

ASBU modules mapped to Work Programme

APTA	Airport Accessibility
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ASBU modules mapped to Work Programme

Element	Expected Effective Dat	Work Programme	Status
B0-APTA			
1162 Annex 10 - Vol I /		REC-C-ASBU	Completed
265 Annex 10 - Vol I / Standards on SBAS Cat I	30-Jun-10	ROI-8-2016-1	Completed
1163 Annex 11 /		REC-C-ASBU	Completed
1159 PANS-ATM (Doc 4444) /		REC-C-ASBU	Completed
1146 PANS-OPS Vol I (Doc 8168) /		REC-C-ASBU	Not approved
571 PANS-OPS Vol I (Doc 8168) / Procedure design criteria on LP/Baro-VNAV.	30-Jun-16	ROI-4-2016-2	On-schedule
566 PANS-OPS Vol I (Doc 8168) / Visual procedures utilizing PBN	30-Jun-18	ROI-8-2018-6	Not approved
570 PANS-OPS Vol II (Doc 8168) / Procedure design criteria on LP/Baro-VNAV.	30-Jun-16	ROI-4-2016-2	On-schedule
272 PANS-OPS Vol II (Doc 8168) / Visual procedures utilizing PBN	30-Jun-18	ROI-8-2018-6	On-schedule
1160 PANS-OPS Vol II (Doc 8168) /		REC-C-ASBU	Completed
103 PANS-OPS Vol II (Doc 8168) / New Baro-VNAV design criteria PBN charting information box and identification consistency.	30-Jun-14	ROI-4-2016-2	On-schedule
266 PANS-OPS Vol II (Doc 8168) / Procedure design criteria on SBAS Cat I	30-Jun-14	ROI-8-2016-1	On-schedule
572 Doc 8697 - Aeronautical Chart Manual (Doc 8697) / Procedure design criteria on LP/Baro-VNAV.	30-Jun-16	ROI-4-2016-2	On-schedule
1161 Doc 9613 - PBN Manual (Doc 9613) /		REC-C-ASBU	Completed
183 Doc ##### - CRM Model (Doc #####) / Precision Approach procedure Collision Risk Model tool update	30-Jun-16	ROI-10-2016-1	On-schedule
108 Doc ##### - Circ. On PBN Charting (Doc #####) / PBN charting information box and identification consistency.	30-Jun-14	ROI-4-2016-2	On-schedule
B1-APTA			
Doc - /			
26 Annex 6 - Part I / SARPS to embed PBN into traditional operations.	1-Jul-16	ROI-2-2016-4	On-schedule
269 Annex 10 - Vol I / Standards to cover GBAS use as a landing aid under Cat II/III	30-Jun-18	ROI-8-2018-5	On-schedule

ASBU modules mapped to Work Programme

1132	Annex 10 - Vol I / Standards to support GBAS support via multiple constellations and frequencies	30-Jul-18	ROI-8-2018-1	On-schedule
680	PANS-ATM (Doc 4444) / GBAS Landing System (GLS) approaches to parallel runway operations		REC-C-PARKING	On-schedule
852	PANS-ATM (Doc 4444) / Separation minima for RNP parallel approaches	30-Jun-18	ROI-8-2018-2	Late
665	PANS-ATM (Doc 4444) / GBAS Landing System (GLS) approaches to parallel runway operations	1-Jul-16	ROI-9-2016-1	On-schedule
1435	PANS-ATM (Doc 4444) / Voice phraseologies associated with runway safety programme		REC-A-ATS-2018	On-schedule
571	PANS-OPS Vol I (Doc 8168) / Procedure design criteria on LP/Baro-VNAV.	30-Jun-16	ROI-4-2016-2	On-schedule
566	PANS-OPS Vol I (Doc 8168) / Visual procedures utilizing PBN	30-Jun-18	ROI-8-2018-6	Not approved
103	PANS-OPS Vol II (Doc 8168) / New Baro-VNAV design criteria PBN charting information box and identification consistency.	30-Jun-14	ROI-4-2016-2	On-schedule
570	PANS-OPS Vol II (Doc 8168) / Procedure design criteria on LP/Baro-VNAV.	30-Jun-16	ROI-4-2016-2	On-schedule
266	PANS-OPS Vol II (Doc 8168) / Procedure design criteria on SBAS Cat I	30-Jun-14	ROI-8-2016-1	On-schedule
270	PANS-OPS Vol II (Doc 8168) / Procedure design criteria for GBAS Cat II/III	30-Nov-18	ROI-8-2018-5	On-schedule
272	PANS-OPS Vol II (Doc 8168) / Visual procedures utilizing PBN	30-Jun-18	ROI-8-2018-6	On-schedule
309	Doc 9849 - GNSS Manual (Doc 9849) / Update of manual to cover GBAS use as a landing aid under Cat II/III	1-Jul-18	ROI-8-2018-5	On-schedule
567	Doc 8697 - Aeronautical Chart Manual (Doc 8697) / Visual procedures utilizing PBN	30-Jun-18	ROI-8-2018-6	Not approved

WAKE

Wake Turbulence Separation

ASBU modules mapped to Work Programme

Element	Expected Effective Date	Work Programme	Status
<u>B0-WAKE</u>			
104 PANS-ATM (Doc 4444) / Provisions for wake turbulence separation Chapter 5 + 8 - RECAT Phase 1 - 6 categories	30-Jun-16	ROI-4-2016-2	On-schedule
17 <i>Doc 9426 - ATS Planning Manual (Doc 9426) / Guidance on establishing and operating ATS units (Complete review update according to current ATM).</i>	30-Nov-16	ROI-1-2016-4	Late
<u>B1-WAKE</u>			
1343 Annex 10 - Vol IV /		REC-C-ASBU	Not approved
294 PANS-ATM (Doc 4444) / Provisions on improved Wake Turbulence Criteria	30-Jul-18	ROI-8-2018-9	On-schedule
353 <i>Doc 9426 - ATS Planning Manual (Doc 9426) / Complete review according to current procedures and future developments</i>	30-Nov-20	ROI-9-2020-2	Not approved
RSEQ Runway Sequencing			

