting COM AMHS/1 (Teleconference, 25 – 27 May 2021)

## Tentative Schedule y Provisional Agenda





TENTATIVE SCHEDULE

HOUR	Tuesday 25 May 2021	HOUR	Wednesday 26 May 2021	HOUR	Thursday 27 May 2021
08:45 09:00	Registration of participants	08:45 09:15	Agenda Item 2	08:45 09:15	Agenda Item 4
09:00 09:15	Opening				
09:15 10:00	Agenda Items 1 & 2	09:15 10:00	Agenda Item 2	09:15 10:00	Agenda Item 4
10:00 10:10	<b>Break</b>	10:00 10:10	<b>Break</b>	10:00 10:10	<b>Break</b>
10:10 11:10	Agenda Item 2	10:10 11:10	Agenda Item 3	10:10 11:10	Agenda Item 5
11:10 12:10	<b>Lunch Break</b>	11:10 12:10	Lunch Break	11:10 12:10	<b>Lunch Break</b>
12:10 13:00	Agenda Item 2	12:10 13:00	Agenda Item 3	12:10 13:00	Agenda Item 5
13:00 13:10	<b>Break</b>	13:00 13:10	<b>Break</b>	13:00 13:10	<b>Break</b>
13:10 14:00	Agenda Item 2	13:10 14:00	Agenda Item 3	13:10 13:20	Closing Session



**RLA/06/901 REGIONAL PROJECT**

**SECOND WORKSHOP/MEETING OF SUPERVISORS/OPERATORS OF COM AMHS CENTERS OF  
THE SAM REGION (COM AMHS/2)  
(Teleconferences, May 25 to 27 2021)**

**PROVISIONAL AGENDA**

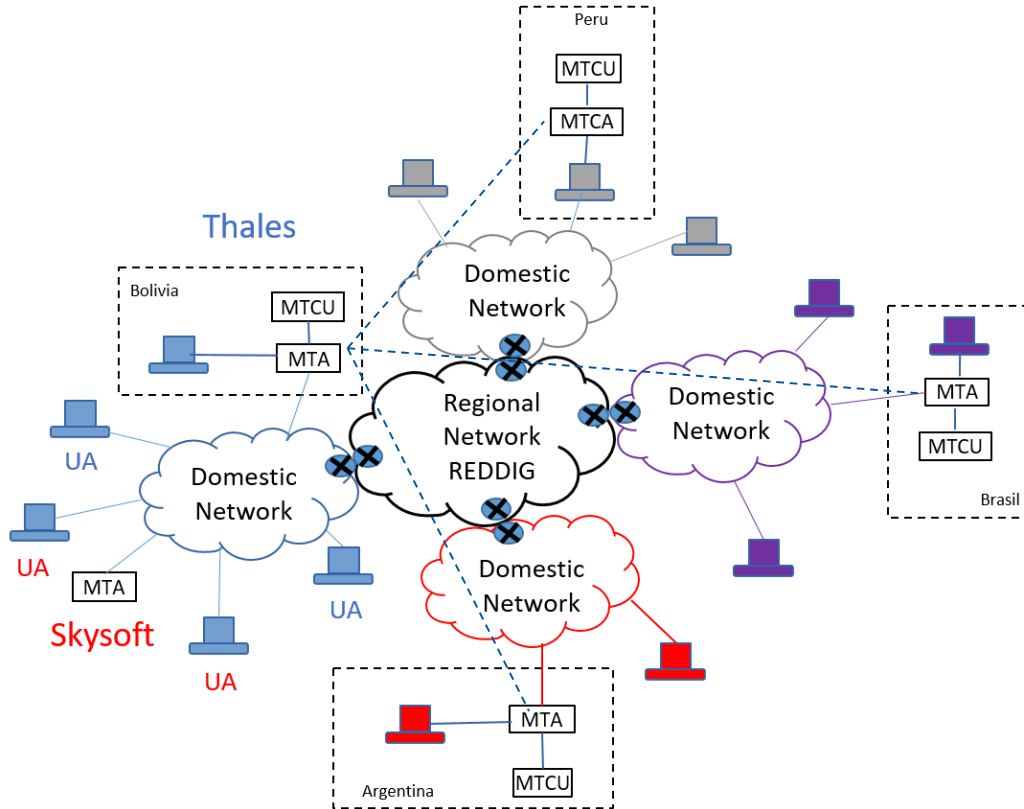
- Agenda Item 1: Adoption of the agenda and schedule of the meeting
- Agenda Item 2: Presentation of contingency plans for message service prepared by SAM Region States
- Agenda Item 3: Review of routing and exchange tables of updated information on AMHS addresses attributed in each State
- Agenda Item 4: Updating information at EUROCONTROL's AMHS Address Management Centre (AMC)
- Agenda Item 5: Other issues



