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NOTE

From:	General Secretariat of the Council
To:	Delegations
No. Cion doc.:	ST 10840/20 + ADD1
Subject:	Amended proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the implementation of the Single European Sky (recast) – Chapter IV Network management

Delegations will find, in Annex I, Chapter IV of the Commission proposal ST 10840/20 + ADD1 - Network Management - that will be discussed at the informal VTC of the members of the Aviation Working Party on 22 October 2020.

In addition, delegations will find, in Annex II, the relevant parts of the 2013 Impact assessment (ST 11501/2013 ADD1) and, in Annex III, the relevant parts of the Commission Staff Working Document (ST 11020/2020).

Delegations are invited to provide **written comments** on Chapter IV of the Commission proposal ST 10840/20 + ADD1 - Network management. The written comments should be sent to the Presidency (verk-4-eu@brue.auswaertiges-amt.de) and to the General Secretariat of the Council (isabelle.besson@consilium.europa.eu, godfrey.galea@consilium.europa.eu and avia-mar@consilium.europa.eu) by **26 October 2020 18:00 pm CET**.

CHAPTER IV**✧ NETWORK MANAGEMENT ✧***Article 266***Network ✧ functions ✧ ~~management and design~~**

1. The air traffic management (~~ATM~~) network functions shall ~~allow optimum~~ ⇒ ensure the sustainable and efficient ⇐ use of the airspace ⇒ and of scarce resources. ⇐ ~~and~~ ✧ They shall also ✧ ensure that airspace users can operate ~~preferred~~ ⇒ environmentally optimal ⇐ trajectories, while allowing maximum access to airspace and air navigation services. Those network functions ⇒ , enumerated in paragraphs 2 and 3, ⇐ shall ⇒ support the achievement of the Union-wide performance targets and shall be based on operational requirements ⇐ ~~be aimed at supporting initiatives at national level and at the level of functional airspace blocks and shall be executed in a manner which respects the separation of regulatory and operational tasks.~~

2. ~~In order to achieve the objectives referred to in paragraph 1 and without prejudice to the responsibilities of the Member States with regard to national routes and airspace structures, the Commission shall ensure that~~ The following ✧ network ✧ functions ✧ referred to in paragraph 1 ✧ include the following ~~carried out~~:

(a) the design ⇒ and management ⇐ of the European ~~route network~~ ⇒ airspace structures ⇐ ;

⇒ (b) air traffic flow management; ⇐

(~~c~~) the coordination of scarce resources within aviation frequency bands used by general air traffic, in particular radio frequencies as well as coordination of radar transponder codes.

↓ new

3. The network functions referred to in paragraph 1 also include the following:

(a) optimisation of airspace design for the network and facilitation of delegation of air traffic services provision through co-operation with the air traffic service providers and Member State authorities;

(b) management of the delivery of air traffic control capacity in the network as set out in the binding Network Operations Plan (NOP);

(c) function for coordination and support in case of network crisis.

(d) air traffic flow and capacity management;

(e) the management of the planning, monitoring and coordination of implementation activities of the deployment of infrastructure in the European ATM network, in accordance with the European ATM Master Plan, taking into account operational needs and associated operational procedures;

(f) the monitoring of the functioning of the European ATM network infrastructure.

↓ 1070/2009 Art. 3.6

4. The functions listed in ~~the first this subparagraph~~ paragraphs 2 and 3 shall not involve the adoption of binding measures of a general scope or the exercise of political discretion. ~~They shall take into account proposals established at national level and at the level of functional airspace blocks.~~ They shall be performed in coordination with military authorities in accordance with agreed procedures concerning the flexible use of airspace.

↓ new

5. The Commission shall be empowered to adopt delegated acts in accordance with Article 36 to amend this Regulation in order to add functions to the ones listed in paragraphs 2 and 3, where necessary for the functioning and performance of the network.

↓ 1070/2009 Art. 3.6 (adapted)

Article 27

⊠ The Network Manager ⊠

↓ new

1. In order to achieve the objectives referred to in Article 26, the Commission, supported by the Agency where relevant, shall ensure that the Network Manager contributes to the execution of the network functions set out in Article 26, by carrying out the tasks referred to in paragraph 4.

