

LSSIP 2019 REPUBLIC OF NORTH MACEDONIA LOCAL SINGLE SKY IMPLEMENTATION

Level 2 - Detailed Implementation Status



APPROVAL SHEET









The following authorities have approved all parts of the LSSIP Year 2019 document and the signatures confirm the correctness of the reported information and reflect the commitment to implement the actions laid down in the European ATM Master Plan Level 3 (Implementation View) – Edition 2019.

Stakeholder / Organisation	Name	Position	Signature and date
CAA	Tomislav TUNTEV	Director General	
M-NAV	Nikolche TASESKI	President of M-NAV Management Board	 19.03.20

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1. Implementation Objective Progress - Details

Objective/Stakeholder Progress Code:			
Completed		Not yet planned	
Ongoing		Not Applicable	
Planned		Missing Data	
Late			

AOM13.1	Harmonise Operational Air Traffic (OAT) and General Air Traffic (GAT) Handling <u>Timescales:</u> Initial operational capability: 01/01/2012 Full operational capability: 31/12/2018	13%	Late
Links to OI Steps: AOM-0301, AOM-0303 [E] Links to Enablers: AAMS-10a, AIMS-19b			
All stakeholders in North Macedonia dedicated significant effort in preparations of implementation of certain provisions from EUROAT document specifications. Few meetings were held and during this year, it is expected by the CAA to introduce the EUROAT Doc. and dully inform EUROCONTROL of its implementation.			01/02/2020
REG (By:12/2018)			
CAA		40%	Late
All stakeholders in North Macedonia dedicated significant effort in preparations of implementation of certain provisions from EUROAT document specifications. Few meetings were held and during this year, it is expected by the CAA to introduce the EUROAT Doc. and dully inform EUROCONTROL of its implementation.			01/02/2020
AOM13.1-REG01	Revise national legislation as required		by:31/12/2018
CAA	-	40%	Late
	1 Activity started (e.g. Project kicked-off)	10%	Y 01/02/2020
	2 National rules and regulations for implementation of new principles, rules and procedures for OAT/GAT handling in accordance with EUROAT drafted	30%	Y -
	3 National rules and regulations in accordance with EUROAT established and EUROCONTROL informed about the official national implementation date	60%	N -
Mil. Authority		10%	Late
	-		01/01/2020
AOM13.1-REG01	Revise national legislation as required		by:31/12/2018
Mil. Authority	-	10%	Late
	1 Activity started (e.g. Project kicked-off)	10%	Y 01/01/2020
	2 National rules and regulations for implementation of new principles, rules and procedures for OAT/GAT handling in accordance with EUROAT drafted	30%	N -
	3 National rules and regulations in accordance with EUROAT established and EUROCONTROL informed about the official national implementation date	60%	N -

Comment:	The Military authorities are awaiting for the national rules and regulations to be drafted in accordance with the EUROAT.		
ASP (By:12/2018)			
M-NAV		10%	Late
All stakeholders in North Macedonia dedicated significant effort in preparations of implementation of certain provisions from EUROAT document specifications. Few meetings were held and during this year, it is expected by the CAA to introduce the EUROAT Doc. and dully inform EUROCONTROL of its implementation.			01/01/2020
AOM13.1-ASP01	Apply common principles, rules and procedures for OAT handling and OAT/GAT interface		by:31/12/2018
M-NAV	-	10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y 01/01/2020
2	Procedures for OAT/GAT interfaces drafted	30%	N -
3	Procedures for OAT/GAT interfaces agreed, tested & validated	35%	N -
4	Procedures for OAT/GAT interfaces implemented, i.e. in operational use	25%	N -
Comment:	M-NAV dedicated resources to start drafting and working upon the provisions stated in the EUROAT document issued by EUROCONTROL(ver. 3.0)		
AOM13.1-ASP02	Train staff as necessary		by:31/12/2018
M-NAV	-	10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y 01/01/2020
2	Training for Air Traffic Services (ATS) personnel in provision of ATS to OAT-IFR flights ongoing	40%	N -
3	Training for Air Traffic Services (ATS) personnel in provision of ATS to OAT-IFR flights completed	50%	N -
Comment:	Military traffic outside temporary restricted areas is handled by the civilian ATCOs. Common separation criteria are applied to GAT/OAT traffic.		
Mil. Authority		10%	Late
-			01/01/2020
AOM13.1-ASP02	Train staff as necessary		by:31/12/2018
Mil. Authority	-	10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y 01/01/2020
2	Training for Air Traffic Services (ATS) personnel in provision of ATS to OAT-IFR flights ongoing	40%	N -
3	Training for Air Traffic Services (ATS) personnel in provision of ATS to OAT-IFR flights completed	50%	N -
Comment:	Military traffic outside temporary restricted areas is handled by the civilian ATCOs. Common separation criteria are applied to GAT/OAT traffic.		
MIL (By:12/2018)			
Mil. Authority		10%	Late
Military traffic outside temporary restricted areas is handled by the civilian ATCOs. Common separation criteria are applied to GAT/OAT traffic. The migration to EAD is considered as not applicable due to non-existence of military AIS.			01/02/2020
AOM13.1-MIL01	Apply common principles, rules and procedures for OAT handling and OAT/GAT interface		by:31/12/2018
Mil. Authority	-	10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y 01/02/2020

2	Procedures for OAT/GAT interfaces drafted	30%	N
			-
3	Procedures for OAT/GAT interfaces agreed, tested & validated	35%	N
			-
4	Procedures for OAT/GAT interfaces implemented, i.e. in operational use	25%	N
			-
Comment: M-NAV is responsible to handle civil and military traffic. The GAT rules and procedures are applied to GAT/OAT interface.			
AOM13.1-MIL02	Provide feedback on result of conformance analysis between national rules to EUROAT		by:31/12/2012
Mil. Authority	-	10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y
			01/02/2020
2	Conformance analysis of national rules and EUROAT performed	40%	N
			-
3	Point of contact (POC) and distribution list for the dissemination of EUROAT specification established and provided to EUROCONTROL	50%	N
			-
Comment: The military regulatory authority nominated the Point of Contact concerning the EUROAT rules on 17 Nov 2014			
AOM13.1-MIL04	Migrate military aeronautical information to EAD		by:31/12/2015
Mil. Authority	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Plan for migration of aeronautical information to EAD established and Data Provider Agreement with EUROCONTROL signed by all Military Authorities responsible for AIS Data	40%	NA
			-
3	All Military Authorities responsible for AIS Data have implemented EAD and maintain the three sets of AIP Data	50%	NA
			-
Comment: The migration to EAD is considered as not applicable due to non-existence of military AIS.			

AOM19.1	ASM Support Tools to Support Advanced FUA (AFUA) (Outside Applicability Area) Timescales: - not applicable -	%	Not Applicable
Links to DP Families: 3.1.1 - ASM Tool to support AFUA			
There is no operational need for implementation of A-FUA			-
ASP (By:12/2018)			
M-NAV		%	Not Applicable
There is no operational need for implementation of A-FUA			-
AOM19.1-ASP01	Deploy automated ASM support systems		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Automated ASM support systems procured	30%	N
			-
3	Automated ASM support systems installed	35%	N
			-
4	Automated ASM support system tested, validated and in operational use	25%	N
			-
AOM19.1-ASP02	Implement interoperability of local ASM support system with NM system		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Local ASM support system has been adapted to make it interoperable with NM system (AIXM 5.1 interface)	65%	N
			-
3	A Letter of Agreement (LoA) has been concluded with NM	25%	N
			-
AOM19.1-ASP03	Improve planning and allocation of airspace booking		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	A tool allowing the measurement of FUA Indicators (described in detail in Section 7 of the EUROCONTROL ASM Handbook) has been installed (e.g. PRISMIL or a similar tool)	30%	N
			-
3	FUA Indicators are continuously measured using PRISMIL or a similar tool	35%	N
			-
4	Planning and allocation of reserved/segregated airspace at pre-tactical ASM level 2 is improved as required in the description of this SLoA	25%	N
			-

AOM19.2	ASM Management of Real-Time Airspace Data (Outside Applicability Area) Timescales: - not applicable -	%	Not Applicable
Links to OI Steps: AOM-0202-A [E], AOM-0206-A [E] Links to ICAO ASBUs: B1-FRTO, B1-NOPS Links to DP Families: 3.1.2 - ASM management of real time airspace data			
For the time being, there is no state plan and no operational need for further development of the ASM management.			-
ASP (By:12/2021)			
M-NAV		%	Not Applicable
For the time being, there is no state plan and no operational need for further development of the ASM management.			-
AOM19.2-ASP01	Adapt ATM systems for real-time ASM data exchanges		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N -
2	Upgrade to ATM systems to enable real-time ASM data exchanges with local ASM support systems procured	30%	N -
3	Upgrade to ATM systems to enable real-time ASM data exchanges with local ASM support systems installed	60%	N -
AOM19.2-ASP02	Adapt local ASM support system for real-time ASM data exchanges with NM systems		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N -
2	Upgrade to local ASM support system for real-time ASM data exchanges with NM procured	30%	N -
3	Upgrade to local ASM support system for real-time ASM data exchanges with NM installed	60%	N -
AOM19.2-ASP03	Implement procedures related to real-time (tactical) ASM level III information exchange		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N -
2	Procedures related to real-time (tactical) ASM level III information exchange drafted	30%	N -
3	Procedures related to real-time (tactical) ASM level III information exchange agreed, tested & validated	35%	N -
4	Procedures related to real-time (tactical) ASM level III information exchange implemented	25%	N -

AOM19.3	Full Rolling ASM/ATFCM Process and ASM Information Sharing (Outside Applicability Area) Timescales: - not applicable -	%	Not Applicable
Links to OI Steps: AOM-0202, AOM-0202-A [E] Links to ICAO ASBUs: B0-FRTO, B1-FRTO, B1-NOPS, B2-NOPS Links to DP Families: 3.1.3 - Full rolling ASM/ATFCM process and ASM information sharing			
No state plan for implementing full rolling ASM/ATFCM process. No operational need for further development of the existing ASM procedures because of very low level of operational traffic.			-
ASP (By:12/2021)			
M-NAV		%	Not Applicable
No state plan for implementing full rolling ASM/ATFCM process. No operational need for further development of the existing ASM procedures because of very low level of operational traffic.			-
AOM19.3-ASP01	Adapt ASM systems to support a full rolling ASM/ATFCM process		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Upgrade to ASM systems to support a full rolling ASM/ATFCM process procured	30%	N
			-
3	Upgrade to ASM systems to support a full rolling ASM/ATFCM process installed	60%	N
			-
AOM19.3-ASP02	Implement procedures and processes for a full rolling ASM/ATFCM process		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Procedures and processes for a full rolling ASM/ATFCM process drafted	30%	N
			-
3	Procedures and processes for a full rolling ASM/ATFCM process agreed, tested & validated	35%	N
			-
4	Procedures and processes for a full rolling ASM/ATFCM process (including processes for initial CDM, full management of airspace structure via AUP/UUP, and process supporting sharing of information of airspace configurations via AUP/UUP) implemented	25%	N
			-

AOM19.4	Management of Pre-defined Airspace Configurations (Outside Applicability Area) <u>Timescales:</u> - not applicable -	%	Not Applicable
Links to ICAO ASBUs: B1-FRTO, B1-NOPS Links to DP Families: 3.1.4 - Management of dynamic airspace configurations			
No plans for implementation of pre-defined airspace configurations as no operational need has been identified			-
ASP (By:12/2021)			
M-NAV		%	Not Applicable
Still no plans for implementation of pre-defined airspace configurations.			-
AOM19.4-ASP01	Adapt ATM systems to support the management of ASM solutions and pre-defined airspace configurations.		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	New/upgraded ATM system supporting management of ASM solutions and pre-defined airspace configurations procured	30%	N
			-
3	New/upgraded ATM system supporting management of ASM solutions and pre-defined airspace configurations installed	60%	N
			-
AOM19.4-ASP02	Implement procedures in support of an improved ASM solution process and pre-defined airspace configurations		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Procedures to support ASM solution process and pre-defined airspace configurations drafted	30%	N
			-
3	Procedures to support ASM solution process and pre-defined airspace configurations agreed, tested & validated	35%	N
			-
4	Procedures to support ASM solution process and pre-defined airspace configurations implemented	25%	N
			-

AOM21.1	Direct Routing Timescales: Initial Operational Capability: 01/01/2015 Full Operational Capability: 31/12/2017	100%	Completed
Links to DP Families: 3.2.1 - Upgrade of ATM systems (NM, ANSPs, AUs) to support Direct Routings (DCTs) and Free Routing Airspace (FRA), 3.2.3 - Implement Published Direct Routings (DCTs)			
Night Direct Routing was implemented in 2013, at the time planned for phase I of III in the implementation of full FRA in Skopje FIR. Full FRA in Skopje FIR above FL245 has been implemented in June 2016.			24/04/2013
ASP (By:12/2017)			
M-NAV		100%	Completed
-	-		24/04/2013
AOM21.1-ASP01	Implement procedures and processes in support of the network dimension		by:31/12/2017
M-NAV	Skopje ACC	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y
			-
2	Direct routing airspace has been identified in coordination with the Network and FAB partners and the RAD has been updated accordingly	30%	Y
			-
3	Local ATFCM procedures in cooperation with the network taking on board the Direct Routing impact agreed, tested and validated	35%	Y
			-
4	Local ATFCM procedures in cooperation with the network taking on board the Direct Routing impact implemented	25%	Y
			24/04/2013
Comment: Due to low complexity and no significance to the traffic affected, there was no need for updating the ATFCM procedures.			
AOM21.1-ASP02	Implement system improvements		by:31/12/2017
M-NAV	Skopje ACC	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y
			-
2	System/Function for implementation of Direct Routing procured	30%	Y
			-
3	System/Function for implementation of Direct Routing installed	60%	Y
			24/04/2013
Comment: All the Night Direct Routing were input in the FDPS.			
AOM21.1-ASP03	Implement procedures and processes in support of the local dimension		by:31/12/2017
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y
			-
2	The Direct Routing airspace has been described and published in the AIP, RAD and/or the charts	30%	Y
			-
3	ASM and ATC procedures taking on board the Direct Routing impact agreed, tested & validated	35%	Y
			-
4	ASM and ATC procedures taking on board the Direct Routing implemented	25%	Y
			24/04/2013
Comment: RAD published, not in the AIP. No need for update of ASM and ATC procedures due low impact on the traffic concerned.			

AOM21.1-ASP04	Implement transversal activities (verification at local/regional level, safety case and training)		by:31/12/2017
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y
			-
2	Direct Routing concept validated	30%	Y
			-
3	Safety argument has been developed and delivered to the competent authority	30%	Y
			-
4	ATCO Training conducted	30%	Y
			24/04/2013
Comment:	No need for ATCO training due to low impact on the complexity and the traffic affected.		

AOM21.2	Free Route Airspace <u>Timescales:</u> Initial operational capability: 01/01/2015 Full operational capability: 31/12/2021	100%	Completed
Links to OI Steps: AOM-0401, AOM-0402, AOM-0501 [E], AOM-0505 [E], CM-0102-A [E] Links to ICAO ASBUs: B0-FRTO, B1-FRTO Links to DP Families: 3.2.1 - Upgrade of ATM systems (NM, ANSPs, AUs) to support Direct Routings (DCTs) and Free Routing Airspace (FRA), 3.2.4 - Implement Free Route Airspace			
FRA implemented in Skopje FIR above FL245, 24/7, on 23/06/2016			01/12/2016
ASP (By:12/2021)			
M-NAV		100%	Completed
FRA implemented in Skopje FIR above FL245, 24/7, on 23/06/2016			01/12/2016
AOM21.2-ASP01	Implement procedures and processes in support of the network dimension		by:31/12/2021
M-NAV	Skopje ACC	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 08/01/2016
Comment: Project Implementation Unit established			
2	FRA airspace has been identified in coordination with the Network and FAB partners and the RAD has been updated accordingly	30%	Y 14/03/2016
Comment: Airspace validation of FRA area arranged for March 14th 2016 with NM			
3	Local ATFCM procedures in cooperation with the network taking on board the FRA impact agreed, tested and validated	35%	Y 14/03/2016
4	Local ATFCM procedures in cooperation with the network taking on board the FRA impact implemented	25%	Y 15/06/2016
AOM21.2-ASP02	Implement system improvements		by:31/12/2021
M-NAV	Skopje ACC	100%	Completed
1	Activity started (e.g. Project kicked-off)	14%	Y 08/01/2016
2	System/Function for implementation of FRA procured	30%	NA -
Comment: No need for new procurement, the system/functions in use is capable to support the implementation of FRA.			
3	System/Function for implementation of FRA installed	86%	Y 23/06/2016
Comment: FDPS and HMI were upgraded accordingly the FRA requirements.			
AOM21.2-ASP03	Implement dynamic sectorisation		by:31/12/2021
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA -
Comment: No operational need for it, at this time, but it will be part of the new system expected for 2021.			
2	New/upgraded ATM system supporting support dynamic sectorisation procured	30%	NA -
Comment: No operational need for it, at this time, but it will be part of the new system expected for 2021.			
3	New/upgraded ATM system supporting support dynamic sectorisation installed	35%	NA -
Comment: No operational need for it, at this time, but it will be part of the new system expected for 2021.			
4	Procedures implementing dynamic sectorisation are tested, validated and in operational use	25%	NA -
Comment: No operational need for it, at this time, but it will be part of the new system expected for 2021.			

AOM21.2-ASP04	Implement procedures and processes in support of the local dimension		by:31/12/2021
M-NAV	Skopje ACC	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 08/01/2016
2	FRA airspace has been described and published in the AIP, RAD and/or the charts	30%	Y 28/04/2016
Comment:	FRA Airspace was published 2 AIRAC cycles before implementation. RAD publication 1 AIRAC cycle prior implementation		
3	ASM and ATC procedures taking on board FRA impact agreed, tested & validated	35%	Y 16/05/2016
4	ASM and ATC procedures taking on board FRA implemented	25%	Y 23/06/2016
AOM21.2-ASP05	Implement transversal activities in support to operational deployment of FRA (validation, safety case and training)		by:31/12/2021
M-NAV	Skopje ACC	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 08/01/2015
2	FRA concept validated	30%	Y 18/06/2015
Comment:	OCD compiled with the support of EUROCONTROL's experts		
3	Safety argument has been developed and delivered to the competent authority	30%	Y 01/12/2016
Comment:	Safety case created and submitted to CAA		
4	ATCO Training conducted	30%	Y 15/06/2016
Comment:	ATCO Training was delivered during the Emergency training course in April, May, June 2016		

AOP04.1	Advanced Surface Movement Guidance and Control System A-SMGCS Surveillance (former Level 1) <u>Timescales:</u> - not applicable -	%	Not Applicable
Links to DP Families: 2.2.1 - A-SMGCS Level 1 and 2			
LWSK - Skopje Airport (Outside Applicability Area)			
Macedonia is not part of the objective applicability area. There is no operational need for an A-SMGCS system.			-
REG (By:12/2010)			
CAA		%	Not Applicable
-	-		-
AOP04.1-REG01	Mandate the carriage of required aircraft equipment to enable location and identification of aircraft on the movement area (including military aircraft, as appropriate)		by:-
CAA	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Airworthiness certification requirements related to A-SMGCS adopted by the Regulator	90%	NA
			-
AOP04.1-REG02	Mandate the carriage of required vehicle equipment to enable location and identification of vehicles on the manoeuvring area		by:-
CAA	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Certification requirements related to A-SMGCS vehicle equipage adopted by the Regulator	90%	NA
			-
AOP04.1-REG03	Publish A-SMGCS Surveillance procedures (including transponder operating procedures) in national aeronautical information publications		by:-
CAA	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	A-SMGCS operational procedures drafted	30%	NA
			-
3	A-SMGCS operational procedures agreed, harmonized with application of transponder operating procedures, approved and published in national AIP	60%	NA
			-
ASP (By:12/2011)			
M-NAV		%	Not Applicable
-	-		-
AOP04.1-ASP01	Install required surveillance equipment		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Required surveillance equipment procured	30%	NA
			-
3	Required surveillance equipment installed	60%	NA
			-

AOP04.1-ASP02	Train aerodrome control staff in the use of A-SMGCS Surveillance in the provision of aerodrome control service		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Training ongoing	40%	NA
			-
3	Training completed	50%	NA
			-
AOP04.1-ASP03	Implement approved A-SMGCS operational procedures at airports equipped with A-SMGCS		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	A-SMGCS operational procedures drafted	30%	NA
			-
3	A-SMGCS operational procedures agreed, tested & validated	35%	NA
			-
4	A-SMGCS operational procedures implemented, i.e. in operational use	25%	NA
			-
APO (By:12/2010)			
SKOPJE Airport		%	Not Applicable
-	-		-
AOP04.1-APO01	Install required surveillance equipment		by:-
SKOPJE Airport	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Required surveillance equipment procured	30%	NA
			-
3	Required surveillance equipment installed	60%	NA
			-
AOP04.1-APO02	Equip Ground Vehicles		by:-
SKOPJE Airport	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Ground vehicles equipment procured	30%	NA
			-
3	Ground vehicles equipment installed, tested & validated	60%	NA
			-
AOP04.1-APO03	Train ground vehicle drivers		by:-
SKOPJE Airport	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Training ongoing	40%	NA
			-
3	Training completed	50%	NA
			-

AOP04.2	Advanced Surface Movement Guidance and Control System (A-SMGCS) Runway Monitoring and Conflict Alerting (RMCA) (former Level 2) <u>Timescales:</u> - not applicable -	%	Not Applicable
Links to DP Families: 2.2.1 - A-SMGCS Level 1 and 2			
LWSK - Skopje Airport (Outside Applicability Area)			
Macedonia is not part of the objective applicability area. There is no operational need for an A-SMGCS system.			-
ASP (By:12/2017)			
M-NAV		%	Not Applicable
-	-		-
AOP04.2-ASP01	Install required A-SMGCS RMCA function equipment		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
2	Required A-SMGCS Level 2 control function system procured	30%	NA
3	Required A-SMGCS Level 2 control function system installed	60%	NA
AOP04.2-ASP02	Train aerodrome control staff in the use of A-SMGCS RMCA in the provision of an aerodrome control service		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
2	Training ongoing	40%	NA
3	Training completed	50%	NA
AOP04.2-ASP03	Implement approved A-SMGCS RMCA operational procedures		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
2	Local A-SMGCS Level 2 operational procedures drafted	30%	NA
3	Local A-SMGCS Level 2 operational procedures agreed, tested & validated	35%	NA
4	Local A-SMGCS Level 2 operational procedures implemented, i.e. in operational use	25%	NA
APO (By:12/2017)			
SKOPJE Airport		%	Not Applicable
-	-		-
AOP04.2-APO01	Install required A-SMGCS RMCA function equipment		by:-
SKOPJE Airport	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
2	Required A-SMGCS Level 2 control function system procured	30%	NA
3	Required A-SMGCS Level 2 control function system installed	60%	NA