# Virtual Meeting COM AMHS/1 (Teleconference, 23 – 25 Sep 2020)

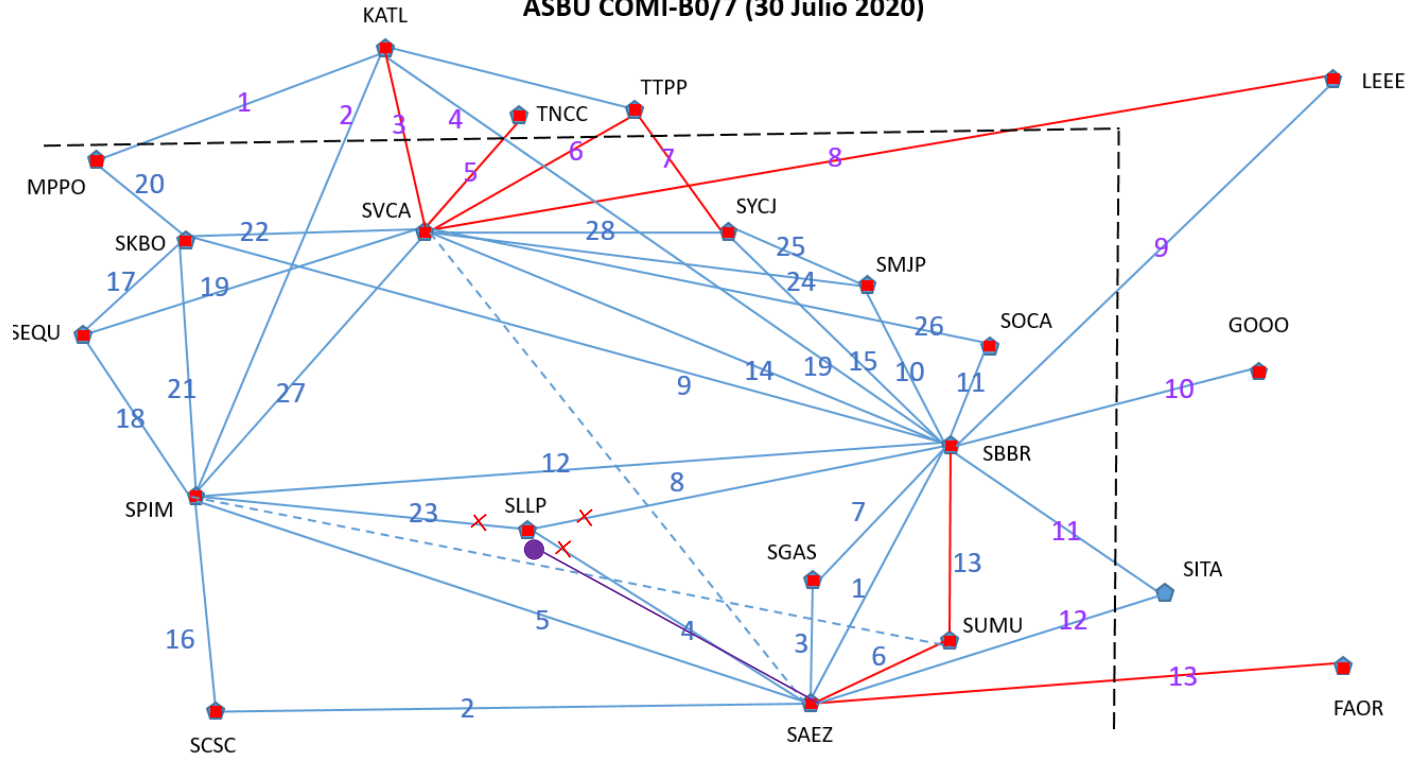
## Agenda Item 2 Presentation of Contingency Plans for Message Service







**AMHS Interconnections / Interconexiones AMHS  
ASBU COMI-B0/7 (30 Julio 2020)**





# Virtual Meeting COM AMHS/1 (Teleconference, 23 – 25 Sep 2020)

## Agenda Item 3 Routing Tables





View Operational Data

- ▶ Network Inventory
- ▶ **Routing Directory**
- ▶ Address Management
- ▶ User Capabilities Management
- ▶ Statistics
- ▶ Static Report
- ▶ COM Charts

