<u>SINGLE EUROPEAN SKIES: FUNCTIONAL AIRSPACE BLOCKS</u> - <u>Delays and responses</u>

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ABSTRACT

This article considers the 'Functional Airspace Blocks' (FAB's) – which are part of the European initiative for a Single European Sky (SES). The primary objective of the transport policy has been to complete the internal market for transport and facilitate the free movement of persons, good and services. Yet the significance of the transport policy to the wider objectives of the EU is often overlooked. Whilst deregulation of the air transport sector in the EU has created the world's largest and most successful example of regional market integration and liberalization in air transport – the industry remains hampered by disjointed skies, which standard to compromise safety and impact upon economic development. And, whilst the FAB should have been completed – 'by' December 2012 - it is still not a reality. The research identifies the aims and advantages of a common European airspace and reviews the delays and consequences of implementation, specifically commenting on the use of the infringement process (or non-use) against Member States regarding the implementation of the FAB's.

1. INTRODUCTION

The primary purpose of the European Community¹ was to bring about the gradual integration of the States of Europe following the devastation and destruction of the Second World War (WWII) through the establishment of a common market founded on the four recognized freedoms - the movement of goods, services, people and capital. Significantly, transport had a major role to play in realizing these goals and remains, therefore, a vital element of the European Union (EU). Transport should be viewed as a fundamental cornerstone, and the foundation on which the Union has been constructed.

Aviation is a key transport mode; it is a strategic sector that makes a vital contribution

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¹ European Coal and Steel Community with the ECSC Treaty signed: 18 April 1951 - By France, Germany, Italy and the Benelux countries. Entered into force: 23 July 1952. (Expired: 23 July 2002). In 1957, the Treaties of Rome established the European Economic Community (EEC) and the European Atomic Energy Community (EURATOM) - Signed: 25 March 1957 Entered into force: 1 January 1958 by the six founding Member States: Belgium, Germany, France, Italy, Luxembourg, Netherlands.

to the EU's overall economy and employment. Aviation supports 5.1 million jobs and contributes in excess of €365 billion, or 2.4% to European GDP. This remains a growth area where the expansion is estimated to be 5% annually until 2030.²

That said, as traffic volumes increase so do concerns about safety and efficiency. The common EU aviation policy has the aim of making Europe the safest air space in the world; yet, despite leading the world in terms of internal liberalization of the air transport market, the skies above remain fragmented and inefficient. Whilst the EU Member States have embraced, or, arguably, had thrust upon them, measures (which created a single market relating to air carrier licensing, market access, fares etc.,) removing restrictions which limited development of the air transport market and prevented cross-border investment by European airlines, the same access and opportunities have not occurred in the EU skies. Undoubtedly, reticence amongst some Members States still exists. This continues to result in a segmented system that ultimately translates through to inefficiency, increased fuel costs, more congested skies – and arguably reduced and hence, compromised safety.

This article therefore reviews the fragmented EU's skies and the drive by the EU for a Single European Sky (SES), through the Functional Airspace Block (FAB) approach, which had as the latest implementation date – 'by' December 2012. In 2015 this was still not achieved. The research identifies the aims and advantages of the common European airspace and reviews the delays and consequences of implementation – specifically commenting on the use of the infringement process (or non-use) against Member States regarding the implementation of the FAB's (as specified within the air navigation services Regulation ('The SP Regulation').³

2. Transport and the EU: the current White Paper

The objective behind a single market has always been to bring down barriers and simplify existing rules, thus enabling citizens in the EU to make the most of the opportunities available to them. The importance of transport should not be overlooked - without an efficient and effective transport policy, one of the pinnacle objectives, the free movement of persons and goods, would be seriously compromised, 'there can be no market without transport!'

The primary objective of the transport policy has therefore always been to complete the internal market for transport, whilst ensuring sustainable development and adhering to environmental challenges. The 'Roadmap to a Single European Transport Area' focuses on a competitive and resource efficient transport system.⁵ This encompasses the development of the major networks within Europe, spatial management, the improvement of transport safety and security and the development of international cooperation. The policy recognizes the need to develop a competitive

² Based on EU data.

³ Regulation (EC) No 550/2004 of the European Parliament and of the Council of 10 March 2004 on the provision of air navigation services in the single European sky (the service provision Regulation). ⁴ As acknowledged by EU Commission (specifically in this instance in relation to transport by road) within their publication, 'Road Transport, Europe on the move.' Luxembourg 2004, ISBN 92-894-6649-9.

