EUROPEAN
COMMISSION

Brussels, XXX
[…](2013) XXX draft

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

on accelerating the implementation of the Single European Sky (recast)

(Text with EEA relevance)

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

on accelerating the implementation of the Single European Sky (recast)

(Text with EEA relevance)

1. INTRODUCTION

1.1. Objectives of the Single European Sky

The European aviation industry plays a vital role in the European economy, by promoting trade and tourism and acting as a vehicle for employment growth. Air traffic control is a key actor in the value chain of the aviation industry. It should ensure the safe, expeditious and cost-efficient flow of air traffic thereby minimising fuel usage, carbon emissions and flying times.

However, European air navigation services (ANS) have evolved primarily within national borders, with each Member State establishing its own Air Traffic Management (ATM) system leading to costly and inefficient structural fragmentation of the European ATM system and a persistent lack of responsiveness to the requirements of its customers – the airlines, and ultimately, the paying customers.

In 2004[1], the EU launched the Single European Sky (SES) initiative with a threefold objective: "*to enhance current air traffic safety standards, to contribute to the sustainable development of the air transport system and to improve the overall performance of the European ATM system and ANS*"[2]. The commitment to these objectives was further enforced by formulating high level goals to be achieved by 2020[3]. A major project to modernise the technology behind the European ATM system was launched in 2007 (the SESAR project). 2009 saw the addition of additional concrete tools to drive performance[4]: a revised approach to stimulate integrated service provision, a process of target-setting for performance objectives and the establishment of the Network Manager to coordinate action at the European network level.

The achievement of the SES is one of the key priorities of the European Commission's overall transport policy[5]. But although all Member States remain committed to the SES, implementation still falls well below the original expectations, and accelerating the process through a new package of measures was identified in 2012 as a key action for the development of the Single Market[6]. Air traffic delays due to air traffic control have been reduced (partly as a consequence of the financial crisis which has reduced air traffic in Europe) but cost-efficiency has not improved quickly enough, and the environmental impact of sub-optimal flights profiles remains significant while safety levels have been constantly

1 Regulations (EC) Nos 549, 550, 551, 552/2004 of 10 March 2004 (OJ L 96, 31.3.2004, p. 1)
2 Regulation (EC) No 549, Article 1(1)
3 A three-fold increase of capacity, an improvement in safety by a factor of 10, a 10% reduction in the effects flights have on the environment and a reduction of the cost of ATM services to airspace users by at least 50%
4 Regulation (EC) No 1070/2009 of 21 October 2009 (OJ L 300, 14.11.2009, p. 34)
5 Refer to Annex I of COM(2011) 144 final
6 COM(2012) 573 final

maintained. And at a time when the European airlines are facing tough competition globally, it is hard to ignore the possible gains of the SES, amounting to €5 billion per year.

The implementation of the SES and associated reform of the European ATM system must be accelerated, helping our airspace users to flourish in a tough global competitive environment, and facilitating future economic growth. That is why the Commission, building on the experience of the SES so far, is proposing a carefully targeted further legislative proposal to facilitate early implementation of the SES.

1.2. Evolution of the performance of air navigation services

At the end of the 1990s, Europe faced major delay and inefficiency in the provision of air traffic control (ATC) services. More than a decade later, fragmentation of the European airspace remains high, with 64 air traffic control centres in the 27 different Air Navigation Service Providers (ANSPs)[7].

In 2011, the total direct and indirect costs for ATC amounted to some EUR [14] billion. Just the direct costs (levied in the form of user charges) make up more than 20% of the total operating costs, excluding fuel, of the most efficient airlines. ATC direct costs are the third largest item (after fuel and airport charges) for airlines.

Productivity (measured in air traffic controller-hours) has increased by around one third in the last decade, but the overall employment costs for air traffic controllers (ATCOs) have risen faster (by more than 40%). Total ATC costs rose by a fifth, and the number of European ATCOs has risen by a quarter to around 17000, but ATCOs remain less than 30% of total staff employed by ANSPs, indicating a very high number of support staff (around [40000] in 2011).