ASBU modules mapped to Work Programme

Element	Expected Effective Dat	Work Programme	Status
<u>B1-RSEQ</u>			
1443 PANS-ATM (Doc 4444) / Provisions for improved runway sequencing		REC-C-ASBU	Not approved
357 PANS-ATM (Doc 4444) / Phraseology and message set for interval management	30-Nov-20	ROI-9-2020-1	On-schedule
650 PANS-OPS Vol I (Doc 8168) / Operational procedures to include RTA		ROI-9-2018-2	Not approved
358 Doc 9994 - Airborne Surveillance Manual (Doc 9994) / Guidance to support interval management procedures	30-Nov-20	ROI-9-2020-1	On-schedule
574 Doc 9997 - PBN OPS App Manual (Doc 9997) / Updated OPS approval Manual to include RTA	30-Nov-18	ROI-9-2018-2	On-schedule
SURF			
Surface Operations			

ASBU modules mapped to Work Programme

Element	Expected Effective Dat	Work Programme	Status
<u>B0-SURF</u>			
20 Annex 6 - Part I / SARPs to support low visibility operations.	30-Nov-14	ROI-2-2016-2	Completed
21 Annex 6 - Part II / SARPs to support low visibility operations.	30-Nov-14	ROI-2-2016-2	Completed
22 Annex 6 - Part III / SARPs to support low visibility operations.	30-Nov-14	ROI-2-2016-2	Completed
1180 PANS-ATM (Doc 4444) /		REC-C-ASBU	Not approved
545 Doc 9365 - Manual of All WX OPS (Doc 9365) / Guidance on provisons to support low visibility operations.	30-Nov-15	ROI-2-2016-2	On-schedule
639 Doc 9476 - Manual SMGCS (Doc 9476) / Guidance on provisons to support low visibility operations.		REC-C-PARKING	Not approved
640 Doc 9830 - A-SMGCS Manual (Doc 9830) / Guidance on provisons to support low visibility operations.		ROI-2-2016-2	Not approved
1178 Doc 9924 - Aeronautical Surveillance Manual (Doc 9924) /		REC-C-ASBU	Not approved
1179 Doc 9830 - A-SMGCS Manual (Doc 9830) /		REC-C-ASBU	Not approved
1376 Doc 7030/5 - Regional Supplementary Procedures, Sec. 6.5.6 and 6.5.7 /		REC-C-ASBU	Not approved
1377 Doc 7030 - EUR and NAT Regional SUPPs /		REC-C-ASBU	Not approved
1374 Doc 9871 - Technical Provisions for Mode S Services and Extended Squitter /		REC-C-ASBU	Not approved
<u>B1-SURF</u>			
20 Annex 6 - Part I / SARPs to support low visibility operations.	30-Nov-14	ROI-2-2016-2	Completed
1018 Annex 6 - Part I / Harmonization of low visibility/surface movement guidance provisions		REC-C-PARKING	On-schedule
158 Annex 6 - Part I / Technology for runway safety (on- board equipment) provisions	1-Jul-16	ROI-8-2018-x	On-schedule
263 Annex 6 - Part I / Amended SARPs for low visibility oprations	1-Jul-18	REC-C-PARKING	On-schedule
159 Annex 6 - Part II / Technology for runway safety (on- board equipment) provisions	1-Jul-16	ROI-8-2018-x	On-schedule
883 Annex 6 - Part II / SARPS to address lighting systems considerations for low visibility operations.	1-Jul-18	ROI-3-2018-x	On-schedule
1022 Annex 6 - Part II / Harmonization of low visibility/surface movement guidance provisions		REC-C-PARKING	On-schedule
21 Annex 6 - Part II / SARPs to support low visibility operations.	30-Nov-14	ROI-2-2016-2	Completed

ASBU modules mapped to Work Programme

1081	Annex 6 - Part II / Amended SARPs for low visibility operations	1-Jul-18	REC-C-PARKING	On-schedule
264	Annex 6 - Part III / Amended SARPs for low visibility operations	1-Jul-18	ROI-8-2018-7	On-schedule
1023	Annex 6 - Part III / Harmonization of low visibility/surface movement guidance provisions		REC-C-PARKING	On-schedule
22	Annex 6 - Part III / SARPs to support low visibility operations.	30-Nov-14	ROI-2-2016-2	Completed
1134	Annex 10 - Vol I / Develop provisions for ARAIM	30-Jul-18	ROI-8-2018-1	On-schedule
1131	Annex 10 - Vol I / Standards to support GNSS multi-constellation dual frequency	30-Jul-18	ROI-8-2018-1	On-schedule
1132	Annex 10 - Vol I / Standards to support GBAS support via multiple constellations and frequencies	30-Jul-18	ROI-8-2018-1	On-schedule
298	Annex 10 - Vol I / Standards to support SBAS support via multiple constellations and frequencies	30-Jul-18	ROI-8-2018-1	On-schedule
578	<i>Annex 10 - Vol III / Amendments to accommodate Airport Surface Datalink</i>	30-Jul-16	ENB-CNS-2016-6	On-schedule
65	Annex 10 - Vol IV / Provisions on the situational awareness on the airport surface AND provisions on low-cost ADS-B for users of uncontrolled airspace and ground vehicles.	30-Jul-18	ROI-3-2018-2	On-schedule
171	Annex 10 - Vol IV / Standards for increased accuracy of ADS-B to support surface operations AND provisions for ADS-B capabilities for users of uncontrolled airspace and ground users.	30-Jul-18	REC-C-PARKING	On-schedule
1344	Annex 11 /		REC-C-ASBU	Not approved
1347	Annex 14 - Vol I /		REC-C-ASBU	Not approved
66	PANS-ATM (Doc 4444) / Identify the requirements for enhanced situational awareness using ATS Surveillance Systems and Airborne Surveillance at aerodromes.	30-Nov-16	ROI-3-2018-2	On-schedule
174	PANS-ATM (Doc 4444) / Identify the requirements for enhanced situational awareness using ATS Surveillance Systems and Airborne Surveillance at aerodromes	30-Nov-18	ROI-4-2018-2	Not approved
1024	PANS-OPS Vol I (Doc 8168) / Harmonization of low visibility/surface movement guidance provisions		REC-C-PARKING	On-schedule
233	PANS-OPS Vol I (Doc 8168) / Procedures for using the runway surface condition assesment information	1-Jul-16	ROI-8-2018-x	On-schedule
302	PANS-OPS Vol I (Doc 8168) / Update to flight procedures to allow multiple GNSS constellations	30-Jul-18	ROI-8-2018-1	On-schedule
262	PANS-OPS Vol I (Doc 8168) / Amended procedures for low visibility oprations	30-Nov-18	REC-C-PARKING	On-schedule
121	PANS-OPS Vol I (Doc 8168) / Procedures and symbology on charts for low visibility operations	14-Jul-18	ROI-4-2018-x	On-schedule
1028	PANS-OPS Vol I (Doc 8168) / Technology for runway safety (on- board equipment) provisions	30-Jul-18	ROI-8-2018-x	On-schedule