AOP05	Airport Collaborative Decision Making (A-CDM) <u>Timescales:</u> - not applicable -	%	Not Applicable
Links to OI Steps: AO-0501, AO-0601, AO-0602 [E], AO-0603, TS-0201 [E] Links to ICAO ASBUs: B0-ACDM, B0-RSEQ Links to DP Families: 2.1.1 - Initial DMAN, 2.1.3 - Basic A-CDM			
LWSK - Skopje Airport (Outside Applicability Area)			
Republic of North Macedonia is not part of the objective applicability area. All Airports handle less movements yearly, then the agreed threshold, according to the A-CDM Eurocontrol Manual.			-
ASP (By:12/2016)			
M-NAV		%	Not Applicable
-	-	-	-
AOP05-ASP01	Define and agree performance objectives and KPIs at local level, specific to ANSP in accordance with A-CDM Manual guidelines		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Local A-CDM committee established with all Stakeholders involved	10%	NA
			-
3	Performance objectives and KPIs drafted	30%	NA
			-
4	Performance objectives and KPIs agreed by all parties	50%	NA
			-
AOP05-ASP02	Define and implement local Air Navigation Service (ANS) procedures for information sharing through Letters of Agreement (LoAs) and/or Memorandum of Understanding (MoU) in accordance with A-CDM Manual guidelines		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Information sharing principles/procedures defined and information sharing platform (if applicable) procured	30%	NA
			-
3	Information sharing platform (if applicable) installed	10%	NA
			-
4	Information sharing procedures agreed, tested & validated	25%	NA
			-
5	LoA and/or MoU signed by all partners and procedures implemented	25%	NA
			-
AOP05-ASP03	Define and implement local procedures for turnaround processes in accordance with CDM manual guidelines		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Procedures for turnaround processes drafted through LoA and/or MoU	30%	NA
			-
3	Procedures for turnaround processes agreed, tested & validated	35%	NA
			-
4	LoA and/or MoU signed by all partners and procedures for turnaround processes implemented	25%	NA
			-

AOP05-ASP04	Continually review and measure airport performance in accordance with Airport CDM Manual guidelines		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Procedure & methodology for measuring airport performance agreed & validated	30%	NA
			-
3	Procedure & methodology for measuring airport performance implemented	35%	NA
			-
4	Airport performance results/benefits published	25%	NA
			-
AOP05-ASP05	Define and implement variable taxi-time and predeparture sequencing procedure (i.e. initial DMAN) according to airport CDM Manual guidelines		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Procedures for variable taxi time and pre-departure sequencing drafted	30%	NA
			-
3	Procedures for variable taxi time and pre-departure sequencing agreed, tested & validated	35%	NA
			-
4	Procedures for variable taxi time and pre-departure sequencing implemented and published in the AIP	25%	NA
			-
AOP05-ASP06	Define and implement procedures for CDM in adverse conditions, including the de-icing according to airport CDM Manual guidelines		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Procedures for adverse conditions drafted through LoA and/or MoU	30%	NA
			-
3	Procedures for adverse conditions agreed, tested & validated	35%	NA
			-
4	LoA and/or MoU signed by all partners and procedures for adverse conditions implemented	25%	NA
			-
APO (By:12/2016)			
SKOPJE Airport		%	Not Applicable
	-		-
AOP05-APO01	Define and agree performance objectives and KPIs at local level specific to airport operations in accordance with A-CDM Manual guidelines		by:-
SKOPJE Airport	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Local A-CDM committee established with all Stakeholders involved	10%	NA
			-
3	Performance objectives and KPIs drafted	30%	NA
			-
4	Performance objectives and KPIs agreed by all parties	50%	NA
			-

AOP05-APO02	Define and implement local airport operations procedures for information sharing through Letters of Agreement (LoAs) and/or Memorandum of Understanding (MoU) in accordance with A-CDM Manual guidelines		by:-
SKOPJE Airport	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Information sharing principles/procedures defined and information sharing platform (if applicable) procured	30%	NA
			-
3	Information sharing platform (if applicable) installed, tested & validated	10%	NA
			-
4	Information sharing procedures agreed, tested & validated	25%	NA
			-
5	LoA and/or MoU signed by all partners and procedures implemented	25%	NA
			-
AOP05-APO03	Define and implement local procedures for turnaround processes in accordance with CDM manual guidelines (baseline CDM)		by:-
SKOPJE Airport	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Procedures for turnaround processes drafted through LoA and/or MoU	30%	NA
			-
3	Procedures for turnaround processes agreed, tested & validated	35%	NA
			-
4	LoA and/or MoU signed by all partners and procedures for turnaround processes implemented	25%	NA
			-
AOP05-APO04	Continually review and measure airport performance in accordance with Airport CDM Manual guidelines		by:-
SKOPJE Airport	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Procedure & methodology for measuring airport performance agreed & validated	30%	NA
			-
3	Procedure & methodology for measuring airport performance implemented	35%	NA
			-
4	Airport performance results/benefits published	25%	NA
			-
AOP05-APO05	Define and implement the exchange of messages, Flight Update Message (FUM) and Departure Planning Information (DPI) between NMOC and the airport in accordance with A-CDM Manual guidelines		by:-
SKOPJE Airport	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Capability to send/receive DPI/FUM messages available in systems	40%	NA
			-
3	Procedures for exchange of messages (DPI/FUM) with NMOC agreed, tested & validated	25%	NA
			-
4	Procedures for exchange of messages (DPI/FUM) with NMOC operational	25%	NA
			-

AOP05-APO06	Define and implement procedures for CDM in adverse conditions including the de-icing according to airport CDM Manual guidelines		by:-
SKOPJE Airport	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Procedures for adverse conditions and de-icing drafted through LoA and/or MoU	30%	NA
			-
3	Procedures for adverse conditions and de-icing agreed, tested & validated	35%	NA
			-
4	LoA and/or MoU signed by all partners and procedures for adverse conditions and de-icing implemented	25%	NA
			-

AOP10	Time-Based Separation <u>Timescales:</u> - not applicable -	%	Not Applicable
Links to DP Families: 2.3.1 - Time Based Separation (TBS)			
LWSK - Skopje Airport (Outside Applicability Area)			
Not Applicable for Skopje Airport, outside of Applicability Area			-
REG (By:12/2023)			
CAA		%	Not Applicable
-	-		-
AOP10-REG01	Publish TBS operations procedures in national aeronautical information publications		by:-
CAA	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
2	Procedures for TBS operations have been drafted by the ANSP and provided to the Regulator	30%	NA
3	Procedures for TBS operations have been validated	35%	NA
4	Procedures for TBS operations have been published by the ANSP in the local/State AIP	25%	NA
ASP (By:12/2023)			
CAA		%	Not Applicable
-	-		-
AOP10-ASP05	Implement procedures for TBS operations		by:-
CAA	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
2	Procedures for TBS operations have been drafted	30%	NA
3	Procedures for TBS operations have been tested & validated	35%	NA
4	Procedures for TBS operations have been implemented are in operational use and have been published in the local/State AIP	25%	NA
M-NAV		%	Not Applicable
-	-		-
AOP10-ASP01	Ensure AMAN system is compatible with TBS support tool		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
2	FDPS and AMAN system are compatible with the TBS support tool	30%	NA
3	CWP is modified to display headwind independent time based separation	30%	NA
4	TBS support tool is able to calculate headwind independent time based separation	30%	NA

AOP10-ASP02	Modify CWP to integrate TBS Support tool with safety nets		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	CWP modification to integrate TBS support tool has been procured (if necessary)	30%	NA
			-
3	CWP modification to integrate TBS support tool has been installed	35%	NA
			-
4	CWP modification to integrate TBS support tool has been tested, validated and is available for operational use	25%	NA
			-
AOP10-ASP03	Local MET info with actual glide-slope wind conditions to be provided into TBS Support tool		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Local meteorological information providing actual glide slope wind conditions to the TBS support tool has been tested & validated	65%	NA
			-
3	Local meteorological information providing actual glide slope wind conditions is fed into the TBS support tool	25%	NA
			-
AOP10-ASP04	TBS Support tool to provide automatic monitoring and alerting of non-conformant behaviours, infringements, wrong aircraft		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	A TBS support tool has been procured	30%	NA
			-
3	A TBS support tool has been installed	60%	NA
			-
AOP10-ASP06	Train controllers (Tower and Approach) on TBS operations		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	The training of Tower and Approach Controllers on the procedures and practices to TBS is ongoing	40%	NA
			-
3	The training of Tower and Approach Controllers on the procedures and practices to TBS has been completed	50%	NA
			-

AOP11	Initial Airport Operations Plan <u>Timescales:</u> - not applicable -	%	Not Applicable
Links to OI Steps: AO-0801-A [E] Links to ICAO ASBUs: B1-ACDM Links to DP Families: 2.1.4 - Initial Airport Operations Plan (AOP)			
LWSK - Skopje Airport (Outside Applicability Area)			
Not Applicable for Skopje Airport. The low level of traffic and its lack of impact on the Network does not justify the implementation of an AOP.			-
ASP (By:12/2021)			
M-NAV		%	Not Applicable
-	-		-
AOP11-ASP01	Provide the required information to the AOP		by:-
M-NAV	Skopje Airport	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
2	A local agreement for the provision of AOP elements with the APO has been signed	40%	NA
3	The ANSP is providing the AOP information to the APO	25%	NA
4	The ANSP is maintaining the information to the AOP constantly ensuring the appropriate quality	25%	NA
APO (By:12/2021)			
SKOPJE Airport		%	Not Applicable
-	-		-
AOP11-APO01	Set up and manage the Airport Operational Plan		by:-
SKOPJE Airport	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
2	All the stakeholders relevant to the Airport Operation Plan (AOP) have been identified	15%	NA
3	Local agreements for the provision of AOP information have been signed with the relevant stakeholders	25%	NA
4	The Airport Operation Plan has been approved and release	50%	NA
AOP11-APO02	Provide the required information to the AOP		by:-
SKOPJE Airport	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
2	The APO is providing the AOP elements (core and supporting) to the AOP	65%	NA
3	The APO is maintaining the AOP constantly ensuring the appropriate quality	25%	NA
AOP11-APO03	Train all relevant personnel		by:-
SKOPJE Airport	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
3	The training of the relevant personnel on the procedures and practices to the AOP is ongoing	40%	NA
4	The training of the relevant personnel on the procedures and practices to the AOP has been completed	50%	NA

AOP12	Improve Runway and Airfield Safety with Conflicting ATC Clearances (CATC) Detection and Conformance Monitoring Alerts for Controllers (CMAC) <u>Timescales:</u> - not applicable -	%	Not Applicable
Links to OI Steps: AO-0104-A [E] Links to Enablers: AERODROME-ATC-36 Links to ICAO ASBUs: B2-SURF Links to DP Families: 2.1.2 - Electronic Flight Strips (EFS), 2.5.1 - Airport Safety Nets associated with A-SMGCS Level 2			
LWSK - Skopje Airport (Outside Applicability Area)			
Not Applicable for Skopje Airport, outside of Applicability Area. Not needed due to the low level of traffic and low complexity.			-
ASP (By:12/2020)			
M-NAV		%	Not Applicable
-	-	-	-
AOP12-ASP01	Install required 'Airport Safety Nets'		by:-
M-NAV	Skopje Airport	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Airport Safety Nets function defined and appropriate system (if necessary) procured	30%	NA
			-
3	Airport Safety Nets function support system (if required) installed	35%	NA
			-
4	Airport Safety Nets function tested, validated and in operational use	25%	NA
			-
Comment:			
AOP12-ASP02	Train aerodrome control staff on the functionality of 'Airport Safety Nets'		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Training on the Airport Safety Nets functionality ongoing	40%	NA
			-
3	Training on the Airport Safety Nets functionality completed	50%	NA
			-
Comment:			
AOP12-ASP03	Implement digital systems such as electronic flight strips (EFS)		by:-
M-NAV	Skopje Airport	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Digital systems (such as EFS) procured	30%	NA
			-
3	Digital systems (such as EFS) installed	35%	NA
			-
4	Digital systems (such as EFS) tested, validated and available for operational use	25%	NA
			-
Comment:			

APO (By:12/2020)			
SKOPJE Airport		%	Not Applicable
-			-
AOP12-APO01	Train all relevant staff on the functionality of 'Airport Safety Nets'		by:-
SKOPJE Airport	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Training of staff on the Airport Safety Nets functionality ongoing	40%	NA
			-
3	Training of staff on the Airport Safety Nets functionality completed	50%	NA
			-

AOP13	Automated Assistance to Controller for Surface Movement Planning and Routing <u>Timescales:</u> - not applicable -	%	Not Applicable
Links to OI Steps: AO-0205 [E], TS-0202 Links to ICAO ASBUs: B1-ACDM, B1-RSEQ, B2-SURF Links to DP Families: 2.4.1 - A-SMGCS Routing and Planning Functions			
LWSK - Skopje Airport (Outside Applicability Area)			
Not applicable, LWSK is not a PCP high performing airport			-
REG (By:12/2023)			
CAA		%	Not Applicable
Not applicable, LWSK is not a PCP high performing airport			-
AOP13-REG01	Coordination and final official approval of procedures by the local regulator is required		by:-
CAA	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Request for operational approval and relevant material received by the competent authority	65%	N
			-
3	Relevant material verified and operational approval granted	25%	N
			-
ASP (By:12/2023)			
-			
AOP13-ASP02	Ensure the planning and routing function is used to optimise pre-departure sequencing		by:-
-	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	New/upgraded A-SMGCS and A-CDM system supporting interaction of DMAN and planning and routing function procured	30%	N
			-
3	New/upgraded A-SMGCS and A-CDM system supporting interaction of DMAN and planning and routing function installed	60%	N
			-
M-NAV		%	Not Applicable
No operational need for applying this objective due to low traffic at LWSK			-
AOP13-ASP01	Upgrade ATS systems to support automated assistance to air traffic controllers for surface movement planning and routing		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	New/upgraded ATS systems to support automated assistance to ATCOs surface movement planning and routing procured	30%	N
			-
3	New/upgraded ATS systems to support automated assistance to ATCOs surface movement planning and routing installed	60%	N
			-

AOP13-ASP03	Implement operational procedures implementing automated assistance to air traffic controllers for surface movement planning and routing		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Procedures for automated assistance to ATCOs for surface movement planning and routing drafted	30%	N
			-
3	Procedures for automated assistance to ATCOs for surface movement planning and routing agreed, tested & validated	35%	N
			-
4	Procedures for automated assistance to ATCOs for surface movement planning and routing implemented	25%	N
			-
AOP13-ASP04	Develop, and deliver as necessary, a safety assessment of the changes imposed by the implementation of automated assistance to air traffic controllers for surface movement planning and routing		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Safety Assessment drafted	30%	N
			-
3	Safety Assessment delivered to the competent authority	60%	N
			-
AOP13-ASP05	Train all operational personnel concerned in the use of automated assistance for surface movement planning and routing		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Training ongoing	40%	N
			-
3	Training completed	50%	N
			-

AOP14	Remote Tower Services <i>Applicability and timescale: Local</i>	%	Not Applicable
LWOH - OHRID			
At this time, there is no operational need for Remote tower at Ohrid.			-

AOP14	Remote Tower Services <i>Applicability and timescale: Local</i>	%	Not Applicable
LWSK - Skopje Airport			
No plan for implementation of Remote tower in Skopje, no operational need.			-

AOP15	Enhanced traffic situational awareness and airport safety nets for the vehicle drivers <i>Applicability and timescale: Local</i>	%	Not Applicable
Links to DP Families: 2.5.2 - Vehicle and aircraft systems contributing to Airport Safety Nets			
LWSK - Skopje Airport			
Skopje airport does not intent to implement. No surface movement surveillance aids available.			-

AOP16	Guidance assistance through airfield ground lighting <u>Applicability and timescale: Local</u>	%	Not Applicable
Links to DP Families: 2.4.1 - A-SMGCS Routing and Planning Functions			
LWSK - Skopje Airport			
Skopje airport does not intent to implement. No surface movement surveillance aids available.			-

AOP17	Provision/integration of departure planning information to NMOC <i>Applicability and timescale: Local</i>	0%	Not yet planned
LWSK - Skopje Airport			
Unavailability of systems for ACDM and no much traffic.			-

AOP18	Runway Status Lights (RWSL) <i>Applicability and timescale: Local</i>	%	Not Applicable
LWSK - Skopje Airport			
No needs for Skopje at this moment.			-

ATC02.2	Implement ground based safety nets - Short Term Conflict Alert (STCA) - level 2 for en-route operations <u>Timescales:</u> Initial operational capability: 01/01/2008 Full operational capability: 31/01/2013	100%	Completed
Links to OI Steps: CM-0801 Links to ICAO ASBUs: B0-SNET			
STCA function has been implemented on the ATM system deployed for service provision at Skopje ACC/APP. The system at Ohrid APP is also equipped with the STCA function.			31/12/2009
ASP (By:01/2013)			
M-NAV		100%	Completed
STCA function has been implemented by all ATS units that provide radar service. The ATCO training on STCA was done in 2009.			31/12/2009
ATC02.2-ASP01	Implement STCA function for en-route operations		by:31/01/2013
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y -
2	The upgrade of ground systems to support the STCA function has been procured	30%	Y -
3	The upgrade of ground systems to support the STCA function has been installed	35%	Y -
4	The upgrade of ground systems to support the STCA function is tested, validated and in operational use	25%	Y 21/12/2009
ATC02.2-ASP02	Align ATCO training with the use of STCA ground-based safety tools		by:31/01/2013
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y -
2	Training for the concerned personnel is ongoing	40%	Y -
3	Training for the concerned personnel is completed	50%	Y 31/12/2009
ATC02.2-ASP03	Develop safety assessment for the changes		by:31/01/2013
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y -
2	Safety Assessment drafted	30%	Y -
3	Safety Assessment delivered to the competent authority	60%	Y 31/12/2009

ATC02.8	Ground-Based Safety Nets <u>Timescales:</u> Initial operational capability: 01/01/2009 Full operational capability: 31/12/2016	100%	Completed
Links to OI Steps: CM-0801 Links to ICAO ASBUs: B0-SNET, B1-SNET Links to DP Families: 3.2.1 - Upgrade of ATM systems (NM, ANSPs, AUs) to support Direct Routings (DCTs) and Free Routing Airspace (FRA)			
M-NAV have implemented APW and MSAW. APM has been already implemented at Ohrid TWR. The implementation of Approach Path Monitoring (APM) will be reassessed depending on the implementation of the Mode-S sensors and traffic volume at the Skopje airport.			31/12/2016
ASP (By:12/2016)			
M-NAV		100%	Completed
The APM function is already implemented at Ohrid TWR. - The implementation of Approach Path Monitoring (APM) and download of TCAS Resolution Advisor (RA) will be reassessed in 2018 depending in the implementation of the Mode-S sensors and traffic volume at the Skopje airport			31/12/2016
ATC02.8-ASP01	Implement the APW function		by:31/12/2016
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2012
2	The upgrade of ground systems to support the APW function has been procured	30%	Y 31/12/2012
3	The upgrade of ground systems to support the APW function has been installed	35%	Y 31/12/2012
4	The upgrade of ground systems to support the APW function is tested, validated and in operational use	25%	Y 31/12/2012
ATC02.8-ASP02	Align ATCO training with the use of APW ground-based safety tools		by:31/12/2016
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2012
2	Training for the concerned personnel is ongoing	40%	Y 31/12/2012
3	Training for the concerned personnel has been completed	50%	Y 31/12/2012
ATC02.8-ASP03	Implement the MSAW function		by:31/12/2016
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2012
Comment: MSAW function has been implemented on the ATM system deployed for service provision at Skopje ACC/APP. The system at Ohrid APP is also equipped with the MSAW function.			
2	The upgrade of ground systems to support the MSAW function has been procured	30%	Y 31/12/2012
3	The upgrade of ground systems to support the MSAW function has been installed	35%	Y 31/12/2012
4	The upgrade of ground systems to support the MSAW function is tested, validated and in operational use	25%	Y 31/12/2012

ATC02.8-ASP04	Align ATCO training with the use of MSAW ground-based safety tools		by:31/12/2016
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2012
2	Training for the concerned personnel is ongoing	40%	Y 31/12/2012
3	Training for the concerned personnel has been completed	50%	Y 31/12/2012
ATC02.8-ASP05	Implement the APM function		by:31/12/2016
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2016
2	The upgrade of ground systems to support the APM function has been procured by the ANSP	30%	Y 31/12/2016
3	The upgrade of ground systems to support the APM function has been installed	35%	Y 31/12/2016
4	The upgrade of ground systems to support the APM function is tested, validated and in operational use	25%	Y 31/12/2016
Comment: at Ohrid TWR			
ATC02.8-ASP06	Align ATCO training with the use of APM ground-based safety tools		by:31/12/2016
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2016
2	Training for the concerned personnel is ongoing	40%	Y 31/12/2016
3	Training for the concerned personnel has been completed	50%	Y 31/12/2016
Comment: at Ohrid TWR			