And even with the traffic losses easing the pressure on the system, capacity has been stagnant: the average total ATC delay per flight (1.8 minutes per flight) was roughly the same in 2011 as 2003. Environmental performance depends on flight efficiency that is the opportunity given to airspace users to fly along the more direct routings. Full success it this field is still to come and costs of additional fuel and flying times are estimated at €3.8 billion in 2011. ATC shows good safety record and work is in progress to reinforce the implementation of safety programmes, management systems and analysis methods.

2. ENFORCING AND IMPROVING EXISTING RULES

In the last revision of the legal framework in 2009, the Commission focused on the need for a radical improvement of the performance of the air traffic control system. The delivery of the performance objectives should indeed be seen as a primary ambition in setting up the Functional Airspace Blocks (FABs), the management of network functions (Network Manager), and the SESAR project.

All have advanced over the last two years. Targets for the first reference period (RP1) of the performance scheme were completed in 2011 and the scheme itself entered into force in 2012; the Network Manager (with Eurocontrol designated to act as NM) became operational in 2011; and the deadline for shifting to a more integrated operating airspace, based on FABs, arrived in December 2012. The SESAR Joint Undertaking started to deliver concrete results. Finally, the deadlines for some other key measures (such as datalink and aeronautical data quality) have also been reached.

[7] The geographical scope of the SES extend over non-EU Member States, like Switzerland and Norway, that have committed to implement it through bilateral and multilateral agreements

The activity level has been high in the last two years, but the delivery of benefits generally insufficient. The performance plans agreed at the EU level for RP1 (2012-14) would generate savings of €2.4 billion over the three years, although contributions from Member States to the overall target have not matched this overall target, leaving a shortfall of €189 million. Furthermore airspace users dispute the validity of these figures, arguing that inflation, carry-overs and risk-sharing resulting from previous years will in fact lead to a substantial increase of their costs in 2014. The Network Manager has performed well, but its functions remain limited functions, in particular with regard to the adoption of concrete remedial actions. And finally, while the Member States have agreed to set up nine FABs, they remain essentially institutional and administrative endeavours and do not yet provide concrete operational gains.

Existing legislation already goes some way in addressing these issues with powers given to the Commission to define and enforce implementing measures. The performance and charging schemes have recently been revised. Performance targets for the next reference period (2015-2019) must be set by the end of 2013. Governance mechanisms for SESAR deployment have been introduced paving the way for the selection of a deployment manager and the launch of the deployment process in 2014.

The Commission is determined to ensure implementation of the SES in all aspects, and has therefore taken preparatory steps to launch infringement procedures against Member States who have thus far failed to comply with the requirements for the establishment of FABs. Similarly it will not hesitate to take further actions if the lack of implementation of some interoperability measures is confirmed, e.g., datalink services.

But most essential of all, accelerating the implementation of SES requires that ambitious performance targets, in particular in the cost-efficiency area, are set in view of the second reference period of the performance scheme.

3. ENHANCING THE EFFICIENCY OF SES

3.1. Focussing ANSPs on customer needs: delivering on performance

The performance scheme is the key enabler for the creation of the Single European Sky. Based on a system of target setting, planning, monitoring and reporting in the four key performance areas of safety, environment, capacity and cost-efficiency, the performance scheme establishes the framework under which service providers are compelled to change in order to provide better services at lower costs.

The implementation of the scheme in the first reference period from 2012-2014 will lead to some tangible results in form of efficiency gains. Costs will be reduced by 3.2% per year. Together with environment and capacity targets, flights will be more direct and delays reduced. At the same time it is also clear that more could have been achieved: the initial targets proposed by the Commission and the PRB for the first reference period were reduced in the approval process in the Single Sky Committee where Member States vetoed more ambitious targets; and, the final acceptance of performance plans with a remaining gap to the targets further reduced that ambition.

Experience also shows that Member States, which are either sole or majority owners of service providers, have a strong tendency to focus on healthy revenue streams of the user-financed system of ATC, and can be therefore reluctant to endorse fundamental change which brings risks of strikes or repercussions on cash-strapped national budgets.

