



| ICAO

# INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY



**PROPOSAL OF HIGH-LEVEL MAPPING OF ANS SUMMIT PROJECTS**

# AFI ANS SUMMIT – PROJECTS IMPLEMENTATION MAPPING

## Volume 1

### Phase 1

## Volume 2

### Phase 2

## Volume 3

### Phase 3

### Phase 4

**AIS**

AFI AIM  
CBTS

AFI AIM  
ADQ

AFI AIM-  
MET QMS

AFI AIM  
TOD

AFI AIM  
AIXM

AFI AIM  
AMDIFP

**AOP**

AFI-  
AEROCERT

AFI-AO-  
TRG

AFI-CDM-  
IMP

AFI-  
RUNSAFE

AFI-  
WILDSAFE

AFI-AMP

AFI-  
RUNSAFE

AFI-AERO-  
EP

**ATM**

AFI-CB-  
ATM-CASI

AFI-  
AOM/OPT  
MOD

AFI-  
AOM/OPT  
MOD

AFI-ATS-  
UH

AFI-XB-  
ATFM

AFI-ATS-  
UH

AFI-XB-  
FRA

AFI-ATC-  
TRG-UP

AFI-CB-  
ATM-CASI

ATM-SAFE

AFI-  
RHLS/ROA

**CNS**

AFI-IATI

AFI-  
SPECTRA

AFI  
NAVMOD

AFI-ATSEP

AFI-  
COMMODO

AFI-SWIM

AFI-GGCOM  
AFI

AFI  
SURVDATA

AFI-CYRES

**MET**

AFI-CB-  
MET-AMP

AFI -  
DISMET

AFI -  
DIGIMET

AFI-  
METCAL

AFI-SADIS

AFI-SPWX

ATIS-AFI

AFI-  
METCAL

AFI -  
DIGIMET

AFI-WARN

ATIS-AFI

**PANS OPS**

AFI-CB-  
PANSOPS

AFI-CB-  
IFPDV

AFI-QA-  
IFPD

AFI-CB-  
PANSOPS

AFI-CB-  
IFPDV

AFI-  
DATOIA

**SAR**

AFI-  
MSARA

AFI-  
RCCEFF

AFI-  
SAROV

AFI-  
RCCEFF

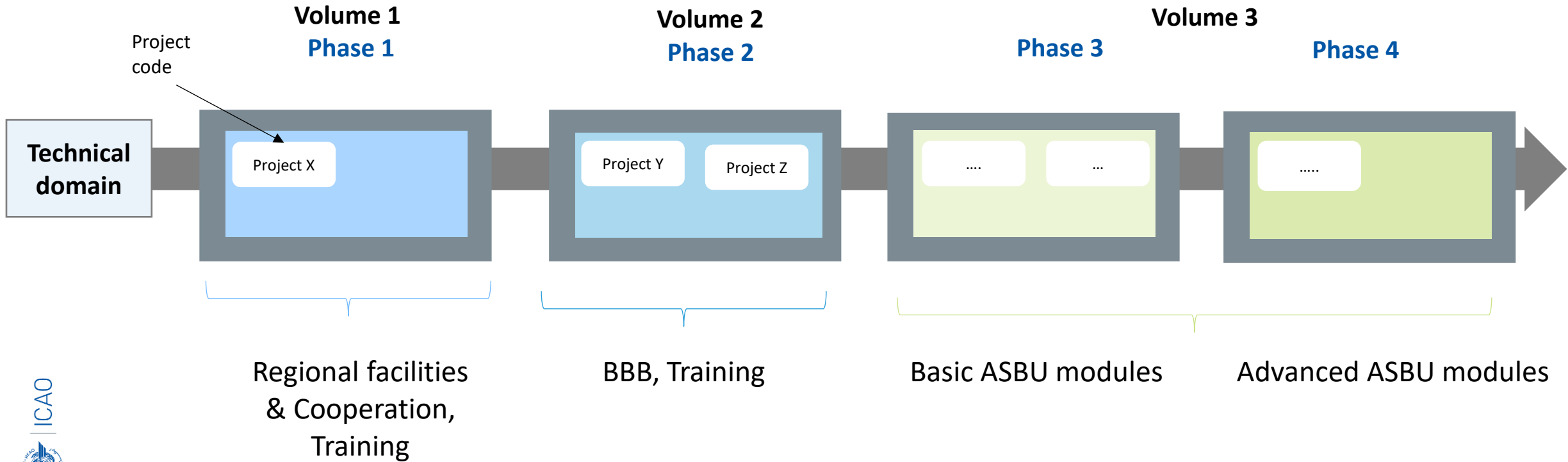
AFI-JRCCP

AFI-  
SARTRX

AFI-  
SARTRX

# AFI ANS SUMMIT – PROJECTS DEVELOPMENT MAPPING

## Phases



# Overview of Projects with AFI ANP and ICAO Reference Integration

4

| Domain | Project Title                                                                             | Project Code | AFI ANP        |                      |                                                                  | ICAO References                  |
|--------|-------------------------------------------------------------------------------------------|--------------|----------------|----------------------|------------------------------------------------------------------|----------------------------------|
|        |                                                                                           |              | Vol I          | Vol II               | Vol III                                                          |                                  |
| AIM    | Monitoring of the Aeronautical information quality and Improvement of NOTAM               | AIM ADQ      |                | Part VII, §2.1, §2.2 | ASBU module<br>DAIM-B1 :<br>DAIM-B1/7                            | Annex 15                         |
| AIM    | Implementation of Aerodrome mapping data sets and Instrument flight procedure data sets   | AIM AMDIFP   |                |                      | ASBU module<br>DAIM-B1:<br>DAIM-B1/1,<br>DAIM-B1/5,<br>DAIM-B1/6 | Annex 15                         |
| AIM    | Implementation of Competency-Based Training Standards for AIS personnel in the AFI Region | AIM CBTS     | Part I § 6.5.1 |                      |                                                                  | Annex 15<br>PANS AIM<br>Doc 9991 |
| AIM    | Implementation of the AIXM database and electronic AIP                                    | AIM AIXM     |                |                      | ASBU module<br>DAIM-B1:<br>DAIM-B1/1                             | Annex 15<br>PANS AIM             |