ATC02.9	Short Term Conflict Alert (STCA) for TMAs <u>Timescales:</u> Initial operational capability: 01/01/2018 Full operational capability: 31/12/2020	100%	Completed
The STCA that is used in TMA is the same STCA that is used En-route, using the same algorithm, which in our case, taking into account the complexity of the TMA and the traffic level, is sufficient for the purpose. Multi-hypothesis algorithm is not used as not needed.			31/12/2009
ASP (By:12/2020)			
M-NAV		100%	Completed
The STCA that is used in TMA is the same STCA that is used En-route, using the same algorithm, which in our case, taking into account the complexity of the TMA and the traffic level, is sufficient for the purpose.			31/12/2009
ATC02.9-ASP01	Implement the STCA function in TMA		by:31/12/2020
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2009
2	The upgrade of ground systems to support the STCA function in TMA has been procured by the ANSP	30%	Y 31/12/2009
3	The upgrade of ground systems to support the STCA function in TMA has been tested & validated by the ANSP	35%	Y 31/12/2009
4	The upgrade of ground systems to support the STCA function in TMA has been deployed & available for operational use by the ANSP	25%	Y 31/12/2009
ATC02.9-ASP02	Improve the STCA functionality		by:-
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2009
2	System/Function procured	30%	Y 31/12/2009
3	System/Function tested & validated	35%	Y 31/12/2009
4	System/Function deployed & available for operational use	25%	Y 31/12/2009
ATC02.9-ASP03	Develop and implement ATC procedures related to the use of STCA in TMA		by:31/12/2020
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2009
2	Procedures for the use of STCA function in TMA drafted	30%	Y 31/12/2009
3	Procedures for the use of STCA function in TMA agreed, tested and validated	35%	Y 31/12/2009
4	Procedures for the use of STCA function in TMA implemented, i.e. in operational use	25%	Y 31/12/2009
ATC02.9-ASP04	Align ATCO training with the use of STCA in TMA		by:31/12/2020
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2009
2	The training plans and training packages for the use of STCA function in TMA have been drafted by the ANSP	10%	Y 31/12/2009
3	The training plans and training packages for the use of STCA function in TMA have been approved/released by the ANSP	20%	Y 31/12/2009
4	Training for the concerned personnel is ongoing	40%	Y 31/12/2009
5	Training for the concerned personnel has been completed	20%	Y 31/12/2009

ATC02.9-ASP05	Develop a local safety assessment		by:31/12/2020
M-NAV	-	%	Not Applicable
Comment:	At the time when the system was implemented, there was no need for a local safety assessment and it was not conducted at the time. Still it have not been done specifically for this feature, however the current ATM system is approved and FHA was conducted and approved by CAA in the recent years.		
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Local safety assessment has been drafted	30%	N
			-
3	Local safety assessment has been submitted to the NSA	60%	N
			-

ATC07.1	AMAN Tools and Procedures <u>Timescales:</u> - not applicable -	%	Not Applicable
Links to OI Steps: TS-0102 Links to ICAO ASBUs: B0-RSEQ Links to DP Families: 1.1.1 - Basic AMAN			
LWSK - Skopje Airport (Outside Applicability Area)			
There is no operational need for AMAN tool but an arrival sequencing function is already implemented			-
ASP (By:12/2019)			
M-NAV		%	Not Applicable
There is no operational need for AMAN tool but an arrival sequencing function is already implemented			-
ATC07.1-ASP01	Implement initial basic arrival management tools		by:-
M-NAV	Skopje TMA	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	System/Function procured	30%	NA
			-
3	System/Function installed	60%	NA
			-
ATC07.1-ASP02	Implement initial basic AMAN procedures		by:-
M-NAV	Skopje TMA	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Procedures for operational use of basic AMAN tools drafted	30%	NA
			-
3	Procedures agreed, tested & validated	35%	NA
			-
4	Procedures implemented, i.e. basic AMAN tools in operational use	25%	NA
			-
Comment: AMAN function, procedures and TMA adaptation is not planned.			
ATC07.1-ASP03	Adapt TMA organisation to accommodate use of basic AMAN		by:-
M-NAV	Skopje TMA	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Adaptation of TMA organisation is drafted	30%	NA
			-
3	Adaptation of TMA organisation is agreed, tested and validated	35%	NA
			-
4	Adaptation of TMA organisation is implemented so that it can accommodate the operational use of basic AMAN	25%	NA
			-
Comment: AMAN function, procedures and TMA adaptation is not planned.			

ATC07.1-ASP04	Adapt ground ATC systems to support basic AMAN functions		by:-
M-NAV	Skopje TMA	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	New ATC System compliant to basic AMAN tool procured, or existing system adapted accordingly	30%	NA
			-
3	New or adapted ATC System tested & validated	35%	NA
			-
4	New or adapted ATC System deployed & available for operational use	25%	NA
			-
Comment: AMAN function, procedures and TMA adaptation is not planned.			

ATC12.1	Automated Support for Conflict Detection, Resolution Support Information and Conformance Monitoring <u>Timescales:</u> Initial operational capability: 01/01/2015 Full operational capability: 31/12/2021	75%	Ongoing
Links to OI Steps: CM-0202, CM-0203, CM-0205, CM-0207-A Links to ICAO ASBUs: B1-FRTO Links to DP Families: 3.2.1 - Upgrade of ATM systems (NM, ANSPs, AUs) to support Direct Routings (DCTs) and Free Routing Airspace (FRA)			
MONA and MTCD have been implemented (conflict resolution function is not available). TCT is planned for the new ATM system.			31/12/2021
ASP (By:12/2021)			
M-NAV		75%	Ongoing
MONA and MTCD have been implemented. TCT is planned for the new ATM system.		New ATM System Project	31/12/2021
ATC12.1-ASP01	Implement MTCD and associated procedures		by:31/12/2021
M-NAV	Skopje ACC / Skopje TMA	100%	Completed
	1 Project/task to implement MTCD and resolution support functions has been kicked off	10%	Y 31/12/2002
	2 MTCD have been procured	30%	Y 31/12/2002
	3 MTCD have been installed, tested, validated and ready for operational use	35%	Y 31/12/2002
	4 MTCD are used operationally	25%	Y 31/12/2002
ATC12.1-ASP02	Implement resolution support function and associated procedures		by:31/12/2021
M-NAV	-	40%	Ongoing
	1 Activity started (e.g. Project kicked-off)	10%	Y 31/01/2014
Comment: The resolution support function is planned to be implemented with the new ATM system.			
	2 New/upgraded ATM system supporting resolution support function in the context of MTCD procured	30%	Y 31/12/2019
Comment: The resolution support function is procured and will be implemented with the new ATM system.			
	3 New/upgraded ATM system supporting resolution support function in the context of MTCD are tested, validated and in operational use	35%	N -
Comment: The resolution support function is planned to be implemented with the new ATM system. After installation and during the SAT shall be tested, validated and put in operational use.			
	4 Procedures implementing resolution support function in the context of MTCD used operationally	25%	N 31/12/2021

ATC12.1-ASP03	Implement TCT and associated procedures		by:31/12/2021
M-NAV	-	10%	Ongoing
Comment:	This tool will be available after the installation of the new system in 2021.		
1	Project/task to implement TCT and resolution support functions has been kicked off	10%	Y 15/01/2014
Comment:	Project kicked off for procurement of new ATM system.		
2	TCT have been procured	30%	N -
Comment:	With the new ATM system the TCT and resolution support functions will be available. Procurement is ongoing.		
3	TCT have been installed, tested, validated and ready for operational use	35%	N -
Comment:	TCT is planned for implementation in the new ATM system		
4	TCT related procedures are used operationally	25%	N 31/12/2021
Comment:	TCT is planned for implementation in the new ATM system		
ATC12.1-ASP04	Implement MONA functions		by:31/12/2021
M-NAV	-	100%	Completed
Comment:	MONA functions are available and in use with the current ATM system.		
1	Project/task to implement MONA tool and related functions has been kicked off	10%	Y 31/12/2002
2	MONA tool and related functions have been procured	30%	Y 31/12/2002
3	MONA tool and related functions have been installed, tested, validated and ready for operational use	35%	Y 31/12/2002
4	MONA tool and related functions are used operationally	25%	Y 31/12/2002
ATC12.1-ASP05	Perform ATCO training for the use of CDT (MTCD and or TCT), resolution support and MONA related functions		by:31/12/2021
M-NAV	-	100%	Completed
Comment:	The ATCO training for MTCD was performed upon validation of the current ATM system in 2002. The TCT function will be available with the new ATM system in 2021.		
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2002
2	Training ongoing	40%	Y 31/12/2002
3	Training completed	50%	Y 31/12/2002
ATC12.1-ASP06	Develop safety assessment for the changes		by:31/12/2021
M-NAV	-	100%	Completed
Comment:	FHA, PSSA for the new ATM system approved by CAA.		
1	Activity started (e.g. Project kicked-off)	10%	Y 15/01/2014
2	Safety assessment drafted	40%	Y 15/10/2016
Comment:	FHA, PSSA for the new ATM system drafted.		
3	Safety assessment delivered to the competent authority	50%	Y 15/10/2016
Comment:	FHA, PSSA for the new ATM system approved by CAA.		

ATC15.1	Information Exchange with En-route in Support of AMAN (Outside Applicability Area) <u>Timescales:</u> - not applicable -	%	Not Applicable
Links to OI Steps: TS-0305 Links to ICAO ASBUs: B1-RSEQ Links to DP Families: 1.1.2 - AMAN Upgrade to include Extended Horizon function			
There is no operational need and justification for AMAN tool.			-
ASP (By:12/2019)			
M-NAV		%	Not Applicable
There is no operational need and justification for AMAN tool.			-
ATC15.1-ASP01	Develop safety assessment for the changes		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Safety assessment drafted	40%	NA
			-
3	Safety assessment delivered to the competent authority	50%	NA
			-
ATC15.1-ASP02	Adapt the ATC systems that will implement arrival management functionality in En-Route sectors in support of AMAN operations in adjacent/subjacent TMAs		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	AMAN function compliant to the use in En-Route developed/procured	30%	NA
			-
3	AMAN function compliant to the use in En-Route installed	60%	NA
			-
ATC15.1-ASP03	Implement ATC procedures in En-Route airspace/sectors that will implement AMAN information and functionality		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Procedures for the use of AMAN function in En-Route drafted	30%	NA
			-
3	Procedures for the use of AMAN function agreed, tested & validated	35%	NA
			-
4	Procedures for the use of AMAN function implemented, i.e. in operational use	25%	NA
			-
ATC15.1-ASP04	Train operational and technical staff and update Training Plans		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Training ongoing	40%	NA
			-
3	Training completed	50%	NA
			-

ATC15.2	Arrival Management Extended to En-route Airspace (Outside Applicability Area) <u>Timescales:</u> - not applicable -	%	Not Applicable
Links to OI Steps: TS-0305-A [E] Links to ICAO ASBUs: B1-RSEQ Links to DP Families: 1.1.2 - AMAN Upgrade to include Extended Horizon function			
So far, there is no operational need for implementation of Arrival Management to be extended to en-route airspace.			-
ASP (By:12/2023)			
M-NAV		%	Not Applicable
So far, there is no operational need for implementation of Arrival Management to be extended to en-route airspace.			-
ATC15.2-ASP01	Upgrade ATC systems to support extended AMAN		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	New/upgraded ATC systems supporting extended AMAN procured	30%	N
			-
3	New/upgraded ATC systems supporting extended AMAN installed	60%	N
			-
ATC15.2-ASP02	Implement ATC procedures to support extended AMAN		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Procedures to support extended AMAN drafted	30%	N
			-
3	Procedures to support extended AMAN agreed, tested & validated	35%	N
			-
4	Procedures to support extended AMAN implemented	25%	N
			-
ATC15.2-ASP03	Develop, and deliver as necessary, a safety assessment		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Safety Assessment drafted	30%	N
			-
3	Safety Assessment delivered to the competent authority	60%	N
			-
ATC15.2-ASP04	Establish Bilateral agreements		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Bilateral arrangements (LoA or MoU) with concerned neighbouring ACCs drafted	30%	N
			-
3	Bilateral arrangements (LoA or MoU) with concerned neighbouring ACCs signed	60%	N
			-
ATC15.2-ASP05	Ensure that all operational personnel concerned is adequately trained		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Training ongoing	40%	N
			-
3	Training completed	50%	N

ATC16	Implement ACAS II compliant with TCAS II change 7.1 <u>Timescales:</u> Initial operational capability: 01/03/2012 Full operational capability: 31/12/2015	100%	Completed
Links to Enablers: PRO-AC-21 Links to ICAO ASBUs: B0-ACAS			
See comments at stakeholder level.			31/12/2016
REG (By:12/2015)			
CAA		100%	Completed
-	-		31/12/2016
ATC16-REG01	Supervise compliance with regulatory provisions		by:31/12/2015
CAA	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2016
2	Ensure that all concerned aircraft in the State of Registry under its oversight are equipped with certified ACAS II equipment	30%	Y 31/12/2016
3	Ensure that these ACAS II equipment have received airworthiness certificate, in compliance with applicable EASA certification material	30%	Y 31/12/2016
4	Ensure that all concerned aircraft operators in the State of Registry under its oversight have received an operational approval in compliance with applicable EASA material	30%	Y 31/12/2016
ATC16-REG02	Provide airworthiness certification		by:31/12/2015
CAA	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2016
2	Provide percentage of aircraft in the State of Registry under its responsibility having received airworthiness certification for ACAS II (TCAS 7.1) (use the overwrite percentage box)	90%	Y 31/12/2016
ATC16-REG03	Deliver operational approval for ACAS II version 7.1 equipped aircraft		by:31/12/2015
CAA	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2016
2	Provide percentage of applicable aircraft having received operational approval for ACAS II version 7.1 (use the overwrite percentage box)	90%	Y 31/12/2016
ASP (By:03/2012)			
M-NAV		100%	Completed
The training has been completed during the refresher ATC course at the end of 06/2012. A monitoring system of the performance of ACAS in the ATC environment has been established in 12/2012			31/12/2012
ATC16-ASP01	Train controllers		by:01/03/2012
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y -
2	Training ongoing	40%	Y -
3	Training completed	50%	Y 30/06/2012

ATC16-ASP02	Establish ACAS II (TCAS II version 7.1) performance monitoring		by:01/03/2012
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 01/03/2012
2	System/upgrade procured, if necessary	30%	Y 01/03/2012
3	Procedures for implementing a monitoring system of the performance of ACAS in the ATC environment, by means of regular incident occurrence reporting, investigation and analysis, have been drafted	35%	Y 01/03/2012
4	Procedures/system for monitoring the performance of ACAS in the ATC environment, by means of regular incident occurrence reporting, investigation and analysis, are in use	25%	Y 31/12/2012
MIL (By:12/2015)			
Mil. Authority		%	Not Applicable
No State aircraft fulfil the criteria for equipage.		-	-
ATC16-MIL01	Equip and put into service transport-type aircraft with ACAS II (TCAS II version 7.1) capability		by:31/12/2015
Mil. Authority	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA -
2	Provide percentage of applicable service transport-type aircraft equipped with ACAS II (TCAS 7.1) (use the overwrite percentage box)	90%	NA -
ATC16-MIL02	Train aircrews of tactical aircraft (not ACAS II equipped)		by:31/03/2012
Mil. Authority	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA -
2	Training ongoing	40%	NA -
3	Training completed	50%	NA -

ATC17	Electronic Dialogue as Automated Assistance to Controller during Coordination and Transfer <u>Timescales:</u> Initial operational capability: 01/01/2013 Full operational capability: 31/12/2018	26%	Late
Links to OI Steps: CM-0201 Links to DP Families: 3.2.1 - Upgrade of ATM systems (NM, ANSPs, AUs) to support Direct Routings (DCTs) and Free Routing Airspace (FRA)			
Will be part of the new ATM system, planned to be operational by 31/12/2021			31/12/2021
ASP (By:12/2018)			
M-NAV		26%	Late
Will be part of the new ATM system, planned to be operational by 31/12/2021		New ATM System Project / New ATM System Project	31/12/2021
ATC17-ASP01	Develop safety assessment for the changes		by:31/12/2018
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 15/01/2014
Comment: The safety assessment of the new ATM system is going along with the procurement, following the whole cycle. The electronic dialogue is part of the whole procurement for the new ATM system, so it is part of the safety assessment for the change.			
2	Safety assessment drafted	30%	Y 01/10/2012
Comment: FHA and PSSA for the new ATM system has been produced.			
3	Safety assessment delivered to the competent authority	60%	Y 01/10/2012
Comment: FHA and PSSA for the new ATM system has been approved by the CAA.			
ATC17-ASP02	Upgrade and put into service ATC system to support the Basic procedure (specifically PAC and COD)		by:31/12/2018
M-NAV	Skopje ACC	10%	Late
Comment: Will be part of the new ATM system, should be implemented by 31/12/2021			
1	Project/task to implement ATC System to support OLDI Basic Procedures (specifically PAC and COD) has been kicked off	10%	Y 15/01/2014
Comment: Will be part of the new ATM system.			
2	ATC System to support OLDI Basic Procedures (specifically PAC and COD) has been procured	30%	N 31/12/2021
3	ATC System to support OLDI Basic Procedures (specifically PAC and COD) has been installed	35%	N 31/12/2021
4	ATC System to support Basic Procedures (specifically PAC and COD) is used operationally	25%	N 31/12/2021

ATC17-ASP03	Upgrade and put into service ATC system to support electronic dialogue procedure in Transfer of communication process		by:31/12/2018
M-NAV	Skopje ACC	10%	Late
Comment:	Electronic dialogue procedure in transfer of communication process will be part of the new ATM system, should be introduced by 31/12/2021		
1	Project/task to implement ATC System to support electronic dialogue procedure in Transfer of communication process (ROF, COF, TIM, HOP, MAS and SDM) has been kicked off	10%	Y
			31/12/2021
Comment:	Planned to be part of the new ATM system.		
2	ATC System to support electronic dialogue procedure in Transfer of communication process (ROF, COF, TIM, HOP, MAS and SDM) has been procured	30%	N
			31/12/2021
3	ATC System to support electronic dialogue procedure in Transfer of communication process (ROF, COF, TIM, HOP, MAS and SDM) have been installed	35%	N
			31/12/2021
4	ATC System to support electronic dialogue procedure in Transfer of communication process (ROF, COF, TIM, HOP, MAS and SDM) is used operationally	25%	N
			31/12/2021
ATC17-ASP04	Upgrade and put into service ATC system to support electronic dialogue procedure in Coordination process		by:31/12/2018
M-NAV	Skopje ACC	10%	Late
Comment:	Electronic dialogue procedure in coordination process will be part of the new ATM system, planned for implementation 15.04.2019		
1	Project/task to implement ATC System to support electronic dialogue procedure in coordination process (RAP, RRV, CDN, ACP, RJC and SBY) has been kicked off	10%	Y
			15/01/2014
Comment:	Planned to be part of the new ATM system.		
2	ATC System to support electronic dialogue procedure in coordination process (RAP, RRV, CDN, ACP, RJC and SBY) have been procured	30%	N
			31/12/2021
3	ATC System to support electronic dialogue procedure in coordination process (RAP, RRV, CDN, ACP, RJC and SBY) have been installed	35%	N
			31/12/2021
4	ATC System to support electronic dialogue procedure in coordination process (RAP, RRV, CDN, ACP, RJC and SBY) is used operationally	25%	N
			31/12/2021
ATC17-ASP05	Train ATC staff for applying electronic dialogue procedure		by:31/12/2018
M-NAV	Skopje ACC / Skopje TMA	0%	Late
Comment:	The training of the ATC staff shall be conducted after the SAT of the new system, and it shall be planned accordingly.		
1	Activity started (e.g. Project kicked-off)	10%	N
			31/12/2021
Comment:	The training of the ATC staff shall be conducted after the SAT of the new system, and it shall be planned accordingly.		
2	Training ongoing	40%	N
			31/12/2021
3	Training completed	50%	N
			31/12/2021

ATC18	Multi-Sector Planning En-route - 1P2T <i>Applicability and timescale: Local</i>	0%	Planned
Planned to be implemented in Skopje ACC, through the whole FIR. Planned to be implemented on all 6 sectors, but with only 2 planning positions. (1 planning controller per 3 sectors). Maximum available positions is 8. Planned as a capability with the new ATM system, however, the availability of this configuration will be additionally assessed, taking into account the features of the new ATM system, the increase and the complexity of the traffic.			31/12/2021

ATC19	Enhanced AMAN-DMAN integration <i>Applicability and timescale: Local</i>	%	Not Applicable
Skopje has no needs, not a busy airport.			-

ATC20	Enhanced STCA with down-linked parameters via Mode S EHS <i>Applicability and timescale: Local</i>	0%	Not yet planned
Still under investigation.			-

COM10	Migrate from AFTN to AMHS <u>Timescales:</u> Initial operational capability: 01/12/2011 Full operational capability: 31/12/2018	44%	Late
Links to Enablers: CTE-C06c			
M-NAV has implemented the EUROCONTROL Communication Gateway (ECG), which replaced the previous AFTN system. ECG as a means of AMHS compliance satisfies the AFS requirements for Macedonia. Regarding ICAO requirements migration of OPMET Data Exchange of Traditional Alphanumeric Code to IWXXM, M-NAV plans to upgrade existing AFTN/AMHS switch with basic services to AFTN/AMHS with extended services. The deadline for implementation is April 2021.			31/12/2020
ASP (By:12/2018)			
M-NAV		44%	Late
M-NAV has implemented the EUROCONTROL Communication Gateway (ECG), which replaced the previous AFTN system.			31/12/2020
COM10-ASP01	Implement AMHS capability (Basic ATSMHS) and gateway facilities to AFTN		by:31/12/2011
M-NAV	-	75%	Late
1	Project/task to upgrade the existing COM centres to provide basic AMHS capability has been kicked off	10%	Y 01/12/2011
2	Basic AMHS functions procured	30%	Y 01/12/2011
3	Basic AMHS functions installed	35%	Y 01/12/2011
4	Basic AMHS functions tested, validated & in operational use	25%	N 31/12/2020
Comment: M-NAV has implemented the EUROCONTROL Communication Gateway (ECG), which replaced the previous AFTN system. ECG as a means of AMHS compliance satisfies the AFS requirements for Macedonia. Currently there are 3 AFTN communication links with 3 neighboring ATC centers. As soon as we upgrade the existing AMHS to extended services, we are going to establish AMHS with neighboring centers and perform test & validity.			
COM10-ASP02	Implement regional boundary gateways		by:31/12/2011
M-NAV	-	%	Not Applicable
Comment: Macedonia is not a boundary state in EUR region			
1	Activity started (e.g. Project kicked-off)	10%	NA -
2	Interfaces to non-European AFTN and to AMHS network outside the EUR Region procured	30%	NA -
3	Interfaces to non-European AFTN and to AMHS network outside the EUR Region installed	35%	NA -
4	Interfaces to non-European AFTN and to AMHS network outside the EUR Region tested, validated & in operational use	25%	NA -
Comment: Macedonia is not a boundary state in EUR region			

