

Avitech

an  **indra** company



IFAIMA Global AIM Kampala 2017

KEY ASPECTS OF SUCCESSFUL AIM IMPLEMENTATION

Steffen Kovacs (Services Manager)
Jose Rodriguez (Sales Manager)

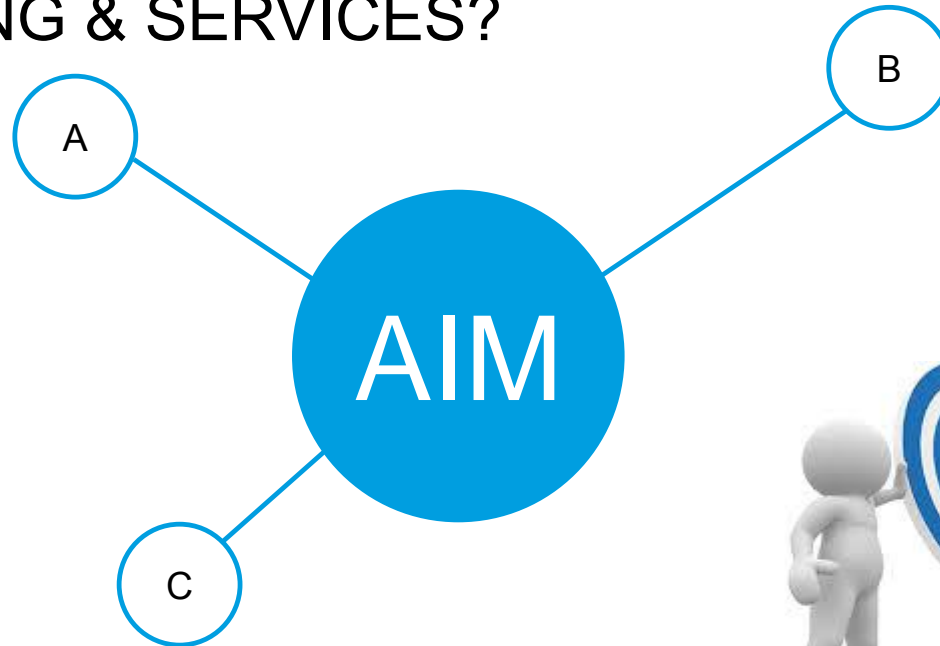
Avitech

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WHAT IS AIM ABOUT?

SYSTEM (SW-HW) & DATA?

TRAINING & SERVICES?



CUSTOMERS & PROJECTS?

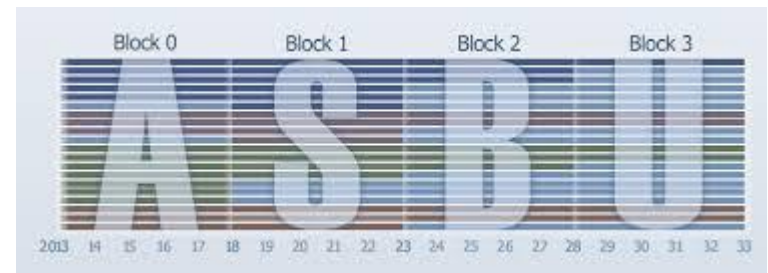


AIM IS NOT ONLY ABOUT THE SYSTEM AND



Data Centricism, Consistency & Quality

ADQ and ASBUs



Timely collection, storing, exchange

AIS to **AIM** Transition



AIM IS ALSO ABOUT THE SERVICES

Final Audit & iterations



Going Digital



Phase III



Phase II

Consolidation



Phase I

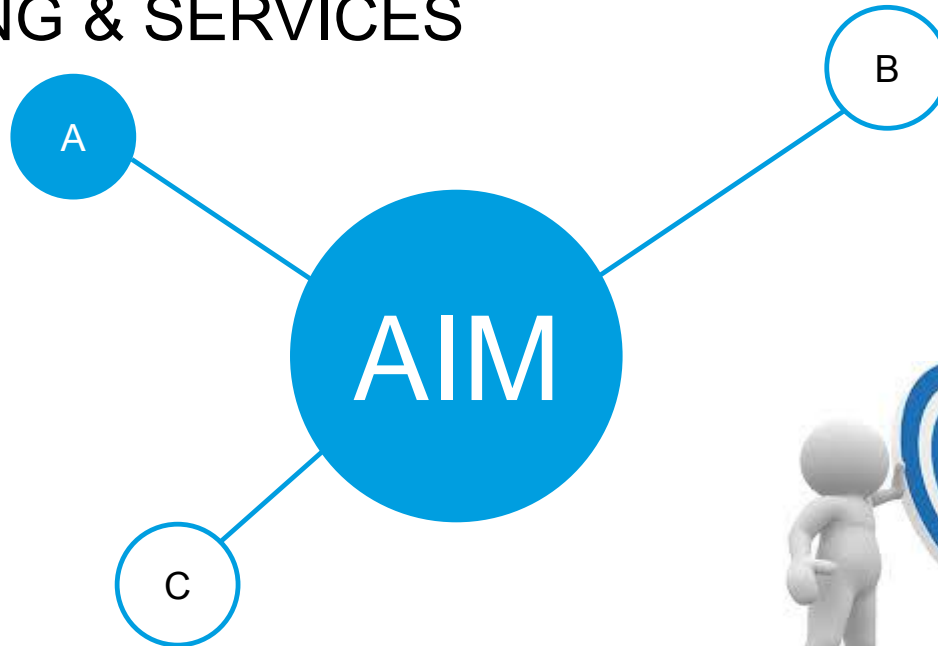
Phase 0
Where are we?
Initial Audits
Gap analysis



