



International Civil Aviation Organization

Jordan Presentation

AIDC/OLDI

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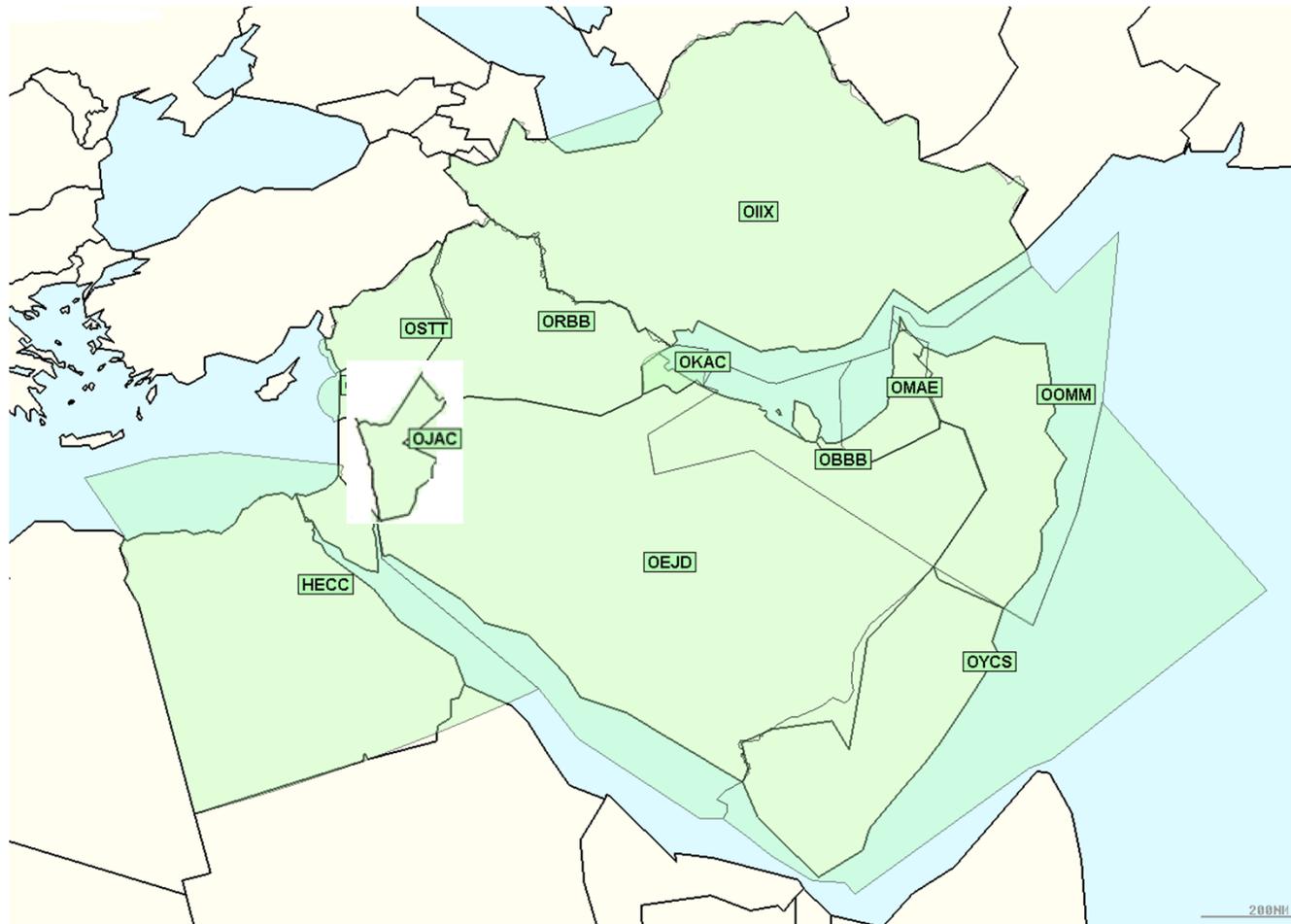
(Cairo, Egypt, 3-5 March 2014)

Contents



- Jordan FIR
- Available Surveillance
- System Capabilities
- Implementation Plan
- Challenges
- Conclusion

Jordan Air Space



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Available Surveillance



- Monopulse Secondary Surveillance
RADAR MSSR RSM 970 From THALES
Company (FRANCE)
- Has been installed since 1999
- The ATM system is EUROCAT 1000
- Simulator for training (part of Eurocat 1000)
- Kept as a backup system



Available Surveillance

- MODE S RADAR IRS-20MP/S from INDRA company (SPAIN)
- new automation system AirCon2100
- Has been installed since 2012
- Simulator for training (part of AirCon 2100) installed in marka airport



Available Surveillance

- ADS-B System SKYSURV from INTELCAN company (CANADA)
- Four station have been installed since 2012 at (SAFAWI, REESHA, AQABA AND MARKA)

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Current Systems Capabilities

- Our Aircon2100 (Indra) system has the capability to support both standards:
 - 1- OLDI/X.25
 - 2- FMTP (OLDI/IPv6)
 - 3- AIDC

Current Systems Capabilities

- Support all type of ports (eg. serial, Ethernet)
- Support all type of protocols(eg. TCP/IP, X.25)
- Message format:
 - ICAO AIDC coordination Messages, according to ICAO 4444, and ICD of AIDC version 3.
 - ADEXP OLDI coordination Messages according to Eurocontrol OLDI version 4.1.

