Commission Implementing Regulation (EU) 2017/373 of 1 March 2017 laying down common requirements for providers of air traffic management/ air navigation services and other air traffic management network functions and their oversight, repealing Regulation (EC) No 482/2008, Implementing Regulations (EU) No 1034/2011, (EU) No 1035/2011 and (EU) 2016/1377 and amending Regulation (EU) No 677/2011 (Text with EEA relevance)

Article 2	Definitions	

- Article 3 Provision of ATM/ANS and ATM network functions
- Article 4 Competent authority for certification, oversight and enforcement
- Article 5 Powers of the competent authority referred to in Article 4
- Article 6 Service providers
- Article 7 Declaration by providers of flight information services
- Article 8 Existing certificates
- Article 9 Repeal and amendment
- Article 10 Entry into force
 - Signature

ANNEX I

DEFINITIONS OF TERMS USED IN ANNEXES II TO XIII

For the purposes of Annexes II to XIII, the following... 'acceptable means of compliance (AMC)' means non-binding standards adopted by...

ANNEX II

REQUIREMENTS FOR COMPETENT AUTHORITIES — OVERSIGHT OF SERVICES AND OTHER ATM NETWORK FUNCTIONS

SUBPART A — GENERAL REQUIREMENTS

ATM/ANS.AR.A.001 Scope ATM/ANS.AR.A.005 Certification, oversight and enforcement tasks ATM/ANS.AR.A.010 Certification, oversight and enforcement documentation ATM/ANS.AR.A.015 Means of compliance ATM/ANS.AR.A.020 Information to the Agency ATM/ANS.AR.A.025 Immediate reaction to safety problem ATM/ANS.AR.A.030 Safety directives

SUBPART B — MANAGEMENT (ATM/ANS.AR.B) ATM/ANS.AR.B.001 Management system ATM/ANS.AR.B.005 Allocation of tasks to qualified entities ATM/ANS.AR.B.010 Changes in the management system ATM/ANS.AR.B.015 Record-keeping SUBPART C — OVERSIGHT, CERTIFICATION AND ENFORCEMENT (ATM/ ANS.AR.C)

ATM/ANS.AR.C.001 Monitoring of safety performance

ATM/ANS.AR.C.005 Certification, declaration, and verification of service providers' compliance with...

ATM/ANS.AR.C.010 Oversight

ATM/ANS.AR.C.015 Oversight programme

ATM/ANS.AR.C.020 Issue of certificates

ATM/ANS.AR.C.025 Changes

ATM/ANS.AR.C.030 Approval of change management procedures for functional systems

ATM/ANS.AR.C.035 Decision to review a notified change to the functional... ATM/ANS.AR.C.040 Review of a notified change to the functional system... ATM/ANS.AR.C.045 Declarations of flight information services providers ATM/ANS.AR.C.050 Findings, corrective actions, and enforcement measures

Appendix 1

CERTIFICATHEFORV SERVICAT RONO WIDER ORITY SERVICE PROVIDER CERTIFICATE [CERTIFICATE NUMBER/ISSUE No]...SERVICE PROVIDER CERTIFICATE [CERTIFICATE NUMBER/ISSUE No] Pursuant to Implementing Regulation... [CERTIFICATE NUMBER/ISSUE No] [NAME]@EDDRESSEQVICHEPRERVIDERPROVIDER]

SERVICEHRIOPHIDAHE SERVICE PROVISION CONDITIONS Attachment to service provider's certificate: [CERTIFICATE NUMBER/ISSUE... [CERTIFICAME OFIMIBE SHRSWEENROVIDER]

ANNEX III

COMMON REQUIREMENTS FOR SERVICE PROVIDERS

SUBPART A — GENERAL REQUIREMENTS (ATM/ANS.OR.A) ATM/ANS.OR.A.001 Scope ATM/ANS.OR.A.005 Application for a service provider certificate ATM/ANS.OR.A.010 Application for a limited certificate ATM/ANS.OR.A.015 Declaration by flight information services providers ATM/ANS.OR.A.020 Means of compliance ATM/ANS.OR.A.025 Continued validity of a certificate ATM/ANS.OR.A.030 Continued validity of a declaration of a flight information... ATM/ANS.OR.A.035 Demonstration of compliance ATM/ANS.OR.A.040 Changes — general ATM/ANS.OR.A.045 Changes to a functional system ATM/ANS.OR.A.050 Facilitation and cooperation ATM/ANS.OR.A.055 Findings and corrective actions ATM/ANS.OR.A.060 Immediate reaction to a safety problem ATM/ANS.OR.A.065 Occurrence reporting ATM/ANS.OR.A.070 Contingency plans ATM/ANS.OR.A.075 Open and transparent provision of services ATM/ANS.OR.A.080 Provision of aeronautical data