| AIM    | Implementation of Terrain and Obstacle Data Set                                           | AIM TOD      |                |                      | ASBU module<br>DAIM-B1:<br>DAIM-B1/3,<br>DAIM-B1/4,              | Annex 15<br>PANS AIM             |
| AIM    | Implementation of QMS for AIM and MET                                                     | AIM-MET QMS  |                | Part VII, §2.4, §2.5 | ASBU Module<br>DAIM-B1 :<br>DAIM-B1/1                            | Annex 15<br>PANS AIM             |

# Overview of Projects with AFI ANP and ICAO Reference Integration

| Domain | Project Title                                                     | Project Code | AFI ANP            |                              |                                                                     | ICAO References         |
|--------|-------------------------------------------------------------------|--------------|--------------------|------------------------------|---------------------------------------------------------------------|-------------------------|
|        |                                                                   |              | Vol I              | Vol II                       | Vol III                                                             |                         |
| AOP    |                                                                   |              |                    |                              |                                                                     |                         |
| AOP    | Aerodrome Certification                                           | AFI-AEROCERT |                    | PART II §2<br>TABLE AOP II-1 |                                                                     | ICAO Annex 14, Volume I |
| AOP    | Runway Safety                                                     | AFI-RUNSAFE  | PART I, AOP 1.1    |                              |                                                                     | ICAO Annex 14           |
| AOP    | A-CDM Implementation                                              | AFI-CDM-IMP  |                    | PART I , §2.13               | PART 2 Table<br>AOP III-1<br>ASBU modules:<br>ACDM-B0,<br>ACDM-B0/1 | ICAO Annex 14           |
| AOP    | Training and Qualification of Aerodrome Operations and Inspectors | AFI-AO-TRG   | Part I, §6, §6.5.1 |                              | ASBU modules :<br>ACDM-B0/1<br>ACDM-B0/2                            |                         |
| AOP    | Airport Master Planning                                           | AFI-AMP      | PART II, §2        |                              |                                                                     |                         |
| AOP    | Wildlife Hazard Management                                        | AFI-WILDSAFE |                    |                              |                                                                     | ICAO Annex 14, Volume I |
| AOP    | Emergency planning at Aerodromes                                  | AFI-AERO-EP  |                    |                              |                                                                     | ICAO Annex 14, Volume I |