AIDC PARAMETERS



AHMS PARAMETERS	
AFTN Origin Line1 :	
AFTN Password Line1:	
AFTN Ms Pa Line1 :	
AIDC Origin Line1 :	
AIDC Password Line1:	
AIDC Ms Pa Line1 :	
AFTN Origin Line2 :	
AFTN Password Line2:	
AFTN Ms Pa Line2 :	
AIDC Origin Line2 :	
AIDC Password Line2:	
AIDC Ms Pa Line2 :	

OLDI DATA FLOW



ControlCentersEdit EDUU

Data Base : war_prueba

EXIT Esc Save F1

NAME : EDUU CONTROL CENTER OPS ORDER NUMBER : 1

KIND : Foreign Local

FORMAT : ADEXP ICAO

COMMUNICATIONS

CLASS : NONE OLDI AFTN AFTN ADDRESS : EPWTEST

OLDI PARAMETERS

BEHAVIOUR : LISTENER (MASTER) CALLER (SLAVE)

PARTNERS MESSAGE FORMAT : ORIGINAL INF

LOCAL ATS UNIT : WA

REMOTE ATS IDENTIFIER : R

OPTIONAL OLDI MESSAGE FIELDS

X25 FMTF

LOCAL ATS PHONE NUMBER : 1122131103

REMOTE ATS PHONE NUMBER : 1015121118

LINE COMMUNICATION : sync 1

AUTHORITY AND FORMAT IDENTIFIER (AFI)

LOCAL CENTER VALUE	: 0x		ADJACENT CENTER VALUE	: 0x	48
LOCAL CENTER IDENTIFIER	: 0x		ADJACENT CENTER IDENTIFIER	: 0x	10
LOCAL CENTER SELECTOR	: 0x		ADJACENT CENTER SELECTOR	: 0x	00
			TIME OUT EXPECTED HEARTBEAT	:	70
			TIME OUT SENDING HEARTBEAT	:	30

TCP CLIENT (CALLER) TCP SERVER (LISTENER)

PORT : 8501

NET. INTERFACE : ETH0

REMOTE CENTER (HOSTNAME) : ETIC1

LOCAL ID (FDP) : SENDER

REMOTE ID (EXT) : DEST

Ti (s) : 50

Tr (s) : 70

Ts (s) : 60

OLDI DATA FLOW(Messages)



CenterParametersEdit
Data Base : jordan_tech

EXIT Esc Save F1

OLDI MESSAGES

CENTER : HECA

DIALOGUE LEVEL

<input checked="" type="checkbox"/> BASIC NO DIALOGUE ACT LAM ABI	PAC <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	REV <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	MAC <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/> EXTENDED NO DIALOGUE ACT LAM COF MAS ABI	PAC <input type="checkbox"/> YES <input type="checkbox"/> NO
	REV <input type="checkbox"/> YES <input type="checkbox"/> NO
	MAC <input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/> COMPLETE NO DIALOGUE ACT LAM COF MAS TIM SDM HOP ROF ABI	PAC <input type="checkbox"/> YES <input type="checkbox"/> NO
	REV <input type="checkbox"/> YES <input type="checkbox"/> NO
	MAC <input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/> BASIC DIALOGUE ACT LAM MAC REV RAP RRV CDN SBY ACP RJC ABI	PAC <input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/> EXTENDED DIALOGUE ACT LAM MAC REV RAP RRV CDN SBY ACP RJC COF MAS ABI	PAC <input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/> COMPLETE DIALOGUE ACT LAM MAC REV RAP RRV CDN SBY ACP RJC COF MAS TIM SDM HOP ROF ABI	PAC <input type="checkbox"/> YES <input type="checkbox"/> NO