ATM/ANS.OR.A.085 Aeronautical data quality management ATM/ANS.OR.A.090 Common reference systems for air navigation SUBPART B — MANAGEMENT (ATM/ANS.OR.B)

ATM/ANS.OR.B.001 Technical and operational competence and capability

ATM/ANS.OR.B.005 Management system

ATM/ANS.OR.B.010 Change management procedures

ATM/ANS.OR.B.015 Contracted activities

ATM/ANS.OR.B.020 Personnel requirements

ATM/ANS.OR.B.025 Facilities requirements

ATM/ANS.OR.B.030 Record-keeping

ATM/ANS.OR.B.035 Operations manuals

SUBPART C — SPECIFIC ORGANISATION REQUIREMENTS FOR SERVICE PROVIDERS OTHER...

ATM/ANS.OR.C.001 Scope

ATM/ANS.OR.C.005 Safety support assessment and assurance of changes to the...

SUBPART D — SPECIFIC ORGANISATIONAL REQUIREMENTS FOR ANS ... (ATM/ANS.OR.D)...

ATM/ANS.OR.D.001 Scope

ATM/ANS.OR.D.005 Business, annual, and performance plans

- (a) Business plan
- (b) Annual plan

(c) Performance part of the plans

ATM/ANS.OR.D.010 Security management

ATM/ANS.OR.D.015 Financial strength — economic and financial capacity

ATM/ANS.OR.D.020 Liability and insurance cover

ATM/ANS.OR.D.025 Reporting requirements

ANNEX IV

SPECIFIC REQUIREMENTS FOR PROVIDERS OF AIR TRAFFIC SERVICES

SUBPART A — ADDITIONAL ORGANISATION REQUIREMENTS FOR PROVIDERS OF AIR...

SECTION 1 — GENERAL REQUIREMENTS

ATS.OR.100 Ownership An air traffic services provider shall notify the...

ATS.OR.100 Ownership ATS.OR.105 Open and transparent provision of service ATS.OR.110 Coordination between aerodrome operators and air traffic services providers... ATS.OR.125 Coordination between aeronautical information services and air traffic services...

SECTION 2 — SAFETY OF SERVICES

ATS.OR.200 Safety management system An air traffic services provider shall...

ATS.OR.200 Safety management system

ATS.OR.205 Safety assessment and assurance of changes to the functional... ATS.OR.210 Safety criteria

ATS.OR.215 Licensing and medical certification requirements for air traffic controllers...

SECTION 3 — SPECIFIC HUMAN FACTORS REQUIREMENTS FOR AIR TRAFFIC CONTROL SERVICE PROVIDERS

ATS.OR.300 Scope This section establishes the requirements to be met...

ATS.OR.300 Scope ATS.OR.305 Responsibilities of air traffic control service providers with regard... ATS.OR.310 Stress ATS.OR.315 Fatigue ATS.OR.320 Air traffic controllers' rostering system(s)

SUBPART B — TECHNICAL REQUIREMENTS FOR PROVIDERS OF AIR TRAFFIC...

SECTION 1 — GENERAL REQUIREMENTS

ATS.TR.100 Working methods and operating procedures for providers of air...

ATS.TR.100 Working methods and operating procedures for providers of air...

ANNEX V

SPECIFIC REQUIREMENTS FOR PROVIDERS OF METEOROLOGICAL SERVICES

SUBPART A — ADDITIONAL ORGANISATION REQUIREMENTS FOR PROVIDERS OF METEOROLOGICAL...

SECTION 1 — GENERAL REQUIREMENTS

MET.OR.100 Meteorological data and information A meteorological services provider shall...

MET.OR.100 Meteorological data and information MET.OR.105 Retention of meteorological information MET.OR.110 Meteorological information exchange requirements MET.OR.115 Meteorological bulletins MET.OR.120 Notification of discrepancies to the world area forecast centres...

SECTION 2 — SPECIFIC REQUIREMENTS

Chapter 1 — Requirements for aeronautical meteorological stations MET.OR.200 Meteorological...

Chapter 1 — Requirements for aeronautical meteorological stations

MET.OR.200 Meteorological reports and other information An aeronautical meteorological station...

MET.OR.200 Meteorological reports and other information MET.OR.205 Reporting of meteorological elements MET.OR.210 Observing meteorological elements

Chapter 2 — Requirements for aerodrome meteorological offices

MET.OR.215 Forecasts and other information An aerodrome meteorological office shall:...