COM10-ASP03	Enhance AMHS capability (Extended ATSMHS)		by:31/12/2018
M-NAV	-	0%	Late
Comment:	Regarding ICAO requirements migration of OPMET Data Exchange of Traditional Alphanumeric Code to IWXXM, M-NAV plan to upgrade existing AFTN/AMHS switch with basic services to AFTN/AMHS with extended services. The deadline for implementation is April 2020.		
1	Project/task for enhancing AMHS capability has kicked off	10%	N 31/12/2020
Comment:	initial requirements for upgrade the existing AMHS to extended services		
2	Extended AMHS functions procured	30%	N 31/12/2020
3	Extended AMHS functions installed	35%	N 31/12/2020
4	Extended AMHS functions tested, validated & in operational use	25%	N 31/12/2020
Comment:	Extended ATSMHS has to be installed, test and verified prior November 2020.		
COM10-ASP04	Ensure the conformity of AMHS systems and associated procedures		by:31/12/2018
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA -
2	AMHS systems conformity documentation and associated procedures drafted	30%	NA -
3	AMHS declaration of verification is submitted to NSA	60%	NA -
COM10-ASP05	Organise personnel awareness and training		by:31/12/2018
M-NAV	-	0%	Late
Comment:	When the new equipment with AMHS extended services is going to be procured, so the training will be organized.		
1	Activity started (e.g. Project kicked-off)	10%	N 31/12/2020
2	Training of personnel ongoing	40%	N 31/12/2020
3	Training of personnel completed	50%	N 31/12/2020
Comment:	Personnel training organised.		
COM10-ASP06	Participate in AMC activities for ATS Messaging Management		by:31/12/2018
M-NAV	-	100%	Completed
Comment:	on-going activity		
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2017
2	AMC Procedures for Cooperating COM Centres (CCC) operators have been implemented as defined in the ATS Messaging Management Manual	90%	Y 31/12/2017
Comment:	on-going activity		

COM11.1	Voice over Internet Protocol (VoIP) in En-Route Timescales: Initial operational capability: 01/01/2013 Full operational capability: 31/12/2021	40%	Ongoing
Links to DP Families: 3.1.4 - Management of dynamic airspace configurations, 3.2.1 - Upgrade of ATM systems (NM, ANSPs, AUs) to support Direct Routings (DCTs) and Free Routing Airspace (FRA)			
Planned with the new communication system.			30/06/2021
ASP (By:12/2021)			
M-NAV		40%	Ongoing
Planned with the new communication system.		VoIP	30/06/2021
COM11.1-ASP01	Develop safety assessment for the changes		by:31/12/2021
M-NAV	Skopje ACC / Skopje TMA	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 08/06/2015
Comment: Project kick off			
2	Safety assessment conducted and relevant documentation drafted	30%	Y 01/12/2015
Comment: FHA was conducted for the new VCS system			
3	Safety assessment documentation approved and submitted to NSA	60%	Y 01/12/2015
Comment: FHA submitted and approved by CAA.			
COM11.1-ASP03	Upgrade and put into service Voice Communication Systems to support VoIP inter-centre telephony		by:31/12/2021
M-NAV	Skopje ACC / Skopje TMA	10%	Ongoing
Comment: The process of procuring the new VCS system to support VOIP is currently in progress. Re-tendering procedure is in progress. The implementation planned Q1, 2021.			
1	Project/task for upgrading or buying a new VCS to support VoIP inter-centre telephony has kicked off	10%	Y 08/06/2015
Comment: Project kick off			
2	Upgrade or new Voice Communication System procured	30%	N 31/10/2020
Comment: The process for procurement is underway.			
3	Upgrade or new Voice Communication System installed	35%	N 01/04/2021
4	Upgrade or new Voice communication system tested, validated & in operation use	25%	N 30/06/2021
COM11.1-ASP04	Upgrade and put into service Voice Communication Systems to support VoIP links to the ground radio stations		by:31/12/2021
M-NAV	Skopje ACC / Skopje TMA	10%	Ongoing
Comment: The new GRS with VoIP capability is in progress, planned for implementation 07/2020.			
1	Project/task for upgrading or buying a new VCS to support VoIP links to the ground radio stations has kicked off	10%	Y 08/06/2015
2	Upgrade or new Voice Communication System procured	30%	N 30/06/2021
Comment: Procurement is underway.			
3	Voice Communication System installed	35%	N 30/06/2021
4	Voice communication system tested, validated & in operation use	25%	N 30/06/2021

COM11.2	Voice over Internet Protocol (VoIP) in Airport/Terminal <u>Timescales:</u> Initial operational capability: 01/01/2013 Full operational capability: 31/12/2023	%	Not Applicable
Links to Enablers: CTE-C05a, CTE-C05b			
TMA and airport terminal do not need VoIP. Communication limited to adjacent Skopje ACC.			-
ASP (By:12/2023)			
M-NAV		%	Not Applicable
-	VoIP		-
COM11.2-ASP01	Develop safety assessment for the changes		by:31/12/2023
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Document drafted	30%	N
			-
3	Document approved/released	60%	N
			-
COM11.2-ASP03	Upgrade and put into service Voice Communication Systems to support VoIP inter-centre telephony		by:31/12/2023
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	System/Function procured	30%	N
			-
3	System/Function tested & validated	35%	N
			-
4	System/Function deployed & available for operational use	25%	N
			-
COM11.2-ASP04	Upgrade and put into service Voice Communication Systems to support VoIP links to the ground radio stations		by:31/12/2023
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	System/Function procured	30%	N
			-
3	System/Function tested & validated	35%	N
			-
4	System/Function deployed & available for operational use	25%	N
			-

COM12	New Pan-European Network Service (NewPENS) <u>Timescales:</u> Initial operational capability: 01/01/2018 Full operational capability (33 ANSPs): 31/12/2020	25%	Ongoing
Links to Enablers: CTE-C06b Links to ICAO ASBUs: B1-SWIM Links to DP Families: 5.1.2 - NewPENS: New Pan-European Network Service, 5.2.1 - Stakeholders Internet Protocol Compliance			
-			31/12/2020
ASP (By:12/2024)			
M-NAV		25%	Ongoing
M-NAV participates in NEW PENS procurement process and plans to connect to NEW PENS.			31/12/2020
COM12-ASP01	Provide NewPENS connectivity infrastructure		by:31/12/2020
M-NAV	-	40%	Ongoing
Comment: Equipment for connection to NewPENS is procured,			
1	Project/task for deploying NewPENS connectivity infrastructure has kicked off	10%	Y 01/01/2018
2	NewPENS connectivity infrastructure is procured	30%	Y 31/12/2020
Comment: Procurement for the infrastructure is completed.			
3	NewPENS connectivity infrastructure is installed	35%	N 31/12/2020
4	NewPENS connectivity infrastructure is tested, validated & available for use	25%	N 31/12/2020
COM12-ASP02	Migrate to NewPENS		by:31/12/2020
M-NAV	-	10%	Ongoing
Comment: The migration depends on the implementation of new (IP capable) systems. The new ATM system will be available in 2021.			
1	Activity started (e.g. Project kicked-off)	10%	Y 01/01/2018
2	Migration Plan to NewPENS developed	30%	N 31/12/2020
3	Migration to NewPENS ongoing	35%	N 31/12/2020
4	Migration to NewPENS completed	25%	N 31/12/2020
APO (By:12/2024)			
SKOPJE Airport		%	Not Applicable
-			-
COM12-APO01	Migrate to NewPENS, if deemed beneficial		by:31/12/2024
SKOPJE Airport	-	%	Not Applicable
Comment: There is no operational need for migration to NewPENS.			
1	Activity started (e.g. Project kicked-off)	10%	N -
2	Migration Plan to NewPENS developed	30%	N -
3	Migration to NewPENS ongoing	35%	N -
4	Migration to NewPENS completed	25%	N -

ENV01	Continuous Descent Operations (CDO) <u>Timescales:</u> - not applicable -	0%	Not yet planned
Links to OI Steps: AOM-0701, AOM-0702-A Links to ICAO ASBUs: B0-CDO, B1-CDO			
LWSK - Skopje Airport (Outside Applicability Area)			
In the following months, depending on the availability of resources, M-NAV will elaborate and analyze further needs and requirements for applying CDO.			-
ASP (By:12/2023)			
M-NAV		0%	Not yet planned
-	-	-	-
ENV01-ASP01	Implement rules and procedures for the application of CDO techniques		by:-
M-NAV	-	%	Not yet planned
Comment: A managerial decision is expected in the following period regarding further actions for implementing CDO.			
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	CDO Rules & Procedures have been drafted	30%	NA
			-
3	CDO Rules & Procedures have been tested & validated	35%	NA
			-
4	CDO Rules & Procedures have been published in the local/State AIP	25%	NA
			-
ENV01-ASP02	Design and implement CDO procedures enabled by PBN		by:-
M-NAV	-	0%	Not yet planned
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	CDO Procedures enabled by PBN developed	30%	N
			-
3	CDO Procedures enabled by PBN tested & validated	35%	N
			-
4	CDO Procedures enabled by PBN published in AIP	25%	N
			-
ENV01-ASP03	Train controllers in the application of CDO techniques whenever practicable		by:-
M-NAV	-	%	Not yet planned
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	The training of Air traffic Controllers on the application of CDO techniques is ongoing	40%	NA
			-
3	The training of Air traffic Controllers on the application of CDO techniques has been completed	50%	NA
			-
ENV01-ASP04	Monitor and measure the execution of CDO		by:-
M-NAV	-	0%	Not yet planned
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Procedures for monitoring and measurement of CDO execution drafted	30%	N
			-
3	Procedures for monitoring and measurement of CDO execution tested & validated	35%	N
			-
4	Procedures for monitoring and measurement of CDO execution in operational use	25%	N
			-

APO (By:12/2023)			
SKOPJE Airport		%	Not Applicable
-			-
ENV01-APO01	Monitor and measure the execution of CDO		by:-
SKOPJE Airport	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	CDO Procedures are supported by the Airport Operator	40%	NA
			-
3	A monitoring and performance measurement process, including a feedback process to the ANSP and users has been established	25%	NA
			-
4	A main link with the local community, including information sessions is available	25%	NA
			-

ENV02	Airport Collaborative Environmental Management <i>Applicability and timescale: Local</i>	50%	Ongoing
LWSK - Skopje Airport			
<p>The airport Safety Committee, regarding the impact on the environment, from the ATC landing and departure procedures, performs regular measurements and monitoring twice a year of the noise on two referent points on the Airport Skopje. The first being the Aerodrome Reference Point, and the second is at the begging of the threshold.</p> <p>Delayed to 31/12/2020.</p>			31/12/2020

ENV03	Continuous Climb Operations (CCO) <i>Applicability and timescale: Local</i>	%	Not Applicable
LWOH - OHRID			
No operational need exist for CCO in Ohrid.			-

ENV03	Continuous Climb Operations (CCO) <i>Applicability and timescale: Local</i>	0%	Not yet planned
LWSK - Skopje Airport			
After the adoption of the PBN Implementation Plan, the relevant procedures for application of CCO will be assessed.			-

FCM01	Implement enhanced tactical flow management services <u>Timescales:</u> Initial operational capability: 01/08/2001 Full operational capability: 31/12/2006	28%	Late
Links to OI Steps: IS-0102 Links to ICAO ASBUs: B0-NOPS			
The provision of correlated surveillance data to ETFMS and implementation of FSA will be part of the new ATM system, planned to be operational by 31/12/2021.			31/12/2021
ASP (By:07/2014)			
M-NAV		28%	Late
M-NAV decided to procure a new ATM system, which is required for ARTAS implementation, and FDPS upgrade. Will be part of the new ATM system, planned to be operational by 31/12/2021.			31/12/2021
FCM01-ASP01	Supply ETFMS with Basic Correlated Position Data		by:31/12/2004
M-NAV	Skopje ACC	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
2	System/upgrade procured	30%	NA
3	ATC system is capable of automatically supplying ETFMS with Basic Correlated Position Data	35%	NA
4	Reception by NM of Basic Correlated Position Data has been ensured	25%	NA
FCM01-ASP02	Supply ETFMS with Standard Correlated Position Data		by:31/12/2006
M-NAV	Skopje ACC	10%	Late
Comment: Planned as part of the new ATM system.			
1	Activity started (e.g. Project kicked-off)	10%	Y 15/04/2016
2	System/upgrade procured	30%	N -
3	ATC system is capable of automatically supplying ETFMS with Standard Correlated Position Data	35%	N -
4	Reception by NM of Standard Correlated Position Data has been ensured	25%	N 31/12/2021
FCM01-ASP03	Receive and process ATFM data from the NM		by:31/12/2001
M-NAV	Skopje ACC	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y -
2	System/upgrade procured	30%	Y -
3	ATC system is capable of receiving and processing ATFM data from the NM	35%	Y -
4	Capability to receive and process ATFM data from the NM is used in operations	25%	Y 31/12/1999
FCM01-ASP04	Inform NM of flight activations and estimates for ATFM purposes		by:31/12/1999
M-NAV	Skopje ACC	10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y 15/05/2016
2	System/upgrade procured	30%	N -
3	ATC system is capable of automatically informing NM of flight activations and estimates for ATFM purposes	35%	N -
4	Reception by NM of FSA messages for flight activations and estimates for ATFM purposes has been ensured	25%	N 31/12/2021

FCM01-ASP06	Inform NM of re-routings inside FDPA for ATFM purposes		by:31/12/2006
M-NAV	Skopje ACC	10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y 31/07/2014
2	System/upgrade procured	30%	N -
3	ATC system is capable of automatically informing NM of re-routings inside FDPA for ATFM purposes	35%	N -
4	Reception by NM of FSA messages for re-routings inside FDPA for ATFM purposes has been ensured	25%	N 31/12/2021
FCM01-ASP07	Inform NM of aircraft holding for ATFM purposes		by:31/12/2006
M-NAV	Skopje ACC	10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y 31/07/2014
2	System/upgrade procured	30%	N -
3	ATC system is capable of automatically informing NM of aircraft holding for ATFM purposes	35%	N -
4	Reception by NM of FSA messages for aircraft holding for ATFM purposes has been ensured	25%	N 31/12/2021
FCM01-ASP08	Supply NM with Departure Planning Information (DPI)		by:04/07/2014
M-NAV	Skopje ACC	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA -
2	System/upgrade procured	30%	NA -
3	ATC system capable of supplying NM with Departure Planning Information (DPI)	35%	NA -
4	Reception by NM of Departure Planning Information (DPI) has been ensured	25%	NA -

FCM03	Collaborative Flight Planning <u>Timescales:</u> Initial operational capability: 01/01/2000 Full operational capability: 31/12/2017	34%	Late
Links to OI Steps: IS-0102 Links to ICAO ASBUs: B0-NOPS Links to DP Families: 4.2.3 - Interface ATM systems to NM systems			
Will be part of the new ATM system, planned to be operational by 31/12/2021.			31/12/2021
ASP (By:12/2017)			
M-NAV		34%	Late
Will be part of the new ATM system, planned to be operational by 31/12/2021.			31/12/2021
FCM03-ASP01	Provide flight plan message processing in ICAO format		by:31/12/1995
M-NAV	Skopje ACC	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/1995
2	System/upgrade procured	30%	Y 31/12/1995
3	ATC system is capable of automatically processing flight plan messages in ICAO format	35%	Y 31/12/1995
4	Capability to automatically process flight plan messages in ICAO format is used in operation	25%	Y 31/12/1995
FCM03-ASP02	Automatically process FPLs derived from RPLs		by:31/12/1995
M-NAV	Skopje ACC	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/1995
2	System/upgrade procured	30%	Y 31/12/1995
3	ATC system is capable of receiving and automatically processing IFPS output derived from RPL to suppress the need for RPL bulk-output from IFPS	35%	Y 31/12/1995
4	Capability to automatically process FPLs derived from RPLs is used in operations	25%	Y 31/12/1995
FCM03-ASP03	Provide flight plan message processing in ADEXP format		by:31/12/2012
M-NAV	Skopje ACC	0%	Late
1	Activity started (e.g. Project kicked-off)	10%	N 31/12/2021
Comment: Project for the procurement and installation of the new ATM system has been launched.			
2	System/upgrade procured	30%	N 31/12/2021
3	ATC system is able to receive and process flight plan data from IFPS in ADEXP format	35%	N 31/12/2021
4	Capability to receive and process flight plan data in ADEXP format is used in operations	25%	N 31/12/2021
FCM03-ASP04	Processing of APL and ACH messages		by:31/12/1999
M-NAV	Skopje ACC	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/1999
2	System/upgrade procured	30%	Y 31/12/1999
3	ATC system capable of automatically processing real-time updates to flight plan information as provided by IFPS via APL and ACH messages	35%	Y 31/12/1999
4	Capability to automatically process APL and ACH messages is used in operations	25%	Y 31/12/1999

FCM03-ASP05	Automatically provide AFP for missing flight plans		by:31/12/2017
M-NAV	Skopje ACC	10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y 15/01/2014
2	System/upgrade procured	30%	N 31/12/2021
3	ATC system is able to automatically generate AFP messages for missing flight plans	35%	N 31/12/2021
4	Reception by NM of automatically generated AFP messages for missing flight plans has been ensured	25%	N 31/12/2021
FCM03-ASP06	Automatically provide AFP message for change of route		by:31/12/2017
M-NAV	Skopje ACC	10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y 15/01/2014
2	System/upgrade procured	30%	N 31/12/2021
3	ATC system is able to automatically generate AFP messages for change of route	35%	N 31/12/2021
4	Reception by NM of automatically generated AFP messages for change of route has been ensured	25%	N 31/12/2021
FCM03-ASP07	Automatically provide AFP message for a diversion		by:31/12/2017
M-NAV	Skopje ACC	10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y 15/01/2014
2	System/upgrade procured	30%	N 31/12/2021
3	ATC system is able to automatically generate AFP messages for diversion	35%	N 31/12/2021
4	Reception by NM of automatically generated AFP messages for diversion has been ensured	25%	N 31/12/2021
FCM03-ASP08	Automatically provide AFP message for a change of flight rules or flight type		by:31/12/2017
M-NAV	Skopje ACC	10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y 15/01/2014
2	System/upgrade procured	30%	N 31/12/2021
3	ATC system is able to automatically generate AFP messages for change of flight rules or flight type	35%	N 31/12/2021
4	Reception by NM of automatically generated AFP messages for change of flight rules or flight type has been ensured	25%	N 31/12/2021
FCM03-ASP09	Automatically provide AFP message for a change of requested cruising level		by:31/12/2017
M-NAV	Skopje ACC	10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y 15/01/2014
2	System/upgrade procured	30%	N 31/12/2021
3	ATC system is able to automatically generate AFP messages for change of requested cruising level	35%	N 31/12/2021
4	Reception by NM of automatically generated AFP messages for change of requested cruising level has been ensured	25%	N 31/12/2021

FCM03-ASP13	Automatically provide AFP message for change of aircraft type		by:31/12/2017
M-NAV	Skopje ACC	10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y 15/01/2014
2	System/upgrade procured	30%	N 31/12/2021
3	ATC system is able to automatically generate AFP messages for change of aircraft type	35%	N 31/12/2021
4	Reception by NM of automatically generated AFP messages for change of aircraft type has been ensured	25%	N 31/12/2021
FCM03-ASP14	Automatically provide AFP message for change of aircraft equipment		by:31/12/2017
M-NAV	Skopje ACC	10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y 15/01/2014
2	System/upgrade procured	30%	N 31/12/2021
3	ATC system is able to automatically generate AFP messages for change of aircraft equipment	35%	N 31/12/2021
4	Reception by NM of automatically generated AFP messages for change of aircraft equipment has been ensured	25%	N 31/12/2021

FCM04.2	Short Term ATFCM Measures (STAM) - Phase 2 <u>Timescales:</u> Full operational capability: 31/12/2021		5%	Ongoing
Links to OI Steps: DCB-0308 [E] Links to Enablers: ER APP ATC 17 Links to DP Families: 4.1.2 - STAM Phase 2				
Currently there is no operational need for STAM P2. However, the new system will have the capability to support STAM P2. The new system is planned to be operational 31/12/2021				31/12/2021
ASP (By:12/2021)				
M-NAV			5%	Ongoing
Currently there is no operational need for STAM P2. However, the new system will have the capability to support STAM P2.				31/12/2021
FCM04.2-ASP01	Develop STAM procedures and upgrade the local systems			by:-
M-NAV	-		%	Not Applicable
Comment: Currently there is no operational need for STAM P2. However the new system will have the capability to support STAM P2 using the NM tool. The new system is planned to be operational 31/12/2021.				
1	Activity started (e.g. Project kicked-off)	10%	NA	
			-	
2	Upgrade the local STAM systems has been procured	30%	NA	
			-	
3	Upgrade the local STAM systems has been installed	35%	NA	
			-	
4	Local STAM system tested, validated and in operational use	25%	NA	
			-	
FCM04.2-ASP02	Use of STAM phase 2			by:-
M-NAV	-		10%	Ongoing
Comment: Currently there is no operational need for STAM P2. However the new system will have the capability to support STAM P2 using the NM tool. The new system is planned to be operational 31/12/2021.				
1	Activity started (e.g. Project kicked-off)	10%	Y	
			15/06/2016	
2	STAM phase 2 procedures agreed, tested & validated	65%	N	
			-	
3	STAM phase 2 procedures are in operational use	25%	N	
			31/12/2021	
FCM04.2-ASP03	Train the personnel			by:-
M-NAV	-		0%	Planned
1	Activity started (e.g. Project kicked-off)	10%	N	
			-	
2	Training ongoing	40%	N	
			-	
3	Training completed	50%	N	
			31/12/2021	