↓ 1070/2009 Art. 3.6 (adapted)

⇒ new

2. The Commission may, ~~after consultation of the Single Sky Committee and in conformity with the implementing rules referred to in paragraph 4, entrust to~~ ☒ appoint ☒ Eurocontrol, or another impartial and competent body, ⇒ to carry out ☐ the tasks ~~necessary for the execution of the functions listed in the first subparagraph~~ ⇒ of the Network Manager ☐. To this end, the Commission shall adopt an implementing act in accordance with the examination procedure referred to in Article 37(3). This appointment Decision shall include the terms and conditions of the appointment, including the financing of the Network Manager.

3. ⇒ The tasks of the Network Manager ☐ ~~These tasks~~ shall be executed in an ⇒ independent, ☐ impartial and cost ~~effective~~ ⇒ efficient ☐ manner ~~and performed on behalf of Member States and stakeholders~~. They shall be subject to appropriate governance, which ~~recognises~~ ☒ shall recognise ☒ ~~the~~ separate accountabilities for service provision and regulation ⇒ where the competent body designated as the Network Manager also has regulatory functions. ☐ ⇒ In the execution of its tasks, the Network Manager shall take ☐ ~~taking~~ into consideration the needs of the whole ATM network and ~~with the full~~ ⇒ shall fully involve ☐ ~~involvement of~~ the airspace users, ~~and~~ air navigation service providers ⇒, aerodrome operators and the military. ☐

↓ new

4. The Network Manager shall contribute to the execution of the network functions through support measures aimed at safe and efficient planning and operations of the network under normal and crisis conditions and through measures aimed at the continuous improvement of network operations in the Single European Sky and the overall performance of the network, especially regarding the implementation of the performance scheme. The action taken by the Network Manager shall take account of the need to fully integrate the airports in the network.

5. The Network Manager shall cooperate closely with the Agency acting as PRB in order to ensure that the performance targets referred to in Article 10 are adequately reflected in the capacity to be delivered by individual air navigation service providers and agreed between the Network Manager and those air navigation service providers in the Network Operations Plan.

6. The Network Manager shall:

(a) decide on individual measures to implement the network functions and to support the effective implementation of the binding Network Operations Plan and the achievement of the binding performance targets;

(b) advise the Commission and provide relevant information to the Agency acting as PRB on the deployment of the ATM network infrastructure in accordance with the European ATM Master Plan, in particular to identify investments necessary for the network.

7. The Network Manager shall take decisions through a cooperative decision-making process.

Parties to the cooperative decision-making process shall act to the maximum extent possible with a view to improving the functioning and performance of the network. The cooperative decision-making process shall promote the interest of the network.

↓ 1070/2009 Art. 3.6

~~3. The Commission may add to the list of the functions in paragraph 2 after proper consultation of industry stakeholders. Those measures, designed to amend non-essential elements of this Regulation by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 5(4) of the framework Regulation.~~

↓ new

8. By way of implementing acts adopted in accordance with the examination procedure referred to in Article 37(3), the Commission shall establish detailed rules for the execution of the network functions, the tasks of the Network Manager, governance mechanisms including decision-making processes and crisis management.

~~4. Detailed rules for the implementation of the measures referred to in this Article, except for those referred to in paragraphs 6 to 9, shall be adopted in accordance with the regulatory procedure referred to in Article 5(3) of the framework Regulation. Those implementing rules shall address in particular:~~

~~(a) the coordination and harmonisation of processes and procedures to enhance the efficiency of aeronautical frequency management including the development of principles and criteria;~~

~~(b) the central function to coordinate the early identification and resolution of frequency needs in the bands allocated to European general air traffic to support the design and operation of European aviation network;~~

~~(c) additional network functions as defined in the ATM Master Plan;~~

~~(d) detailed arrangements for cooperative decision-making between the Member States, the air navigation service providers and the network management function for the tasks referred to in paragraph 2;~~