WHAT IS AIM ABOUT?

SYSTEM (SW-HW) & DATA

TRAINING & SERVICES



CUSTOMERS & PROJECTS



PREPARATION AND PLANNING

Determine where you are and find a path to your objective!!!

Verification of AIS Status:

Is your AIS OK according to ICAO?

- Organisation and Staff
- AIP and NOTAM products
- QMS (ICAO Doc. 9839)



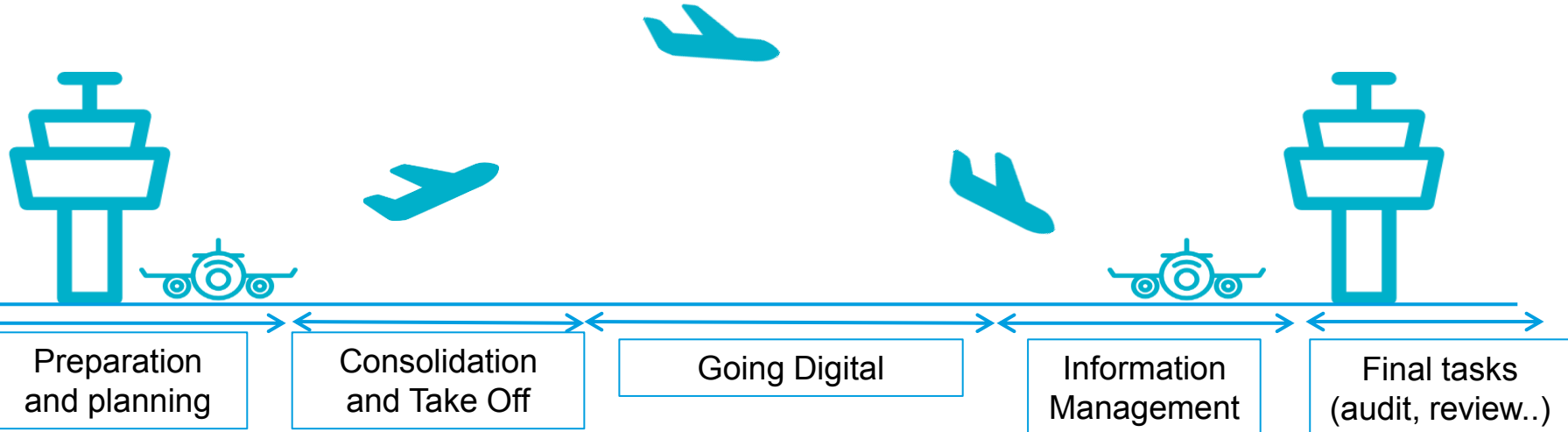
EVERY AIS ORGANISATION IS DIFFERENT

- Different size
 - Number of people
 - Amount of data
 - Number of changes
- Different skill levels
- Different responsibilities
- Different management support
- Different working culture



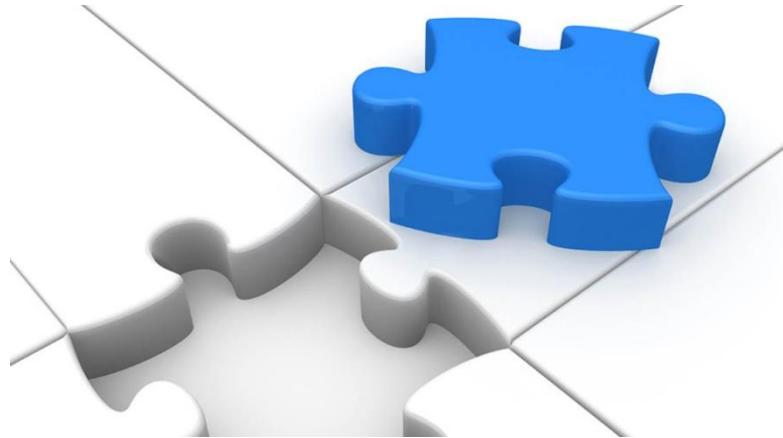
Every AIS is Different

AIS TO AIM ICAO JOURNEY (21 STEPS, 3 PHASES)