FCM05	Interactive Rolling NOP (Outside Applicability Area) <u>Timescales:</u> - not applicable -	%	Not Applicable
Links to OI Steps: DCB-0102, DCB-0103-A [E] Links to ICAO ASBUs: B1-ACDM, B1-NOPS Links to DP Families: 4.2.2 - Interactive Rolling NOP, 4.2.4 - AOP/NOP information sharing			
M-NAV has no need and no plans to deploy LARA in a near future therefore the AIXM 5.1 interface is not applicable. AOP is not being implemented at Skopje Airport therefore there is no need for integration into the NOP			-
ASP (By:12/2021)			
M-NAV		%	Not Applicable
-	-		-
FCM05-ASP04	Develop and implement ATFCM procedures for interaction with the NOP		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	ATFCM procedures related to interaction with the NOP drafted	30%	N
			-
3	ATFCM procedures related to interaction with the NOP agreed, tested & validated	35%	N
			-
4	ATFCM procedures related to interaction with the NOP implemented	25%	N
			-
FCM05-ASP05	Train the relevant personnel for interaction with the NOP		by:-
M-NAV	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Training ongoing	40%	N
			-
3	Training completed	50%	N
			-
APO (By:12/2021)			
SKOPJE Airport		%	Not Applicable
-	-		-
FCM05-APO01	Provide the required data to the Network Manager for DDR		by:-
SKOPJE Airport	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	Airport slot information provided to DDR	90%	NA
			-
FCM05-APO02	Perform the integration of the AOP with the NOP		by:-
SKOPJE Airport	Skopje Airport	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	System allowing the exchange of information between the AOP and the NOP procured	30%	NA
			-
3	System allowing the exchange of information between the AOP and the NOP tested & validated	35%	NA
			-
4	System allowing the exchange of information between the AOP and the NOP deployed & available for operational use	25%	NA
			-

FCM06	Traffic Complexity Assessment <u>Timescales:</u> Full operational capability: 31/12/2021	10%	Ongoing
Links to OI Steps: CM-0101, CM-0103-A [E] Links to Enablers: NIMS-20 Links to DP Families: 4.4.2 - Traffic Complexity Tools			
Planned for implementation within the new ATM system			31/12/2021
ASP (By:12/2021)			
M-NAV		10%	Ongoing
Planned for implementation within the new ATM system			31/12/2021
FCM06-ASP01	Implement Local Traffic Load Management tool		by:-
M-NAV	Skopje ACC	10%	Ongoing
1	Activity started (e.g. Project kicked-off)	10%	Y 15/01/2014
Comment: Will be part of the new ATM system, planned to be operational by 31/12/2021			
2	Local Traffic Load Management tool procured	30%	N 31/12/2021
3	Local Traffic Load Management tool installed	60%	N 31/12/2021
FCM06-ASP02	Receive, process and integrate ETFMS Flight Data (EFD)		by:-
M-NAV	-	10%	Ongoing
1	Activity started (e.g. Project kicked-off)	10%	Y 15/01/2014
2	FDP adaptation to receive, process and integrate EFD procured	30%	N 31/12/2021
3	FDP adaptation to receive, process and integrate EFD installed	60%	N 31/12/2021
FCM06-ASP03	Implement Local Traffic Complexity tools and procedures		by:-
M-NAV	-	10%	Ongoing
1	Activity started (e.g. Project kicked-off)	10%	Y 15/01/2014
2	Procedures for the use of Traffic Complexity tools drafted	30%	N 31/12/2021
3	Procedures for the use of Traffic Complexity tools tested & validated	35%	N 31/12/2021
4	Procedures for the use of Traffic Complexity tools in operational use	25%	N 31/12/2021

FCM08	Extended Flight Plan <u>Timescales:</u> Initial operational capability: 01/01/2016 Full operational capability: 31/12/2021	0%	Not yet planned
Links to DP Families: 4.2.3 - Interface ATM systems to NM systems			
No Plan yet, pending evolution of the concept.			-
ASP (By:12/2021)			
M-NAV		0%	Not yet planned
No Plan yet, pending evolution of the concept			-
FCM08-ASP01	Upgrade the ground systems and develop the associated procedures.		by:31/12/2021
M-NAV	-	0%	Not yet planned
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Upgrade to ground systems enabling the reception and processing of EFPL information via FF-ICE/1 has been procured	30%	N
			-
3	Upgrade to ground systems enabling the reception and processing of EFPL information via FF-ICE/1 has been installed	35%	N
			-
4	Systems enabling the reception and processing of EFPL information via FF-ICE/1 have been tested, validated and are in operations	25%	N
			-
FCM08-ASP02	Develop, and deliver as necessary, a safety assessment		by:31/12/2021
M-NAV	-	0%	Not yet planned
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Safety Assessment drafted	30%	N
			-
3	Safety Assessment delivered to the competent authority	60%	N
			-

INF07	Electronic Terrain and Obstacle Data (eTOD) <u>Timescales:</u> Initial operational capability: 01/11/2014 Full operational capability: 31/05/2018	5%	Late
Links to Enablers: AIMS-16			
Links to DP Families: 1.2.2 - Geographic database for procedure design			
CAA still has to develop a regulatory framework and adopt a national TOD policy. Depending on the CAA's fulfilment of the obligations, M-NAV will develop a TOD implementation plan and act accordingly.			31/12/2022
REG (By:05/2018)			
CAA		0%	Late
CAA still has to develop a regulatory framework and adopt a national TOD policy.			31/05/2022
INF07-REG01	Establish National TOD policy		by:30/11/2015
CAA	-	0%	Late
Comment: CAA has Regulation on method for use, maintenance and control of an airport maneuvering areas, aprons, objects, installations, devices and equipment.			
1	Activity started (e.g. Project kicked-off)	10%	N 31/05/2022
2	National TOD policy and implementation programme coordinated with stakeholders and drafted	30%	N -
3	National TOD policy and implementation programme approved and established	60%	N -
Comment: To be considered in further period			
INF07-REG02	Establish TOD regulatory framework		by:31/12/2017
CAA	-	0%	Late
Comment: CAA has Regulation on method for use, maintenance and control of an airport maneuvering areas, aprons, objects, installations, devices and equipment.			
1	Activity started (e.g. Project kicked-off)	10%	N 31/05/2022
2	Development and updating of national rules and regulations affecting eTOD drafted, including the identification of aerodromes (area 2,3 and4) where TOD should be provided	30%	N -
3	TOD regulatory framework established, list of aerodromes included in EUR ANP/FASID and, where appropriate, changes to State legislation initiated	60%	N -
Comment: To be developed after the promulgation of the national TOD policy			
INF07-REG03	Establish oversight of TOD implementation		by:31/12/2017
CAA	-	0%	Late
Comment: CAA has Regulation on method for use, maintenance and control of an airport maneuvering areas, aprons, objects, installations, devices and equipment.			
1	Activity started (e.g. Project kicked-off)	10%	N 31/05/2022
2	Draft the plans and procedures to oversight the TOD implementation, in accordance with TOD Policy and framework	30%	N -
3	Plans and procedures agreed and approved, ready to initiate oversight	60%	N -
Comment: To be developed after the promulgation of the national TOD policy			

INF07-REG04	Verify the regulatory compliance of TOD implementation			by:31/05/2018
CAA	-		0%	Late
Comment:	CAA has Regulation on method for use, maintenance and control of an airport maneuvering areas, aprons, objects, installations, devices and equipment.			
1	Activity started (e.g. Project kicked-off)		10%	N
				31/05/2022
2	Initiation of the oversight in accordance with international TOD requirements and the regulatory framework		30%	N
				-
3	Approval of the reports and results coming from the verification and compliance		60%	N
				-
Comment:	To be developed after the promulgation of the national TOD policy			
ASP (By:05/2018)				
M-NAV			10%	Late
Depending on the CAA's fulfillment of the obligations, M-NAV will develop a TOD implementation plan and act accordingly.				31/12/2022
INF07-ASP01	Plan the required activities for the collection, management and provision of TOD in accordance with national TOD policy			by:30/11/2015
M-NAV	-		10%	Late
Comment:	CAA still has to develop a regulatory framework and adopt a national TOD policy. Depending on the CAA's fulfillment of the obligations, M-NAV will develop a TOD implementation plan and act accordingly.			
1	Activity started (e.g. Project kicked-off)		10%	Y
				31/12/2018
Comment:	In 2013, the first geodetic survey in accordance with the TOD manual have been performed and following data are available upon request: 1. Obstacle data for Area 2 and Area 3 for Skopje and Ohrid aerodrome. 2. Terrain data for Area 1 as provided by the National Geodetic Agency (national geodetic system only). As of 2017, the obstacle data for Area 1 (all manmade obstacles higher than 100m) is also available and is published in the AIP since March 2019. No plans are in place for Area 4 since there are no CAT II/III operations at either Skopje or Ohrid aerodrome.			
2	Plan/roadmap coordinated and drafted		30%	N
				31/12/2022
3	Plan/roadmap approved		60%	N
				31/12/2022

INF07-ASP02	Implement the collection, management and provision of TOD in accordance with the national TOD policy and regulatory framework		by:31/05/2018
M-NAV	-	10%	Late
<p>Comment: In 2013, the first geodetic survey in accordance with the TOD manual have been performed and following data are available upon request:</p> <ol style="list-style-type: none"> 1. Obstacle data for Area 2 and Area 3 for Skopje and Ohrid aerodrome. 2. Terrain data for Area 1 as provided by the National Geodetic Agency (national geodetic system only). <p>As of 2017, the obstacle data for Area 1 (all manmade obstacles higher than 100m) is also available and will be published in the AIP since March 2019.</p> <p>No plans are in place for Area 4 since there are no CAT II/III operations at either Skopje or Ohrid aerodrome.</p> <p>Terrain data for Area 2 and 3 are subject to a cost/benefit analysis.</p>			
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2018
<p>Comment: CAA still has to develop a regulatory framework and adopt a national TOD policy. Depending on the CAA's fulfillment of the obligations, M-NAV will develop a TOD implementation plan and act accordingly.</p>			
2	Identify the requirements and adjustments required to ensure the collection, management and provision of TOD	30%	N 31/12/2022
3	Requirements and adjustments implemented in accordance with national TOD and regulatory framework	60%	N 31/12/2022
APO (By:05/2018)			
SKOPJE Airport	-	10%	Late
Depending on the CAA's fulfillment of the obligations, LWSK will develop a TOD implementation plan and act accordingly.			31/12/2022
INF07-APO01	Plan the required activities for the collection, management and provision of TOD in accordance with national TOD policy		by:30/11/2015
SKOPJE Airport	-	10%	Late
Comment: waiting CAA regulation			
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2018
2	Plan/roadmap coordinated and drafted	30%	N 31/12/2022
3	Plan/roadmap approved	60%	N 31/12/2022
INF07-APO02	Implement the collection, management and provision of TOD in accordance with the national TOD policy and regulatory framework		by:31/05/2018
SKOPJE Airport	-	10%	Late
Comment: Depending on the CAA's fulfillment of the obligations, LWSK will develop a TOD implementation plan and act accordingly.			
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2018
2	Identify the requirements and adjustments required to ensure the collection, management and provision of TOD	30%	N 31/12/2022
3	Requirements and adjustments implemented in accordance with national TOD and regulatory framework	60%	N 31/12/2022

INF08.1	Information Exchanges using the SWIM Yellow TI Profile <u>Timescales:</u> - not applicable -	%	Not yet planned
Links to OI Steps: IS-0901-A [E], MET-0101 [E] Links to ICAO ASBUs: B1-DATM, B1-SWIM Links to DP Families: 5.1.3 - Common SWIM Infrastructure Components, 5.1.4 - Common SWIM PKI and Cybersecurity, 5.2.1 - Stakeholders Internet Protocol Compliance, 5.2.2 - Stakeholders SWIM Infrastructure Components, 5.2.3 - Stakeholders SWIM PKI and Cybersecurity, 5.3.1 - Upgrade/Implement Aeronautical Information Exchange System/Service, 5.4.1 - Upgrade/Implement Meteorological Information Exchange System/Service, 5.5.1 - Upgrade/Implement Cooperative Network Information Exchange System/Service, 5.6.1 - Upgrade/Implement Flight Information Exchange System/Service supported by Yellow Profile			
No plans for this implementation objective.			-
ASP (By:12/2024)			
M-NAV		%	Not yet planned
No plans for this implementation objective.			-
INF08.1-ASP01	Implement Aeronautical information exchanges		by:-
M-NAV	-	%	Not yet planned
Comment: No plans for this implementation objective.			
1	Activity started (e.g. Project kicked-off)	10%	-
2	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services were procured.	15%	-
3	Aeronautical Information exchanges were procured.	15%	-
4	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services are installed, tested, validated and in operational use.	20%	-
5	Aeronautical Information exchanges are installed, tested, validated and in operational use. Is the EUROCONTROL SWIM Registry used? Please indicate.	40%	-
INF08.1-ASP02	Implement Meteorological Information exchanges		by:-
M-NAV	-	%	Not yet planned
Comment: No plans for this implementation objective.			
1	Activity started (e.g. Project kicked-off)	10%	N
2	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services were procured.	15%	N
3	Meteorological Information exchanges were procured.	15%	N
4	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services are installed, tested, validated and in operational use.	20%	N
5	Meteorological Information exchanges are installed, tested, validated and in operational use. Is the EUROCONTROL SWIM Registry used? Please indicate.	40%	-

INF08.1-ASP03	Implement Cooperative Network information exchanges		by:-
M-NAV	-	%	Not yet planned
Comment: No plans for this implementation objective.			
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services were procured.	15%	N
			-
3	Cooperative Network Information exchanges were procured.	15%	N
			-
4	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services are installed, tested, validated and in operational use.	20%	N
			-
5	Cooperative Network Information exchanges are installed, tested, validated and in operational use. Is the EUROCONTROL SWIM Registry used? Please indicate.	40%	-
			-
INF08.1-ASP04	Implement Flight Information exchanges		by:-
M-NAV	-	%	Not yet planned
Comment: No plans for this implementation objective.			
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services were procured.	15%	N
			-
3	Flight Information exchanges were procured.	15%	N
			-
4	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services are installed, tested, validated and in operational use.	20%	N
			-
5	Flight Information exchanges are installed, tested, validated and in operational use. Is the EUROCONTROL SWIM Registry used? Please indicate.	40%	-
			-
MIL (By:12/2024)			
Mil. Authority		%	Not yet planned
No plans for this implementation objective.			
			-
INF08.1-MIL01	Implement Aeronautical information exchanges		by:-
Mil. Authority	-	%	Not yet planned
Comment: No plans for this implementation objective.			
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services were procured.	15%	N
			-
3	Aeronautical Information exchanges were procured.	15%	N
			-
4	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services are installed, tested, validated and in operational use.	20%	N
			-
5	Aeronautical Information exchanges are installed, tested, validated and in operational use. Is the EUROCONTROL SWIM Registry used? Please indicate.	40%	-
			-

INF08.1-MIL02	Implement Meteorological Information exchanges		by:-
Mil. Authority	-	%	Not yet planned
Comment: No plans for this implementation objective.			
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services were procured.	15%	N
			-
3	Meteorological Information exchanges were procured.	15%	N
			-
4	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services are installed, tested, validated and in operational use.	20%	N
			-
5	Meteorological Information exchanges are installed, tested, validated and in operational use. Is the EUROCONTROL SWIM Registry used? Please indicate.	40%	-
			-
INF08.1-MIL03	Implement Cooperative Network information exchanges		by:-
Mil. Authority	-	%	Not yet planned
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services were procured.	15%	N
			-
3	Cooperative Network Information exchanges were procured.	15%	N
			-
4	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services are installed, tested, validated and in operational use.	20%	N
			-
5	Cooperative Network Information exchanges are installed, tested, validated and in operational use. Is the EUROCONTROL SWIM Registry used? Please indicate.	40%	-
			-
INF08.1-MIL04	Implement Flight Information exchanges		by:-
Mil. Authority	-	%	Not yet planned
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services were procured.	15%	N
			-
3	Flight Information exchanges were procured.	15%	N
			-
4	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services are installed, tested, validated and in operational use.	20%	N
			-
5	Flight Information exchanges are installed, tested, validated and in operational use. Is the EUROCONTROL SWIM Registry used? Please indicate.	40%	-
			-

APO (By:12/2024)			
SKOPJE Airport		%	Not yet planned
No plans for this implementation objective.			-
INF08.1-APO01	Implement Aeronautical information exchanges		by:-
SKOPJE Airport	-	%	Not yet planned
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services were procured	15%	N
			-
3	Aeronautical Information exchanges were procured	15%	N
			-
4	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services are installed, tested, validated and in operational use	20%	N
			-
5	Aeronautical Information exchanges are installed, tested, validated and in operational use. Is the EUROCONTROL SWIM Registry used? Please indicate.	40%	-
INF08.1-APO02	Implement Meteorological Information exchanges		by:-
SKOPJE Airport	-	%	Not yet planned
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services were procured	15%	N
			-
3	Meteorological Information exchanges were procured	15%	N
			-
4	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services are installed, tested, validated and in operational use	20%	N
			-
5	Meteorological Information exchanges are installed, tested, validated and in operational use. Is the EUROCONTROL SWIM Registry used? Please indicate.	40%	-
INF08.1-APO03	Implement Cooperative Network information exchanges		by:-
SKOPJE Airport	-	%	Not yet planned
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services were procured	15%	N
			-
3	Cooperative Network Information exchanges were procured	15%	N
			-
4	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services are installed, tested, validated and in operational use	20%	N
			-
5	Cooperative Network Information exchanges are installed, tested, validated and in operational use. Is the EUROCONTROL SWIM Registry used? Please indicate	40%	-

INF08.1-APO04	Implement Flight Information exchanges		by:-
SKOPJE Airport	-	%	Not yet planned
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services were procured.	15%	N
			-
3	Flight Information exchanges were procured.	15%	N
			-
4	New/upgraded local infrastructure components supporting SWIM Yellow Profile exchange services are installed, tested, validated and in operational use.	20%	N
			-
5	Flight Information exchanges are installed, tested, validated and in operational use. Is the EUROCONTROL SWIM Registry used? Please indicate.	40%	-
			-

ITY-ACID	Aircraft Identification <u>Timescales:</u> Entry into force of the Regulation: 13/12/2011 System capability: 02/01/2020		3%	Late
Links to Enablers: GSURV-0101				
To be implemented in the new ATM system latest 31/12/2021				31/12/2021
ASP (By:01/2020)				
M-NAV			3%	Late
To be implemented in the new ATM system				31/12/2021
ITY-ACID-ASP01	Ensure the capability of the cooperative surveillance chain, to use the downlinked aircraft identification			by:02/01/2020
M-NAV	Skopje ACC		10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y	
			15/01/2014	
2	System procured (this milestones includes procurement of a new system or the upgrade of the existing one)	30%	N	
			31/12/2021	
3	System installed	35%	N	
			31/12/2021	
4	System tested, validated and in operational use	25%	N	
			31/12/2021	
ITY-ACID-ASP02	Organise personnel training and awareness			by:02/01/2020
M-NAV	Skopje ACC		0%	Late
1	Activity started (e.g. Project kicked-off)	10%	N	
			-	
2	Training ongoing	40%	N	
			31/12/2020	
3	Training completed	50%	N	
			31/12/2021	
ITY-ACID-ASP03	Develop, and deliver as necessary, a safety assessment of the changes imposed by the implementation of the capability allowing the establishment of the individual aircraft identification using the downlinked aircraft identification feature			by:02/01/2020
M-NAV	-		0%	Late
1	Activity started (e.g. Project kicked-off)	10%	N	
			31/12/2021	
2	Safety Assessment drafted	30%	N	
			-	
3	Safety Assessment delivered to the competent authority	60%	N	
			-	

ITY-ADQ	Ensure Quality of Aeronautical Data and Aeronautical Information <u>Timescales:</u> Entry into force of the regulation: 16/02/2010 Article 5(4)(a), Article 5(4)(b) and Article 6 to 13 to be implemented by: 30/06/2013 Article 4, Article5(1) and Article 5(2), Article 5(3) and Article 5(4)(c) to be implemented by: 30/06/2014 All data requirements implemented by: 30/06/2017		15%	Late
	Links to OI Steps: IS-0202, IS-0204			
	Links to ICAO ASBUs: B0-DATM			
	Links to DP Families: 1.2.2 - Geographic database for procedure design			
			31/12/2020	
REG (By:06/2017)				
CAA			10%	Late
The Reg(EU)73/2010 and Reg(EU)1029/2014 are transposed into national legislation under ARC NO 6.9 with effective date 01/2018.				31/12/2020
ITY-ADQ-REG01	Verify the compliance with data quality requirements and supervise safety assessments			by:30/06/2013
CAA			10%	Late
	1 Activity started (e.g. Project kicked-off)		10%	Y
				13/01/2018
	Comment: The Reg(EU)73/2010 and Reg(EU)1029/2014 are transposed into national legislation under ARC NO 6.9 with effective date 01/2018.			
	2 Verification that data quality and process requirements were met	30%	N	
			-	
	3 Supervision of safety assessment conducted	35%	N	
			-	
	4 Notification that changes were accepted	25%	N	
			31/12/2020	
ITY-ADQ-REG02	Verify the establishment of formal arrangements			by:30/06/2013
CAA			10%	Late
	1 Activity started (e.g. Project kicked-off)		10%	Y
				01/06/2018
	Comment: The Reg(EU)73/2010 and Reg(EU)1029/2014 are transposed into national legislation under ARC NO 6.9 with effective date 01/2018.			
	2 Formal arrangements have been received	65%	N	
			-	
	3 Formal arrangements have been verified and accepted	25%	N	
			31/12/2020	
ITY-ADQ-REG04	Verify that all parties comply with all data requirements			by:30/06/2017
CAA			10%	Late
	1 Activity started (e.g. Project kicked-off)		10%	Y
				01/06/2018
	Comment: The Reg(EU)73/2010 and Reg(EU)1029/2014 are transposed into national legislation under ARC NO 6.9 with effective date 01/2018.			
	2 All parties publishing aeronautical data and/or aeronautical information comply with all the requirements	65%	N	
			-	
	3 An according statement of compliance has been received	25%	N	
			31/12/2020	