~~(e) arrangements for consultation of the relevant stakeholders in the decision-making process both at national and European levels; and~~

~~(f) within the radio spectrum allocated to general air traffic by the International Telecommunication Union, a division of tasks and responsibilities between the network management function and national frequency managers, ensuring that the national frequency management functions continue to perform those frequency assignments that have no impact on the network. For those cases which do have an impact on the network, the national frequency managers shall cooperate with those responsible for the network management function to optimise the use of frequencies.~~

↓ new

9. Aspects of design of airspace structures other than those referred to in paragraphs 2 and 3 of Article 26 shall be addressed by Member States. In this regard, Member States shall take into account air traffic demands, seasonality and complexity of air traffic and of performance plans. Before deciding on those aspects, they shall consult airspace users concerned or groups representing such airspace users and military authorities as appropriate.

↓ 1070/2009 Art. 3.6

~~5. Aspects of airspace design other than those referred to in paragraph 2 shall be dealt with at national level or at the level of functional airspace blocks. This design process shall take into account traffic demands and complexity, national or functional airspace block performance plans and shall include full consultation of relevant airspace users or relevant groups representing airspace users and military authorities as appropriate.~~

~~6. Member States shall entrust Eurocontrol or another impartial and competent body with the performance of air traffic flow management, subject to appropriate oversight arrangements.~~

~~7. Implementing rules for air traffic flow management, including the necessary oversight arrangements, shall be developed in accordance with the advisory procedure referred to in Article 5(2) of the framework Regulation and adopted in accordance with the regulatory procedure referred to in Article 5(3) of the framework Regulation, with a view to optimising available capacity in the use of airspace and enhancing air traffic flow management processes. These rules shall be based on transparency and efficiency, ensuring that capacity is provided in a flexible and timely manner, consistent with the recommendations of the ICAO Regional Air Navigation Plan, European Region.~~

~~8. The implementing rules for air traffic flow management shall support operational decisions by air navigation service providers, airport operators and airspace users and shall cover the following areas:~~

~~(a) flight planning;~~

~~(b) use of available airspace capacity during all phases of flight, including slot assignment, and~~

~~(c) use of routings by general air traffic, including:~~

~~the creation of a single publication for route and traffic orientation;~~

~~options for diversion of general air traffic from congested areas; and~~

~~priority rules regarding access to airspace for general air traffic, particularly during periods of congestion and crisis.~~

~~9. When developing and adopting the implementing rules the Commission shall, as appropriate and without prejudice to safety, take into account consistency between flight plans and airport slots and the necessary coordination with adjacent regions.~~

↓ new

Article 28

Transparency of accounts of the Network Manager

1. The Network Manager shall draw up, submit to and publish its financial accounts. Those accounts shall comply with the international accounting standards adopted by the Union. Where, due to the legal status of the Network Manager, full compliance with the international accounting standards is not possible, the Network Manager shall achieve such compliance to the maximum possible extent.

2. The Network Manager shall publish an annual report and regularly undergo an independent audit.

↓ 550/2004

Article 10

~~Relations between service providers~~

~~1. Air navigation service providers may avail themselves of the services of other service providers that have been certified in the Community.~~

~~2. Air navigation service providers shall formalise their working relationships by means of written agreements or equivalent legal arrangements, setting out the specific duties and functions assumed by each provider and allowing for the exchange of operational data between all service providers in so far as general air traffic is concerned. Those arrangements shall be notified to the national supervisory authority or authorities concerned.~~

~~3. In cases involving the provision of air traffic services, the approval of the Member States concerned shall be required. In cases involving the provision of meteorological services, the approval of the Member States concerned shall be required if they have designated a provider on an exclusive basis in accordance with Article 9(1).~~

↓ new

Article 29

Relations with stakeholders

The air traffic service providers shall establish consultation mechanisms to consult the relevant airspace users and aerodrome operators on all major issues related to services provided, including relevant changes to airspace configurations, or strategic investments which have a relevant impact on air traffic management and air navigation service provision and/or charges. The airspace users shall also be involved in the process of approving strategic investment plans. The Commission shall adopt measures detailing the modalities of the consultation and of the involvement of airspace users in approving investment plans. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 37 (3).