Miscellaneous Functions

- ▶ Support Functions
- ▶ View Bulletin Board
- ▶ View AIRAC Cycle
- ▶ AMC Operator Details
- ▶ Documentation Part of AMRD
- ▶ Path Function
- ▶ Convert AFTN Address
- ▶ AFTN Country Code and AMHS PRMD
- ▶ View ANP Locations
- ▶ Regions
- ▶ Send E-Mail to User Groups
- ▶ Archived Data

AMHS MD Contacts

- ▶ Persons and Contacts

ATS Messaging Management

Routing Directory

Operational Area [HELP]

AFTN Routing Table CIDIN Routing Table AMHS Routing Table

Region or Country: SAM | COM Centre: SOCA | Location: CAYENNE-FELIX-BOUÉ | Country: Guyane Française | AFTN Matrix: OPER.214

[HOME] [SEARCH]

MD Common Name: FRENCH GUIANA | Country-Name: XX | ADMD-Name: ICAO | PRMD-Name: FRENCH GUIANA

[EXTENDED]

Destination	Existing Main	MTCU	Existing Altn	MTCU	Planned Main	MTCU	Planned Altn	MTCU
A		[X]		[ ]		[ ]		[ ]
B		[X]		[ ]		[ ]		[ ]
C		[X]		[ ]		[ ]		[ ]
D		[X]		[ ]		[ ]		[ ]
E		[X]		[ ]		[ ]		[ ]
F		[X]		[ ]		[ ]		[ ]
G		[X]		[ ]		[ ]		[ ]
H		[X]		[ ]		[ ]		[ ]
K		[X]		[ ]		[ ]		[ ]
L		[X]		[ ]		[ ]		[ ]
M		[X]		[ ]		[ ]		[ ]
MB		[X]		[ ]		[ ]		[ ]
MD		[X]		[ ]		[ ]		[ ]
MG		[X]		[ ]		[ ]		[ ]
MH		[X]		[ ]		[ ]		[ ]
MK		[X]		[ ]		[ ]		[ ]
MM		[X]		[ ]		[ ]		[ ]

[REPORT] [EXPORT]



### View Operational Data

- ▶ Network Inventory
- ▶ **Routing Directory**
- ▶ Address Management
- ▶ User Capabilities Management
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- ▶ COM Charts

### Miscellaneous Functions

- ▶ Support Functions
- ▶ View Bulletin Board
- ▶ View AIRAC Cycle
- ▶ AMC Operator Details
- ▶ Documentation Part of AMRD
- ▶ Path Function
- ▶ Convert AFTN Address
- ▶ AFTN Country Code and AMHS PRMD
- ▶ View ANP Locations
- ▶ Regions
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- ▶ Archived Data

### AMHS MD Contacts

- ▶ Persons and Contacts

## ATS Messaging Management

### Operational Area [ HELP ]

**AFTN Routing Table**
**CIDIN Routing Table**
**AMHS Routing Table**

Region or Country	COM Centre	Location	Country	AMHS Matrix	
<input type="text" value="SAM"/>	<input type="text" value="SOCA"/>	<input type="text" value="CAYENNE-FELIX-EBOUE"/>	<input type="text" value="Guyane Francaise"/>	<input type="text" value="OPER.214"/>	<input type="button" value="SEARCH"/>

MD Common Name	Country-Name	ADMD-Name	PRMD-Name	
<input type="text" value="FRENCH GUIANA"/>	<input type="text" value="XX"/>	<input type="text" value="ICAO"/>	<input type="text" value="FRENCH GUIANA"/>	<input type="button" value="EXTENDED"/>