ADDITIONAL TASKS PRIOR TO PHASE I (PHASE 0)

Some Key activities are missing in the ICAO 21 steps puzzle



Phase 0 (First steps):

- Awareness Workshop
 - ICAO Compliance
 - AIP/NOTAM format
 - QMS / doc 9839
- Initial Audits
- Risk analysis & plan

ICAO AIS TO AIM PHASE I

AIS to AIM Journey

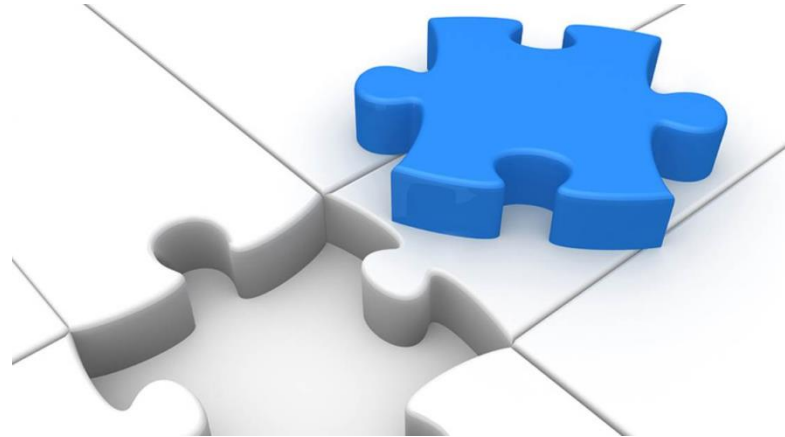


**Phase I
Consolidation**

- P-03. AIRAC adherence
- P-04. Annex differences
- P-05. WGS-84
- P-17. Quality

ADDITIONAL TASKS IN PHASE I

Some Key activities are missing in the ICAO 21 steps puzzle



Phase I:

- Initial Workshops
 - Data Originators
 - Customers
 - Quality Dept.
 - Regulator

ICAO AIS TO AIM PHASE II

AIS to AIM Journey

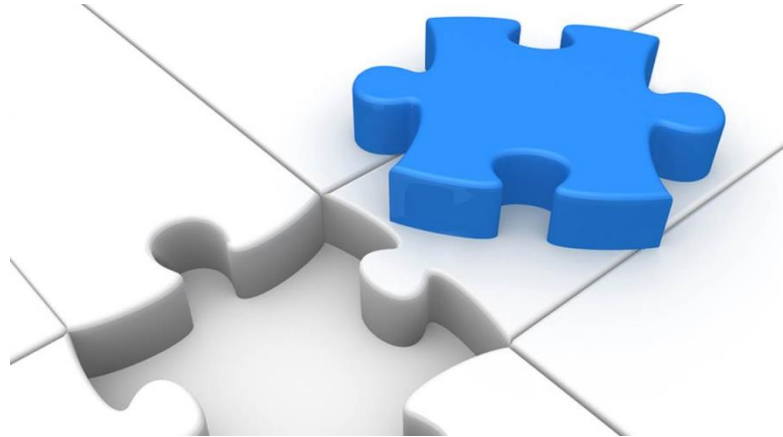


Phase II Going Digital

- P-01. Data Quality
- P-02. Data Integrity
- P-06. Integrated DB
- P-07 & 08. Unique IDs/AICM
- P-15. AMDB
- P-13&14. eTOD
- P-11. eAIP

ADDITIONAL TASKS IN PHASE II

Some Key activities are missing in the ICAO 21 steps puzzle

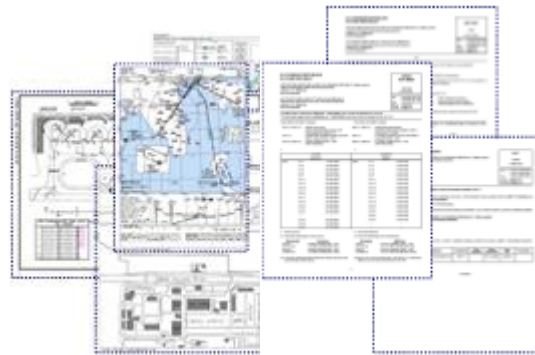


Phase II:

- Data Migration
- Workshops with Data Originators
- AMDB
- Obstacles

AIXM DATA LOAD & MIGRATION → OUTPUTS

Unrealistic Expectations!!!