# Overview of Projects with AFI ANP and ICAO Reference Integration

6

| Domain | Project Title                                                                  | Project Code   | AFI ANP              |                  |                                                                                                                           | ICAO References                                               |
|--------|--------------------------------------------------------------------------------|----------------|----------------------|------------------|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
|        |                                                                                |                | Vol I                | Vol II           | Vol III                                                                                                                   |                                                               |
| ATM    | Airspace Optimization and Modernization                                        | AFI-AOM/OPTMOD | PART IV §2.3-2.8     | PART I, §2.1-2.6 | ASBU module elements : FRTO-B0/2, FRTO-B1/4, NOPS-B0/1                                                                    | Annex 11, chapter 2, App 1, 2, 3 & 4                          |
| ATM    | Reduced and Harmonised Longitudinal Separations in Remote and Oceanic Airspace | AFI-RHLS/ROA   |                      |                  | ASBU module elements : CSEP-B1/3, FRTO-B0/4, FRTO-B1/5                                                                    | Annex 11 Chapter 3<br>PANS ATM –(Doc4444, Chapter 5)          |
| ATM    | Civil/Military Cooperation in ATM & Flexible Use of Airspace Implementation    | AFI-CIVMIL/FUA | PART IV §2.7         | PART IV, §3.1    | ASBU modules : FRTO-B0/2, FRTO-B1/3                                                                                       | Annex 11, chapter 2<br>Doc 10088                              |
| ATM    | Cross-border ATFM Implementation                                               | AFI-XB-ATFM    |                      |                  | ASBU modules : NOPS-B0/1, NOPS-B0/2, NOPS-B0/3, NOPS-B0/5, NOPS-B1/1, NOPS-B1/2, NOPS-B1/5, NOPS-B2/3, NOPS-B2/6          | Annex 11 Chapter 3<br>PANS-ATM –(Doc4444, Chapter 3)          |
| ATM    | Cross-border FRA Implementation                                                | AFI-XB-FRA     |                      |                  | ASBU modules : FRTO-B1/1, FRTO-B2/3, NOPS-B2/6                                                                            | APIRG 22 Conclusion 22/36<br>AN Conf/14, Recommendation 3.1/4 |
| ATM    | Air Traffic Services Upgrade and Harmonization                                 | AFI-ATS-UH     | PART IV, §1.1        | PART IV, §1.1    | ASBU modules : FRTO-B0/4, FRTO-B1/5, SNET-B0/1, SNET-B0/2, SNET-B0/3, SNET-B0/4, SNET-B1/1, SNET-B1/2, TBO-B0/1, TBO-B1/1 | Annex 11 Chapter 3, 4 and 5<br>PANS-ATM –(Doc4444, Chapter 4) |
| ATM    | ATC Training Harmonization and Upgrade                                         | AFI-ATC-TRG-UP | Part 1, §6.4, §6.5.1 |                  | Enablers for all ATM related modules                                                                                      | Annex 1, Chapter 4<br>PANS-TRG (Doc9868)                      |
| ATM    | ATM Oversight Enhancement                                                      | ATM-SAFE       | Part 1, §6.4, §6.5.1 |                  | Enablers for all ATM related modules                                                                                      | Annex 11, Attachment C<br>AFI eANP Vol II                     |

