

PBN en-route Action Plan GPI 1, 4, 5, 7, 8, 10, 11, 12, 16, 21,23				
1	Airspace Concept	Start	End	Remarks
1.1	Establish and prioritize Strategic Objectives (Safety, Capacity, Environment, etc)			
1.2	Collect air traffic data to understand airspace traffic flows in a particular airspace.			
1.3	Analyse navigation capability of the fleet			
1.4	Analyse communication, ground navigation (VOR, DME) and surveillance for navigation specification and reversionary mode compliance.			
1.5	Optimise the airspace structure, by reorganising the network or implementing new routes based on the strategic objective of the airspace concept. Consider Airspace Modelling, ATC simulations (fast time and/or real time), Live Trials, etc.			
2	Develop Performance Measurement Plan			
2.1	Prepare Performance Measurement Plan, including gas emission, safety, efficiency, etc.			
2.2	Conduct Performance Measurement Plan			
3	Airspace safety assessment			
3.1	Determine which methodology shall be used to evaluate airspace safety and ATS routes spacing, depending on the navigation specification. Consider Airspace Modelling, ATC simulations (fast time and/or real time), Live Trials, etc.			
3.2	Prepare a data collection programme for airspace safety assessment			
3.3	Prepare preliminary airspace safety assessment			
3.4	Prepare final airspace safety assessment			
4	Establish collaboration decision making (CDM) process			

4.1	Coordinate planning and implementation needs with Air Navigation Service Providers, Regulators, Users, aircraft operators and military authorities			
4.2	Establish implementation date			
4.3	Establish the documentation format of CAR/SAM RNAV/RNP Website			
4.4	Report planning and implementation progress to the corresponding Regional Office			
5	ATC Automated Systems			
5.1	Evaluate the PBN implementation in the ATC Automated Systems, considering the Amendment 1 to the PANS/ATM (FPLSG).			
5.2	Implement the necessary changes in the ATC Automated Systems			
6	Aircraft and operators approval			
6.1	Be aware of the national implementation programme and of the required navigation specifications			
6.2	Analyse aircraft approval requirements, aircrew and operator approval requirements for the navigation specifications to be implemented, as contained in the ICAO PBN Manual			
6.3	Publish the national regulations to implement the required ICAO navigation specifications			
6.4	Approval of aircraft and operators for each type of procedure and navigation specification			
6.5	Establish and keep updated a record of approved aircraft and operators			
6.6	Verify operations with a continuing monitoring programme			
7	Standards and Procedures			
7.1	Evaluate regulations for GNSS use, and if such were the case, proceed to its publication.			

7.2	Finalize implementation of WGS-84			
7.3	Develop and publish AIC notifying PBN implementation planning			
7.4	Publish AIP Supplement including applicable standards and procedures			
7.5	Review Procedural Manuals of the ATS units involved			
7.6	Update Letters of Agreement between ATS units			
7.7	Develop amendment to the regional documentation, if necessary			
7.8	Provide procedures to accommodate non-approved RNAV/RNP aircraft, when applicable			
7.9	Identify transition areas and procedures, if necessary			
7.10	Conduct ATC simulations to identify the workload/operational factors, if necessary, and report the simulations activities to the ATM Committee			
8	Training			
8.1	Develop a training programme and documentation for operators (pilots, dispatchers and maintenance)			
8.2	Develop training programme and documentation for Air Traffic Controllers and AIS Operators			
8.3	Develop training programme to regulators (aviation safety inspectors)			
8.4	Conduct training programmes			
8.5	Hold seminars oriented to operators, indicating the plans and the operational and financial benefits expected			
9	Decision for implementation			

9.1 Evaluate operational documentation availability (ATS, OPS/AIR)			
9.2 Evaluate the percentage of approved aircraft and operations (mixed equipage concerns)			
9.3 Review safety assessment results			
10 System Performance Monitoring			
10.1 Develop post-implementation en-route operations monitoring programme			
10.2 Execute post-implementation en-route operations monitoring programme			
Pre operational implementation date			
Definitive implementation date			