↓ 1070/2009 Art. 2.6 (adapted)

⇒ new

Article ~~3044~~

Relations with military authorities

Member States shall, within the context of the common transport policy, ~~take the necessary steps to~~ ensure that written agreements between the competent civil and military authorities or equivalent legal arrangements are established or renewed in respect of the management of specific airspace blocks ⇒ and notify the Commission thereof ⇐.

↓ 550/2004

Article 13

~~Access to and protection of data~~

~~1. In so far as general air traffic is concerned, relevant operational data shall be exchanged in real time between all air navigation service providers, airspace users and airports, to facilitate their operational needs. The data shall be used only for operational purposes.~~

~~2. Access to relevant operational data shall be granted to appropriate authorities, certified air navigation service providers, airspace users and airports on a non-discriminatory basis. 3. Certified service providers, airspace users and airports shall establish standard conditions of access to their relevant operational data other than those referred to in paragraph 1. National supervisory authorities shall approve such standard conditions. Detailed rules relating to such conditions shall be established, where appropriate, in accordance with the procedure referred to in Article 5(3) of the framework Regulation.~~

*Article 31***Availability of and access to operational data for general air traffic**

1. With regard to general air traffic, relevant operational data shall be made available in real-time, on a non-discriminatory basis and without prejudice to security or defence policy interests, by all air navigation service providers, airspace users, airports, and the Network Manager, including on cross-border basis and on a Union-wide basis. Such availability shall be to the benefit of certified or declared air traffic service providers, entities having a proven interest in considering the provision of air navigation services, airspace users and airports as well as the Network Manager. The data shall be used only for operational purposes.
2. Prices for the service referred to in paragraph 1 shall be based on the marginal cost of making the data available.
3. Access to relevant operational data as referred to in paragraph 1 shall be granted to the authorities in charge of safety oversight, performance oversight and network oversight, including the Agency.
4. The Commission may lay down the detailed requirements for the making available of and the access to data in accordance with paragraphs 1 and 3 and the methodology to set the prices as referred to in paragraph 2. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 37(3).

1.1 ROLE OF THE NETWORK MANAGER

1.1.1 Assessment of impacts

The pros, cons and associated risks of the network manager options, as assessed in this part and in annex V, are presented below.

Figure 5-11: Pros, cons and risks of the options on the role of the network manager

	Option 6.1 Do nothing	Option 6.2 Operational governance by industry, EU and MS simplified strategic governance	Option 6.3 Joint undertaking of the industry to operate the Network Manager	Option 6.4 Options 6.2 or 6.3 with Eurocontrol being Network Manager, including airspace design
Pros	The NM may need some time for current functions/processes/relations to mature	- Greater user influence - Allows the NM to effectively manage the performance of the network. - Enhanced cooperation	- Greater user influence - The NM maintains neutrality needed for centralised services. - A more strategic partnership between FABs and Network Manager may reduce duplications. - Dependency of the Network Manager role and SESAR is recognised supporting achievement of the European ATM Master Plan	- Establishes a semi-commercial model as an option for provision of ATM support services. - May lead to centralisation of additional services (e.g. MET) providing scale effects - ANSP given direct management oversight. - Optimal solution for harmonisation of systems and facilitating alignment with SESAR.
Cons	- The NM remains weakly integrated into the planning and investment decisions of ANSPs - The NM may struggle in establishing itself as a strategic partner to ANSPs and FAB - No basis for widening the scope of functions	- The NM has no enforcing powers - The Network Manager relies on ANSPs/FABs to deliver network performance, but this option could make them less committed	The State and ANSP stakeholders need to be prepared to work through the FAB structure.	
Risks	If the NM functions are not extended to support SESAR, the deployment of SESAR may be delayed	User priorities (being often short-term) may not align with SES or SESAR priorities	User priorities (being often short-term) may not align with SES or SESAR priorities	Many States would oppose a commercial model if outsourcing to external companies is used.