Destination				Existing Main		Existing Alternate		Planned Main		Planned Alternate		Comments
C	ADMD	PRMD	O	COM	M	COM	M	COM	M	COM	M	
XX	ICAO	AG		SBBR	[ ]	(SVCA)	[ ]		[ ]		[ ]	APAC (AG)
XX	ICAO	AN		SBBR	[ ]	(SVCA)	[ ]		[ ]		[ ]	APAC (AN)
XX	ICAO	ANSA BH		SBBR	[ ]	(SVCA)	[ ]		[ ]		[ ]	EUR/NAT (LQ)
XX	ICAO	AUSTRALIA		SBBR	[ ]	(SVCA)	[ ]		[ ]		[ ]	APAC (Y)
XX	ICAO	AUSTRIA		SBBR	[ ]	(SVCA)	[ ]		[ ]		[ ]	EUR/NAT (LO)
XX	ICAO	AY		SBBR	[ ]	(SVCA)	[ ]		[ ]		[ ]	APAC (AY)
XX	ICAO	BANGLADESH		SBBR	[ ]	(SVCA)	[ ]		[ ]		[ ]	APAC (VG)
XX	ICAO	BELGIUM		SBBR	[ ]	(SVCA)	[ ]		[ ]		[ ]	EUR/NAT (EB)
XX	ICAO	BHUTAN		SBBR	[ ]	(SVCA)	[ ]		[ ]		[ ]	APAC (VQ)
XX	ICAO	BKPR		SBBR	[ ]	(SVCA)	[ ]		[ ]		[ ]	EUR/NAT (BK)
XX	ICAO	BOLIVIA		SBBR	[ ]	(SVCA)	[ ]		[ ]		[ ]	SAM (SL)
XX	ICAO	C		SBBR	[ ]	(SVCA)	[ ]		[ ]		[ ]	NAM (C)
XX	ICAO	CAMBODIA		SBBR	[ ]	(SVCA)	[ ]		[ ]		[ ]	APAC (VD)
XX	ICAO	CHINA		SBBR	[ ]	(SVCA)	[ ]		[ ]		[ ]	APAC (Z)