ANSWER COD TO ABI REQUEST : N YES NO

TRANSFER TYPE : C COF MAS BOTH

REVISIONS

REV COP MODIFICATION : YES NO

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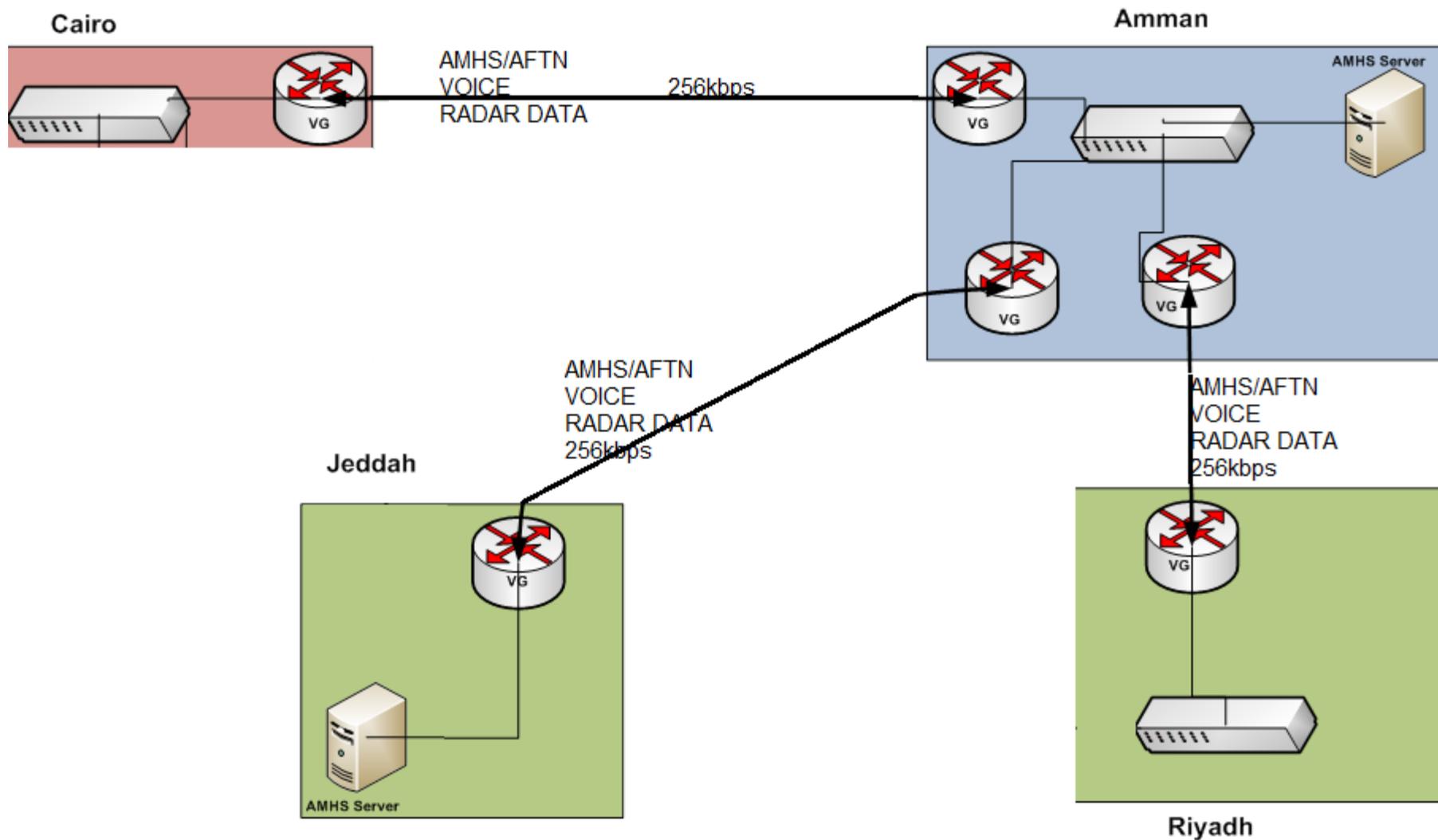


Implementation Plan

1- Under the umbrella of Jordan Saudi Cooperation for Air Navigation Services, the two parties agreed to establish OLDI service between Amman and Jeddah Centers over the unified voice and data line, and to update the speed to **256 Kbps**.

2- OLDI/AIDC connection with Cairo also planned in the near future

Implementation Plan



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Challenges

- Developing Letter of Agreement (LoA) to determine the appropriate parameters (type of protocol, number of messages, type of messages, time etc...).
- No regional Interface Control Document (ICD) for state about the AIDC/OLDI implementation
- X.25 is an obsolete technology and not supported by Jordan telecommunication provider anymore



Challenges

- Lack of training for controllers and technicians
- Testing and Validation of the AIDC/OLDI service to ensure the Data integrity and accuracy.

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Conclusion

- Jordan system has the capability to support both standard OLDI and AIDC
- AIDC can be implemented as a standalone system or over AMHS Network.
- Most of the MID States who are Implementing data exchange utilize OLDI/x.25 because of their European partner.
- A standard Template of a Letter of Agreement (LoA) between MID states is a key requirement for the successful Implementation
- Regional Interface Control Document (ICD) for AIDC Implementation should be developed.
- Introducing of a new facility like OLDI will require additional training for the operational and technical staff.

Thank you!