ICAO AIS TO AIM PHASE III

AIS to AIM Journey



**Phase III
Information
Management**

- P-16. Training
- P-18. Agreements with Data Originator s
- P-20. eCharts
- P-09. Aeronautical data exchange

ADDITIONAL TASKS IN PHASE III

Some Key activities are missing in the ICAO 21 steps puzzle

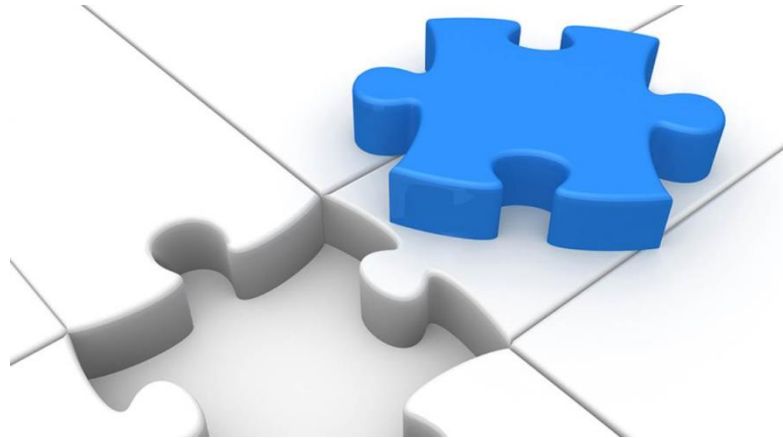


Phase III:

- Final Workshops
 - Data Originators
 - Customers
 - Quality Dept.
 - Regulator

FINAL TASKS AFTER PHASE III – CONSOLIDATE AIM

Some Key activities are missing in the ICAO 21 steps puzzle

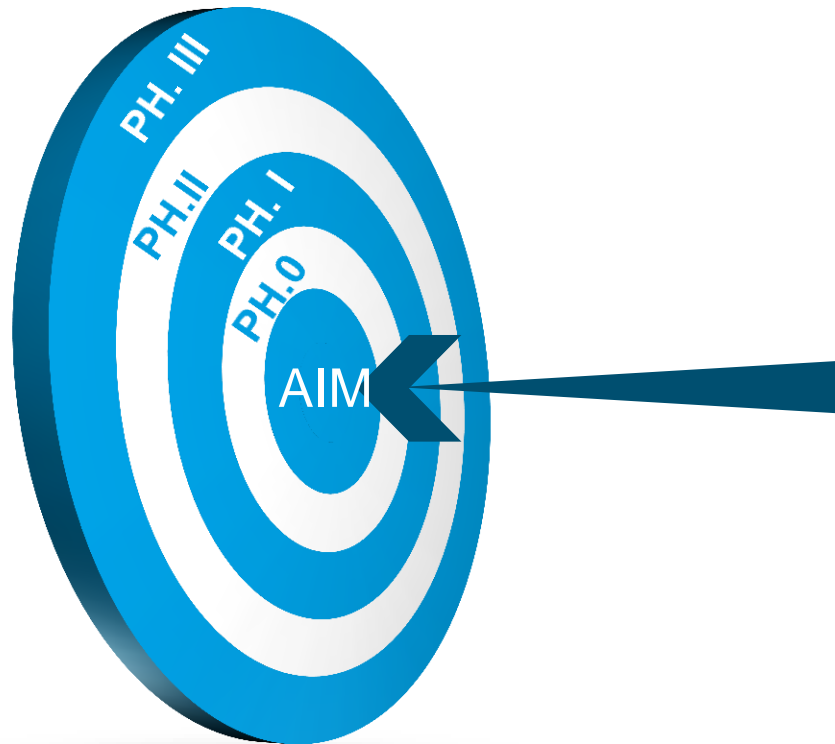


Phase IV (Final):

- Final Audits (AIM organisation, AIP, QMS)
- Risk analysis
- AIM documentation
- Plan (step, audit)
- Full AIM docs.

FULL AIM AFTER COMPLETION OF STEPS

Verify that AIM is achieved and maintain & consolidate status!



Full AIM:

- Training
- AIRAC
- Data Quality
- WGS-84
- QMS
- Integrated DB
- Unique IDs
- AMDB
- TOD
- eAIP
- eCharts
- Data exchange
- D.O. agreem.

AIS TO AIM DOESN'T MEAN LESS WORK



PLAN CAREFULLY

Every task needs time and planning:

- System configuration
- Data migration
- Parallel operation
- Training
- ...

Are really you ready for a change?