ASBU modules mapped to Work Programme

303	PANS-OPS Vol II (Doc 8168) / Update to flight procedures to allow multiple GNSS constellations	30-Jul-18	ROI-8-2018-1	On-schedule
52	Doc 9994 - Airborne Surveillance Manual (Doc 9994) / Second Edition Initial guidance to support surface operations using ADS-B for ATC and Pilots.	30-Nov-16	ROI-3-2016-1	Completed
1135	Doc 9849 - GNSS Manual (Doc 9849) / Develop an operational concept for ARAIM	30-Jul-18	ROI-8-2018-1	On-schedule
1133	Doc 9849 - GNSS Manual (Doc 9849) / Update to allow GBAS support via multiple constellations and frequencies	30-Jul-18	ROI-8-2018-1	On-schedule
299	Doc 9849 - GNSS Manual (Doc 9849) / Update to allow SBAS support via multiple constellations and frequencies	30-Nov-18	ROI-8-2018-1	On-schedule
300	Doc 9613 - PBN Manual (Doc 9613) / Update to navspecs to allow multiple GNSS constellations	30-Jul-18	ROI-8-2018-1	On-schedule
301	Doc 9997 - PBN OPS App Manual (Doc 9997) / Update to OPS approval to allow multiple GNSS constellations	30-Jul-18	ROI-8-2018-1	On-schedule
68	Doc 9994 - Airborne Surveillance Manual (Doc 9994) / Guidance to support surface operations using ADS-B for ATC and Pilots.	30-Jul-18	ROI-3-2018-2	Late
261	Doc 9365 - Manual of All WX OPS (Doc 9365) / Guidance on SARPs for low visibility operations	1-Jul-18	REC-C-PARKING	On-schedule
1034	Doc ##### - Circ on technology for runway safety (VA) (Doc #####) / Circular in technology for runway safety (visual aids) (Or provisions as recommended by Panel. See element PANS-OPS in this element)	1-Jul-18	ROI-8-2018-x	On-schedule
623	Doc 9871 - Technical Provisions for Mode S Services and Extended Squitter / Guidance on low-cost ADS-B capabilities for users of uncontrolled airspace and ground vehicles	30-Nov-18	ROI-4-2018-2	On-schedule

B2-SURF

1182	Doc 9830 - A-SMGCS Manual (Doc 9830) /		REC-C-ASBU	Not approved
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ACDM

Airport Collaborative Decision Making

ASBU modules mapped to Work Programme

Element	Expected Effective Dat	Work Programme	Status
B0-ACDM			
3 PANS-ATM (Doc 4444) / Provisions to support airport CDM and ATFM.	30-Jun-16	ROI-1-2016-1	On-schedule
874 PANS-ATM (Doc 4444) / Amendment to add flight crew /de-icing crew phraseology in Chapter 12.	30-Jun-16	ROI-1-2016-1	On-schedule
142 PANS-AERO (Doc 9981) / Procedures for CDM/A-CDM.	30-Nov-18	ROI-3-2018-1	Late
2 Doc 9640 - Manual of A/C Ground De-Icing/Anti-Icing Ops (Doc 9640) / Guidance on the use of phraseology (scrapped) and procedures for de-icing ground and flight crews.	30-Jun-16	ROI-1-2016-1	On-schedule
14 Doc 9971 - Manual on Collab ATFM, Part II (Doc 9971) / Guidance on implementation of ATFM.	30-Apr-14	ROI-1-2016-2	Completed
1 Doc 9971 - Manual on Collab ATFM, Part III (Doc 9971) / Airport CDM guidance material.	30-Jun-16	ROI-1-2016-1	Late
B1-ACDM			
3 PANS-ATM (Doc 4444) / Provisions to support airport CDM and ATFM.	30-Jun-16	ROI-1-2016-1	On-schedule
874 PANS-ATM (Doc 4444) / Amendment to add flight crew /de-icing crew phraseology in Chapter 12.	30-Jun-16	ROI-1-2016-1	On-schedule
142 PANS-AERO (Doc 9981) / Procedures for CDM/A-CDM.	30-Nov-18	ROI-3-2018-1	Late
1 Doc 9971 - Manual on Collab ATFM, Part III (Doc 9971) / Airport CDM guidance material.	30-Jun-16	ROI-1-2016-1	Late
2 Doc 9640 - Manual of A/C Ground De-Icing/Anti-Icing Ops (Doc 9640) / Guidance on the use of phraseology (scrapped) and procedures for de-icing ground and flight crews.	30-Jun-16	ROI-1-2016-1	On-schedule
RATS Remote Air Traffic Services			