Against this background, the performance scheme should be strengthened to increase transparency and become more enforceable; to make target setting more technical and evidence based and thus less political; to increase the independence of the Performance

Review Body as the key technical adviser, and finally to reinforce control and sanction tools when targets are not met. In parallel airspace users should be given more opportunities to express their views on the process.

Under the current system, Member States in the Single Sky Committee have the ultimate say on targets, the adoption of performance plans and the acceptance of corrective measure in case targets are not reached. This needs to be adapted by reinforcing control and sanction mechanisms. Furthermore, members of the Performance Review Body should henceforth be directly nominated by the Commission, to ensure impartiality and to allow expertise from outside aviation to be introduced, for example, from regulators of other network industries.

3.2. Unbundling of support services

The first SES package of 2004 aimed to introduce market mechanisms for the provision of support services, in order to improve their efficiency[8]. Little in practice has been achieved although in the two cases[9] where such measures have been taken, the results have been positive (one of the ANSPs estimated the saving to be around 50% compared to internalised provision of support services). So more could and should be done to delegate the provision of support services to specialised providers.

Introducing market mechanisms, where possible, is fully in line with what is being done elsewhere in European infrastructure industries, either by competition within the market or competition for the market under tender procedures providing time limited concessions. On the most conservative estimate, roughly 20% savings can be expected in respect of support services.

Clearly not all services will be appropriate. The Commission's analysis indicates that the core air traffic control services are natural monopolies at least under current technology: it is not feasible e.g. to have two control towers at a single airport or two controllers in the same sector competing for business. In theory, tender procedures with limited time concession could be considered for these core services, but these would require strong economic regulation and oversight.

However, support services, such as meteorology, aeronautical information, communication, navigation or surveillance services are more practical propositions. There are many companies outside the ATM world who could offer such services, which could be divided between several providers to maximise competition, or – as suggested by Eurocontrol, attributed to a single provider that could support several core providers.

It is imperative that market mechanisms are introduced to increase efficiency in the provision of support services. Therefore the Commission proposes to pursue the unbundling and market opening of certain of these support services.

3.3. Reinforcing National Supervisory Authorities' (NSA) independence

NSAs have a major role to play in the implementation of SES. Their tasks have gradually increased since their establishment in 2004 and most are still developing their organisation and capabilities to match. Their primary responsibilities cover verifications of compliance of the ANSPs, which involves the supervision of safe and efficient service provision, organisation of proper inspections and the conclusion and implementation of agreements on

[8] Regulation (EC) 550/2004, recital 13

[9] Swedish air navigation service provider LFV and Highlands and Islands Airports (HIAL) outsource many of their support services

the supervision of ANSPs within FABs. NSAs also cooperate to ensure supervision of ANSPs providing services in another State. Finally, they prepare, oversee and monitor the ANSP performance plans, this new task becoming more and more important.

A number of difficulties in the implementation of SES can be attributed to NSA difficulties – to inadequate resources, to a lack of expertise and a lack of independence from both governments and ANSPs. This has affected both the processes of certification and oversight of ANSPs, as well as in the preparation and implementation of the performance scheme. Failing to address these shortcomings will significantly risk the implementation of the SES.

The problem of inadequate resources has a direct impact on technical skills and weakens the independence of the regulatory body vis-à-vis the ANSP, and should be resolved by strengthening mutual co-operation between NSAs (for example at FAB level), by more intensive coordination between NSAs at EU level allowing them to exchange best practices and participate in training programmes and by the pooling of experts for example under EASA auspices.. Greater financial autonomy will make it possible to tackle the existing staff shortages (estimated to be around 100 staff (FTEs) across Europe).

NSAs have to perform their duties with impartiality and independence. While existing legislation requires that *"this independence shall be achieved through adequate separation at the functional level at least"*[10] between NSAs and ANSPs, most of the States have opted for a structural separation. Nevertheless, even this has not always delivered, especially when the resources and expertise remain inadequate, resulting in a stronger influence by the ANSPs. Therefore, the Commission will propose a set of binding criteria in order to ensure the autonomous and effective operation of NSAs.