1.1.1.1 Economic impacts

Cost efficiency: Impacts of the options 6.2 *operational governance to industry* and 6.3 *joint undertaking* would be only marginally positive. While user influence increases, the decisions on service provision remain ultimately in hands of ANSPs. Still, under option 6.3 there would be more scope for the Network Manager services which would slightly improve the potential for efficiency gains. Option 6.4 *centralised services* would have considerable potential for improving the baseline situation, but the level of outcome depends on the precise content and format of the centralised services provided by the Network Manager¹. However, even a conservative estimate would be a benefit of € 150-200 million over the next decade and there is a possibility for multiplication (up to 10 times) of this benefit with inclusion in the scope the meteorological services and some prospective SESAR functions².

Flight Efficiency: For options 6.2 *operational governance to industry* and 6.3 *joint undertaking* the impact would be only marginally positive due to the increased influence of airspace users. Option 6.4 *centralised services* would be expected to have more profound effect by pushing the performance achievements towards the higher end of the RP2 flight efficiency targets.

Capacity: As for flight efficiency, the impacts of options 6.2 *operational governance to industry* and 6.3 *joint undertaking* would be only marginally positive. Option 6.4 *centralised services* would have potential for higher delivery through improvements in flow management via introduction of effective 4D trajectory management³.

Administration costs: Administration costs would remain unchanged for option 6.2 *operational governance to industry* as model will be very similar to the existing one. In option 6.3 *joint undertaking* the costs of running the Network Manager Board would be doubled as more frequent meetings are needed. These costs would be covered through the route charges in the standard manner. In option 6.4 *centralised services* there would be some additional administration cost in EASA overseeing the enlarged Network Manager. This cost could be recovered in the normal manner from the entity being overseen (i.e. in this case the Network Manager). In total these costs would not exceed one FTE (i.e. € 162 000) for options 6.2 and 6.3 as all the additional work is just incremental addition to already existing work. For option 6.4 a second FTE should be accounted for.

¹ Would be determined by comitology procedure

² See Annex V, chapter 7 for further details

³ 4D trajectory management is one of the key SESAR concepts, which transforms current air traffic flow management function into time-based activity, where tight time windows are used to determine the position of the aircraft at each point along its route. This allows for example to maximise runway capacity as any idle moments on the runway can be avoided and conversely no aircraft will have to wait in the air for the runway to become free as the aircraft will not be allowed to depart before a clear and optimal trajectory along its route can be guaranteed all the way to the destination gate.

Box 5-4: Business case for a centralised network services⁴

The concept of more centralised services for the network manager is built on the success of initiatives such as the European AIS Database (EAD⁵) and, more recently, the PENS network service⁶. The objective of any centralised service must be to meet user's requirements in an efficient way, avoiding duplication of the service across the user base. Centralised services are also driven by an imperative to collaborate, and may show some or all of the following characteristics:

- require information to be shared with a high degree of trust (accuracy, integrity, confidentiality and security);
- provide services that may be complex and therefore difficult to fulfil;
- meet common needs of users without generating a 'superset' of requirements;
- provide a common view of information, typically through a single point of access;
- provide de-facto harmonisation of information and its formats and processes;
- support open source access to enable users or other suppliers to innovate value-added services (without duplicating costs to stakeholders).
- Allow for deploying SESAR concepts from a blank sheet with minimal cost.

It would be reasonable to expect a compelling business case for a centralised service, which will not only account for cost-benefit analyses but also consider risks and benefits to service quality. The ideas and initial investigations for a centralised service should arise through existing bodies, such as Eurocontrol, FABs, other ANSP Alliances and, in the future increasingly the SESAR Deployment Manager. The Network Manager is the logical coordinating point/contracting agent for a number of the services currently provided by ANSPs individually and in particular for the entirely new services arising from SESAR.

1.1.1.2 Social impacts

Impacts on employment and working conditions: There will be no impact under options 6.2 *operational governance to industry* and 6.3 *joint undertaking*. In case of option 6.4 *centralised services* the practise of tendering out of the centralised services for time-bound concessions would incur periodic changes in the companies providing these services and subsequently job security in these companies would be lowered. However, many of these services are new services, being created by the SESAR programme. No reduction in overall staff numbers is expected.