WHEN THINGS DON'T HAPPEN
RIGHT AWAY JUST REMEMBER IT
TAKES 6 MONTHS TO BUILD A
ROLLS-ROYCE AND 13 HOURS TO
BUILD TOYOTA

EXPECT CHANGES



AIS TO AIM JOURNEY - CONCLUSIONS

In order to succeed in the AIS to AIM Challenge

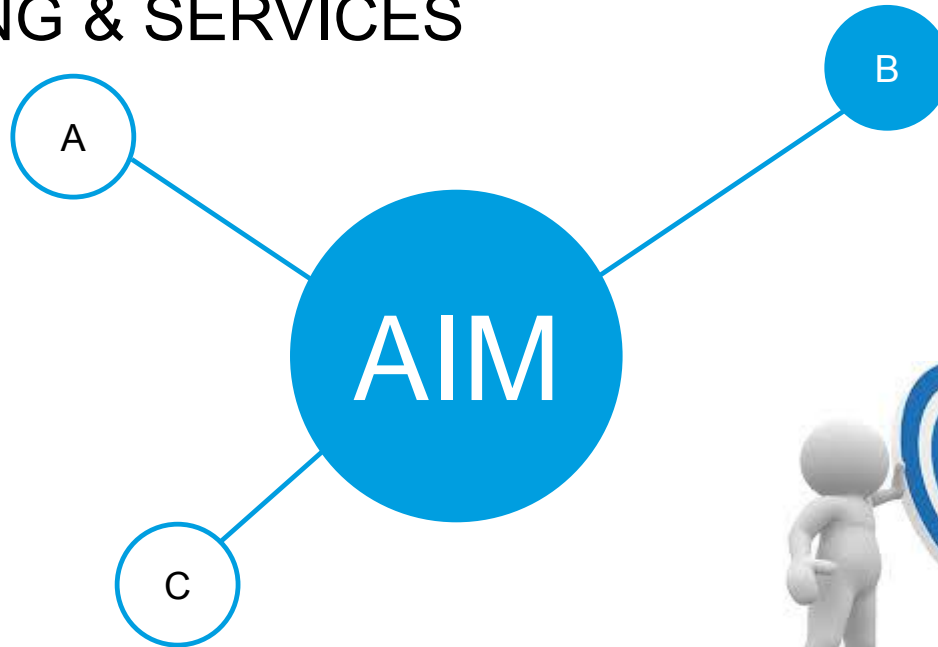
- **Plan ahead / have a clear vision what you want to achieve**
- **Do not set the goals to high**
- **Allow time for the transition**
- **Plan proper training ahead**
- **Check the possibility of temporary outsourcing**
- **Involve all members of the aeronautical data chain**
- **Close cooperation with the regulatory authority**
- **Identify business opportunities early**



WHAT IS AIM ABOUT?