In this context, the Commission is of the opinion that the regulatory framework dealing with the efficiency and independence of NSAs should be reinforced as a matter of priority.

4. REMOVING THE FRAGMENTATION OF THE EUROPEAN ATM SYSTEM

4.1. Enabling industrial partnerships

One of the central initiatives throughout SES development has been the concept of FABs. They are intended to combat fragmentation of the airspace by establishing co-operation between ANSPs, optimising the organisation and use of airspace through design of optimal control sectors and routes over larger areas and hence achieving overall synergies through economies of scale. In 2009, a binding deadline of December 2012 was set for Member States to establish FABs, and the concept was adjusted from a purely airspace reorganisation to one of service provision to ensure that FABs were flexible tools to improve performance.

Whilst a lot of work by the Member States and their ANSPs has been done to create FABs, progress has been disappointing. Nine FABs have been announced, but in fact none of them are fully operational, and most seem intended to fulfil formal requirements, rather than developing synergies or economies of scale.

The Commission will continue to pursue infringement cases against Member States in relation to the FABs but remains committed to ensuring their success. FABs indeed may need more flexibility by making it legally clearer that they can pursue more variable co-operation arrangements between ANSPs to exploit synergies and team up with different partners for different projects. These arrangements could cover common procurement, training, support services or delegation of services. We propose to modify the rules to enable FABs to focus more clearly on producing performance benefits. The precise manner of improving

[10] Article 4(2) of Regulation (EC) No 549/2004

performance should be left to the choice of the industry participants, as long as performance improvements are realised.

The Commission proposes to develop the FAB concept so that it becomes a more performance driven and flexible tool for ANSPs, based on industrial partnerships, to achieve the targets set by the SES performance scheme.

More emphasis will also be put on the central Network Manager as regards overall airspace management (see section 4.2)

4.2. Reinforcing the role of the Network Manager (NM)

The NM for the EU ATM network, which has been operational since 2011, is a major player in the implementation of SES. A growing number of functions and services in the European ATM system could in fact be performed by a single entity at a central level. Eurocontrol has been designated by the Commission as Network Manager, and has performed well[11]; in its capacity as NM, it has as a key remit the prevention of bottlenecks in the airspace and system overloads on a day-to-day basis, as well as the facilitation of direct routings of aircraft. These functions thereby directly support ANSPs in meeting performance targets related to capacity and flight efficiency. The NM's role is recognised by all stakeholders as essential.

Promoting the network dimension in strategic and operational terms requires a very close cooperation across all operational stakeholders. However, whilst the original intention was to create strong industry-led governance with clear executive powers, in practice the NM Manager tends to decide by consensus, which often results in weak compromises. The model of a joint undertaking should be taken as an objective which would also fit with the further reform of Eurocontrol (see section 5.2).

Furthermore, the current NM operations cover only a subset of functions and services needed for the optimisation of the performance of the network. A gradual extension of the NM initial operating scope of action is therefore needed.

The Commission will therefore propose to reinforce the role of the NM based on streamlined governance that gives a more prominent role to the industry (both the ANSPs and airspace users). This will allow the enlarging of its scope to include new functions (including aspects of airspace design) and services to be performed at the central level by the NM, or delegated to groupings of ANSPs to deliver on behalf of all in the Centralised Services model.

5. BUILDING A MORE CONSISTENT INSTITUTIONAL FRAMEWORK

5.1. Role of the European Aviation Safety Agency (EASA) in ATM

EASA has been pivotal in EU aviation policy since 2002, with its objective both to achieve a high and uniform level of safety and to further the traditional EU goals of a level playing field, free movement, environmental protection, avoidance of regulatory duplication, promotion of ICAO rules etc. In 2009[12], EASA's responsibilities expanded to cover in addition safety aspects relating to ATM and aerodromes. The 2009 extension to ATM created duplication in that as a result some tasks are covered by both SES legislation and the EASA basic regulation. This was deliberate to avoid a possible gap in the regulatory framework during the transition phase. But the legislation invites the Commission to propose changes to

[11] The Network Management Function (NMF) was established under Commission Implementing Regulation (EU) No 677/2011, and Eurocontrol was nominated as the Network Manager (NM) through a Commission Decision of July 2011

[12] Regulation (EC) No 1108/2009 of 21 October 2009 (OJ L 309, 24.11.2009, p. 51)

remove the overlap once the corresponding EASA implementing rules have been established[13].