Safety: No effects in any of the options.

1.1.1.3 Environmental impacts

Linked to the changes in flight efficiency, the impacts in options 6.2 *operational governance to industry* and 6.3 *joint undertaking* would be only marginally positive. Option 6.4 *centralised services* would be expected reduce emissions more substantially.

⁴ Further details in Annex V, chapter 7

⁵ www.ead.eurocontrol.int/eadcms/eadsite/index.php.html

⁶ www.eurocontrol.int/articles/pan-european-network-services-pens

1.1.2 Comparison of options

Economic, social and environmental impacts of this group of options, along with their efficiency/effectiveness are compared in the table below.

Figure 5-12: Comparison of the options on the role of the network manager

	Option 6.1 Do nothing	Option 6.2 Operational governance by industry, EU and MS simplified strategic governance	Option 6.3 Joint undertaking of the industry to operate the Network Manager	Option 6.4 Options 6.2 or 6.3 with Eurocontrol being Network Manager, including airspace design
SUMMARY OF IMPACTS				
Economic impacts:				
Cost efficiency	0	+	+	++ ~€ 15-20 M p.a.
Flight efficiency	0	+	+	++
Capacity/Delays	0	+	+	++
Administration costs	0	- € 0.16 M p.a.	- € 0.16 M p.a.	- € 0.32 M p.a.
Social impacts:				
Employment and working conditions :				
NSAs	0	0	0	0
ANSPs	0	-	0	-
Safety	0	0	0	
Environmental impacts:	0	+	+	++
EFFECTIVENESS/EFFICIENCY				
Effectiveness:				
Specific objectives:				
SO1: Improve performance of ATS in terms of efficiency	0	0	0	++
SO2: Improve utilisation of ATM capacity	0	0	0	++
Operational objectives:				
OO5: Strengthen the governance and operational scope of the Network Manager	0	+	+	++
Efficiency				
	0	+	+	++ ~€ 15-20 M p.a.

In conclusion, option 6.4 brings the greatest efficiency and capacity benefits and the only question is whether it should be combined with the governance model in option 6.2 or 6.3. As noted in the cost efficiency assessment, option 6.3 has a slight edge in the sense that being fully industry-run, the organisation would probably seek efficiencies slightly more actively than in case of States-run organisation which could continue defending national status quos. Moreover, given that the Network Manager providing the centralised services would essentially be an ANSP like any other, it would be logical to choose a combination of options 6.4 and 6.3 as the preferred option.

1.1. Chapter IV (Network Management)

1.1.1. Functional Airspace Blocks (FABs)

FABs should no longer be regulated, but may continue to exist by choice of their Member States, if deemed useful. The abolition of specific rules on FABs would not stand in the way of, or otherwise affect more flexible cooperation configurations among ANSPs.

Indeed, the experience and assessment of the functioning of FABs since they were first set up in 2009 has made clear that the FABs have failed to address the problem of airspace fragmentation, which was their original objective. As an example, performance plans for the third reference period (RP3) were all submitted to the Commission by Member States individually at the end of the second reference period (RP2), with the exception of FABEC. In bilateral meetings with FABs carried out in 2019 with DG MOVE, it became clear that only a few FABs are effectively functioning. In addition, other types of cooperation between Member States without limiting them to a predefined geographical area are also encouraged. This is why the obligation for Member States to formally cooperate within FAB should be abolished. However, this would not prevent Member States from continuing to cooperate in the context of FABs or other forms or ways, should they wish to do so. Neither would this prevent any ANSP to delegate or outsource certain services to the ANSP of another Member State (i.e. cross-border service provision) to enable better capacity management and match with resources.

The 2013 impact assessment accompanying the SES2+ proposal presents a preferred option of making FABs more flexible. It presents evidence that flexibility over rigidity is preferred. The option would focus the FABs as tools for achieving the performance scheme targets. Airspace design would be increasingly moved to the level of the Network Manager to ensure seamless airspace throughout the network, whereas the FABs themselves would focus on finding the optimal alliances for each part of the services being provided. The desired flexibility expounded by the preferred option could be addressed by removing requirements on FABs altogether.