⁵ White Paper, 'Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system.' COM(2011)144 final. Brussels, 28 March 2011.

and efficient system that will lead to increased mobility, whilst continuing to strive to remove residual barriers. However one of the challenges of transport remains the reliance on fossil fuels; and therefore, the EU transport White Paper also set far reaching targets in order to reduce greenhouse gas emissions and limit the effects of climate change. That said, the Roadmap also clearly identifies that '[c]urbing mobility is not an option.'6

3. Aviation

A further area that the White Paper addresses is the need for a Single European Transport Area for all modes. One specific area commented upon was the need for a Single European Sky, and in this respect it was clearly stated that the EU Commission were already addressing the capacity and quality of airports and that the Single European Sky (SES) needed to be implemented as 'foreseen.' In this regard, the White Paper provides a clear message that the progress needed and envisaged has not been satisfactory. It is stated that since the earlier, 2001, White Paper on Transport the SES has been launched but that improvements still need to be made to traffic management operations in accordance with the Air Transport Management (ATM) programme.

Alongside this, it is reinforced that a key aim is to ensure that Europe is the safest region in the world for aviation. And, in order to achieve this, the White Paper sets out a five-point approach, which relates to,

- Improving data collection (including exchange and analysis) and reviewing respective legislation on occurrence reporting in civil aviation.
- Adapting a regulatory safety framework to the development of new technologies ('SESAR' 10).
- Ensuring the implementation of the EU aviation safety strategy consistently across all aviation domains;
- Promoting transparency and exchange of safety information with international partners such as ICAO, cooperating with non-EU countries, on safety matters on regulatory convergence, mutual recognition and technical assistance;
- Developing a Safety Management System at EU level that incorporates safety performance targets and measurements in order to identify the risks and to achieve continued improvement in safety levels.

The EU's updated Aviation Strategy¹¹ reinforced the fact that safety remains at the centre of the EU's aviation policy being of paramount importance to air transport movements and development within the EU. With traffic growth in Europe predicted to reach 14.4 million flights in 2035 – equating to 50% more than in 2012, achieving

⁶ Ibid., para 18.

⁷ Ibid. at 3.1, para. 36.

⁸ White Paper European Transport policy for 2010: time to decide. COM(2001)370 Final. Brussels, 12 Sept. 2001

⁹ http://ec.europa.eu/transport/air/sesar/deployment_en.htm

¹⁰ SESAR (Single European Sky ATM Research).

¹¹ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions. An Aviation Strategy for Europe. Com(2015) 598 Final, 7 December 2015.

a single joined up European approach is key to maintaining high levels of European safety. ¹² Seamless transport is also essential to ensuring a competitive and efficient Europe. This necessitates smart mobility systems, which requires appropriate regulatory frameworks as well as coordinated partnerships and practices. Yet, half way through the duration of the White Paper and the respective policy aims, it is arguable whether the progression envisaged has been met – particularly in terms of creating a Single European Sky, where development has been remarkably delayed.

3.1. A Single European Sky

Since the 1980's there have been calls to tackle the airspace capacity and congestion ¹³ issues above the skies in Europe, 14 with the call being led by the European Organisation for the Safety of Air Navigation (EUROCONTROL). 15 Over ten-years ago, in 2004, the European Commission initiated the SES project. 16 This was as a result of the EU gaining further competences in air traffic management (ATM) with the decision-making process moving away from an intergovernmental practice to the EU framework.

SESAR (Single European Sky ATM Research) is the technical pillar of the SES initiative and involves using modern technology in order to deal with today's challenges, whilst preparing for those of tomorrow. The main tasks of the ATM (summarized) involves:

- (i) Air traffic control - the management of aircraft movements;
- Flow and capacity management the prioritizing of aircraft to ensure an (ii) systematic and organized process;
- (iii) Airspace management – the organization of airspace so as to cater for traffic volumes and respective needs.

The aim of SESAR is to develop a new ATM system to handle increased traffic movements with the objectives to enhance and improve safety alongside lowering costs, thereby also improving flight efficiency.

Deregulation of airlines began in the EU in 1978 through a series of packages, ¹⁷ before this time the national markets within the EU were protected and fragmented.

¹² Ibid.

¹³ Arthur D. Little, Limited (2000) Study into the potential impact of changes in technology on the development of air transport in the UK - Final Report to Department of the Environment, Transport and Regions (DETR), DETR Contract No. PPAD 9/91/14, London U.K.

¹⁴ A. Majumdar and J. W. Polak (2001) A Framework for the Estimation of European Airspace Capacity using a Model of Controller Workload, Transportation Research Records, 1744, 30-43; Arnab Majumdar and Washington Y. Ochieng, Centre for Transport Studies Dept. of Civil & Environmental Engineering, Imperial College London & Gerard McAuley, Jean Michel Lenzi and Catalin Lepadatu, EUROCONTROL DAS/AFN Division, Brussels, Belgium (U/K) The factors affecting airspace capacity in Europe: A Framework Methodology based on Cross Sectional Time-Series Analysis using Simulated Controller Workload Data. http://www.atmseminar.org/seminarcontent/seminar6/papers/p_119_u.pdf

¹⁵ EUROCONTROL is the pan-European organization established in 1960 to coordinate air traffic control and air traffic management (ATC/ATM).