ASBU modules mapped to Work Programme

Element	Expected Effective Dat	Work Programme	Status
<u>B1-RATS</u>			
1433 Annex 11 / Provisions on remotely operated ATS		REC-A-ATS-2018	On-schedule
1434 PANS-ATM (Doc 4444) / Procedures on remotely operated ATS		REC-A-ATS-2018	On-schedule
1442 PANS-ATM (Doc 4444) / Provisions for remotely operated aerodrome control		REC-C-ASBU	Not approved
FICE	FF/ICE		

ASBU modules mapped to Work Programme

Element	Expected Effective Dat	Work Programme	Status
B0-FICE			
439 PANS-ATM (Doc 4444) / Requirements for flight and flow information	1-Jul-18	ENB-IM-2018-1	On-schedule
1184 PANS-ATM (Doc 4444) /		REC-C-ASBU	Not approved
440 Doc ##### - PANS-AIM (Doc #####) / Procedures for flight and flow information	30-Jul-18	REC-C-PARKING	On-schedule
376 Doc 9965 - Manual FF-ICE (Doc 9965) / Guidance on information elements for flight and flow.		ROI-6-2016-1	Completed
1426 Doc 9694 - Manual of Air Traffic Services Data Link Applications / Revision to ATS data link applications manual to introduce new technologies and remove obsolete texts	30-Jul-18	REC-C-PARKING	On-schedule
B1-FICE			
656 Annex 2 / New rules related to flight planning	30-Jul-18	ROI-6-2018-x	On-schedule
456 Annex 11 / New services associated to extended flight plan	30-Jul-18	ROI-8-2018-8	On-schedule
657 Annex 11 / New services associated to extended flight plan	30-Jul-18	ROI-6-2018-x	On-schedule
439 PANS-ATM (Doc 4444) / Requirements for flight and flow information	1-Jul-18	ENB-IM-2018-1	On-schedule
295 PANS-ATM (Doc 4444) / Procedures for flight and flow information for pre-departure use	30-Jul-18	ROI-8-2018-8	On-schedule
675 PANS-ATM (Doc 4444) / Procedures for flight and flow information for pre-departure use		REC-C-PARKING	On-schedule
658 PANS-ATM (Doc 4444) / Procedures for flight and flow information for pre-departure	30-Jul-18	ROI-6-2018-x	On-schedule
DATM	Digital Aeronautical Management		

ASBU modules mapped to Work Programme

Element	Expected Effective Dat	Work Programme	Status
<u>B0-DATM</u>			
441 Annex 3 / Requirements for digital information	1-Jul-16	ENB-IM-2016-1	On-schedule
444 Annex 4 / Final amendment on the transition from AIS to AIM	30-Jul-16	ENB-IM-2018-1	On-schedule
<u>B1-DATM</u>			
448 Annex 3 / Amendment on the requirements of the use of improved NOTAM system for MET	30-Nov-18	ENB-IM-2018-4	On-schedule
444 Annex 4 / Final amendment on the transition from AIS to AIM	30-Jul-16	ENB-IM-2018-1	On-schedule
730 <i>Annex 6 - Part III / Use of terms such as authorization approval and acceptance provisions</i>		REC-A-OPS-2018	On-schedule
633 Annex 10 - Vol III / Provisions to support SWIM	30-Jun-18	ENB-IM-2018-2	On-schedule
449 Annex 11 / Amendment on the requirements on the use of the improved NOTAM system for ATM	30-Nov-18	ENB-IM-2018-4	Not approved
634 Annex 11 / Provisions on making use of SWIM		ENB-IM-2018-2	Not approved
630 Annex 15 / Exchange Models	30-Jun-16	ENB-IM-2016-1	Completed
445 Annex 15 / Final Amendment (39) supporting transition from AIS to AIM	30-Jul-16	ENB-IM-2018-1	On-schedule
635 Annex 15 / Provisions on the use and support of SWIM	30-Nov-18	ENB-IM-2018-2	On-schedule
636 Annex 15 / Amendment on the requirements on the use of the improved NOTAM system for AIM	30-Jun-18	ENB-IM-2018-4	On-schedule
439 PANS-ATM (Doc 4444) / Requirements for flight and flow information	1-Jul-18	ENB-IM-2018-1	On-schedule
450 PANS-ATM (Doc 4444) / Procedures and guidance on the use of improved NOTAM system for ATM	30-Nov-18	ENB-IM-2018-4	Not approved
1222 Doc ##### - PANS-AIM (Doc #####) / PANS-AIM planned for availability in 2016		REC-C-ASBU	Not approved
440 Doc ##### - PANS-AIM (Doc #####) / Procedures for flight and flow information	30-Jul-18	REC-C-PARKING	On-schedule
446 Doc ##### - PANS-AIM (Doc #####) / Introduction of PANS-AIM	30-Jul-16	ENB-IM-2018-1	On-schedule
451 Doc ##### - PANS-AIM (Doc #####) / Procedurs and guidance on the general use of improved NOTAM system	30-Nov-18	ENB-IM-2018-4	Not approved
631 Doc 8126 - AIS Manual (Doc 8126) / Guidance to support PANS-AIM	30-Nov-18	ENB-IM-2018-1	On-schedule
443 Doc ##### - Manual on the SWIM Concept (Doc #####) / Second Edition	1-Nov-18	ENB-IM-2018-2	Not approved

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447 Doc ##### - Manual on the ATM RM (Doc #####) / New manual on the ATM Reference Model

1-Nov-18

ENB-IM-2018-3

Not approved

442 Doc ##### - Manual on the SWIM Concept (Doc #####) / First Edition

ENB-IM-2016-2

On-schedule

SWIM System Wide Information Management

ASBU modules mapped to Work Programme

Element	Expected Effective Dat	Work Programme	Status
<u>B1-SWIM</u>			
633 Annex 10 - Vol III / Provisions to support SWIM	30-Jun-18	ENB-IM-2018-2	On-schedule
634 Annex 11 / Provisions on making use of SWIM		ENB-IM-2018-2	Not approved
635 Annex 15 / Provisions on the use and support of SWIM	30-Nov-18	ENB-IM-2018-2	On-schedule
439 PANS-ATM (Doc 4444) / Requirements for flight and flow information	1-Jul-18	ENB-IM-2018-1	On-schedule
442 Doc ##### - Manual on the SWIM Concept (Doc #####) / First Edition		ENB-IM-2016-2	On-schedule
443 Doc ##### - Manual on the SWIM Concept (Doc #####) / Second Edition	1-Nov-18	ENB-IM-2018-2	Not approved
AMET Advanced Meteorological Information			