1.1.2. Network management

1.1.2.1. Adaptions suggested

In order to facilitate the discharge of network functions and to enable the Network Manager to better respond to crises, a number of adaptations should be made.

The network functions should be more clearly defined and should include the facilitation of delegation of air traffic services provision as well as management of the delivery of air traffic control capacity in the network, as set out in the binding Network Operations Plan previously agreed between the Network Manager and individual air navigation service providers. An additional function should consist in the management of the planning, monitoring and coordination of the implementation activities of deployment of the European ATM network infrastructure, in accordance with the European ATM Master Plan and taking into account operational needs. More generally, the definition of network functions should be reviewed in a perspective of strengthening the overall network-oriented approach. This should notably support the implementation of the mandatory Network Operations Plan, the achievement of the binding performance targets, as well as the deployment of the ATM network infrastructure in accordance with the European ATM Master Plan.

The role of the Network Manager in contributing to the execution of the network functions should be clearly set out. Requirements on the cooperative decision-making process should also be strengthened, to ensure that the interest of the network prevails and that the procedures allow for resolving issues and finding consensus. Airports should also be addressed in the proposal and shall be fully integrated into the network.

The overall aim would be to strengthen the functioning of the European network.

Cooperation and consultation with operational stakeholders should remain a key activity for the execution of the network functions. Critically, Member States' sovereignty over their airspace and the requirements of the Member States relating to public order, public security and defence matters should remain unaffected.

The Network functions should remain subject to an adapted performance scheme.

The safety oversight of Network Manager and its capacity to perform network functions should remain, as today, the responsibility of EASA.

One of the preferred options of the 2013 impact assessment consisted in creating a joint undertaking of the industry to operate the Network Manager with a role for Eurocontrol built around the Network Manager, and a more comprehensive centralised service provider, including also airspace design in a broad sense. Better defining and strengthening the network functions and the governance of the Network Manager would be in line with the rationale of that preferred option. The studies and recommendations available justify the proposed approach, as will be explained immediately below.

1.1.2.2. *Justification*

The airspace, capacity and infrastructure management concepts developed below build on reports of the Network Manager periodically presented to Member States in the comitology committee (Single Sky Committee), on the second recommendation of the Wise Persons Group on the Future of SES, as well as on the EP Pilot Project on the New Airspace Architecture Study. In the peak summer seasons of 2018 and 2019, when delays negatively affected large parts of the network, the Network Manager developed a number of measures to address the ‘capacity crisis’. This experience has shown the essential role played by the Network Manager, but also the need to strengthen its coordination function, as well as to ensure that the interests of the network prevails in its daily, as well as crisis, management.

The table below shows in summary what are the airspace, capacity and infrastructure management concepts

Airspace management	✓ Optimised organisation and utilisation of airspace leading to better scalability, additional capacity and/or more efficient use of existing capacity, and making the network more resilient. ✓ Airspace design and utilisation would be such as to promote the use of the best possible trajectories and preferred routes for civil airspace users and, for military airspace users, to improve effectiveness of military activities.
Capacity management	✓ The Network Operations Plan as a binding instrument would be of assistance when it comes to compliance with the Union-wide performance target on capacity. ✓ An integration of the Airport Operations Plans with the Network Operations Plan would facilitate the connection of capacity on the ground with capacity in the air

Infrastructure management	✓ Planning: This item would entail improved planning, in terms of identifying the ATM network infrastructure deployment needs aiming to support the sustainable future development of ATM infrastructure with a view to supporting sustainable future development of ATM including in the form of infrastructure rationalisation. The planning would be aligned to the European ATM Master Plan and involve full cooperation with all concerned stakeholders. ✓ Deployment: The item would facilitate the timely deployment of ATM network infrastructure improvements based on standardised and sustainable technologies, subject to coordination between the Network Manager and the SESAR Joint Undertaking regarding the industrialisation phase. ✓ Monitoring: This would concern the deployment and technical performance of the relevant infrastructure and would contribute to the effective operation of the European ATM network.
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Table 3: Airspace, capacity and infrastructure management concepts