MET.OR.215 Forecasts and other information MET.OR.220 Aerodrome forecasts MET.OR.225 Forecasts for landing MET.OR.230 Forecasts for take-off MET.OR.235 Aerodrome warnings and wind shear warnings and alerts MET.OR.240 Information for use by operator or flight crew MET.OR.242 Information to be provided to air traffic services units...

Chapter 3 — Requirements for meteorological watch offices

MET.OR.245 Meteorological watch and other information Within its area of...

MET.OR.245 Meteorological watch and other information MET.OR.250 SIGMET MET.OR.255 AIRMET MET.OR.260 Area forecasts for low-level flights

Chapter 4 — Requirements for volcanic ash advisory centre (VAAC)

MET.OR.265 Volcanic ash advisory centre responsibilities In its area of...

MET.OR.265 Volcanic ash advisory centre responsibilities

Chapter 5 — Requirements for tropical cyclone advisory centre (TCAC)

MET.OR.270 Tropical cyclone advisory centre responsibilities A TCAC shall provide:...

MET.OR.270 Tropical cyclone advisory centre responsibilities

Chapter 6 — Requirements for world area forecast centre (WAFC)

MET.OR.275 World area forecast centre responsibilities The WAFC shall provide,...

MET.OR.275 World area forecast centre responsibilities

SUBPART B — TECHNICAL REQUIREMENTS FOR PROVIDERS OF METEOROLOGICAL SERVICES...

SECTION 1 — GENERAL REQUIREMENTS

MET.TR.115 Meteorological bulletins Meteorological bulletins shall contain a heading consisting...

MET.TR.115 Meteorological bulletins

SECTION 2 — SPECIFIC REQUIREMENTS

Chapter 1 — Technical requirements for aeronautical meteorological stations MET.TR.200...

Chapter 1 — Technical requirements for aeronautical meteorological stations

MET.TR.200 Meteorological reports and other information Local routine report, local...

MET.TR.200 Meteorological reports and other information

- MET.TR.205 Reporting of meteorological elements
- (a) Surface wind direction and speed
- (b) Visibility
- (c) Runway visual range (RVR)
- (d) Present weather phenomena
- (e) Clouds
- (f) Air temperature and dew-point temperature
- (g) Atmospheric pressure
- MET.TR.210 Observing meteorological elements
- (a) Surface wind direction and speed
 - (1) Siting
 - (2) Display
 - (3) Averaging
- (b) Visibility

(c)

- (1) The visibility shall be measured or observed, and reported in...
- (2) Siting
- (3) Displays
- (4) Averaging
- Runway visual range (RVR)
 - (1) Siting
 - (2) Instrumented systems
 - (3) Display
 - (4) Averaging
- (d) Present weather phenomena
 - (1) The following present weather phenomena shall be reported, as a...
 - (2) Siting
- (e) Clouds
 - (1) Cloud amount, cloud type and height of cloud base shall...
 - (2) Siting
 - (3) Display
 - (4) Reference level
- (f) Air temperature and dew-point temperature
- (g) Atmospheric pressure

- (1) The atmospheric pressure shall be measured, and QNH and QFE...
- (2) Display
- (3) Reference level

Chapter 2 — Technical requirements for aerodrome meteorological offices

Commission Implementing Regulation (EU) 2017/373. (See end of Document for details)

MET.TR.215 Forecast and other information Meteorological information for operators and...

MET.TR.215 Forecast and other information MET.TR.220 Aerodrome forecasts MET.TR.225 Forecasts for landing MET.TR.230 Forecasts for take-off MET.TR.235 Aerodrome warnings and wind shear warnings and alerts

Chapter 3 — Technical requirements for meteorological watch offices

MET.TR.250 SIGMET The content and order of elements in a...

MET.TR.250 SIGMET MET.TR.255 AIRMET MET.TR.260 Area forecasts for low-level flights

Chapter 4 — Technical requirements for volcanic ash advisory centres (VAAC)

MET.TR.265 Volcanic ash advisory centre responsibilities The advisory information on...

MET.TR.265 Volcanic ash advisory centre responsibilities

Chapter 5 — Technical requirements for tropical cyclone advisory centres (TCAC)

MET.TR.270 Tropical cyclone advisory centre responsibilities The advisory information on...

MET.TR.270 Tropical cyclone advisory centre responsibilities

Chapter 6 — Technical requirements for world area forecast centres (WAFCs)

MET.TR.275 World area forecast centre responsibilities WAFCs shall use processed...