ASP (By:06/2017)			
M-NAV		27%	Late
-			31/12/2020
ITY-ADQ-ASP01	Implement data quality and process requirements		by:30/06/2013
M-NAV		10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y
			31/12/2020
Comment: The implementation of ADQ is ongoing project. The required software/hardware are part of the public procurement plan for 2020. The working procedures are to be revised in accordance to the National ADQ regulation.			
2	Implement data quality, evidence, origination, process, error reporting and rectification requirements. Validate and verify all tools used to support or automate processes	30%	N
			31/12/2020
3	Conduct a safety assessment, provide a safety assessment report to the NSA and if applicable provide safety arguments to the NSA	35%	N
			31/12/2020
Comment: The implementation of ADQ is ongoing project. The required software/hardware are part of the public procurement plan for 2020. The working procedures are to be revised in accordance to the National ADQ regulation.			
4	Introduction of the change into service was accepted by the NSA and a notification of acceptance has been received. An EC declaration of verification of systems and a technical file has been submitted to the NSA	25%	N
			31/12/2020
Comment: The implementation of ADQ is ongoing project. The required software/hardware are part of the public procurement plan for 2020 The working procedures are to be revised in accordance to the National ADQ regulation.			
ITY-ADQ-ASP02	Establish formal arrangements		by:30/06/2013
M-NAV		10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y
			31/12/2020
2	Establish formal arrangements with other relevant parties	40%	N
			31/12/2020
3	Formal arrangements signed by all relevant parties have been established	50%	N
			31/12/2020
ITY-ADQ-ASP03	Establish consistency mechanisms and implement timeliness requirements		by:30/06/2013
M-NAV		40%	Late
Comment: The working procedures are to be revised in accordance to the National ADQ regulation.			
1	Activity started (e.g. Project kicked-off)	10%	Y
			15/01/2018
2	Consistency mechanisms and timeliness requirements drafted	30%	Y
			31/12/2019
3	Consistency mechanisms and timeliness requirements established and documented	60%	N
			31/03/2020
ITY-ADQ-ASP04	Implement personnel and performance requirements		by:30/06/2013
M-NAV		10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y
			15/01/2018
2	Develop and maintain awareness material and implement training and competence requirements	40%	N
			31/12/2020
3	Develop and maintain operating manuals and request security clearances	50%	N
			31/12/2020

ITY-ADQ-ASP05	Implement a quality management system and fulfil safety and security objectives		by:30/06/2013
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 11/05/2018
Comment:	ISO Certificate 9001:2015		
2	A quality management system meeting the safety and security management objectives has been implemented, documented and is maintained	30%	Y 11/05/2018
3	An EN ISO 9001 certificate has been obtained	35%	Y 11/05/2018
Comment:	ISO Certificate 9001:2015		
4	Documentation related to certification has been provided to the NSA. Access authorisations have been provided	25%	Y 11/05/2018
ITY-ADQ-ASP06	Implement the common dataset and digital exchange format		by:30/06/2014
M-NAV	-	10%	Late
Comment:	This activity has started, but still is in the planning phase.		
1	Activity started (e.g. Project kicked-off)	10%	Y 15/01/2018
2	The common dataset and digital exchange format requirements have been implemented	30%	N 31/12/2020
3	Safety assessment done and report, including safety arguments provided to the NSA	35%	N 31/12/2020
4	The introduction of the change into service accepted by the NSA and notification of acceptance received. An EC declaration of verification of systems and a technical file submitted to the NSA	25%	N 31/12/2020
ITY-ADQ-ASP07	Implement all data requirements		by:30/06/2017
M-NAV	-	10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y 15/01/2018
2	All electronic data was updated and is compliant to all requirements	65%	N 31/12/2020
3	A statement of compliance has been provided to the NSA	25%	N 31/12/2020
APO (By:06/2017)			
SKOPJE Airport	-	0%	Late
			31/12/2020
ITY-ADQ-APO01	Implement data quality and process requirements		by:30/06/2013
SKOPJE Airport	-	0%	Late
1	Activity started (e.g. Project kicked-off)	10%	N -
2	Implement data quality, evidence, origination, process, error reporting and rectification requirements. Validate and verify all tools used to support or automate processes	30%	N -
3	Conduct a safety assessment, provide a safety assessment report to the NSA and if applicable provide safety arguments to the NSA	35%	N -
4	Introduction of the change into service was accepted by the NSA and a notification of acceptance has been received. An EC declaration of verification of systems and a technical file has been submitted to the NSA	25%	N 31/12/2020

ITY-ADQ-APO02	Implement personnel and performance requirements		by:30/06/2013
SKOPJE Airport	-	0%	Late
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Develop and maintain awareness material and implement training and competence requirements	40%	N
			-
3	Develop and maintain operating manuals and request security clearances	50%	N
			31/12/2020
ITY-ADQ-APO03	Implement a quality management system and fulfil safety and security objectives		by:30/06/2013
SKOPJE Airport	-	0%	Late
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	A quality management system meeting the safety and security management objectives has been implemented, documented and is maintained	30%	N
			-
3	An EN ISO 9001 certificate has been obtained	35%	N
			-
4	Documentation related to certification has been provided to the NSA. Access authorisations have been provided	25%	N
			31/12/2020
ITY-ADQ-APO04	Implement the common dataset and digital exchange format requirements		by:30/06/2014
SKOPJE Airport	-	0%	Late
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	The common dataset and digital exchange format requirements have been implemented	30%	N
			-
3	Safety assessment done and report, including safety arguments provided to the NSA	35%	N
			-
4	The introduction of the change into service accepted by the NSA and notification of acceptance received. An EC declaration of verification of systems and a technical file submitted to the NSA	25%	N
			31/12/2020
ITY-ADQ-APO05	Implement all data quality requirements		by:30/06/2017
SKOPJE Airport	-	0%	Late
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	All electronic data was updated and is compliant to all requirements	65%	N
			-
3	A statement of compliance has been provided to the NSA	25%	N
			31/12/2020

ITY-AGDL	Initial ATC Air-Ground Data Link Services <u>Timescales:</u> ATS unit operational capability: 05/02/2018 Aircraft capability: 05/02/2020	8%	Late
Links to OI Steps: AUO-0301 Links to ICAO ASBUs: B0-TBO Links to DP Families: 6.1.1 - ATN B1 based services in ATSP domain, 6.1.3 - A/G and G/G Multi Frequency DL Network in defined European Service Areas, 6.1.4 - ATN B1 capability in Multi Frequency environment in Aircraft domain			
The data link air-ground, ground-ground infrastructure capabilities and ATM system upgrades are planned for 2021, without prejudice to the evolution of the technical aspects and possible amendments of the Regulation.			31/12/2021
REG (By:02/2018)			
CAA	5%	Late	
CAA to approve the operational deployment of data link services by M-NAV. FHA, PSSA for the new ATM system has been approved by the CAA.			31/12/2021
ITY-AGDL-REG03	Ensure the publication of relevant information in the national aeronautical information publication		by:05/02/2018
CAA	-	10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y
			15/01/2014
Comment: ATM project kick-off.			
2	National aeronautical information publications have been updated appropriately	90%	N
			31/12/2021
ITY-AGDL-REG04	Ensure ATN/VDL-2 availability, security policy and address management procedures		by:05/02/2018
CAA	-	0%	Late
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	All air-ground communication services satisfying the requirements for ATN and VDL-2 have been approved by NSA	40%	N
			-
3	The appropriate security policy for data exchanges of the DLIC, ACM, ACL and AMC services has been approved by NSA	25%	N
			-
4	The harmonized procedures for managing the addressing information have been approved by NSA	25%	N
			31/12/2021
ITY-AGDL-REG06	Notify potential exemption cases to the European Commission		by:-
CAA	-	%	Not Applicable
1	SLoA closed/completed in 2015 cycle	100%	NA
			-
Comment: For the time being, no potential exemption are foreseen.			

ASP (By:02/2018)			
M-NAV		8%	Late
The data link air-ground, ground-ground infrastructure capabilities and ATM system upgrades are planned for 2021.			31/12/2021
ITY-AGDL-ASP01	Ensure the conformity of communications, flight data and initial flight plan processing systems and associated procedures		by:05/02/2018
M-NAV		10%	Late
Skopje ACC			Y
1	Project/task for ensuring the conformity of communications, flight data and initial flight plan processing systems and associated procedures has kicked off	10%	01/01/2014
Comment: A task for ensuring the conformity of communications, flight data and initial flight plan processing systems is underway, in coordination with CAA about transposition of the EU regulation in the national legislation.			
2	Air ground com. systems, flight data and initial flight plan processing systems to enable datalink communication between controllers and operators of equipped aircraft and to handle information about datalink capability of flights have been procured	30%	N 31/12/2021
3	Communication, flight data and initial flight plan processing systems have been installed	35%	N 31/12/2021
4	Associated procedures are tested, validated and applied in operation	25%	N 31/12/2021
ITY-AGDL-ASP02	Organise personnel awareness and training		by:05/02/2018
M-NAV		0%	Late
Skopje ACC			
1	Activity started (e.g. Project kicked-off)	10%	N 31/12/2021
3	The training is ongoing for the personnel	40%	N 31/12/2021
4	The training of the personnel is completed & operating procedures are used	50%	N 31/12/2021
ITY-AGDL-ASP03	Ensure ground communication systems comply with air-ground communication requirements		by:05/02/2018
M-NAV		10%	Late
Skopje ACC			
1	Project/task for ensuring the ground communication systems comply with air-ground communication requirements has kicked off	10%	Y 31/12/2018
Comment: A task regarding the requirements for compliance of ground comm. systems with air-ground comm is underway, in coordination with CAA about transposition of the EU regulation in the national legislation. The outcome of this task will give us the time frame for implementation/or the need for update/new procurement of equipment.			
2	The ground communication systems and their constituents have been procured	30%	N 31/12/2021
3	The ground communication systems and their constituents have been installed	35%	N 31/12/2021
4	The ground communication systems and their constituents have been tested, validated and available for operational use	25%	N 31/12/2021

ITY-AGDL-ASP04	Deploy communication infrastructure to handle air-ground data link services		by:05/02/2018
M-NAV	Skopje ACC	10%	Late
1	Project/task to deploy the appropriate communication infrastructure to handle air-ground data link services has kicked off	10%	Y 15/01/2014
Comment:	The data link air-ground, ground-ground infrastructure capabilities and ATM system upgrades are planned for 2019.		
2	The appropriate telecommunication infrastructure to handle the selected air-ground datalink services has been procured	30%	N 31/12/2021
3	The appropriate telecommunication infrastructure to handle the selected air-ground datalink services has been installed	35%	N 31/12/2021
4	The appropriate telecommunication infrastructure to handle the selected air-ground datalink services has been tested, validated & available for operation use	25%	N 31/12/2021
ITY-AGDL-ASP05	Implement Logon Forward process		by:05/02/2018
M-NAV	Skopje ACC	10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y 15/01/2014
Comment:	Will be part of the new ATM system.		
2	System/upgrade procured	30%	N 31/12/2021
3	ATC system is capable of transmission and reception of logon parameters of flight data (e.g. LOF OLDI message) between ATC units	35%	N 31/12/2021
4	Procedures implementing the Logon Forward process are tested, validated and in operational use	25%	N 31/12/2021
ITY-AGDL-ASP06	Implement Next Authority Notified process		by:05/02/2018
M-NAV	Skopje ACC	10%	Late
1	Activity started (e.g. Project kicked-off)	10%	Y 15/01/2014
Comment:	Will be part of the new ATM system.		
2	System/upgrade procured	30%	N 31/12/2021
3	ATC system is capable of transmission and reception of the required flight data (e.g. NAN OLDI message) between ATC units	35%	N 31/12/2021
4	Procedures implementing the Next Authority Notified process are tested, validated and in operational use	25%	N 31/12/2021
MIL (By:01/2019)			
Mil. Authority		%	Not Applicable
State transport fleet is not flying above FL 285.			-
ITY-AGDL-MIL01	Equip transport-type State aircraft		by:01/01/2019
Mil. Authority	-	%	Not Applicable
1	Project/task for equipping the transport-type State aircraft has kicked off	10%	NA -
2	50% of applicable State aircraft equipped	40%	NA -
3	100% of applicable State aircraft equipped	50%	NA -
Comment:	State transport fleet is not flying above FL 285		

ITY-AGVCS2	8,33 kHz Air-Ground Voice Channel Spacing below FL195 <u>Timescales:</u> Entry into force: 07/12/2012 New and upgraded radio equipment: 17/11/2013 New or upgraded radios on State aircraft: 01/01/2014 Interim target for freq. conversions: 31/12/2014 All radio equipment: 31/12/2017 All frequencies converted: 31/12/2018 State aircraft equipped, except those notified to EC: 31/12/2018 State aircraft equipped, except those exempted [Art 9(11)]: 31/12/2020		3%	Ongoing
	Links to Enablers: CTE-C01a			
	31/12/2021			
	REG (By:12/2018)			
	CAA			
	0%			
	Planned			
This objective will be covered in 2021 through support to states			31/12/2021	
ITY-AGVCS2-REG01	Ensure radios have 8,33 kHz channel spacing capability		by:31/12/2017	
CAA	-	0%	Planned	
1	Activity started (e.g. Project kicked-off)	10%	N 31/12/2021	
2	Where applicable, the State has published the additional local exemptions as per Article 14 of Regulation (EU) No 1079/2012.	15%	N 31/12/2021	
3	Measures have been taken to ensure that all radio equipment put into service or subject to radio upgrades by ANSPs, operators and other users or owners of radios includes the 8,33 kHz channel spacing capability.	25%	N 31/12/2021	
4	Measures have been taken to ensure that aircraft for which the individual certificates of airworthiness or individual flight permits are first issued from 17 November 2013 and have a radio equipage requirement are fitted with radios having the 8,33 kHz ch	25%	N 31/12/2021	
5	By 31 December 2017: The NSA has evidence that all radios in the State have 8,33 kHz channel spacing capability except where derogations apply and/or exemptions have been granted.	25%	N 31/12/2021	
ITY-AGVCS2-REG02	Ensure the achievement of the interim target for 8,33 kHz frequency conversions		by:31/12/2014	
CAA	-	%	Not Applicable	
1	25% target for frequency conversions as per Articles 6(5) to 6(7) of the Regulation notified to the Commission.	10%	NA -	
2	25% target for frequency conversions achieved.	45%	NA -	
3	All OPC frequency assignments converted to 8,33 kHz or, where applicable, OPC frequencies not converted and justification for it notified to the Commission.	45%	NA -	
ITY-AGVCS2-REG03	Ensure compliance with the requirements on 8,33 kHz frequency conversions		by:31/12/2018	
CAA	-	0%	Ongoing	
1	Activity started (e.g. Project kicked-off)	10%	N 31/12/2020	
2	Introduce % of concerned frequency assignments (i.e. not subject to derogations/exceptions) converted to 8,33 kHz and published in the Table COM2 of ICAO Doc 7754	90%	N 31/12/2020	

ASP (By:12/2018)			
M-NAV		5%	Ongoing
-			31/12/2020
ITY-AGVCS2-ASP01	Ensure conformity of voice communications systems and associated procedures		by:31/12/2018
M-NAV		10%	Ongoing
1	Activity started (e.g. Project kicked-off)	10%	Y
			01/02/2020
2	New/upgraded voice communication systems have been procured	30%	N
			31/12/2020
3	New/upgraded voice communication systems installed	35%	N
			31/12/2020
4	New/upgraded communication systems are tested, validated & in operational use	25%	N
			31/12/2020
ITY-AGVCS2-ASP02	Convert 25 kHz frequencies to 8,33 kHz to achieve the interim target		by:31/12/2014
M-NAV		%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	25% target for frequency conversions has been achieved	90%	NA
			-
ITY-AGVCS2-ASP03	Convert all 25 kHz frequencies to 8,33 kHz		by:31/12/2018
M-NAV		0%	Ongoing
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Introduce % of concerned frequency assignments (i.e. not subject to derogations/exceptions) converted to 8,33 kHz and published in the Table COM2 of ICAO Doc 7754	90%	N
			31/12/2020
ITY-AGVCS2-ASP04	Develop safety assessment		by:31/12/2018
M-NAV		0%	Ongoing
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Safety Assessment drafted	30%	N
			-
3	Safety Assessment delivered to the competent authority	60%	N
			31/12/2020
ITY-AGVCS2-ASP05	Organise personnel training and awareness		by:31/12/2018
M-NAV		10%	Ongoing
1	Activity started (e.g. Project kicked-off)	10%	Y
			31/12/2018
2	Training ongoing	40%	N
			-
3	Training completed	50%	N
			31/12/2020

MIL (By:12/2020)			
Mil. Authority		%	Not Applicable
Compelling technical or budgetary constraints do not allow the equipage of State Aircraft		-	-
ITY-AGVCS2-MIL01	Equip State aircraft with radio equipment with 8,33 kHz channel spacing capability		by:31/12/2020
Mil. Authority		%	Not Applicable
1	List of State aircraft that cannot be equipped with 8,33 kHz radios by 31 December 2018 has been communicated to the Commission	10%	NA
2	% of concerned State aircraft equipped	90%	NA
ITY-AGVCS2-MIL02	Organise personnel training and awareness of military aircrew		by:31/12/2020
Mil. Authority		%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
2	Training ongoing	40%	NA
3	Training completed	50%	NA
APO (By:12/2018)			
SKOPJE Airport		%	Not Applicable
Due to the expected high level of non-equipped traffic (general aviation, military traffic, etc.) it will not be possible to convert any of the airport frequency assignments. therefore the AOP SLoAs are considered as Not Applicable		-	-
ITY-AGVCS2-APO01	Convert all 25 kHz frequencies to 8,33 kHz		by:31/12/2018
SKOPJE Airport		%	Not Applicable
Comment: There is only one handling frequency, 118.675, however, the radio station is capable for 8.33 kHz channel spacing.			
1	Activity started (e.g. Project kicked-off)	10%	NA
2	Introduce % of concerned frequency assignments (i.e. not subject to derogations/exceptions) converted to 8,33 kHz and published in the Table COM2 of ICAO Doc 7754	90%	NA
ITY-AGVCS2-APO02	Accommodate non-equipped vehicles		by:31/12/2017
SKOPJE Airport		%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
2	Procedures for handling non-8,33 kHz equipped vehicles through airport areas using 8,33 kHz channel spacing drafted	30%	N
3	Procedures for handling non-8,33 kHz equipped vehicles through airport areas using 8,33 kHz channel spacing agreed, tested & validated	35%	N
4	Procedures for handling non-8,33 kHz equipped vehicles through airport areas using 8,33 kHz channel spacing implemented	25%	N
ITY-AGVCS2-APO03	Organise personnel training and awareness		by:31/12/2018
SKOPJE Airport		%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	N
2	Training ongoing	40%	N
3	Training completed	50%	N

ITY-COTR	Implementation of ground-ground automated co-ordination processes		100%	Completed
	<u>Timescales:</u>			
	Entry into force of Regulation: 27/07/2006			
	For putting into service of EATMN systems in respect of notification and initial coordination processes: 27/07/2006			
	For putting into service of EATMN systems in respect of Revision of Coordination, Abrogation of Coordination, Basic Flight Data and Change to Basic Flight Data: 01/01/2009			
		To all EATMN systems in operation by 12/2012: 31/12/2012		
Links to OI Steps: CM-0201				
Links to ICAO ASBUs: B0-FICE				
The current ATM systems at Skopje ACC/APP/TWR and Ohrid APP/TWR unit are capable to send and receive complete set of OLDI messages (ACT, LAM, PAC, REV, MAC ABI), to present them to the controllers who could interact, modify and send back to the FDPS system.				30/06/2004
ASP (By:12/2012)				
M-NAV			100%	Completed
REV/PAC/MAC are implemented. ROF/COF/MAS/LOF and NAN will be implemented in the new ATM system.				30/06/2004
ITY-COTR-ASP01	Implement flight data processing and exchange systems			by:31/12/2012
M-NAV	Skopje ACC		100%	Completed
	1 Activity started (e.g. Project kicked-off)		10%	Y
				-
	2 System/upgrade procured		30%	Y
				-
	3 Flight data processing and exchange systems are capable of providing the information required for the display, processing and compilation of the system information exchanged in the process specified. [Regulation (EC) No 1032/2006, Annex I, Part A]		35%	Y
				-
	4 Upgraded flight data processing and exchange systems are in operational use		25%	Y
				30/06/2004
ITY-COTR-ASP02	Implement Notification process			by:31/12/2012
M-NAV	Skopje ACC		100%	Completed
	1 Activity started (e.g. Project kicked-off)		10%	Y
				-
	2 System/upgrade procured		30%	Y
				-
	3 Flight data processing and exchange system is capable of transmission and reception of the required flight data (e.g. ABI OLDI message) between ATC units		35%	Y
				-
	4 Procedures implementing the Notification process are tested, validated and in operational use		25%	Y
				30/06/2004
ITY-COTR-ASP03	Implement Initial Coordination process			by:31/12/2012
M-NAV	Skopje ACC		100%	Completed
	1 Activity started (e.g. Project kicked-off)		10%	Y
				-
	2 System/upgrade procured		30%	Y
				-
	3 Flight data processing and exchange system is capable of transmission and reception of the required flight data (e.g. ACT OLDI message) between ATC units		35%	Y
				-
	4 Procedures implementing the Initial Coordination process are tested, validated and in operational use		25%	Y
				30/06/2004