# Virtual Meeting COM AMHS/1 (Teleconference, 23 – 25 Sep 2020)

## Agenda Item 4 Updating the information in AMC



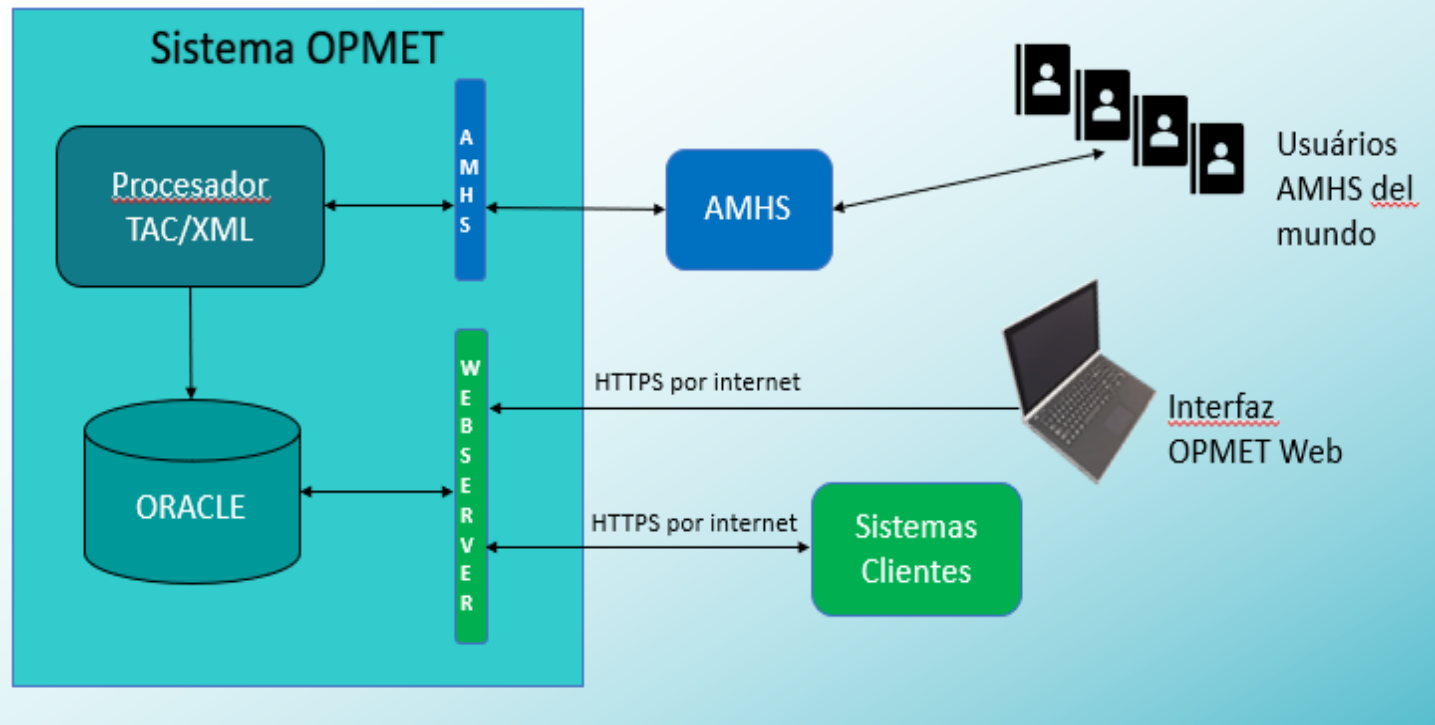




# Virtual Meeting COM AMHS/1 (Teleconference, 23 – 25 Sep 2020)

## Agenda Item 5 Other subjects







Inicio

Mensajeros Meteorológicas ▾

Informes ▾

## Edición de Registro de Observaciones EMS

Mensajes Meteorológicas > Edición de Registro de Observaciones EMS

Registro de Observación

Nubes

Informaciones de la Pista

Condición de Tiempo

Mensaje

### Registro de Observación

Tipo de Observación\*

REGULAR  ESPECIAL  LOCAL  PARCIAL

Seleccionar los Tipos de mensajes\*

METAR  SPECI

Fecha\*

12/08/2020

Hora UTC\*

12:00

Localidad\*

SBBR

nombre de la Localidad\*

BRASILIA / Pres. Juscelino Kubitschek, DF

### Visibilidad

Vis. Predominante\*

2000

Vis. Mínima

0000 dam

Dirección

▾

### mensaje Codificado

Registro de Observación

Tipo de mensaje: METAR Fecha: 12/08/2020  
Hora UTC: 12:00 Localidad: BRASILIA / PRES. JUSCELINO  
KUBITSSCHEK, DF  
Tipo de Observación: REGULAR  
Vis. Predominante: 2000

Nubes

> 3 - Nube(s)