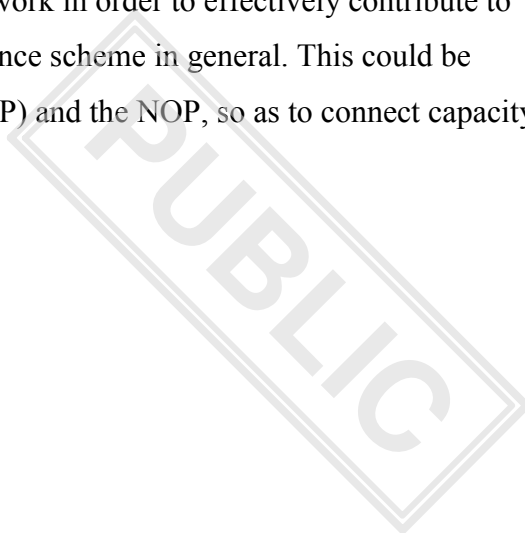
The work of the Network Manager already largely achieves the objectives of the “airspace management” item referred to above, through the discharge of the existing functions in accordance with Commission Implementing Regulation 2019/123. Reinforced cooperative decision-making procedures would further improve the efficiency of this work.

In order to facilitate capacity management, the Network Operations Plans should become mandatory and be linked to the individual ATSPs performance plans. Evidence from the Network Manager on the Network Operational Plan (NOP) shows a lack of commitment by some Member States to provide capacity. It also shows that actual performance is not in line with the NOP. Moreover, lower than planned delivery of capacity cannot be justified by corresponding reduced needs, as significant delays are observed. These delays are shown in the Table below. In comparison to the target set at an average of 0.5 min of delay per flight. In some Member States, these delay figures are double or triple.

ANSP	Delay 2019
Austrocontrol – Vienna ACC	4787 min/day or 1.88min/flt
Skeyes – Brussels ACC	1771 min/day or 1.02 min/flt
DFS – Karlsruhe ACC	8382 min/day or 1.67 min/flt
DSNA – Marseille ACC	5515 min/day or 1.71 min/flt

Table 4: Delays 2019 in ATM Network

In addition, airports must be fully integrated into the network in order to effectively contribute to the overall performance of the network and the performance scheme in general. This could be achieved by integrating the Airport Operations Plan (AOP) and the NOP, so as to connect capacity on the ground with capacity in the air.



As regards infrastructure management, the 2019 ECA Special Report 11 on modernisation of ATM calls for a more effective way of managing ATM infrastructure:

Recommendation 5 of the European Court of Auditors – Ensure appropriate monitoring of performance benefits delivered by ATM modernisation

The Commission should:

(a) ensure that ATM modernisation is appropriately monitored. Performance benefits should be measured and compared with the initial expectations (PCP CBA);

(b) where applicable in the performance scheme, ensure that targets being proposed take into account all performance gains being realised – thereby assuring their delivery to airspace users.

Timeframe: as soon as possible and at the latest for the next target setting exercise (reporting period 4 of the performance scheme)

Finally, in secondary legislation, the work of the two working groups supporting the existing Network Management Board, the working group on operations (NDOP) and the NDTECH, composed of relevant stakeholders should be strengthened to ensure continued industry leadership in the work of the Network Manager. These groups are likely to be the main fora to reinforce the industry role in achieving effective decision-making in a single value chain from operations to technology.

1.1.3. Availability of and access to operational data for general air traffic

It is necessary to ensure that the provision of air traffic data services can be carried out on a cross-border and Union-wide basis for operational purposes. In addition, it is important that new entrants to the data market have access to the relevant operational data of ANSPs even before they are certified, so that they are able to decide on market entry. Therefore, access to this data should be granted not only to authorities, but also to air traffic service providers, airspace users and airports, to entities having a proven interest in considering the provision of air navigation services. In order to prevent cross-subsidisation or double charging, principles for pricing rules should also be laid down.