| Domain | Project Title                                                         | Project Code  | AFI ANP                         |                                                        |                                                                                   | ICAO References                                                                                                                                                                                  |
|--------|-----------------------------------------------------------------------|---------------|---------------------------------|--------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|        |                                                                       |               | Vol I                           | Vol II                                                 | Vol III                                                                           |                                                                                                                                                                                                  |
| CNS    | GNSS monitoring and integrity systems at national and regional levels |               | Part III (CNS) §2.7; §2.8       |                                                        | Vol III , Part 2, Table CNS III-1, ASBU modules : NAVS-B0/1, B0/4 , B1/1, B1/2    | Annex 10 vol 1 §3.7<br>Annex 10 vol 1<br>GNSS Manual (Doc 9849)                                                                                                                                  |
| CNS    | AFI Regional Ground Communication Modernization                       | AFI-GGCOM AFI | Part III (CNS) §2.1; §2.2       | Vol II , Part III, §2.1, 2.2 Table CNS II-3            | Vol III , Part 2, Table CNS III-1, ASBU : COMI-B0/1, COMI-B1/1,, B0-FICE, B0-FICE | Annex 10, Volume II §4.6<br>Annex 10, Volume III, Part I Chapter 1, Chapter 3                                                                                                                    |
| CNS    | AFI Navigation Modernization Initiative                               | AFI NAVMOD    | Part III (CNS) §2.7; §2.8 (NAV) |                                                        | Vol III , Part 2, Table CNS III-1, NAVS-B0/1, NAVS-B1/1, NAVS-B1/2                | Annex 10 vol 1 §3.7<br>Annex 10 vol 1<br>GNSS Manual (Doc 9849)                                                                                                                                  |
| CNS    | AFI Aviation Spectrum Coordination and Protection Initiative          | AFI-SPECTRA   | Part III (CNS) §2.9             | Vol II, Part III, §2.245 to 2.51                       |                                                                                   | Annex 10 volume 5<br>ICAO Doc 9718 vol. 1, Vol 2                                                                                                                                                 |
| CNS    | AFI Surveillance and Data Sharing Enhancement Initiative              | AFI SURVDATA  | Part III (CNS) §2.8             |                                                        | Vol III , Part 2, Table CNS III-1, ASUR-B0/1, ASUR-B1/1, ASUR-B1/2 ASUR-B1/3      | Annex 10 volume IV PART I, Chapter 5 Chapter 6(VDL) §Section 6.9 VDL, Chapter 9: Chapter 12 (UAT)<br>Annex 11, Chapter 3, §3.6, §3.8, §3.9, 3.10<br>Doc 4444 chap 4, 5, 8, chap 13               |
| CNS    | AFI Integrated Aeronautical Telecommunication Infrastructure          | AFI-IATI      | Part III (CNS) §2.1; §2.2       | Vol II, Part III, §2.4 Table CNS II-1 , CHART CNS II-1 | Vol III , Part 3, Table CNS III-1, ASBU : COMI B1/1                               | Annex 10 Vol 3 Part I CHAPTER 3, Doc 9896, Doc9880                                                                                                                                               |
| CNS    | Implementation of System Wide Information Management (SWIM)           | AFI-SWIM      |                                 | Vol II PART III , §2.7                                 | Vol III , Part 3 Table ATM III-1 NOPS-B1,                                         |                                                                                                                                                                                                  |
| CNS    | Modernization of Air-Ground Communication Infrastructure              | AFI-COMMOD    | Part III (CNS) §2.3; §2.4, 2.5  |                                                        | Vol III, Part 2, Table ATM III-1 COMS-B0/1, COMS-B1/1                             | Annexe 10 PART II chapter 3, chapter 6                                                                                                                                                           |
| CNS    | Capacity building and harmonization of training for ATSEP             | AFI-ATSEP     | Part I, §6, §6.5.1              |                                                        |                                                                                   | Annex 10 ICAO Doc 10057                                                                                                                                                                          |
| CNS    | AFI Cyber Resilience in CNS/ATM Systems                               | AFI-CYRES     |                                 |                                                        |                                                                                   | Annex 10, vol II, Aviation Cybersecurity Strategy - ICAO, Cybersecurity Policy Guidance , ICAO Cybersecurity Action Plan Cybersecurity Culture in Civil Aviation , Doc 9896, Doc. 9854, Doc 9855 |



# Overview of Projects with AFI ANP and ICAO Reference Integration

8

| Domain | Project Title                                                                                              | Project Code   | AFI ANP               |                       |                                                           | ICAO References                               |
|--------|------------------------------------------------------------------------------------------------------------|----------------|-----------------------|-----------------------|-----------------------------------------------------------|-----------------------------------------------|
|        |                                                                                                            |                | Vol I                 | Vol II                | Vol III                                                   |                                               |
| MET    | Project on Strengthening Aeronautical Meteorological Personnel Competency Implementation in the AFI Region | AFI-CB-MET-AMP | Part 1 , §6.4, §6.5.1 |                       |                                                           |                                               |
| MET    | Project on Enhancing Space Weather Readiness and Service Provision in the AFI Region                       | AFI-SPWX       |                       |                       | ASBU modules<br>AMET-B1 : AMET-B1/1, AMET-B1/2, AMET-B1/4 |                                               |
| MET    | Project on Improving OPMET Delivery and MET Products Access in the AFI Region                              | AFI -DISMET    |                       | PART V , §2.8, §3.4   | ASBU modules :<br>AMET-B0/1, AMET-B0/2, AMET-B0/4         |                                               |
| MET    | Project on Enhancing Digital Exchange of Aeronautical Meteorological Information in the AFI Region         | AFI-DIGIMET    |                       |                       | ASBU modules :<br>AMET-B1/1, AMET-B1/2, AMET-B1/4         |                                               |
| MET    | Project on Calibration and Control of Surface-based MET Sensors and Instruments                            | AFI-METCAL     |                       |                       | ASBU modules :<br>AMET-B0/1, AMET-B0/2, AMET-B0/4         |                                               |
| MET    | Project on Strengthening Wind Shear Warning Capabilities in the AFI Region                                 | AFI-WARN       |                       |                       | ASBU modules :<br>AMET-B0/1, AMET-B0/2, AMET-B0/4         |                                               |
| MET    | Implementation of the SADIS API system for the provision of WAFS gridded forecasts and datasets            | AFI-SADIS      |                       | PART V , §2.8, §3.4   | ASBU modules :<br>AMET-B1/1, AMET-B1/2, AMET-B1/4         |                                               |
| MET    | Implementation of aeronautical data link (D-VOLMET) and broadcasting (VOLMET) services (V-AFI)             | AFI D-VOLMET   |                       | PART V , §2.11, §2.12 |                                                           |                                               |
| MET    | Implementation of ATIS (voice-ATIS and D-ATIS)                                                             | AFI ATIS       |                       |                       |                                                           | Annex 11, §4.3.4, §4.3.5, annex 10 vol2. §8.1 |