Informaciones de la Pista

> Pista - 11

Condición de Tiempo

Código METAR: RERA  
21 - CHUVA (NÃO CONGELANTE) - RECENTE

0 - NUVENS COBRINDO METADE OU MENOS DO CÉU, DURANTE

SEGUENTE



https://amhsbr.decea.mil.br/taweb/loginPage



# Departamento de Controle do Espaço Aéreo

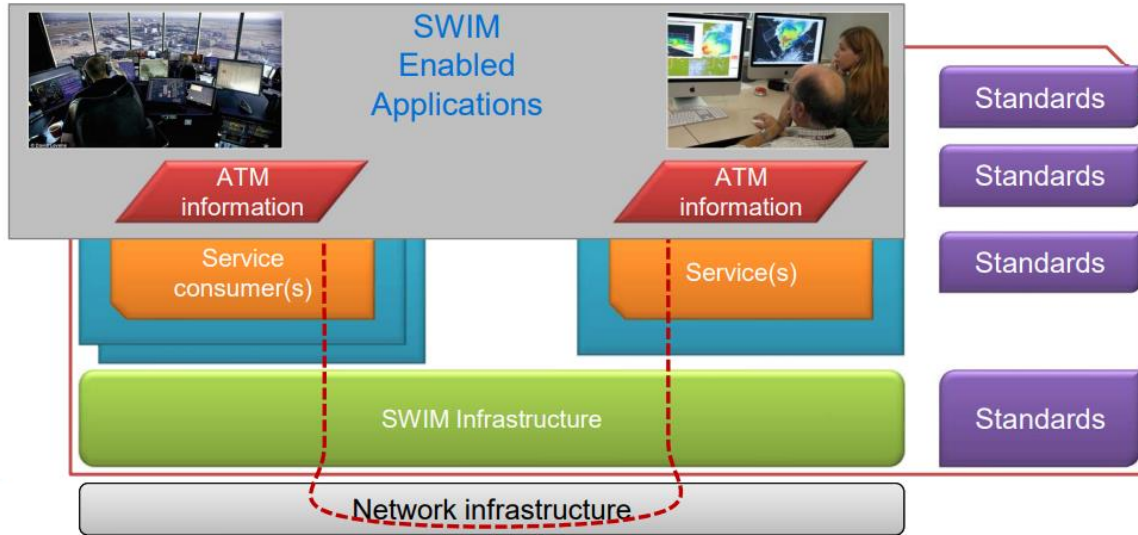
## AMHS WEB

User

Password

Login





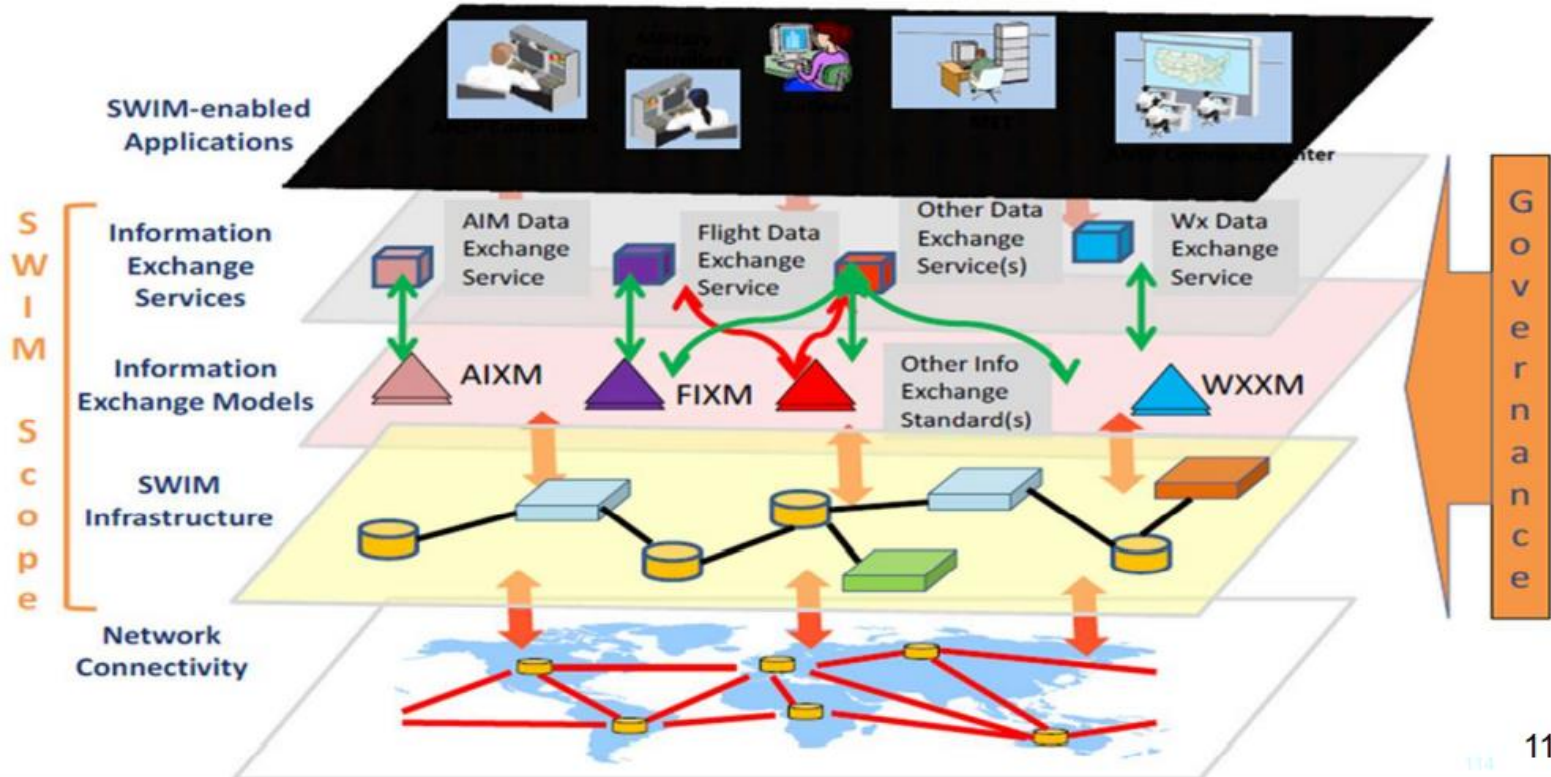
**SWIM consists of standards, infrastructure and governance enabling the management of ATM information and its exchange between qualified parties via interoperable services.**

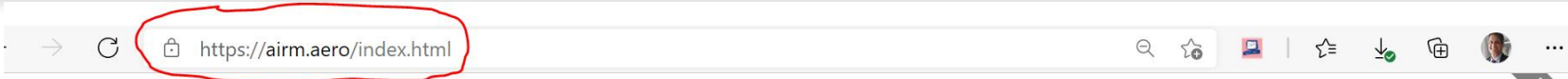


SWIM infrastructure is a set of **software components distributed** across a **network infrastructure** that enables **interoperability** between ATM (civil and military) systems including aircraft.

It provides connected systems with the technical means to support **application services** in **invoking** information services and non-functional services.

All of these services are **interoperable** by using **standard technologies** and a **common data representation**.