ASBU modules mapped to Work Programme

Element	Expected Effective Dat	Work Programme	Status
B0-AMET			
746 Annex 3 / Improved resolution of WAFS forecast information; availability of volcanic ash and tropical cyclone advisory information, AIRMET and special air reports in digital form; rationalisation of SIGMET, AIRMET and special air reports (upklink)		ENB-MET-2016-1	On-schedule
826 Doc 9766 - Manual on IAVW (Doc 9766) / Provision of information on sulphur dioxide and other hazardous gases in the atmosphere. Handbook on the International Airways Volcano Watch (IAVW): Operational Procedures		ENB-MET-2016-1	On-schedule
828 Doc 9691 - Manual on VARMTCC (Doc 9691) / Provision of information on sulphur dioxide and other hazardous gases in the atmosphere.		ENB-MET-2016-1	On-schedule
B1-AMET			
877 Annex 3 / Provisions for new format		REC-C-PARKING	On-schedule
441 Annex 3 / Requirements for digital information	1-Jul-16	ENB-IM-2016-1	On-schedule
747 Annex 3 / Requirements for the provision of METAR/SPECI, TAF and SIGMET in digital form.		ENB-MET-2016-1	On-schedule
750 Doc 10003 - Manual on Digital Exchange of AMET Information (Doc 10003) / Manual on the digital exchange of information (Doc 10003). Guidance on the digital exchange of meteorological information		ENB-MET-2016-2	On-schedule
FRTO	Free Route Operations		

ASBU modules mapped to Work Programme

Element	Expected Effective Dat	Work Programme	Status
B0-FRTO			
373 Annex 6 - Part I / Provisions for performance-based communication and surveillance	30-Jul-16	ROI-6-2016-5	On-schedule
662 Annex 10 - Vol II / Provisions on the use of SATCOM voice	30-Jul-16	ROI-6-2016-5	On-schedule
661 Annex 11 / Provisions for performance-based communication and surveillance	30-Jul-16	ROI-6-2016-5	On-schedule
3 PANS-ATM (Doc 4444) / Provisions to support airport CDM and ATFM.	30-Jun-16	ROI-1-2016-1	On-schedule
874 PANS-ATM (Doc 4444) / Amendment to add flight crew /de-icing crew phraseology in Chapter 12.	30-Jun-16	ROI-1-2016-1	On-schedule
743 PANS-ATM (Doc 4444) / Procedures on implementation of ATFM.	30-Jul-16	ROI-1-2016-2	On-schedule
860 PANS-ATM (Doc 4444) / RLongSM 5 minutes longitudinal separation between ADS-C aircraft on same identical tracks	30-Jun-16	ROI-6-2016-8	On-schedule
744 PANS-ATM (Doc 4444) / Procedures for performance-based communication and surveillance, and SATCOM voice	30-Nov-16	ROI-6-2016-5	On-schedule
745 PANS-OPS Vol I (Doc 8168) / Procedures for performance-based communication and surveillance	30-Jul-16	REC-C-PARKING	On-schedule
380 Doc 9994 - Airborne Surveillance Manual (Doc 9994) / Guidance to support ITP	30-Nov-14	ROI-6-2016-6	Completed
320 Doc 9869 - Manual RCP (Doc 9869) / Guidance on performance-based communication and surveillance	30-Nov-15	ROI-6-2016-5	On-schedule
14 Doc 9971 - Manual on Collab ATFM, Part II (Doc 9971) / Guidance on implementation of ATFM.	30-Apr-14	ROI-1-2016-2	Completed
2 Doc 9640 - Manual of A/C Ground De-Icing/Anti-Icing Ops (Doc 9640) / Guidance on the use of phraseology (scheduled) and procedures for de-icing ground and flight crews.	30-Jun-16	ROI-1-2016-1	On-schedule
322 Doc ##### - Satellite Voice Guidance Material (Doc #####) / Guidance on the use of SATCOM voice.	30-Nov-15	ROI-6-2016-5	On-schedule
319 Doc ##### - GOLD Document (Doc #####) / New guidance on the use of data link applications (upgrade regional into a global manual)	30-Nov-15	REC-C-PARKING	On-schedule
620 Doc ##### - Report on capability operation of C&M S&CA Systems (Doc #####) / Report on activities needed to ensure compatible operation of civil and military surveillance and collision avoidance systems.	30-Nov-16	ROI-1-2016-5	On-schedule
B1-FRTO			
315 Annex 6 - Part I / Standards on the use of PBN on Conventional routes	1-Jul-16	ROI-6-2016-3	On-schedule
864 PANS-ATM (Doc 4444) / Separation minima for RNP2, advanced RNP	30-Jul-18	ROI-6-2018-x	On-schedule