# Overview of Projects with AFI ANP and ICAO Reference Integration

9

| Domain   | Project Title                                                             | Project Code   | AFI ANP                  |               |                                                                                                                | ICAO References                                              |
|----------|---------------------------------------------------------------------------|----------------|--------------------------|---------------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
|          |                                                                           |                | Vol I                    | Vol II        | Vol III                                                                                                        |                                                              |
| PANS-OPS | Departure and arrival trajectories optimization at international airports | AFI-DATOIA     | Part IV, §2.6            |               | ASBU module elements :<br>APTA B0/1, B0/2, B0/5,<br>APTA B1/1, APTA B1/2,<br>APTA B1/5                         | Annex 11, chapter 2, App 4                                   |
| PANS-OPS | Quality assurance implementation in Instrument Flight Procedure Design    | AFI-QA-IFPD    | Part IV, §2.6            | Part IV, §3.1 | ASBU modules elements :<br>APTA B0/1, B0/2, B0/5,<br>APTA B1/1, APTA B1/2,<br>APTA B1/5                        | Annex 11, App 7<br>Doc8168, Vol II<br>Doc9906                |
| PANS-OPS | Capacity building in IFP design and validation                            | AFI-CB-IFPDV   | Part 1 , §6.4,<br>§6.5.1 | Part IV, §3.1 | ASBU module elements:<br>APTA B0/1, B0/2, B0/4,<br>B0/5, APTA B1/1,B1/4,<br>APTA B1/2, APTA B1/5<br>(enablers) | Doc9906, Vol 1,2,3,5 & 6                                     |
| PANS-OPS | Capacity building in PANS OPS oversight                                   | AFI-CB-PANSOPS | Part 1 , §6.5.1          | Part IV, §3.1 | ASBU module elements:<br>APTA B0/1, B0/2, B0/4,<br>B0/5, APTA B1/1,B1/4,<br>APTA B1/2, APTA B1/5<br>(enablers) | Annex 19, chapter 4<br>Doc9735, part A<br>Doc10070           |
| SAR      | Multistate SAR agreement                                                  | AFI-MSARA      | PART VI , §2.3,<br>§2.4  | PART VI, §3.1 |                                                                                                                | Annex 12, chapter 3                                          |
| SAR      | RCC/RSC efficiency enhancement                                            | AFI-RCCEFF     | Part 1 , §6.4,<br>§6.5.1 |               | GADS-B1/1, GADS-B1/2<br>(enablers)                                                                             | Annex 12, chapter 2<br>IAMSAR Doc 9731 Vol I<br>AFI SAR Plan |
| SAR      | National SAR oversight enhancement                                        | AFI-SAROVR     | Part 1 , §6.4,<br>§6.5.1 |               | GADS-B1/1, GADS-B1/2<br>(enablers)                                                                             | Annex 19, chapter 4<br>Doc9735, part A<br>Doc10070           |
| SAR      | Establishment of JRCC/JRSC                                                | AFI-JRCCP      | PART VI , §2.1,<br>2.4   | Part VI, §1.1 |                                                                                                                | Annex 12, chapter 3<br>IMASAR Vol I                          |
| SAR      | Training of SAR personnel including Conduct of SAREX                      | AFI-SARTRX     | Part 1 , §6.4,<br>§6.5.1 |               |                                                                                                                | Annex 12, chapter 4<br>IAMSAR Vol I, II & III                |