HOME

AIRM VIEWER

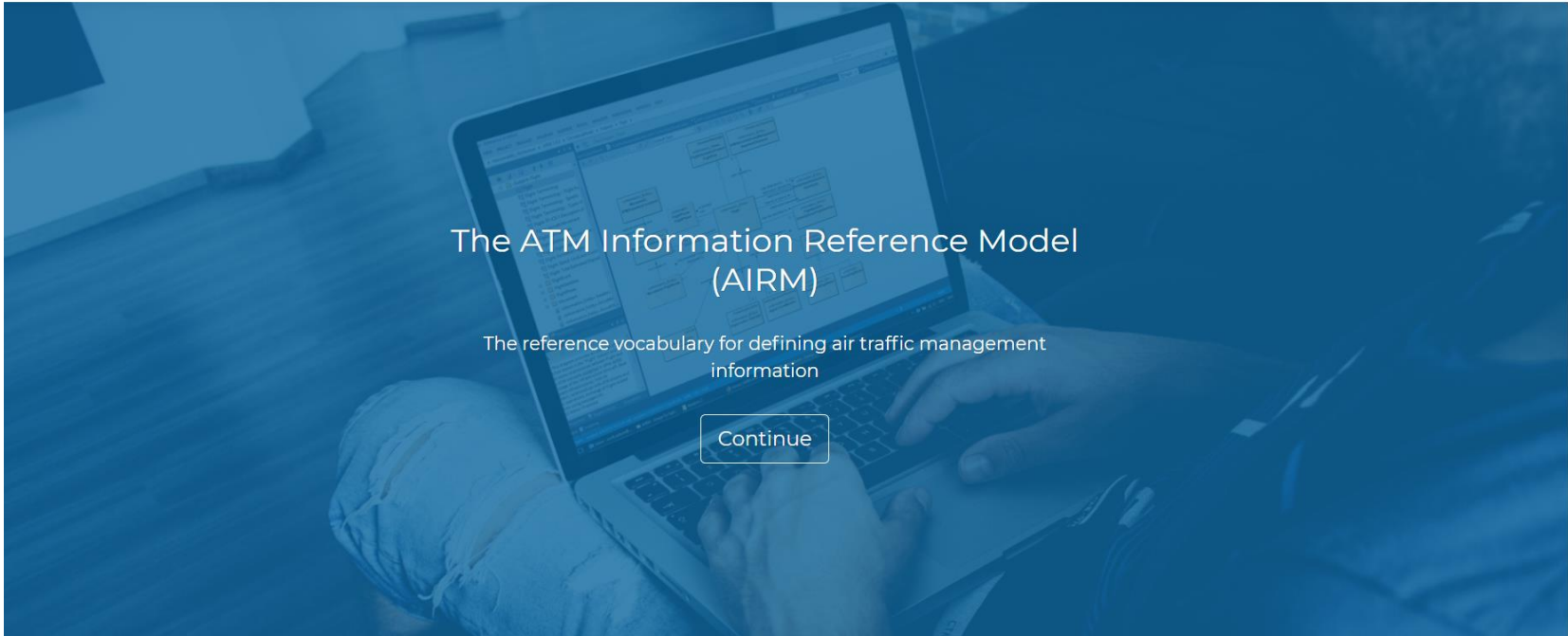
COMMUNITY

DOCS

FAQ

DEVELOPERS

BETA



# The ATM Information Reference Model (AIRM)

The reference vocabulary for defining air traffic management information

Continue



The **information exchanged** between interested parties must be **defined** so that it can be used correctly by **consumers** and **producers**.

**AIRM** (ATM Information Reference Model) is a common reference that helps ensure harmonization of **ATM information models**, reducing costs in sharing information in different environments.



**XML** is a **markup language** created by the World Wide Web Consortium (W3C) to define a **syntax** for encoding documents that both humans and machines could read. It does this through the use of tags that define the structure of the document, as well as how the document should be stored and transported.

It's probably easier to compare it to another markup language that you may be familiar with: the **Markup Language Hypertext (HTML)** used to **encode web pages**.



# Modelos de Intercambio de Información AIRM



AIRM & Information  
Exchange Models ...