In areas such as air crew licensing or airworthiness, EASA ensures the drafting of all technical rules, but ATM was different in that a distinction was made between "safety" and "non-safety" rules, given the strong residual role played by Eurocontrol in non-safety issues. The problem is that all technical ATM rules contain both safety elements and elements related to capacity, cost and efficiency, so implementation is difficult, particularly as an increasing number of ATM rules have impacts also on the airborne side and hence airworthiness, air operations, training etc. With the SESAR project now getting close to deployment, the problem of aligning different technical rules risks getting worse as all related technologies and concepts must be facilitated or mandated by the regulatory system. We need to move to a single regulatory strategy, rule structure and consultation process.

The Commission proposes to eradicate the overlap between SES and EASA rules and will also put forward ideas on how share work between the different institutions. The Commission should focus on the key questions of economic regulation, whilst EASA ensures co-ordinated drafting and oversight of all technical rules, drawing on expertise from Eurocontrol, Member States, and industry stakeholders.

5.2. Focussing Eurocontrol on the management and operation of the European ATM network

Eurocontrol is a major player in the implementation of the SES. Originally established to provide a collective air traffic control system in six European states[14], it took on a broad set of ATM related tasks over the years and became a unique centre of ATM expertise. Following the extension of EU competence to ATM matters, Eurocontrol started a process of reorganisation to align itself with SES policy: firstly to respect the principle of separation of regulatory activities from service provision; secondly to avoid duplication with the increasing roles of the Commission and EASA in policy-making, regulatory, certification and oversight activities. The EU became a provisional member of this organisation in 2003. The ongoing process of reform of Eurocontrol facilitated its appointment as PRB in 2010 and NM in 2011 and, starting from 2007, its participation in the Sesar Joint Undertaking as a founding member.

Furthermore, in an effort to better coordinate their activities, the EU and Eurocontrol signed an agreement in 2012 which recognises the contribution that Eurocontrol can make to the establishment of an efficient European ATM system by assisting the EU in playing its role as single European regulator; this agreement will help in delivering SES through the broad geographical membership of this organisation in support to the bilateral and multilateral arrangements of the EU with third countries.

Significant steps have already been taken, and the final part of the process of the reform of Eurocontrol has begun in 2013. It remains an intergovernmental organisation and its Constitution and its decision-making bodies (such as the Provisional Council) do not yet reflect the outcome of recent reform changes. The Commission supports the ongoing reform of Eurocontrol that will focus on the management and operation of the European ATM network. The particular importance of this role has already been recognised by the EU through a mandate to Eurocontrol to deliver the Network Management functions set up under

[13] Refer to Article 65a of Regulation (EC) 216/2008 of 20 February 2008 (OJ L 79, 19.3.2008, p. 1) as amended

[14] Belgium, France, the Federal Republic of Germany, Luxembourg, the Netherlands and the United Kingdom

SES legislation. These functions could be further enhanced – and the efficiency of the network further improved – if the NM were to be charged with additional network functions or centralised services to be contracted out to industry that ANSPs could make use of. This would deliver economies of scale while allowing air traffic service provision to continue at local level. This development should be promoted in full consistency with the SES legal framework and SESAR deployment. Moreover it cannot materialise without a shift in the governance of this organisation towards a more industry-led environment (see section 4.2).

The Commission intends to co-ordinate the position of Member States to ensure a swift revision of the Eurocontrol Convention starting from 2014 and focusing Eurocontrol on operational tasks in which it has greatest expertise.