ASBU modules mapped to Work Programme

354	PANS-ATM (Doc 4444) / Enhanced separation minima addressing: - 45 ' RNAV arrival and departure separation minima Lateral	30-Nov-18	ROI-9-2016-3	Completed
403	PANS-ATM (Doc 4444) / Separation minima on FRT	30-Nov-18	ROI-6-2018-3	On-schedule
836	PANS-ATM (Doc 4444) / Proposal for amendment to procedures for speed variation in en-route airspace (Doc 4444)		REC-C-PARKING	On-schedule
865	PANS-ATM (Doc 4444) / PBN based Lateral Separation Minima To Special Use Airspace (SUA)	30-Jul-18	ROI-6-2018-x	On-schedule
856	PANS-ATM (Doc 4444) / Refined route spacing, separation minima and procedures for all PBN navigation specifications.	1-Jul-16	ROI-6-2016-8	On-schedule
860	PANS-ATM (Doc 4444) / RLongSM 5 minutes longitudinal separation between ADS-C aircraft on same identical tracks	30-Nov-16	ROI-6-2016-8	On-schedule
408	PANS-ATM (Doc 4444) / Separation minima and procedures for RNP 1, 2 advanced RNP. Tactical lateral separation for GNSS and VOR equipped a/c on conventional routes. Separation standards and procedures for intersecting tracks for RNP 2, 4 and RNAV10	30-Nov-18	ROI-6-2018-x	On-schedule
583	PANS-ATM (Doc 4444) / Improved separation minima for RNP 2 , PBN lateral separation minima for SUA	30-Nov-18	ROI-6-2018-x	Late
582	PANS-ATM (Doc 4444) / Separation minima for RNP2, advanced RNP		REC-C-PARKING	On-schedule
861	PANS-ATM (Doc 4444) / 20 NM lateral separation to support ½ degree oceanic flex tracks.	30-Jun-16	ROI-6-2016-8	Late
862	PANS-ATM (Doc 4444) / GNSS/RNP 2 Lateral separation on intersecting and non-intersecting tracks.	30-Jun-14	ROI-6-2016-8	Completed
313	PANS-OPS Vol I (Doc 8168) / Procedures for the use of PBN on Conventional routes. EN-ROUTE	1-Jul-18	ROI-6-2018-x	On-schedule
412	PANS-OPS Vol I (Doc 8168) / Pilot requirements on FRT	30-Nov-18	ROI-6-2018-3	Not approved
411	PANS-OPS Vol II (Doc 8168) / Instrument flight procedures for FRT	30-Nov-18	ROI-6-2018-3	On-schedule
314	PANS-OPS Vol II (Doc 8168) / New procedure design requirements to support RNP2 and Advanced RNP. New charting requirements including PBN information box and magnetic bearings on PBN routes	30-Jun-14	ROI-6-2016-3	On-schedule
411	PANS-OPS Vol II (Doc 8168) / Instrument flight procedures for FRT	30-Nov-18	ROI-6-2018-3	On-schedule
554	Doc 9613 - PBN Manual (Doc 9613) / Update n on FRT functionality to align with Do 236c	30-Nov-18	ROI-6-2018-3	On-schedule
12	Doc 330 - Circular on Civil/Military Coop. in ATM (Circ. 330) / Guidance on cooperation on ATM between civil and military entities (Improve the contents of Cir.330 and upgrade it to ICAO Manual).	30-Nov-16	ROI-1-2016-5	Late

ASBU modules mapped to Work Programme

NOPS

Network Operations

ASBU modules mapped to Work Programme

Element	Expected Effective Dat	Work Programme	Status
B0-NOPS			
3 PANS-ATM (Doc 4444) / Provisions to support airport CDM and ATFM.	30-Jun-16	ROI-1-2016-1	On-schedule
743 PANS-ATM (Doc 4444) / Procedures on implementation of ATFM.	30-Jul-16	ROI-1-2016-2	On-schedule
14 Doc 9971 - Manual on Collab ATFM, Part II (Doc 9971) / Guidance on implementation of ATFM.	30-Apr-14	ROI-1-2016-2	Completed
B1-NOPS			
743 PANS-ATM (Doc 4444) / Procedures on implementation of ATFM.	30-Jul-16	ROI-1-2016-2	On-schedule
354 PANS-ATM (Doc 4444) / Enhanced separation minima addressing: - 45 ' RNAV arrival and departure separation minima based on PBN based Lateral	30-Nov-16	ROI-9-2016-3	Completed
3 PANS-ATM (Doc 4444) / Provisions to support airport CDM and ATFM.	30-Jun-16	ROI-1-2016-1	On-schedule
865 PANS-ATM (Doc 4444) / PBN based Lateral Separation Minima To Special Use Airspace (SUA)	30-Jul-18	ROI-6-2018-x	On-schedule
14 Doc 9971 - Manual on Collab ATFM, Part II (Doc 9971) / Guidance on implementation of ATFM.	30-Apr-14	ROI-1-2016-2	Completed
12 Doc 330 - Circular on Civil/Military Coop. in ATM (Circ. 330) / Guidance on cooperation on ATM between civil and military entities (Improve the contents of Cir.330 and upgrade it to ICAO Manual).	30-Nov-16	ROI-1-2016-5	Late
620 Doc ##### - Report on capability operation of C&M S&CA Systems (Doc #####) / Report on activities needed to ensure compatible operation of civil and military surveillance and collision avoidance systems.	30-Nov-16	ROI-1-2016-5	On-schedule
ASEP Airborne Separation			

ASBU modules mapped to Work Programme

Element	Expected Effective Date	Work Programme	Status
<u>B0-ASEP</u>			
174 PANS-ATM (Doc 4444) / Identify the requirements for enhanced situational awareness using ATS Surveillance Systems and Airborne Surveillance at aerodromes	30-Jun-18	ROI-4-2018-2	Not approved
121 PANS-OPS Vol I (Doc 8168) / Procedures and symbology on charts for low visibility operations	14-Jul-18	ROI-4-2018-x	On-schedule
122 Doc 9365 - Manual of All WX OPS (Doc 9365) / Guidance and symbology on charts for low visibility	31-Jul-18	ROI-4-2018-x	On-schedule
<u>B1-ASEP</u>			
1335 Annex 6 - Part I /		REC-C-ASBU	Not approved
1322 Annex 8 /		REC-C-ASBU	Not approved
357 PANS-ATM (Doc 4444) / Phraseology and message set for interval management	30-Nov-20	ROI-9-2020-1	On-schedule
401 PANS-ATM (Doc 4444) / Separation minima for interval management	30-Nov-20	ROI-9-2020-1	Not approved
356 Doc 9994 - Airborne Surveillance Manual (Doc 9994) / Second Edition - Initial guidance to support interval management for flight crew and ATS units.	30-Nov-16	REC-C-PARKING	On-schedule
358 Doc 9994 - Airborne Surveillance Manual (Doc 9994) / Guidance to support interval management procedures	30-Nov-20	ROI-9-2020-1	On-schedule
OPFL	Optimum Flight Levels		