**FIXM** → Flight Information Exchange Model (exchange model capturing Flight and Flow information that is globally standardised)

**AIXM** → Exchange model capturing Aeronautical information for the provision in digital format of the AIS information

**IWXXM** → Exchange model capturing Meteorological information to support the exchange of meteorological information

**AMXM** → AMXM is provided in support of Aerodrome Mapping Database (AMDB) data exchange.



## AIRM Information Exchange Models

<https://www.aixm.aero/>



AIXM

<https://www.fixm.aero/>



FIXM

<https://old.wmo.int/wiswiki/>



IWXXM



# ISO 19136 Geography Markup Language (GML)

AIXM5 design decisions are based on the adoption of a number of international standards: :

- Use **GML** (Geography Markup Language) for encoding geographical information – position, areas, routes, etc.
- Use the **ISO19100** series of geospatial information standards as data modeling framework. This would maximize the chances of cross-domain interoperability.
- Use **UML** (Unified Modeling Language) for developing **AIXM 5 Conceptual Model**.
- exhaustive **metadata** incorporation into the model has been identified.

Technical Design Decisions

ISO19100  
series

UML

GML 3.2



Metadata

Integrity

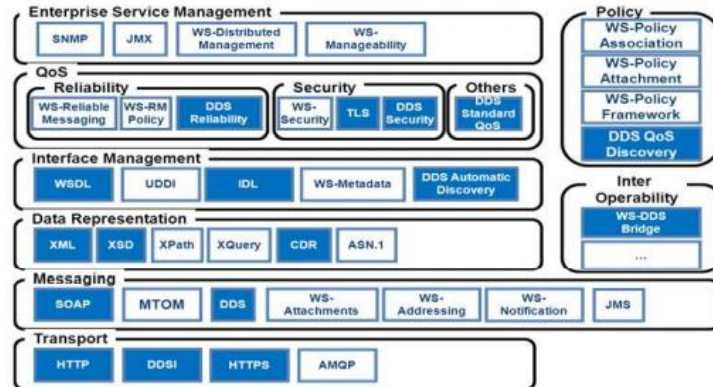
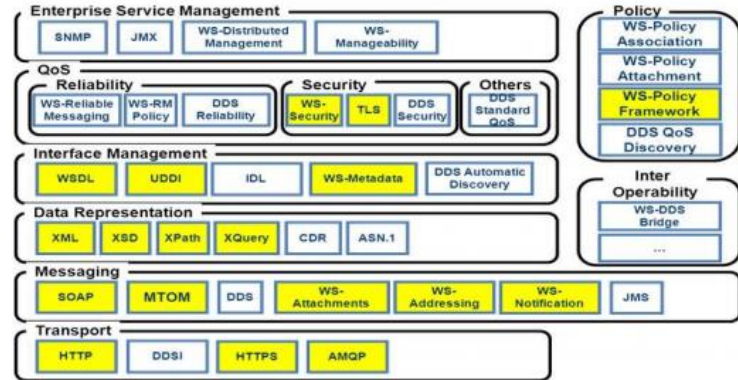
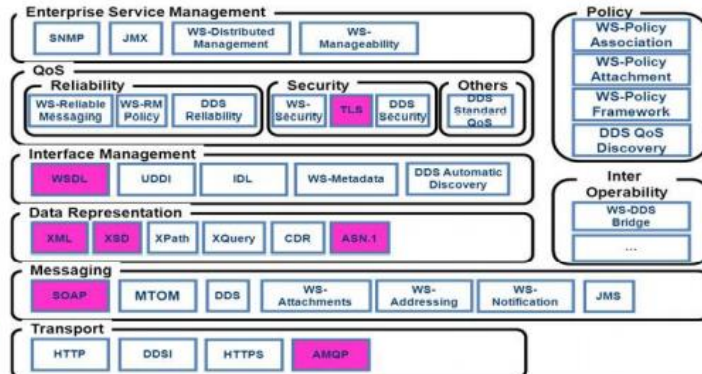
Data Quality Mandates



## SESAR SWIM PROFILES

Reduce complexity with technical profiles tailored for specific usage:

- **Yellow profile** for non critical information (AIM, Weather, ...)
- **Blue profile** for critical information (Flight Object)
- **Purple profile** to accommodate air-ground
- **Green profile** for military





North American  
Central American  
and Caribbean  
(NACC) Office  
Mexico City

South American  
(SAM) Office  
Lima

ICAO  
Headquarters  
Montréal

Western and  
Central African  
(WACAF) Office  
Dakar

European and  
North Atlantic  
(EUR/NAT) Office  
Paris

Middle East  
(MID) Office  
Cairo

Eastern and  
Southern African  
(ESAF) Office  
Nairobi

Asia and Pacific  
(APAC) Sub-office  
Beijing

Asia and Pacific  
(APAC) Office  
Bangkok



**THANKS**