ITY-COTR-ASP04	Implement Revision of Coordination process		by:31/12/2012
M-NAV	Skopje ACC	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y
			-
2	System/upgrade procured	30%	Y
			-
3	Flight data processing and exchange system is capable of transmission and reception of the required flight data (e.g. REV OLDI message) between ATC units	35%	Y
			-
4	Procedures implementing the Revision of Coordination process are tested, validated and in operational use	25%	Y
			30/06/2004
ITY-COTR-ASP05	Implement Abrogation of Coordination process		by:31/12/2012
M-NAV	Skopje ACC	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y
			-
2	System/upgrade procured	30%	Y
			-
3	Flight data processing and exchange system is capable of transmission and reception of the required flight data (e.g. MAC OLDI message) between ATC units	35%	Y
			-
4	Procedures implementing the Abrogation of Coordination process are tested, validated and in operational use	25%	Y
			30/06/2004
ITY-COTR-ASP06	Implement Basic Flight Data process		by:31/12/2012
M-NAV	Skopje ACC	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	System/upgrade procured	30%	NA
			-
3	Flight data processing and exchange system is capable of transmission and reception of the required flight data (e.g. BFD OLDI message) between ATC units	35%	NA
			-
4	Procedures implementing the Basic Flight Data process are tested, validated and in operational use	25%	NA
			-
ITY-COTR-ASP07	Implement Change to Basic Flight Data process		by:31/12/2012
M-NAV	Skopje ACC	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	System/upgrade procured	30%	NA
			-
3	Flight data processing and exchange system is capable of transmission and reception of the required flight data (e.g. CFD OLDI message) between ATC units	35%	NA
			-
4	Procedures implementing the Change to Basic Flight Data process are tested, validated and in operational use	25%	NA
			-
ITY-COTR-ASP10	Develop safety assessment		by:31/12/2012
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y
			-
2	Safety Assessment drafted	30%	Y
			-
3	Safety Assessment delivered to the competent authority	60%	Y
			30/06/2004

ITY-COTR-ASP11	Organise training to Air Traffic Control personnel		by:31/12/2012
M-NAV	Skopje ACC	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y
			-
2	Training ongoing	40%	Y
			-
3	Training completed	50%	Y
			30/06/2004
MIL (By:12/2012)			
Mil. Authority		%	Not Applicable
No operational needs exist for implementation of BFD/CFD exchange with the military authorities, due to the fact that M-NAV is responsible for handling OAT/GAT traffic.			-
ITY-COTR-MIL01	Implement Basic Flight Data process		by:31/12/2012
Mil. Authority	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	System/upgrade procured	30%	NA
			-
3	Flight data processing and exchange system is capable of transmission and reception of the required flight data (e.g. BFD OLDI message) between ATC units	35%	NA
			-
4	Procedures implementing the Basic Flight Data process are tested, validated and in operational use	25%	NA
			-
ITY-COTR-MIL02	Implement Change to Basic Flight Data process		by:31/12/2012
Mil. Authority	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA
			-
2	System/Function procured	30%	NA
			-
3	Flight data processing and exchange system is capable of transmission and reception of the required flight data (e.g. CFD OLDI message) between ATC units	35%	NA
			-
4	Procedures implementing the Change to Basic Flight Data process are tested, validated and in operational use	25%	NA
			-

ITY-FMTP	Common Flight Message Transfer Protocol (FMTP)		10%	Late
	<u>Timescales:</u>			
	Entry into force of regulation: 28/06/2007			
	All EATMN systems put into service after 01/01/09: 01/01/2009			
	All EATMN systems in operation by 20/04/11: 20/04/2011			
	Transitional arrangements: 31/12/2012			
	Transitional arrangements when bilaterally agreed between ANSPs: 31/12/2014			
Links to Enablers: CTE-C06				
Links to ICAO ASBUs: B0-FICE, B1-FICE				
The new FDPS will support the OLDI data exchanged over TCP/IP V6.				31/12/2021
Will be part of the new ATM system, planned to be operational by the 31/12/2021				
ASP (By:12/2014)				
M-NAV			10%	Late
M-NAV implemented the OLDI data exchange via TCP/IP by a dedicated router, which encapsulates X.25 data packages into TCP/IP protocol. The new FDPS will support the OLDI data exchanged over TCP/IP V6.				31/12/2021
ITY-FMTP-ASP01	Upgrade and put into service communication systems to support information exchange via FMTP between FDPS(s) for the purpose of notification, coordination and transfer of the flights between ATC units			by:31/12/2014
M-NAV	-		10%	Late
1	Activity started (e.g. Project kicked-off)		10%	Y
				15/01/2014
Comment:	The procurement of the new ATM system is in progress.			
2	Upgraded communications system/function procured		30%	N
				31/12/2021
Comment:	The technical specification is produced. The procurement is in progress.			
3	Communications system/function installed		35%	N
				31/12/2021
4	Upgraded communication systems/functions tested, validated and in operational use		25%	N
				31/12/2021
ITY-FMTP-ASP02	Develop safety assessment for the changes			by:31/12/2014
M-NAV	-		10%	Late
1	Activity started (e.g. Project kicked-off)		10%	Y
				15/01/2014
Comment:	It is an ongoing process. Safety assessment for the changes of the new ATM system is going parallel as the procurement, following it in every step and updating as necessary.			
2	Draft Safety Assessment produced		30%	N
				31/12/2021
3	Safety Assessment, including safety arguments for the changes, submitted to the NSA		60%	N
				31/12/2021
ITY-FMTP-ASP03	Train technical staff			by:31/12/2014
M-NAV	-		10%	Late
1	Activity started (e.g. Project kicked-off)		10%	Y
				31/12/2020
2	Training ongoing		40%	N
				-
3	Training completed		50%	N
				-

MIL (By:12/2014)			
Mil. Authority		%	Not Applicable
Military does not provide ATS and does not have the ATM system because there is no operational need for it, all ATS services for military flight are provided by civil ANSP M-NAV.			-
ITY-FMTP-MIL01	Upgrade and put into service communication systems to support information exchange via FMTP between FDPS(s) for the purpose of notification, coordination, transfer of the flights and civil-military coordination between ATS units and controlling military units		by:31/12/2014
Mil. Authority		%	Not Applicable
	1 Activity started (e.g. Project kicked-off)	10%	NA
			-
	2 Upgraded communications system/function procured	30%	NA
			-
	3 Communications system/function installed	35%	NA
			-
	4 Upgraded communication systems/functions tested, validated and in operational use	25%	NA
			-

ITY-SPI	Surveillance Performance and Interoperability <u>Timescales:</u> Entry into force of regulation: 13/12/2011 ATS unit operational capability: 12/12/2013 EHS and ADS-B Out in transport-type State aircraft : 07/06/2020 ELS in transport-type State aircraft : 07/06/2020 Ensure training of MIL personnel: 07/06/2020 Retrofit aircraft capability: 07/06/2020		70%	Late
	Links to Enablers: GSURV-0101 Links to ICAO ASBUs: B0-ASUR			
	-			
	31/12/2020			
	REG (By:02/2015)			
	CAA			
		10%	Late	
The Regulation is transposed into national legislation.(see Part 1.3 EU regulations transposed into national Legislation)				01/07/2020
ITY-SPI-REG01	Conduct safety oversight for the existing surveillance chain			by:05/02/2015
CAA	-		10%	Late
	1 Activity started (e.g. Project kicked-off)		10%	Y
				01/07/2020
	2 Safety assessment has been received from the ANSP		30%	N
				-
	3 Safety assessment has been reviewed and results communicated to the ANSP		60%	N
				-
ASP (By:02/2015)				
M-NAV			85%	Late
The Regulation is transposed into national legislation.(see Part 1.3 EU regulations transposed into national Legislation)				31/12/2020
ITY-SPI-ASP01	Ensure interoperability of surveillance data			by:12/12/2013
M-NAV	-		100%	Completed
	1 Activity started (e.g. Project kicked-off)		10%	Y
				15/01/2014
	2 Agreements on data exchange based on a common protocol have been signed		30%	Y
				31/12/2002
	3 Surveillance data is exchanged based on the common protocol		60%	Y
				31/12/2002
ITY-SPI-ASP02	Conduct Safety Assessment for the existing surveillance chain			by:05/02/2015
M-NAV	-		40%	Late
	1 Activity started (e.g. Project kicked-off)		10%	Y
				31/12/2014
	Comment: The safety assessment of the one single radar (at Ohrid radar site) is delivered. The other systems are in the scope of the safety evaluation, which is at the moment underway.			
	2 Safety Assessment drafted		30%	Y
				31/12/2014
	Comment: FHA, PSSA for the new system is drafted. For the existing systems, a solution is underway. FHA, PSSA for the existing system is drafted.			
	3 Safety Assessment delivered to the competent authority		60%	N
				31/12/2020
	Comment: FHA, PSSA approved for the new system. For the existing systems, a solution regarding the approval from the CAA is underway.			

ITY-SPI-ASP03	Conduct Safety Assessment for changes introduced to the surveillance infrastructure		by:12/12/2013
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 15/10/2014
Comment:	Project kicked off.		
2	Safety Assessment drafted	30%	Y 15/10/2014
Comment:	FHA and PSSA drafted for the new ATM system.		
3	Safety Assessment delivered to the competent authority	60%	Y 15/10/2014
Comment:	FHA and PSSA approved by the CAA.		
ITY-SPI-ASP04	Ensure the training of personnel		by:12/12/2013
M-NAV	-	100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2013
2	Training ongoing	40%	Y 31/12/2013
3	Training completed	50%	Y 31/12/2013
MIL (By:06/2020)			
Mil. Authority		%	Not Applicable
No operational need for the military regarding this SloA.			-
ITY-SPI-MIL01	Carriage and operation of Mode S Elementary Surveillance avionics		by:07/06/2020
Mil. Authority	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA -
2	Provide percentage of applicable State aircraft equipped #	90%	NA -
ITY-SPI-MIL02	Carriage and operation of Mode S Enhanced Surveillance and ADS-B Out avionics		by:07/06/2020
Mil. Authority	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA -
2	Provide percentage of applicable transport-type State aircraft equipped #	90%	NA -
ITY-SPI-MIL03	Ensure the training of personnel		by:07/06/2020
Mil. Authority	-	%	Not Applicable
1	Activity started (e.g. Project kicked-off)	10%	NA -
2	Training ongoing	40%	NA -
3	Training completed	50%	NA -

NAV03.1	RNAV 1 in TMA Operations		9%	Ongoing
	Timescales:			
	Initial operational capability: 01/01/2001			
	Locally determined number of RNAV1 SID/STAR, where established: 06/06/2030			
Depending on the national plans, the availability and the plans for further development of RNAV 1 in TMA operations is in progress.				31/12/2023
As a short/medium term goal in the PBN implementation plan, RNAV 1 operations in TMA are planned for 2018-2023.				
REG (By:06/2030)				
CAA			10%	Ongoing
-				31/12/2023
NAV03.1-REG01	Verify the transition plan for PBN in ANS provision			by:06/06/2030
CAA	-		10%	Ongoing
Comment: Meetings have taken place (part of the EUROCONTROL support to states agenda items). The implementation plan is in phase of being reviewed by the ANSP. The CAA workplan has been drafted. Working Groups meetings between stakeholders are taking place.				
1	Activity started (e.g. Project kicked-off)	10%	Y	31/12/2023
2	The verification conducted	60%	N	31/12/2023
3	The outcome of the verification has been notified to ANSP	30%	N	31/12/2023
ASP (By:06/2030)				
M-NAV			8%	Ongoing
Implementation of P-RNAV procedures within Skopje TMA is foreseen for the end of 2023.		Supply and installation of new DME for Skopje Airport		31/12/2023
The PBN implementation plan is subject to Government approval, and all affected stakeholders will produce the required procedures, accordingly.				
NAV03.1-ASP01	Develop an airspace concept based on RNAV 1 arrival and departure procedures			by:06/06/2030
M-NAV	-		0%	Planned
Comment: See state level comment				
1	Activity started (e.g. Project kicked-off)	10%	N	31/12/2023
2	Airspace concept drafted	30%	N	-
3	Airspace concept validated	35%	N	-
4	Airspace concept approved	25%	N	-
NAV03.1-ASP02	Provide appropriate terrestrial navigation infrastructure to support RNAV 1 operations			by:06/06/2030
M-NAV	Skopje TMA		10%	Ongoing
1	Project/task for deploying appropriate terrestrial navigation infrastructure to support RNAV operation has kicked off	10%	Y	15/01/2014
2	Appropriate infrastructure is procured	30%	N	31/12/2023
3	Appropriate infrastructure is installed	35%	N	-
4	Appropriate infrastructure is tested, validated & available for operational use	25%	N	-

NAV03.1-ASP03	Train air traffic controllers in RNAV 1 procedures		by:06/06/2030
M-NAV	-	0%	Planned
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	Training of ATCOs in RNAV procedures is ongoing	40%	N
			31/12/2023
3	Training of ATCOs in RNAV procedures is completed	50%	N
			31/12/2023
NAV03.1-ASP05	Develop and implement at least one RNAV 1 SID and RNAV 1 STAR per instrument RWY		by:06/06/2030
M-NAV	Skopje TMA	40%	Ongoing
1	Project/task for developing RNAV arrival & departure procedures has kicked off	10%	Y
			31/12/2015
2	RNAV arrival & departure procedures are developed	30%	Y
			31/12/2023
3	RNAV arrival & departure procedures are tested & validated	35%	N
			31/12/2023
4	RNAV arrival & departures procedures are published in national AIP and in operational use	25%	N
			31/12/2023
NAV03.1-ASP11	Develop a local RNAV 1 safety assessment		by:06/06/2030
M-NAV	-	0%	Planned
1	Activity started (e.g. Project kicked-off)	10%	N
			31/12/2023
2	Local RNAV safety case has been drafted	30%	N
			31/12/2023
3	Local RNAV safety case has been approved by NSA	60%	N
			31/12/2023
NAV03.1-ASP12	Establish the transition plan for PBN in ANS provision		by:06/06/2030
M-NAV	-	%	Planned
1	Activity started (e.g. Project kicked-off)	10%	Y
			31/12/2023
2	Document drafted	30%	-
			-
3	Document approved/released	60%	-
			-
NAV03.1-ASP13	Develop and implement all RNAV 1 SID and RNAV 1 STAR per instrument RWY		by:06/06/2030
M-NAV	-	0%	Planned
1	Project/task for implementing RNAV1 arrival and departure procedures has kicked off	10%	N
			31/12/2023
2	RNAV1 arrival and departure procedures are developed	30%	N
			-
3	RNAV1 arrival and departure procedures are tested & validated	35%	N
			-
4	RNAV1 arrival and departure procedures are published in national AIP and in operational use	25%	N
			-

NAV03.2	RNP 1 in TMA Operations <u>Timescales:</u> Start: 07/08/2018 Locally determined number of RNP1 SID/STAR, where established.: 06/06/2030		0%	Planned
Links to DP Families: 1.2.3 - RNP 1 Operations in high density TMAs (ground capabilities), 1.2.4 - RNP 1 operations (aircraft capabilities)				
The plan for RNP 1 in TMA is foreseen to be implemented with the time frame defined in the PBN implementation plan. As a long term goal in the PBN implementation plan, RNP operations in TMA are planned for 2023. REG (By:06/2030)				31/12/2023
CAA			%	Planned
Meetings have taken place (part of the EUROCONTROL support to states agenda items). The implementation plan is in phase of being reviewed by the ANSP. The CAA workplan has been drafted. Working Groups meetings between stakeholders are taking place				31/12/2023
NAV03.2-REG01	Verify the transition plan for PBN in ANS provision			by:06/06/2030
CAA	-		%	Planned
	1	Activity started (e.g. Project kicked-off)	10%	N 31/12/2023
	2	The verification conducted	60%	-
	3	The outcome of the verification has been notified to ANSP	30%	-
ASP (By:06/2030)				
M-NAV			0%	Planned
The plan for RNP 1 in TMA is foreseen to be implemented with the time frame defined in the PBN implementation plan. It is up to CAA to approve the PBN implementation plan, and accordingly, M-NAV will efficiently produce the required procedures, taking into account the managerial decision with the priorities between RNAV and RNP operations in TMA.				31/12/2023
NAV03.2-ASP01	Develop an airspace concept based on designated RNP 1 arrival and departure procedures with Radius to Fix (RF)			by:06/06/2030
M-NAV	-		0%	Planned
	1	Activity started (e.g. Project kicked-off)	10%	N 31/12/2023
	2	Airspace concept drafted	30%	N 31/12/2023
	3	Airspace concept validated	35%	N 31/12/2023
	4	Airspace concept approved	25%	N 31/12/2023
NAV03.2-ASP02	Where necessary, provide appropriate navigation infrastructure to support RNP 1 operations including the infrastructure required for GNSS reversion			by:06/06/2030
M-NAV	Skopje TMA		0%	Planned
	1	Project/task for deploying appropriate terrestrial navigation infrastructure to support RNP 1 operations including the infrastructure required for GNSS reversion has kicked off	10%	N 31/12/2023
	2	Appropriate infrastructure is procured	30%	N 31/12/2023
	3	Appropriate infrastructure is installed	35%	N 31/12/2023
	4	Appropriate infrastructure is tested, validated & available for operational use	25%	N 31/12/2023

NAV03.2-ASP03	Train air traffic controllers in RNP1 with Radius to Fix (RF) procedures		by:06/06/2030
M-NAV	Skopje TMA	0%	Planned
	1 Activity started (e.g. Project kicked-off)	10%	N 31/12/2023
	2 Training of ATCOs in RNP1 with Radius to Fix (RF) procedures is ongoing	40%	N 31/12/2023
	3 Training of ATCOs in RNP1 with Radius to Fix (RF) procedures is completed	50%	N 31/12/2023
NAV03.2-ASP04	Implement at least one RNP1 SID and STAR with radius to Fix (RF), per instrument RWY		by:06/06/2030
M-NAV	Skopje TMA	0%	Planned
	1 Project/task for implementing RNP1 arrival and departure procedures with radius to Fix (RF) has kicked off	10%	N 31/12/2023
	2 RNP1 arrival and departure procedures with radius to Fix (RF) are developed	30%	N 31/12/2023
	3 RNP1 arrival and departure procedures with radius to Fix (RF) are tested & validated	35%	N 31/12/2023
	4 RNP1 arrival and departure procedures with radius to Fix (RF) are published in national AIP and in operational use	25%	N 31/12/2023
NAV03.2-ASP05	Develop a local safety assessment		by:06/06/2030
M-NAV	-	0%	Planned
	1 Activity started (e.g. Project kicked-off)	10%	N 31/12/2023
	2 Local safety assessment has been drafted	30%	N 31/12/2023
	3 Local safety assessment has been submitted to the NSA	60%	N 31/12/2023
NAV03.2-ASP06	Establish the transition plan for PBN in ANS provision		by:06/06/2030
M-NAV	-	0%	Planned
	1 Activity started (e.g. Project kicked-off)	10%	N 31/12/2023
	2 Document drafted	30%	N -
	3 Document approved/released	60%	N -
NAV03.2-ASP07	Implement all RNP1 SID and STAR with radius to Fix (RF), per instrument RWY		by:06/06/2030
M-NAV	-	0%	Not yet planned
	1 Project/task for implementing RNP1 arrival and departure procedures with radius to Fix (RF) has kicked off	10%	N -
	2 RNP1 arrival and departure procedures with radius to Fix (RF) are developed	30%	N -
	3 RNP1 arrival and departure procedures with radius to Fix (RF) are tested & validated	35%	N -
	4 RNP1 arrival and departure procedures with radius to Fix (RF) are published in national AIP and in operational use	25%	N -

NAV10	RNP Approach Procedures to instrument RWY <u>Timescales:</u> Initial operational capability: 01/06/2011 Instrument RWY ends served by precision approach (including PCP airports): 25/01/2024 Instrument RWY ends without precision approach at other ECAC+ instrument RWYs.: 25/01/2024	33%	Ongoing
Links to DP Families: 1.2.1 - RNP Approaches with vertical guidance, 1.2.2 - Geographic database for procedure design			
The PBN implementation plan (PBN IP) will be effective after the proposed changes into the Aviation Act are accepted. According to the proposed PBN IP, The implementation of the roadmap steps are defined in the PBN implementation plan. The first LNAV/VNAV/Baro procedures are expected to be implemented by 03/12/2021. The Regulator is expected to establish proper procedures for training of all involved personnel, design criteria and monitoring of the signal.			31/12/2023
REG (By:01/2024)			
CAA		10%	Ongoing
The PBN implementation plan (PBN IP) will be effective after the proposed changes into the Aviation Act are accepted. According to the proposed PBN IP, The implementation of the roadmap steps are defined in the PBN implementation plan. The first LNAV/VNAV/Baro procedures are expected to be implemented by 03/12/2020. The Regulator is expected to establish proper procedures for training of all involved personnel, design criteria and monitoring of the signal.			31/12/2023
NAV10-REG01	Apply EASA material to local national regulatory activities		by:25/01/2024
CAA	-	10%	Ongoing
Comment: The PBN implementation plan (PBN IP) will be effective after the proposed changes into the Aviation Act are accepted. According to the proposed PBN IP, The implementation of the roadmap steps are defined in the PBN implementation plan. The first LNAV/VNAV (APVBaro) procedures are expected to be implemented by 03/12/2020. The Regulator is expected to establish proper procedures for training of all involved personnel, design criteria and monitoring of the signal.			
1	Activity started (e.g. Project kicked-off)	10%	Y 01/01/2016
2	Regulatory material drafted	30%	N -
3	Regulatory material approved and published	60%	N 03/12/2020
Comment: JAA/EASA TGL 9/10 requirements streamlined into the national regulations.			
NAV10-REG02	Verify the transition plan for PBN in ANS provision		by:25/01/2024
CAA	-	%	Planned
1	Activity started (e.g. Project kicked-off)	10%	N 31/12/2023
2	The verification conducted	60%	-
3	The outcome of the verification has been notified to ANSP	30%	-