SYSTEM (SW-HW) & DATA

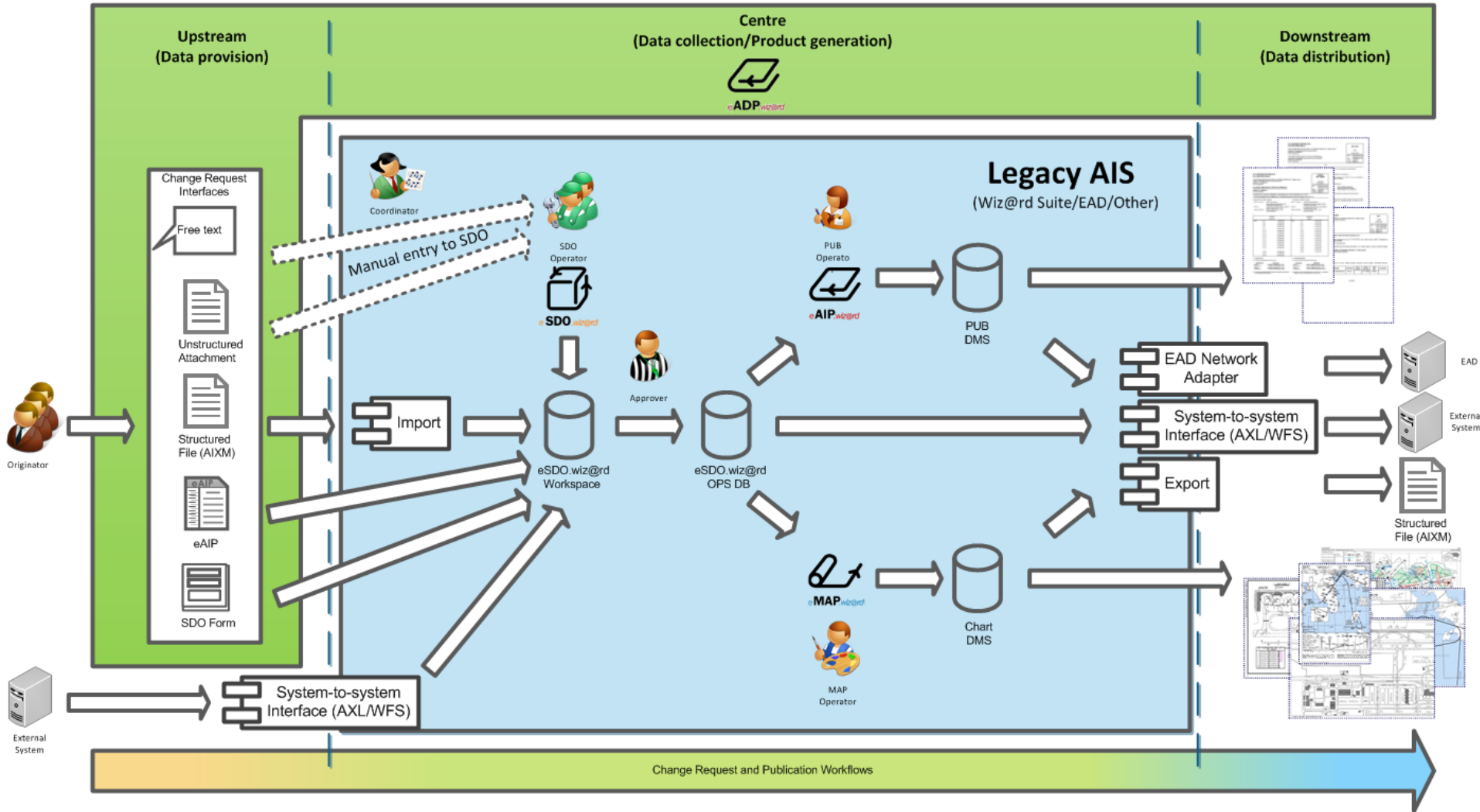
TRAINING & SERVICES



CUSTOMERS & PROJECTS



WORKFLOW DRIVEN SOLUTION



ASBU BLOCKS COVERED - FUTURE PROOF

- Compliance with ICAO (Annex 15 and latest Amendments, ASBU Blocks, PANS-AIM, GANP, Doc 8126,...) & Regional regulations

Block 0 2013 - 2018

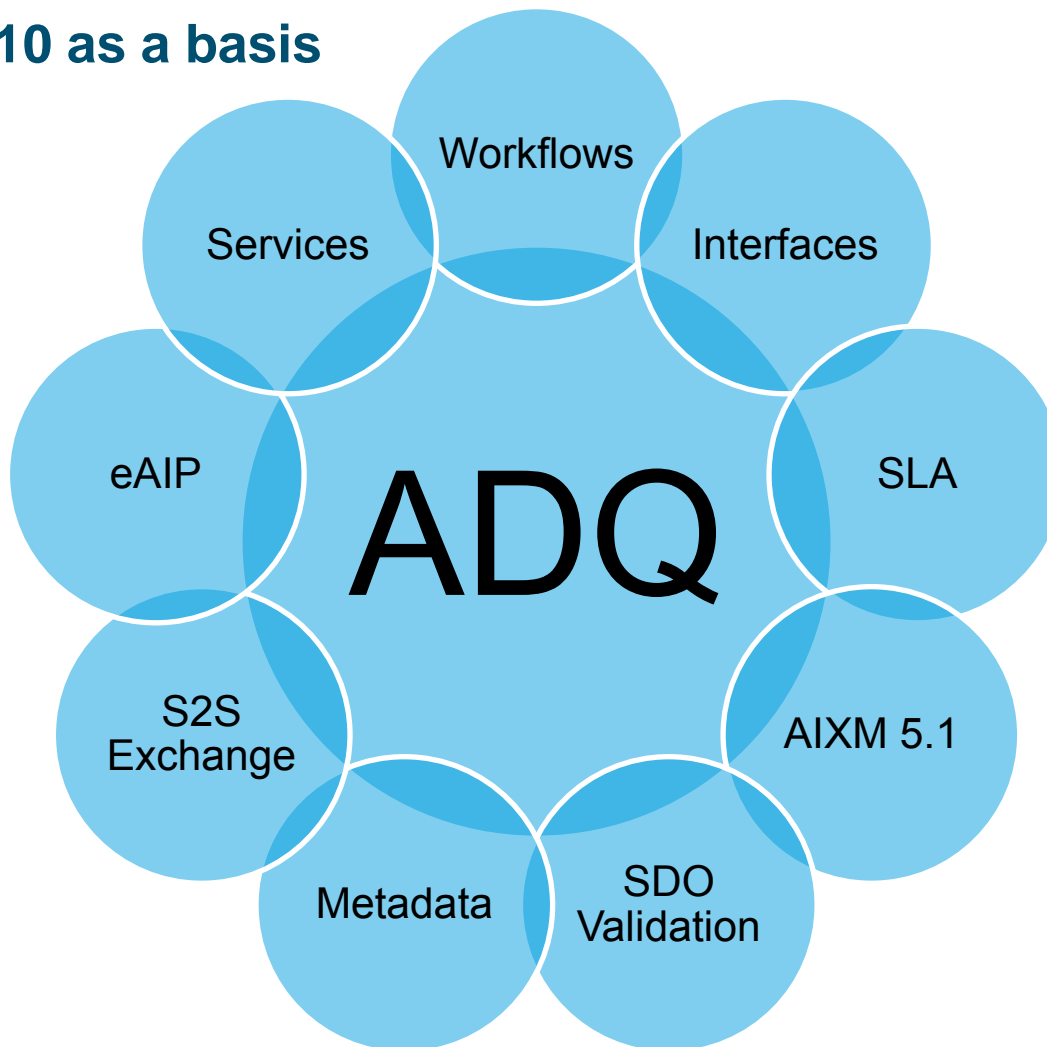
Airport Operations		
B0-APTA	Optimization of Approach Procedures including vertical guidance	Avitech AIM Avitech ATM
B0-SURF	Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2)	Avitech AIM
B0-ACDM	Improved Airport Operations through Airport-CDM	Avitech AIM Avitech ATM Avitech MET Avitech MHS Avitech SWIM
Globally Interoperable Systems and Data		
B0-FICE	Increased Interoperability, Efficiency and Capacity through Ground-Ground-Integration	Avitech ATM Avitech SWIM
B0-DAIM	Service Improvement through Digital Aeronautical Information Management	Avitech AIM Avitech SWIM
B0-AMET	Meteorological information supporting enhanced operational efficiency and safety	Avitech ATM Avitech MET Avitech SWIM
Efficient Flight Paths		
B0-CDO	Improved Flexibility and Efficiency in Descent Profiles (CDOs)	Avitech AIM Avitech ATM
B0-CCO	Improved Flexibility and Efficiency in Departure Profiles - Continuous Climb Operations (CCOs)	Avitech AIM Avitech ATM