ASBU modules mapped to Work Programme

Element	Expected Effective Dat	Work Programme	Status
<u>B0-OPFL</u>			
378 Annex 10 - Vol II / Definitions of pre-formatted and standardized free text messages.	30-Jun-14	ROI-6-2016-6	Completed
379 PANS-ATM (Doc 4444) / New CPDLC messages. Procedures and criteria for application for ITP	30-Nov-14	ROI-6-2016-6	Completed
380 Doc 9994 - Airborne Surveillance Manual (Doc 9994) / Guidance to support ITP	30-Nov-14	ROI-6-2016-6	Completed
406 Doc 325 - ITP Circular (Circ. 325) / General description of ITP	30-Nov-14	ROI-6-2016-6	Completed
ACAS	Airborne Collision Avoidance Systems		

ASBU modules mapped to Work Programme

Element	Expected Effective Date	Work Programme	Status
B0-ACAS			
1454 PANS-OPS Vol I (Doc 8168) / Provisions on new ACAS logic. Revised altitude levelling laws and auto-coupling.	30-Jul-16	REC-A-CNS-2016	On-schedule
205 Doc 9863 - Airborne Collision Avoidance System (ACAS) Manual / Guidance on dealing with false aircraft proximity alerts.	30-Nov-18	ROI-10-2018-x	On-schedule
SNET			
Ground-Based Safety Nets			

ASBU modules mapped to Work Programme

Element	Expected Effective Dat	Work Programme	Status
<u>B0-SNET</u>			
1452 Doc ##### - Manual for Ground-based Safety Nets / Contains guidance on STCA, MWAS and Area Proximity Warnings		ENB-CNS-2016-8	On-schedule
<u>B1-SNET</u>			
1453 Doc ##### - Guidance on Ground-Based Safety Nets / Update to include Approach Path Monitoring		ENB-CNS-2018-6	On-schedule
CDO Continuous Descent Operations			

ASBU modules mapped to Work Programme

Element	Expected Effective Dat	Work Programme	Status
B0-CDO			
200 PANS-ATM (Doc 4444) / Procedures and phraseologies for SID/STAR	30-Jul-16	ROI-10-2016-3	On-schedule
558 PANS-OPS Vol I (Doc 8168) / Supporting clarification on CDO	30-Jun-14	ROI-9-2014-5	On-schedule
557 PANS-OPS Vol II (Doc 8168) / Supporting clarification on CDO	30-Jun-14	ROI-9-2014-5	On-schedule
335 Doc 9931 - CDO Manual (Doc 9931) / New CDO manual	30-Jun-12	ROI-9-2014-5	Completed
B1-CDO			
1039 Annex 6 - Part I / Next Steps for Continuous Descent Final Approach Operations (CDFA) Provisions		REC-A-OPS-2016	On-schedule
1040 Annex 6 - Part II / Next Steps for Continuous Descent Final Approach Operations (CDFA) Provisions		REC-A-OPS-2016	On-schedule
1041 Annex 6 - Part III / Next Steps for Continuous Descent Final Approach Operations (CDFA) Provisions		REC-A-OPS-2016	On-schedule
558 PANS-OPS Vol I (Doc 8168) / Supporting clarification on CDO	30-Jun-14	ROI-9-2014-5	On-schedule
1043 PANS-OPS Vol I (Doc 8168) / Next Steps for Continuous Descent Final Approach Operations (CDFA) Provisions		REC-A-OPS-2016	On-schedule
1044 PANS-OPS Vol II (Doc 8168) / Next Steps for Continuous Descent Final Approach Operations (CDFA) Provisions		REC-A-OPS-2016	On-schedule
557 PANS-OPS Vol II (Doc 8168) / Supporting clarification on CDO	30-Jun-14	ROI-9-2014-5	On-schedule
335 Doc 9931 - CDO Manual (Doc 9931) / New CDO manual	30-Jun-12	ROI-9-2014-5	Completed
TBO	Trajectory-Based Operations		

ASBU modules mapped to Work Programme

Element	Expected Effective Dat	Work Programme	Status
<u>B0-TBO</u>			
373 Annex 6 - Part I / Provisions for performance-based communication and surveillance	30-Jul-16	ROI-6-2016-5	On-schedule
662 Annex 10 - Vol II / Provisions on the use of SATCOM voice	30-Jul-16	ROI-6-2016-5	On-schedule
661 Annex 11 / Provisions for performance-based communication and surveillance	30-Jul-16	ROI-6-2016-5	On-schedule
291 PANS-ATM (Doc 4444) / improved procedures and message set for CPDLC and ADS-C	30-Nov-16	ROI-6-2016-2	On-schedule
745 PANS-OPS Vol I (Doc 8168) / Procedures for performance-based communication and surveillance	30-Jul-16	REC-C-PARKING	On-schedule
318 Doc 9925 - Manual on AMS(R)S (Doc 9925) / New section to accommodate SWIFT broadband system.	30-Nov-16	ROI-6-2016-5	On-schedule
292 Doc ##### - GOLD Document (Doc #####) / Guidance on the use of datalin applications (upgrade regional document into a global manual)	30-Nov-15	ROI-6-2016-2	On-schedule
319 Doc ##### - GOLD Document (Doc #####) / New guidance on the use of data link applications (upgrade regional document into a global manual)	30-Nov-15	REC-C-PARKING	On-schedule
<u>B1-TBO</u>			
677 Annex 2 / TBO requirements	30-Jul-18	REC-C-PARKING	On-schedule
397 Annex 6 - Part I / Standards on RTA for commercial operations	30-Jun-18	ROI-6-2018-2	Not approved
678 Annex 11 / TBO requirements	30-Jul-18	REC-C-PARKING	On-schedule
396 PANS-ATM (Doc 4444) / ATM procedures for RTA.	30-Nov-18	ROI-6-2018-2	On-schedule
679 PANS-ATM (Doc 4444) / TBO requirements	30-Jul-18	REC-C-PARKING	On-schedule
650 PANS-OPS Vol I (Doc 8168) / Operational procedures to include RTA		ROI-9-2018-2	Not approved
400 PANS-OPS Vol I (Doc 8168) / Flight Procedures on RTA	30-Nov-18	ROI-6-2018-2	On-schedule
394 Doc 9613 - PBN Manual (Doc 9613) / Navigation Specifications in RTA	30-Nov-18	ROI-6-2018-2	On-schedule
574 Doc 9997 - PBN OPS App Manual (Doc 9997) / Updated OPS approval Manual to include RTA	30-Nov-18	ROI-9-2018-2	On-schedule
320 Doc 9869 - Manual RCP (Doc 9869) / Guidance on performance-based communication and surveillance	30-Nov-15	ROI-6-2016-5	On-schedule