MET.TR.275 World area forecast centre responsibilities

Appendix 1

Appendix 2

Fixed areas of coverage of WAFS forecasts in chart form... Mercator projection Polar stereographic projection (northern hemisphere) Polar stereographic projection (southern hemisphere)

Appendix 3

Template for TAF Note 1: the ranges and resolutions for the numerical elements included in... Note 2: the explanations for the abbreviations can be found in ICAO...

Ranges and resolutions for the numerical elements included in TAF...

Appendix 4

Template for wind shear warnings

Key: M inclusion mandatory; C inclusion conditional, whenever applicable.

Note 1: the ranges and resolutions for the numerical elements included in...

Note 2: the explanations for the abbreviations can be found in ICAO...

Appendix 5

Appendix 5A

Template for SIGMET and AIRMET

Key: M inclusion mandatory; C inclusion conditional, whenever applicable; and =...

Note: the ranges and resolutions for the numerical elements included in...

Appendix 5B

Template for special air-reports (uplink)

Key: M inclusion mandatory, part of every special air-report (uplink); C...

Note: the ranges and resolutions for the numerical elements included in...

Appendix 6

Template for advisory for volcanic ash

Key: M inclusion mandatory; O inclusion optional; = a double line... Note 1: the ranges and resolutions for the numerical elements included in...

Note 2: the explanations for the abbreviations can be found in ICAO...

Note 3: inclusion of a ' colon ' after each element heading...

Note 4: numbers 1 to 18 are included only for clarity and...

Appendix 7

Commission Implementing Regulation (EU) 2017/373. (See end of Document for details)

Template for advisory for tropical cyclones

Key:

= a double line indicates that the text following it...

Note 1: the ranges and resolutions for the numerical elements included in...

Note 2: the explanations for the abbreviations can be found in ICAO...

Note 3: all the elements are mandatory.

Note 4: inclusion of a ' colon ' after each element heading...

Note 5: numbers 1 to 19 are included only for clarity and...

Appendix 8

Ranges and resolutions for the numerical elements included in volcanic ash advisory, tropical cyclone advisory, SIGMET, AIRMET, aerodrome warning and wind shear warning

ANNEX VI

SPECIFIC REQUIREMENTS FOR THE PROVIDERS OF AERONAUTICAL INFORMATION SERVICES (Part-AIS)

SUBPART A – ADDITIONAL ORGANISATION REQUIREMENTS FOR PROVIDERS OF AERONAUTICAL...

SECTION 1 – GENERAL REQUIREMENTS

AIS.OR.100 Aeronautical information management An aeronautical information services (AIS) provider...

AIS.OR.100 Aeronautical information management AIS.OR.105 Responsibilities of aeronautical information services (AIS) providers

SECTION S. OR. 200A General TAY MISS pace Extensional ensure that: aeronautical data...

AIS.OR.200 General AIS.OR.205 Formal arrangements AIS.OR.210 Exchange of aeronautical data and aeronautical information

AIS.OR.215 Tools and software

Commission Implementing Regulation (EU) 2017/373. (See end of Document for details)

AIS.OR.220 Validation and verification

AIS.OR.225 Metadata

AIS.OR.230 Data error detection and authentication

AIS.OR.235 Error reporting, error measurement, and corrective actions

AIS.OR.240 Data limitations

AIS.OR.250 Consistency requirement

SECTIONS.OR.BRONALEFICALANGORIMATIONOPRODUCTS When providing aeronautical data...

AIS.OR.300 General – Aeronautical information products

Chapter A IS A Corrolation for the stand of the stand of

AIS.OR.305 Aeronautical information publication (AIP)

AIS.OR.310 AIP amendments

AIS.OR.315 AIP supplements

AIS.OR.320 Aeronautical information circular (AIC)

AIS.OR.325 Aeronautical charts

AIS.OR.330 NOTAM

Chapter & ISIO Bits Slatesetal – Digital data sets If available, an AIS...

AIS.OR.335 General - Digital data sets

AIS.OR.340 Metadata requirements

AIS.OR.345 AIP data set

AIS.OR.350 Terrain and obstacle data – General requirements

AIS.OR.355 Terrain data sets

AIS.OR.360 Obstacle data sets

AIS.OR.365 Aerodrome mapping data sets

AIS.OR.370 Instrument flight procedure data sets

SECTIONS.OB.HODROBHTHONNASEDVICE ATLIANT TOTOR MATHONStribute SERVICE Silable aeronautical...

AIS.OR.400 Distribution services

AIS.OR.405 Pre-flight information services

SECTION S.OR. 5000540671CALEIDIE OR AFFORMATEORIA HRODOLOUTS UPDATES AS AIS provider...