Block 1 2019 - 2024

Airport Operations		
B1-APTA	Optimized Airport Accessibility	Avitech AIM Avitech ATM
B1-SURF	Enhanced Safety and Efficiency of Surface Operations - SURF, SURF IA and Enhanced Vision Systems (EVS)	Avitech AIM
B1-ACDM	Optimized Airport Operations through Airport-CDM	Avitech AIM Avitech ATM Avitech MET Avitech MHS Avitech SWIM
B1-RATS	Remotely Operated Aerodrome Control	Avitech ATM
Globally Interoperable Systems and Data		
B1-FICE	Increased Interoperability, Efficiency and Capacity through FF-ICE, Step 1 application before Departure	Avitech ATM Avitech SWIM
B1-DATM	Service Improvement through Integration of all Digital ATM Information	Avitech AIM Avitech SWIM
B1-SWIM	Performance Improvement through the application of System Wide Information Management (SWIM)	Avitech SWIM
B1-AMET	Enhanced Operational Decisions through Integrated Meteorological Information (Planning and Near-Term Service)	Avitech MET Avitech SWIM
Efficient Flight Paths		
B1-CDO	Improved Flexibility and Efficiency in Descent Profiles (CDOs) using VNAV	Avitech AIM Avitech ATM
B1-RPAS	Initial Integration of Remotely Piloted Aircraft (RPA) Systems into non-segregated airspace	Avitech AIM Avitech ATM Avitech MET Avitech SWIM