ASBU modules mapped to Work Programme

292	Doc ##### - GOLD Document (Doc #####) / Guidance on the use of datalin applications (upgrade regional documents to a global manual)	30-Nov-15	ROI-6-2016-2	On-schedule
322	Doc ##### - Satellite Voice Guidance Material (Doc #####) / Guidance on the use of SATCOM voice.	30-Nov-15	ROI-6-2016-5	On-schedule

CCO

Continuous Climb Operations

ASBU modules mapped to Work Programme

Element	Expected Effective Dat	Work Programme	Status
<u>B0-CCO</u>			
200 PANS-ATM (Doc 4444) / Procedures and phraseologies for SID/STAR	30-Jul-16	ROI-10-2016-3	On-schedule
559 PANS-OPS Vol I (Doc 8168) / Supporting clarification on CCO	30-Jul-14	ROI-9-2014-6	On-schedule
560 PANS-OPS Vol II (Doc 8168) / Supporting clarification on CCO	30-Jul-14	ROI-9-2014-6	On-schedule
336 Doc 9993 - CCO Manual (Doc 9993) / New manual on application of CCO in terminal airspace		ROI-9-2014-6	Completed
RPAS	Remotely Piloted Aircraft Systems		

ASBU modules mapped to Work Programme

Element	Expected Effective Dat	Work Programme	Status
B1-RPAS			
Doc - /			
364 Annex 1 / SARPs for remote pilot licence	30-Jun-18	REC-C-PARKING	On-schedule
642 Annex 1 / Licensing for remote pilots.		ROI-2-2018-2	On-schedule
817 Annex 6 - Part II / Provisions for the carriage of flight recorders in UASs		REC-C-PARKING	On-schedule
816 Annex 6 - Part IV (#####) / Provisions for the carriage of flight recorders in RPASs	15-Jul-20	REC-A-AIG-2020	On-schedule
371 Annex 6 - Part IV (#####) / Human performance requirements to reduce risk of loss of control in-flight.	30-Jun-18	ROI-7-2018-4	Late
731 Annex 6 - Part IV (#####) / Maintenance of Annex 6 SARPs and Other Supporting Provisions		REC-C-PARKING	Not approved
716 Annex 6 - Part IV (#####) / Maintenance of Annex 6 SARPs and Other Supporting Provisions		REC-C-PARKING	Not approved
1048 Annex 6 - Part IV (#####) / Develop new fatigue management SARPs for Remote Pilots		ENB-HP-2018-1	On-schedule
365 Annex 6 - Part IV (#####) / SARPs for RPA, RPS, C2, RPAS Operator certificate and flight manual, safety oversight and air traffic management	30-Jun-18	REC-C-PARKING	On-schedule
645 Annex 6 - Part IV (#####) / SARPs for the integration of RPA operations into non-segregated airspace.		ROI-2-2018-2	On-schedule
1309 Annex 7 /		REC-C-ASBU	Not approved
366 Annex 8 / SARPs on certification and continuing airworthiness	30-Jun-18	REC-C-PARKING	On-schedule
48 Annex 10 - Vol II / Procedures for loss of C2 link with RPA.	30-Jun-18	ROI-2-2018-2	On-schedule
553 Annex 10 - Vol III / Standards for C2 link for RPAs.	30-Jun-18	ROI-2-2018-2	On-schedule
367 Annex 10 - Vol III / Performance-based requirements for command and control	30-Jun-18	REC-C-PARKING	On-schedule
825 Annex 10 - Vol IV / Develop technical provisions for RPA Detect and Avoid Capabilities		ROI-7-2020-1	On-schedule
368 Annex 10 - Vol V / Potential use of Fixed Satellite Service (FSS) spectrum allocations to support the safe operation of remotely piloted aircraft systems	30-Jun-18	REC-C-PARKING	On-schedule
687 Annex 18 / Amendment		ROI-7-2018-2	Late

ASBU modules mapped to Work Programme

683	PANS-ATM (Doc 4444) / RPA separation Procedures and wake turbulence separation criteria		ROI-7-2018-5	Late
369	<i>Doc 9284 - Tech Ins for the ST of DG by Air (Doc 9284) / Instructions on how to handle dangerous goods carried on RPAS</i>	2018-18	ROI-7-2018-2	On-schedule
688	<i>Doc 9284SU - Supplement to the Tech Instructions (Doc 9284SU) / Amendment</i>		ROI-7-2018-2	On-schedule
363	Doc 10019 - Manual on RPAS (Doc 10019) / Initial guidance on airworthiness, operations, licensing, command and control, detect and avoid, ATM and aerodromes		ROI-7-2014-2	Completed
370	Doc 10019 - Manual on RPAS (Doc 10019) / Updated and expanded guidance on airworthiness, operations, licensing, command and control, detect and avoid, ATM, flight recorders and aerodromes	2018-18	ROI-7-2018-3	On-schedule