AIS.OR.500 General – Aeronautical information products updates

AIS.OR.505 Aeronautical information regulation and control (AIRAC)

AIS.OR.510 NOTAM

AIS.OR.515 Data set updates

SECTIONS.ORIGROONCHETAREQUIREMENTIS addition to point ATM/ ANS.OR.B.005(a)(6) of Annex...

AIS.OR.600 General requirements

SUBPART B – ADDITIONAL TECHNICAL REQUIREMENTS FOR PROVIDERS OF AERONAUTICAL...

SECTIONS. TROCCACeberal IThe McAnace Binae Notical data shall be in...

AIS.TR.200 General

AIS.TR.210 Exchange of aeronautical data and aeronautical information

AIS.TR.220 Verification

Changes to legislation: There are currently no known outstanding effects for the Commission Implementing Regulation (EU) 2017/373. (See end of Document for details)

AIS.TR.225 Metadata

AIS.TR.235 Error reporting, error measurement and corrective actions AIS.TR.240 Data limitations

SECTIONS. FRAEDONIALETACAL ANFORMATION OPPROUDUCFISS ducts Aeronautical information products intended...

AIS.TR.300 General – Aeronautical information products

AIS.TR.305 Aeronautical information publication (AIP)

AIS.TR.310 AIP amendments

AIS.TR.315 AIP supplements

AIS.TR.320 Aeronautical information circular (AIC)

AIS.TR.330 NOTAM

Chapter & ISD igital 5data sets al — Digital data sets A standard for geographic information...

AIS.TR.335 General— Digital data sets

AIS.TR.340 Metadata requirements

AIS.TR.345 AIP data set

AIS.TR.350 Terrain and obstacle data – General requirements

AIS.TR.355 Terrain data sets

AIS.TR.360 Obstacle data sets

AIS.TR.365 Aerodrome mapping data sets

AIS.TR.370 Instrument flight procedure data sets

SECTIONS. TRASORISTICIBLOOM ACTOCER A-FieldeterminetORSVIIATICONSystem

SERVICESNOTAM transmitted...

AIS.TR.400 Distribution services

AIS.TR.405 Pre-flight information services

SECTION S. FRASDOONAALFAILCA ER ONALGIRAVIATION AR ODUGETS UP BD & THE

same AIRAC...

AIS.TR.500 General – Aeronautical information products updates

AIS.TR.505 AIRAC

AIS.TR.510 NOTAM

AIS.TR.515 Data set updates

ANNEX VII

SPECIFIC REQUIREMENTS FOR PROVIDERS OF DATA SERVICES

SUBPART A — ADDITIONAL ORGANISATION REQUIREMENTS FOR PROVIDERS OF DATA...

SECTION 1 — GENERAL REQUIREMENTS

DAT.OR.100 Aeronautical data and information The DAT provider shall receive,...

DAT.OR.100 Aeronautical data and information DAT.OR.105 Technical and operational competence and capability DAT.OR.110 Management system DAT.OR.115 Record-keeping

SECTION 2 — SPECIFIC REQUIREMENTS

DAT.OR.200 Reporting requirements The DAT provider shall: report to the ...

DAT.OR.200 Reporting requirements

SUBPART B — TECHNICAL REQUIREMENTS FOR PROVIDERS OF DATA SERVICES...

SECTION 1 — GENERAL REQUIREMENTS

DAT.TR.100 Working methods and operating procedures The DAT provider shall:...

DAT.TR.100 Working methods and operating procedures DAT.TR.105 Required interfaces

ANNEX VIII

SPECIFIC REQUIREMENTS FOR PROVIDERS OF COMMUNICATION, NAVIGATION, OR SURVEILLANCE SERVICES

SUBPART A — ADDITIONAL ORGANISATION REQUIREMENTS FOR PROVIDERS OF COMMUNICATION,...

SECTION 1 — GENERAL REQUIREMENTS

CNS.OR.100 Technical and operational competence and capability A communication, navigation...

CNS.OR.100 Technical and operational competence and capability

SUBPART B — TECHNICAL REQUIREMENTS FOR PROVIDERS OF COMMUNICATION, NAVIGATION...

SECTION 1 — GENERAL REQUIREMENTS

CNS.TR.100 Working methods and operating procedures for providers of communication,...

CNS.TR.100 Working methods and operating procedures for providers of communication,...

ANNEX IX

SPECIFIC REQUIREMENTS FOR PROVIDERS OF AIR TRAFFIC FLOW MANAGEMENT

TECHNICAL REQUIREMENTS FOR PROVIDERS OF AIR TRAFFIC FLOW MANAGEMENT (ATFM.TR)...