ASP (By:01/2024)			
M-NAV		40%	Ongoing
LNAV/VNAV (APV/Baro) procedures for Skopje TMA are planned to be implemented by the 03/12/2020.		Supply and installation of new DME for Skopje Airport	31/12/2023
NAV10-ASP01	Design and Publish RNP approach procedures to LNAV, LNAV/VNAV and LPV minima to RWYs served by precision approach		by:25/01/2024
M-NAV		10%	Ongoing
1	Project/task for developing LNAV, LNAV/VNAV and LPV minima has kicked off	10%	Y 01/01/2016
2	Procedures to LNAV, LNAV/VNAV and LPV minima are developed for all applicable airports/runway ends	30%	N 03/12/2021
Comment: The development of LNAV/VNAV (APVBaro) procedures to be done by M-NAV.			
3	Procedures to LNAV, LNAV/VNAV and LPV minima are tested & validated for all applicable airports/runway ends	35%	N 03/12/2021
4	Procedures to LNAV, LNAV/VNAV and LPV minima are published in national AIP for all applicable airports/runway ends	25%	N 03/12/2021
NAV10-ASP03	Develop National safety case for RNP approach down to LNAV/VNAV and LPV minima		by:25/01/2024
M-NAV		10%	Ongoing
1	Activity started (e.g. Project kicked-off)	10%	Y 03/12/2019
2	National safety case for operations to LNAV, LNAV/VNAV and LPV minima has been drafted	30%	N 03/12/2021
3	National safety case for operations to LNAV, LNAV/VNAV and LPV minima has been approved by NSA	60%	N 03/12/2021
NAV10-ASP04	Publish in AIPs all coordinates data in WGS-84 in accordance with ICAO Annex 15 requirements and Article 14 of Regulation (EU) No 73/2010		by:25/01/2024
M-NAV		100%	Completed
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2016
2	WGS-84 co-ordinates data have been defined for all applicable airports	30%	Y 31/12/2016
3	WGS-84 co-ordinates data have been published in AIP for all applicable airports	60%	Y 31/12/2016
NAV10-ASP05	Design and Publish RNP approach procedures to LNAV, LNAV/VNAV and LPV minima to RWYs without precision approach		by:25/01/2024
M-NAV		%	Planned
1	Project/task for developing LNAV, LNAV/VNAV and LPV minima has kicked off	10%	Y 31/12/2023
2	Procedures to LNAV, LNAV/VNAV and LPV minima are developed for all applicable airports/runway ends	30%	-
3	Procedures to LNAV, LNAV/VNAV and LPV minima are tested & validated for all applicable airports/runway ends	35%	-
4	Procedures to LNAV, LNAV/VNAV and LPV minima are published in national AIP for all applicable airports/runway ends	25%	-

NAV10-ASP06	Design and Publish RNP non-precision (NPA) approach procedures to LNAV minima		by:25/01/2024
M-NAV	-	%	Planned
1	Project/task for developing procedures to LNAV minima has kicked off	10%	Y 31/12/2023
2	Procedures to LNAV minima are developed for all applicable airports/runway ends	30%	-
3	Procedures to LNAV minima are tested & validated for all applicable airports/runway ends	35%	-
4	Procedures to LNAV minima are published in national AIP for all applicable airports/runway ends	25%	-
NAV10-ASP07	Establish the transition plan for PBN in ANS provision		by:25/01/2024
M-NAV	-	%	Planned
1	Activity started (e.g. Project kicked-off)	10%	Y 31/12/2023
2	Document drafted	30%	-
3	Document approved/released	60%	-
NAV10-ASP08	At PCP airport, Design and Publish RNP approach procedures to LNAV, LNAV/VNAV and LPV minima to RWYs without precision approach		by:-
M-NAV	-	%	Planned
1	Project/task for developing procedures to LNAV, LNAV/VNAV and LPV minima has kicked off	10%	Y 31/12/2021
2	Procedures to LNAV, LNAV/VNAV and LPV minima are developed for all applicable airports/runway ends	30%	-
3	Procedures to LNAV, LNAV/VNAV and LPV minima are tested & validated for all applicable airports/runway ends	35%	-
4	Procedures to LNAV, LNAV/VNAV and LPV minima are published in national AIP for all applicable airports/runway ends	25%	-
NAV10-ASP09	At PCP airport, Design and Publish RNP non-precision (NPA) approach procedures to LNAV minima		by:-
M-NAV	-	%	Planned
1	Project/task for developing procedures to LNAV minima has kicked off	10%	N 31/12/2021
2	Procedures to LNAV minima are developed for all applicable airports/runway ends	30%	-
3	Procedures to LNAV minima are tested & validated for all applicable airports/runway ends	35%	-
4	Procedures to LNAV minima are published in national AIP for all applicable airports/runway ends	25%	-

NAV12	ATS IFR Routes for Rotorcraft Operations		%	Not yet planned
	<u>Timescales:</u> IFR ATS route above/below FL150, SID and STAR for Rotorcraft Operations, where established: 06/06/2030			
For the time being, there is no operational need for IFR routes in TMA for Rotorcraft, due to extremely low rotorcrafts traffic.				-
REG (By:06/2030)				
CAA			%	Not yet planned
-				-
NAV12-REG01	Verify the transition plan for PBN in ANS provision			by:06/06/2030
CAA	-		%	Not yet planned
	1	Activity started (e.g. Project kicked-off)	10%	-
	2	The verification conducted	60%	-
	3	The outcome of the verification has been notified to ANSP	30%	-
ASP (By:06/2030)				
M-NAV			%	Not yet planned
-				-
NAV12-ASP01	Implement low-level IFR routes (LLR) for rotorcraft operations			by:06/06/2030
M-NAV	-		%	Not yet planned
	1	Project/task for implementing LLR procedures for rotorcraft has kicked off	10%	-
	2	LLR procedures for rotorcraft are developed	30%	-
	3	LLR procedures for rotorcraft are tested & validated	35%	-
	4	LLR procedures for rotorcraft are published in national AIP and in operational use	25%	-
NAV12-ASP02	Train air traffic controllers procedures supporting low-level IFR routes (LLR) in TMA and other routes for rotorcraft operations			by:06/06/2030
M-NAV	-		%	Not yet planned
	1	Activity started (e.g. Project kicked-off)	10%	-
	2	Training ongoing	40%	-
	3	Training completed	50%	-
NAV12-ASP03	Develop a local safety assessment for the implementation of low-level IFR routes (LLR) in TMA and other ATS routes for rotorcraft operations			by:06/06/2030
M-NAV	-		%	Not yet planned
	1	Activity started (e.g. Project kicked-off)	10%	-
	2	Document drafted	30%	-
	3	Document approved/released	60%	-

NAV12-ASP04	Implement Rotorcraft ATS routes above FL150		by:06/06/2030
M-NAV	-	%	Not yet planned
1	Project/task for ATS routes for rotorcraft has kicked off	10%	-
2	ATS routes for rotorcraft are developed	30%	-
3	ATS routes for rotorcraft are tested & validated	35%	-
4	ATS routes for rotorcraft are published in national AIP and in operational use	25%	-
NAV12-ASP05	Implement Rotorcraft ATS routes below FL150		by:06/06/2030
M-NAV	-	%	Not yet planned
1	Project/task for ATS routes for rotorcraft has kicked off	10%	-
2	ATS routes for rotorcraft are developed	30%	-
3	ATS routes for rotorcraft are tested & validated	35%	-
4	ATS routes for rotorcraft are published in national AIP and in operational use	25%	-
NAV12-ASP06	Implement one rotorcraft RNP0.3, RNP01 or RNAV1 SID and STAR per instrument RWY		by:06/06/2030
M-NAV	-	%	Not yet planned
1	Project/task for PBN SID and STAR for rotorcraft has kicked off	10%	-
2	PBN SID and STAR for rotorcraft are developed	30%	-
3	PBN SID and STAR for rotorcraft are tested & validated	35%	-
4	PBN SID and STAR for rotorcraft are published in national AIP and in operational use	25%	-
NAV12-ASP07	Implement all rotorcraft RNP0.3, RNP01 or RNAV1 SID and STAR per instrument RWY		by:06/06/2030
M-NAV	-	%	Not yet planned
1	Project/task for PBN SID and STAR for rotorcraft has kicked off	10%	-
2	PBN SID and STAR for rotorcraft are developed	30%	-
3	PBN SID and STAR for rotorcraft are tested & validated	35%	-
4	PBN SID and STAR for rotorcraft are published in national AIP and in operational use	25%	-
NAV12-ASP08	Establish the transition plan for PBN in ANS provision		by:06/06/2030
M-NAV	-	%	Not yet planned
1	Activity started (e.g. Project kicked-off)	10%	-
2	Document drafted	30%	-
3	Document approved/released	60%	-

SAF11	Improve Runway Safety by Preventing Runway Excursions <u>Timescales:</u> Initial operational capability: 01/09/2013 Full operational capability: 31/01/2018	20%	Late
Links to Enablers: PRO-006a			
The CAA planes to adopt certain parts from the European Action Plan for prevention of runway excursion. The stakeholders are expected to fulfill their obligations in accordance with the prescribed provisions from the EAFPPRE.			01/06/2021
REG (By:01/2018)			
CAA		0%	Late
This objective will be covered with support from Eurocontrol under Support to States. The support is plan for 2020 and 2021. Furthermore, there is nominated focal points from all stakeholders in our State, which will establish communication and undertake the necessary activities.			01/06/2021
SAF11-REG01	Implement the appropriate parts of the European Action Plan for the Prevention of Runway Excursions		by:31/01/2018
CAA	-	0%	Late
Comment: The CAA planes to adopt certain parts from the European Action Plan for prevention of runway excursion. The stakeholders are expected to fulfill their obligations in accordance with the prescribed provisions from the EAFPPRE.			
1	Activity started (e.g. Project kicked-off)	10%	N 01/06/2021
2	Documentation for the EAPPRE has been drafted, approved, released and disseminated by the State Authorities	15%	N -
3	Oversight activities arrangements, e.g. audit plans for the EAPPRE have been drafted, agreed & validated by the State Authorities	25%	N -
4	The applicable measures and oversight activities arrangements have been agreed, validated & implemented, i.e. through the appropriate reporting mechanism by the State Authorities	50%	N -
ASP (By:12/2014)			
M-NAV		0%	Not yet planned
-			
SAF11-ASP01	Implement the appropriate parts of the European Action Plan for the Prevention of Runway Excursions		by:31/12/2014
M-NAV	-	0%	Not yet planned
1	Activity started (e.g. Project kicked-off)	10%	N -
2	The applicable measures for the Action plan, part 3.1, 3.2 and 3.3 have been drafted by the ANSP	30%	N -
3	The applicable measures for the Action plan part 3.1, 3.2 and 3.3 have been agreed & validated by the ANSP	35%	N -
4	The applicable measures have been implemented, i.e. through the appropriate reporting mechanism by the ANSP	25%	N -

SAF11-ASP02	Implement the appropriate parts of the European Action Plan for the Prevention of Runway Excursions with regard to the provision of aeronautical information services		by:31/12/2014
M-NAV	-	0%	Not yet planned
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	The applicable measures for the Action plan, part 3.3 have been drafted by the AIS Providers	30%	N
			-
3	The applicable measures for the Action plan part 3.3 have been agreed & validated by the AIS Providers	35%	N
			-
4	The applicable measures have been implemented, i.e. through the appropriate reporting mechanism by the AIS Providers	25%	N
			-
SAF11-ASP03	Implement the appropriate parts of the European Action Plan for the Prevention of Runway Excursions with regard to the provision of meteorological services for international aviation		by:31/12/2014
M-NAV	-	0%	Not yet planned
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	The applicable measures for the Action plan, part 3.2 have been drafted	30%	N
			-
3	The applicable measures for the Action plan part 3.2 have been agreed & validated	35%	N
			-
4	The applicable measures have been implemented, i.e. through the appropriate reporting mechanism	25%	N
			-
Mil. Authority		0%	Not yet planned
-	-		-
SAF11-ASP01	Implement the appropriate parts of the European Action Plan for the Prevention of Runway Excursions		by:31/12/2014
Mil. Authority	-	0%	Not yet planned
1	Activity started (e.g. Project kicked-off)	10%	N
			-
2	The applicable measures for the Action plan, part 3.1, 3.2 and 3.3 have been drafted by the ANSP	30%	N
			-
3	The applicable measures for the Action plan part 3.1, 3.2 and 3.3 have been agreed & validated by the ANSP	35%	N
			-
4	The applicable measures have been implemented, i.e. through the appropriate reporting mechanism by the ANSP	25%	N
			-
APO (By:12/2014)			
Mil. Authority		100%	Completed
-	-		31/12/2018
SAF11-APO01	Implement the appropriate parts of the European Action Plan for the Prevention of Runway Excursions		by:31/12/2014
Mil. Authority	-	100%	Completed
Comment: According the EAPPRE edition 1.0 January 2013, the objectives for the aerodrome operators are met by the Aerodrome operator. (3.2.1, 3.2.2, 3.2.3, 3.2.4, 3.2.5, 3.2.6, 3.2.7, 3.2.8. The objective 3.2.9 is considered as unnecessary at this time.)			
1	Activity started (e.g. Project kicked-off)	10%	Y
			31/12/2018
2	The applicable measures for the Action plan, part 3.1, 3.2 and 3.3 have been drafted by the Airport Operators	30%	Y
			31/12/2018
3	The applicable measures for the Action plan part 3.1, 3.2 and 3.3 have been agreed & validated by the Airport Operators	35%	Y
			31/12/2018
4	The applicable measures have been implemented, i.e. through the appropriate reporting mechanism by the Airport Operators	25%	Y
			31/12/2018

SKOPJE Airport		100%	Completed
-		-	31/12/2018
SAF11-APO01	Implement the appropriate parts of the European Action Plan for the Prevention of Runway Excursions		by:31/12/2014
SKOPJE Airport		100%	Completed
Comment: According the EAPPRE edition 1.0 January 2013, the objectives for the aerodrome operators are met by the Aerodrome operator. (3.2.1, 3.2.2, 3.2.3, 3.2.4, 3.2.5, 3.2.6, 3.2.7, 3.2.8. The objective 3.2.9 is considered as unnecessary at this time.)			
1	Activity started (e.g. Project kicked-off)	10%	Y
			31/12/2018
2	The applicable measures for the Action plan, part 3.1, 3.2 and 3.3 have been drafted by the Airport Operators	30%	Y
			31/12/2018
3	The applicable measures for the Action plan part 3.1, 3.2 and 3.3 have been agreed & validated by the Airport Operators	35%	Y
			31/12/2018
4	The applicable measures have been implemented, i.e. through the appropriate reporting mechanism by the Airport Operators	25%	Y
			31/12/2018

2. Implementation Projects - Details

2.1. National Projects

ILS/MM/DME LWOH			
Organisation(s):	M-NAV (MK)		Type of project: National
Schedule:	By the end of 2020		
Status:	Public procurement is planned for March 20201		
Description:	Procurement and installation of a new ILS, MM and replacement of DME from DVOR/DME at LWOH airport		
Link and references			
ATM MP links:	-		
Other links:	-		
Project included in RP2 Performance Plan:	-	Name/Code in RP2 Performance Plan:	-
Project included in DP:	-	Name/Code in DP:	-
Performance contribution			
Safety:	++	Better continuity and availability	
Environment:		-	
Capacity:		-	
Cost-efficiency:		-	
Operational efficiency:		-	
Security:		-	

MET			
Organisation(s):	M-NAV (MK)		Type of project: National
Schedule:	30/06/2020		
Status:	Training of the affected personnel in completed. OAT is expected to be done during early spring 2020 The system is expected to be fully functional by the end of 2020.		
Description:	Procurement of additional METEO equipment as <ul style="list-style-type: none">• New AWOS/VOLMET/ATIS equipment for Skopje Airport• New AWOS equipment for Ohrid Airport		
Link and references			
ATM MP links:	-		
Other links:	-		
Project included in RP2 Performance Plan:	-	Name/Code in RP2 Performance Plan:	-
Project included in DP:	-	Name/Code in DP:	-
Performance contribution			
Safety:	+	increased safety through the availability of more accurate meteorological information	
Environment:		-	
Capacity:		-	
Cost-efficiency:		-	
Operational efficiency:		-	
Security:		-	

New ATM System Project			
Organisation(s):	M-NAV (MK)		Type of project: National
Schedule:	31/12/2021		
Status:	Now, Leonardo and M-NAV have finalized SAD (System Architecture Design) and SSS (System Segment Specification) documents in which each requirement from Cft specification is linked with at least one or more adequate System Segment specification Requirements SSR-ID(s). After months of common work (Leonardo, M-NAV and EUROCONTROL) and the conduction of 5 SDR (system Design Review) sessions, both parties can conclude that each UR (more than 2K in total) has a proper link(s) with SSS for each software module. After finalizing this stage, the next steps are foreseen in the PMP.		
Description:	Implementation of additional FDPS/CWP functions: <ul style="list-style-type: none">• A complete handling of ATC tactical constraints in 4 D profile calculation• HMI improvements• A complete concept of Aol implementation, definition of airspace volume outside of AoR where the trajectory prediction should be extended• LINUX upgrade• Simulator alignment with all SW upgrades listed related to the operational ATM system• Upgrade of MONA and ATC tools• Conflict Probe implementation		
Link and references			
ATM MP links:	L3: ATC17		
Other links:	-		
Project included in RP2 Performance Plan:	-	Name/Code in RP2 Performance Plan:	-
Project included in DP:	-	Name/Code in DP:	-
Performance contribution			
Safety:	++	Improved safety through the reduction of the controller workload and reduction of human error	
Environment:		-	
Capacity:	++	Increased capacity through increased controller productivity	
Cost-efficiency:		-	
Operational efficiency:		-	
Security:		-	

New ATM System Project			
Organisation(s):	M-NAV (MK)		Type of project: National
Schedule:	31/12/2021		
Status:	Now, Leonardo and M-NAV have finalized SAD (System Architecture Design) and SSS (System Segment Specification) documents in which each requirement from Cft specification is linked with at least one or more adequate System Segment specification Requirements SSR-ID(s). After 4 months of common work (Leonardo, M-NAV and EUROCONTROL) and the conduction of 5 SDR (system Design Review) sessions, both parties can conclude that each UR (more than 2K in total) has a proper link(s) with SSS for each software module which gives us a good starting position for the phases that will follow.		
Description:	New ATM system		
Link and references			
ATM MP links:	L3: ATC12.1, ATC17		
Other links:	Some PCP prerequisites (e.g. AGDL)		
Project included in RP2 Performance Plan:	-	Name/Code in RP2 Performance Plan:	-
Project included in DP:	-	Name/Code in DP:	-
Performance contribution			
Safety:	+	Increase in safety facilitated by the modern ATM system and the facilities it will offer to the controllers.	
Environment:		-	
Capacity:	++	Increased capacity through the deployment of the State of the Art ATM system, in compliance with SESAR, encapsulating modern technologies: IP, Data Link, advanced OLDI, etc.	
Cost-efficiency:		-	
Operational efficiency:		-	
Security:		-	

New ATM System Project - New technical and ops room for the new ATM - Construction of building			
Organisation(s):	M-NAV (MK)		Type of project: National
Schedule:	Planned		
Status:	All preparation regarding the start of the construction work is done. Construction permit is obtained. - Start of construction works on the new ATM building in the Q1 2020. - End of construction work August/September 2020.		
Description:	All preparation regarding the start of the construction work is done. Construction permit is obtained. - Start of construction works on the new ATM building in the Q1 2020 - End of construction work August/September 2020.		
Link and references			
ATM MP links:	-		
Other links:	The project is not related to a Level2/3 element and it does not have a performance contribution by itself. However, it is an essential prerequisite for the deployment of the New ATM system.		
Project included in RP2 Performance Plan:	-	Name/Code in RP2 Performance Plan:	-
Project included in DP:	-	Name/Code in DP:	-
Performance contribution			
Safety:		-	
Environment:		-	
Capacity:		-	
Cost-efficiency:		-	
Operational efficiency:		-	
Security:		-	

Supply and installation of new DME for Skopje Airport			
Organisation(s):	M-NAV (MK)		Type of project: National
Schedule:	By the end of 2020.		
Status:	Public procurement planned for March 2020.		
Description:	Procurement of new DME to facilitate PBN operations in Skopje TMA		
Link and references			
ATM MP links:	L3: NAV03.1, NAV10		
Other links:	Time frame for implementation is dependent on the results from the previous project, the DME study		
Project included in RP2 Performance Plan:	-	Name/Code in RP2 Performance Plan:	-
Project included in DP:	-	Name/Code in DP:	-
Performance contribution			
Safety:		-	
Environment:	+	Emissions and noise nuisance reduced by use of optimal flight procedures and routings	
Capacity:	+	Airspace optimisation	
Cost-efficiency:	+	Fuel cost reduction through optimised routes and TMA procedures.	
Operational efficiency:		-	
Security:		-	

VoIP			
Organisation(s):	M-NAV (MK)		Type of project: National
Schedule:	30/06/2021		
Status:	Technical specification prepared. The tender is expected to be open during the Q2 2020.		
Description:	Procurement and installation of a new VCS (VoIP) for Skopje ACC/APP/TWR units.		
Link and references			
ATM MP links:	L3: COM11.1, COM11.2		
Other links:	-		
Project included in RP2 Performance Plan:	-	Name/Code in RP2 Performance Plan:	-
Project included in DP:	-	Name/Code in DP:	-
Performance contribution			
Safety:		-	
Environment:		-	
Capacity:		Allows more flexible dynamic sectorisation and allocation of voice resources	
Cost-efficiency:	+	Reduced costs through the use of standard hardware and of Internet off the shelf technologies	
Operational efficiency:		-	
Security:		-	

3. Annexes

3.1. Specialists involved in the ATM implementation reporting for North Macedonia

LSSIP Co-ordination

LSSIP Focal Points	Organisation	Name
LSSIP National Focal Point	M-NAV	Jasminka GOCEVSKA
LSSIP Focal Point for NSA/CAA	CAA	Irena LAZAREVSKA Hristina NASKOVSKA
LSSIP Focal Point for ANSP	M-NAV	Jasminka GOCEVSKA
LSSIP Focal Point for Airport	Skopje Airport	Sasho SHTERJOV
LSSIP Focal Point for Military	North Macedonian Aviation Operation Unit	Maj. Ljupco ARNAUTOVSKI

EUROCONTROL LSSIP Support

Function	Directorate	E-mail
LSSIP Contact Person	NMD/INF/PAS	veronique.martou@eurocontrol.int
LSSIP Support Team	NMD/INF/PAS	lssip.support@eurocontrol.int

Other Focal Points

Other Focal Points	Organisation	Name
Focal Point for U-space		Katarina MARKOVSKA (ANSP) Aleksandar FILIPOV (ANSP) Irena LAZAREVSKA (CAA) Dragi STOJANOVSKI (CAA)
Focal Point for NETSYS		Milan JAKIMOV (ANSP) Aleksandar PALCEVSKI (ANSP) Irena LAZAREVSKA (CAA) Gjorgi IVANOV (CAA)