AERONAUTICAL DATA QUALITY KEY FACTORS

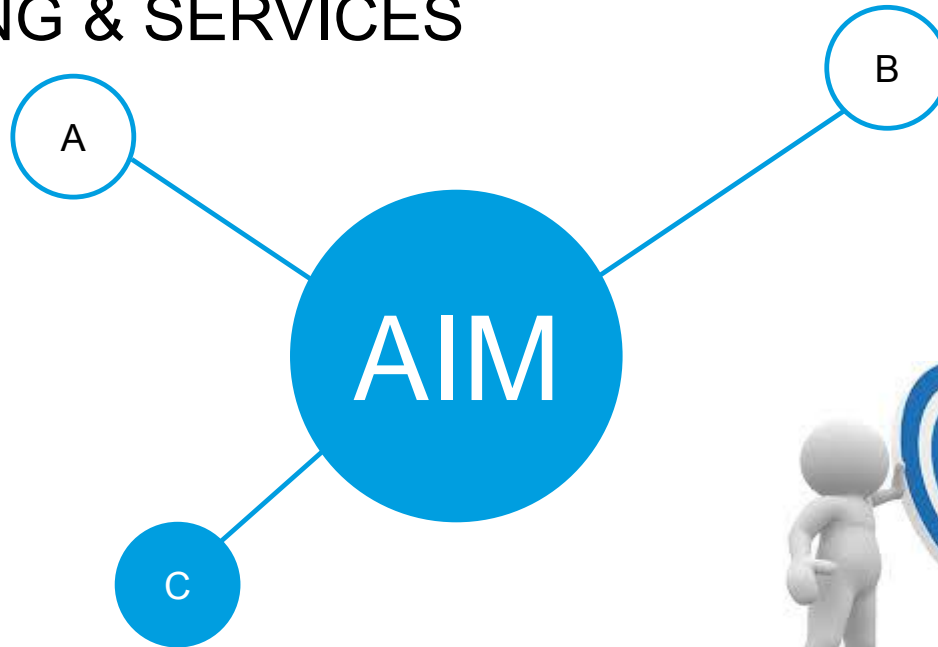
Reg (EC) 73/2010 as a basis



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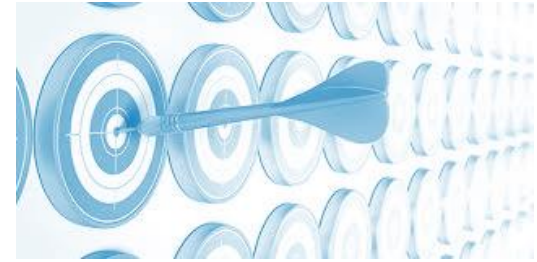


CUSTOMERS & PROJECTS



AIM IS ALSO ABOUT THE CUSTOMERS (PEOPLE)

Customer (KINGS) Satisfaction



User Friendly

Support



Training

Objectives Alignment

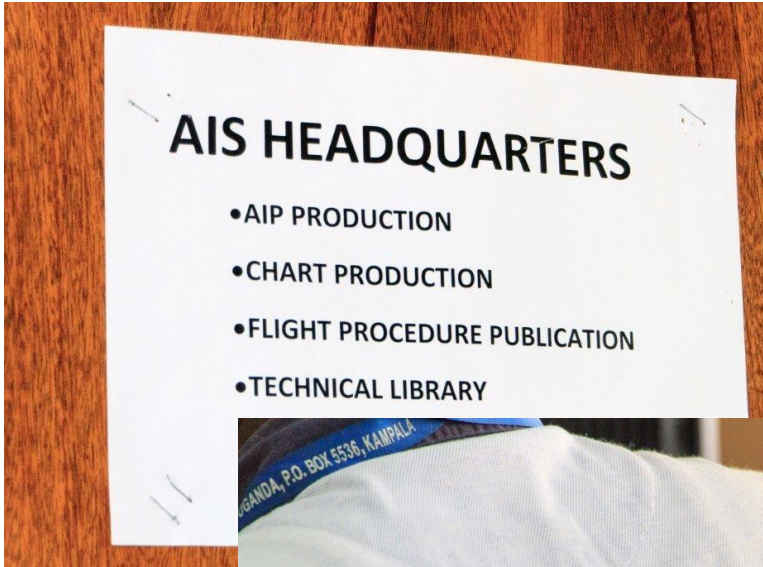


Migration of data (paper/AIXM 4.5 to 5.1)

Evolution and further integrations

Reference projects and success cases

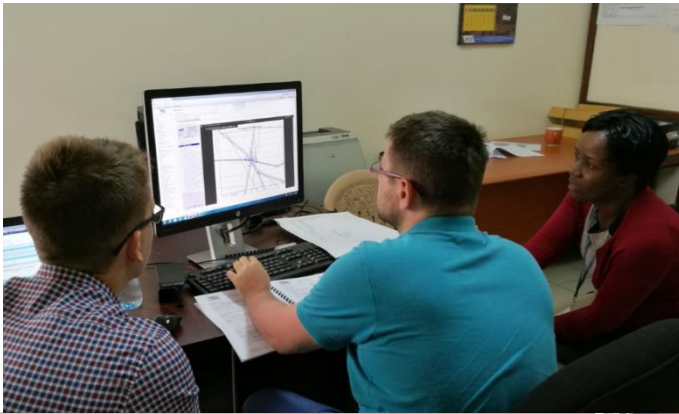
UGANDA CAA AIS TO AIM PHASED APPROACH



UCAA PHASE II (AIS & CORE AIM) & PH.III (FULL AIM)



HAPPY ENDING (SAT PASSED LAST FRIDAY)



Site Acceptance Testing and system upgrade of the above-named system w
installed location(s) of:

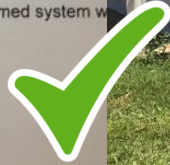
- Entebbe International Airport in Uganda

during the period: 15th – 19th of May 2017

The testing was covering the complete AIS and AIM system.

The result of the Site Acceptance was :

- **Successful**





THANK YOU
VERY MUCH
for your attention!!!

We hope you enjoy
our sponsored
Lunch

Avitech GmbH
Bahnhofplatz 3, 88044 Friedrichshafen,
Germany
Phone: +49 (0) 7541-282-349
Mob: 49 (0) 176 84761660
E-Mail: jose.rodriquez@avitech.aero

Steffen Kovacs
Services Manager

Jose Rodriguez
Sales Manager

www.avitech.aero

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here: <https://transfer.avitech.aero>