SECTION 1 — GENERAL REQUIREMENTS

Commission Implementing Regulation (EU) 2017/373. (See end of Document for details)

ATFM.TR.100 Working methods and operating procedures for providers of air...

ATFM.TR.100 Working methods and operating procedures for providers of air...

ANNEX X

SPECIFIC REQUIREMENTS FOR PROVIDERS OF AIRSPACE MANAGEMENT

TECHNICAL REQUIREMENTS FOR PROVIDERS OF AIRSPACE MANAGEMENT (ASM.TR)

SECTION 1 — GENERAL REQUIREMENTS

ASM.TR.100 Working methods and operating procedures for providers of airspace...

ASM.TR.100 Working methods and operating procedures for providers of airspace...

ANNEX XI

SPECIFIC REQUIREMENTS FOR PROVIDERS OF PROCEDURE DESIGN

ANNEX XII

SPECIFIC REQUIREMENTS FOR THE NETWORK MANAGER

TECHNICAL REQUIREMENTS FOR THE NETWORK MANAGER (NM.TR)

SECTION 1 — GENERAL REQUIREMENTS

NM.TR.100 Working methods and operating procedures for the Network Manager...

NM.TR.100 Working methods and operating procedures for the Network Manager...

ANNEX XIII

REQUIREMENTS FOR SERVICE PROVIDERS CONCERNING PERSONNEL TRAINING AND COMPETENCE ASSESSMENT

SUBPART A —AIR TRAFFIC SAFETY ELECTRONIC PERSONNEL

SECTION 1 — GENERAL REQUIREMENTS

ATSEP.OR.100 Scope This Subpart establishes the requirements to be met...

ATSEP.OR.100 Scope ATSEP.OR.105 Training and competence assessment programme ATSEP.OR.110 Record-keeping ATSEP.OR.115 Language proficiency

SECTION 2 — TRAINING REQUIREMENTS

ATSEP.OR.200 Training requirements — General A service provider shall ensure...

ATSEP.OR.200 Training requirements — General ATSEP.OR.205 Basic training ATSEP.OR.210 Qualification training ATSEP.OR.215 System and equipment rating training ATSEP.OR.220 Continuation training

SECTION 3 — COMPETENCE ASSESSMENT REQUIREMENTS

ATSEP.OR.300 Competence assessment — General A service provider shall ensure...

ATSEP.OR.300 Competence assessment — General ATSEP.OR.305 Assessment of initial and ongoing competence

SECTION 4 — INSTRUCTORS AND ASSESSORS REQUIREMENTS

ATSEP.OR.400 ATSEP training instructors A service provider employing ATSEP shall...

ATSEP.OR.400 ATSEP training instructors ATSEP.OR.405 Technical skills assessors

Appendix 1

Basic training — Shared Subject 1: INDUCTION TOPIC 1 BASIND — Induction Subject 2: AIR TRAFFIC FAMILIARISATION TOPIC 1 BASATF — Air Traffic Familiarisation

Appendix 2

Basic training — Streams

Appendix 3

Qualification training — Shared Subject 1: SAFETY TOPIC 1 — Safety Management Subject 2: HEALTH AND SAFETY TOPIC 1 — Hazard Awareness and Legal Rules Subject 3: HUMAN FACTORS TOPIC 1 — Introduction to Human Factors

TOPIC 2 — Working Knowledge and Skills

TOPIC 3 — Psychological Factors

TOPIC 4 — Medical

TOPIC 5 — Organisational and Social Factors

TOPIC 6 — Communication

- TOPIC 7 Stress
- TOPIC 8 Human Error

Appendix 4

Qualification training — Streams COMMUNICATION - VOICE 1. Subject 1: VOICE TOPIC 1 — Air-Ground TOPIC 2 — COMVCE — Ground-Ground Subject 2: TRANSMISSION PATH TOPIC 1 — Lines TOPIC 2 — Specific Links Subject 3: RECORDERS TOPIC 1 — Legal Recorders Subject 4: FUNCTIONAL SAFETY TOPIC 1 — Safety Attitude TOPIC 2 — Functional Safety 2. COMMUNICATION - DATA Subject 1: DATA TOPIC 1 — Introduction to Networks TOPIC 2 — Protocols TOPIC 3 — National Networks TOPIC 4 — European Networks TOPIC 5 — Global Networks Subject 2: TRANSMISSION PATH TOPIC 1 — Lines TOPIC 2 — Specific Links Subject 3: RECORDERS TOPIC 1 — Legal Recorders Subject 4: FUNCTIONAL SAFETY TOPIC 1 — Safety Altitude TOPIC 2 — Functional Safety 3. NAVIGATION — NON-DIRECTIONAL BEACON (NDB) Subject 1: PERFORMANCE-BASED NAVIGATION TOPIC 1 — Navigation Concepts Subject 2: GROUND-BASED SYSTEMS — NDB TOPIC 1 — NDB/Locator Subject 3: GLOBAL NAVIGATION SATELLITE SYSTEM TOPIC 1 — GNSS Subject 4: ON-BOARD EQUIPMENT TOPIC 1 — On-board Systems TOPIC 2 — Autonomous Navigation TOPIC 3 — Vertical Navigation Subject 5: FUNCTIONAL SAFETY

TOPIC 1 — Safety Attitude

TOPIC 2 — Functional Safety 4. NAVIGATION — DIRECTION FINDING (DF) Subject 1: PERFORMANCE-BASED NAVIGATION TOPIC 1 — Navigation Concepts Subject 2: GROUND-BASED SYSTEMS — DF TOPIC 1 — DF Subject 3: GLOBAL NAVIGATION SATELLITE SYSTEM TOPIC 1 — GNSS Subject 4: ON-BOARD EQUIPMENT TOPIC 1 — On-board Systems TOPIC 2 — Autonomous Navigation TOPIC 3 — Vertical Navigation Subject 5: FUNCTIONAL SAFETY TOPIC 1 — Safety Attitude TOPIC 2 — Functional Safety 5. NAVIGATION - VHF OMNIDIRECTIONAL RADIO RANGE (VOR) Subject 1: PERFORMANCE-BASED NAVIGATION TOPIC 1 — Navigation Concepts Subject 2: GROUND-BASED SYSTEMS - VOR TOPIC 1 - VORSubject 3: GLOBAL NAVIGATION SATELLITE SYSTEM TOPIC 1 — GNSS Subject 4: ON-BOARD EQUIPMENT TOPIC 1 — On-board Systems TOPIC 2 — Autonomous Navigation TOPIC 3 — Vertical Navigation Subject 5: — FUNCTIONAL SAFETY TOPIC 1 — Safety Attitude TOPIC 2 — Functional Safety 6. NAVIGATION - DISTANCE MEASURING EQUIPMENT (DME) Subject 1: PERFORMANCE-BASED NAVIGATION TOPIC 1 — Navigation concepts Subject 2: GROUND-BASED SYSTEMS — DME TOPIC 1 - DMESubject 3: GLOBAL NAVIGATION SATELLITE SYSTEM TOPIC 1 - GNSSSubject 4: ON-BOARD EQUIPMENT TOPIC 1 — On-board Systems TOPIC 2 — Autonomous Navigation TOPIC 3 — Vertical Navigation Subject 5: FUNCTIONAL SAFETY TOPIC 1 — Safety Attitude TOPIC 2 — Functional Safety 7. NAVIGATION — INSTRUMENT LANDING SYSTEM (ILS) Subject 1: PERFORMANCE-BASED NAVIGATION TOPIC 1 — Navigation concepts Subject 2: GROUND-BASED SYSTEMS — ILS TOPIC 1 - ILSSubject 3: GLOBAL NAVIGATION SATELLITE SYSTEM TOPIC 1 — GNSS Subject 4: ON-BOARD EQUIPMENT

TOPIC 1 — On-board Systems

TOPIC 2 — Autonomous navigation

TOPIC 3 — Vertical Navigation Subject 5: FUNCTIONAL SAFETY TOPIC 1 — Safety Attitude TOPIC 2 — Functional Safety 8 NAVIGATION - MICROWAVE LANDING SYSTEM (MLS) Subject 1: PERFORMANCE-BASED NAVIGATION TOPIC 1 — Navigation Concepts Subject 2: GROUND-BASED SYSTEMS — MLS TOPIC 1 — MLS Subject 3: GLOBAL NAVIGATION SATELLITE SYSTEM TOPIC 1 - GNSSSubject 4: ON-BOARD EQUIPMENT TOPIC 1 — On-board Systems TOPIC 2 — Autonomous navigation TOPIC 3 — Vertical navigation Subject 5: FUNCTIONAL SAFETY TOPIC 1 — Safety attitude TOPIC 2 — Functional safety 9. SURVEILLANCE — PRIMARY SURVEILLANCE RADAR Subject 1: PRIMARY SURVEILLANCE RADAR TOPIC 1 — ATC surveillance TOPIC 2 — SURPSR — Surface Movement Radar TOPIC 3 — SURPSR — Test and Measurement Subject 2: HUMAN MACHINE INTERFACE (HMI) TOPIC 1 — SURPSR — HMI Subject 3: SURVEILLANCE DATA TRANSMISSION TOPIC 1 — SDT Subject 4: FUNCTIONAL SAFETY TOPIC 1 — SURPSR — Safety Attitude TOPIC 2 — SURPSR — Functional Safety Subject 5: DATA PROCESSING SYSTEMS TOPIC 1 — System Components SURVEILLANCE — SECONDARY SURVEILLANCE RADAR 10. Subject 1: SECONDARY SURVEILLANCE RADAR (SSR) TOPIC 1 — SSR and Mono-pulse SSR TOPIC 2 — Mode S TOPIC 3 — Multilateration TOPIC 4 — SURSSR — Environment Subject 2: HUMAN MACHINE INTERFACE (HMI) TOPIC 1 - HMISubject 3: SURVEILLANCE DATA TRANSMISSION TOPIC 1 — SDT Subject 4: FUNCTIONAL SAFETY TOPIC 1 — Safety attitude TOPIC 2 — Functional safety Subject 5: DATA PROCESSING SYSTEMS TOPIC 1 — System components 11. SURVEILLANCE — AUTOMATIC DEPENDENT SURVEILLANCE Subject 1: AUTOMATIC DEPENDENT SURVEILLANCE (ADS) TOPIC 1 — General view on ADS TOPIC 2 — SURADS — ADS-B TOPIC 3 — ADS-C

Subject 2: HUMAN MACHINE INTERFACE (HMI)

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- (1) OJ L 79, 19.3.2008, p. 1.
- (2) OJ L 96, 31.3.2004, p. 10.
- (**3**) OJ L 96, 31.3.2004, p. 20.
- (4) Commission Implementing Regulation (EU) No 1034/2011 of 17 October 2011 on safety oversight in air traffic management and air navigation services and amending Regulation (EU) No 691/2010 (OJ L 271, 18.10.2011, p. 15).
- (5) Commission Implementing Regulation (EU) No 1035/2011 of 17 October 2011 laying down common requirements for the provision of air navigation services and amending Regulations (EC) No 482/2008 and (EU) No 691/2010 (OJ L 271, 18.10.2011, p. 23).
- (6) Regulation (EC) No 549/2004 of the European Parliament and of the Council of 10 March 2004 laying down the framework for the creation of the single European Sky (OJ L 96, 31.3.2004, p. 1).
- (7) Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 296, 25.10.2012, p. 1).
- (8) Commission Regulation (EU) No 1178/2011 of 3 November 2011 laying down technical requirements and administrative procedures related to civil aviation aircrew pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 311, 25.11.2011, p. 1).
- (9) Commission Regulation (EU) No 139/2014 of 12 February 2014 laying down requirements and administrative procedures related to aerodromes pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 44, 14.2.2014, p. 1).
- (10) Commission Regulation (EU) 2015/340 of 20 February 2015 laying down technical requirements and administrative procedures relating to air traffic controllers' licences and certificates pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council, amending Commission Implementing Regulation (EU) No 923/2012 and repealing Commission Regulation (EU) No 805/2011 (OJ L 63, 6.3.2015, p. 1).
- (11) Commission Implementing Regulation (EU) No 923/2012 of 26 September 2012 laying down the common rules of the air and operational provisions regarding services and procedures in air navigation and amending Implementing Regulation (EU) No 1035/2011 and Regulations (EC) No 1265/2007, (EC) No 1794/2006, (EC) No 730/2006, (EC) No 1033/2006 and (EU) No 255/2010 (OJ L 281, 13.10.2012, p. 1).
- (12) Commission Regulation (EC) No 482/2008 of 30 May 2008 establishing a software safety assurance system to be implemented by air navigation service providers and amending Annex II to Regulation (EC) No 2096/2005 (OJ L 141, 31.5.2008, p. 5).
- (13) Commission Regulation (EU) No 677/2011 of 7 July 2011 laying down detailed rules for the implementation of air traffic management (ATM) network functions and amending Regulation (EU) No 691/2010 (OJ L 185, 15.7.2011, p. 1).
- (14) Commission Implementing Regulation (EU) 2016/1377 of 4 August 2016 laying down common requirements for service providers and the oversight in air traffic management/air navigation services and other air traffic management network functions, repealing Regulation (EC) No 482/2008, Implementing Regulations (EU) No 1034/2011 and (EU) No 1035/2011 and amending Regulation (EU) No 677/2011 (OJ L 226, 19.8.2016, p. 1).

Changes to legislation:

There are currently no known outstanding effects for the Commission Implementing Regulation (EU) 2017/373.