¹⁶ The European Commission adopted, on 10 October 2001, a package of measures on air traffic management with a view to establishing the single European sky by the end of 2004.

¹⁷ This was through three successive packages of liberalization measures (1987-1992).

R. Doganis, (2010) The Airline Business. Routledge.

And, although 'the European Union has created the world's largest and most successful example of regional market integration and liberalization in air transport.'18 this is arguably limited to certain areas – such as the creation of the concept of European air carriers and the opportunity of majority investment and ownership by EU citizens in EU airlines. The 2002 so-called 'Open Skies' judgment clarified that the EU needed to act collectively, so as not to discriminate or act unfairly against Members within the Union – specifically, in this instance, in relation to air service agreements. Arguably this philosophy should also extend to the realms of air traffic movements; but that said, the EU does not have a single sky per se, retaining a legacy of disjointed air traffic operations, whereby each country is responsible for its own sky. As Button and Neiva point out, '[r]eforming air traffic control is, however, inherently more difficult than deregulation of airlines and airports. ²⁰ That said, conversely, within Europe, airspace is defined as a common resource; but, the sky is not managed at a European level, instead there are a series of handovers between controllers and technical systems at each border crossing. This means that when a plane enters the airspace of a Member State it is serviced by the relevant air navigation service provider (ANSP), which is according to the applicable rules and operational requirements.

The SES legislative framework consists of Regulations²¹ that relate to air navigation services (ANS), the organization and use of airspace and the interoperability of the European Air Traffic Management Network (EATMN). This has been extended through extensive and comprehensive implementing legislation, which provides an overall framework that also includes more than twenty Implementing Rules and Community Specifications ("technical standards") adopted by the European Commission. The framework includes European Aviation Safety Agency (EASA) (in the field of aerodromes, air traffic management and air navigation services) through

¹⁸ ec.europa.eu – International Aviation.

Case C-466/98 Commission v. United Kingdom [2002] ECR I-9427; Case C-467/98 Commission v. Denmark [2002] ECR I-9519; Case C-468/98 Commission v. Sweden [2002] ECR I-9575; Case C-469/98 Commission v. Finland [2002] ECR I-9627; Case-471/98 Commission v. Belgium [2002] ECR I-9681; Case C-472/98 Commission v. Luxembourg [2002] ECR I-9741; Case C-475/98 Commission v. Austria [2002] ECR I-9797.
 Kenneth Button & Rui Neiva (2013) Single European Sky and the functional airspace blocks: Will

Kenneth Button & Rui Neiva (2013) Single European Sky and the functional airspace blocks: Will they improve economic efficiency? Journal of Air Transport Management 33 (2013) pp. 73-80.
 For example, see - Regulations N° 549/2004, 550/2004, 551/2004 and 552/2004 (SES I)

Regulation (EC) No 549/2004 of the European Parliament and of the Council of 10 March 2004 laying down the framework for the creation of the single European sky (the framework Regulation) [Official Journal L 96 of 31 March 2004].

Regulation (EC) No 550/2004 of the European Parliament and of the Council of 10 March 2004 on the provision of air navigation services in the single European sky (the service provision Regulation) [Official Journal L 96 of 31 March 2004].

Regulation (EC) No 551/2004 of the European Parliament and of the Council of 10 March 2004 on the organization and use of the airspace in the single European sky (the airspace Regulation) [Official Journal L 96 of 31 March 2004]

Regulation (EC) No 552/2004 of the European Parliament and of the Council of 10 March 2004 on the interoperability of the European Air Traffic Management network (the interoperability Regulation) [Official Journal L 96 of 31 March 2004].

The four Regulations adopted in 2004 (the SES I Package) were revised and extended in 2009 with Regulation (EC) N° 1070/2009 aimed at increasing the overall performance of the air traffic management system in Europe (the SES II Package).

the establishment of a joint undertaking (JU) on research & development. 22 As part of this, FAB's have a significant role to play in the revisions leading to the overall aim of an efficient and safe European Single Sky. 23 Whilst it is acknowledged that there have been significant advancements since the launch of the Single Sky was advocated in the 2000's, ²⁴ it is also clearly reinforced that fragmented air traffic management 'hinders optimal capacity use and imposes an unnecessary financial burden on aviation.²⁵ In the SES II package it is acknowledged that the first SES package, 'has not delivered the expected results in important areas. The process of integration within functional airspace blocks, regardless of national borders, has encountered numerous hurdles.'26

In the recent EU updated Aviation Strategy (2015)²⁷ it was clearly acknowledged that within a public consultation on aviation within Europe, ATM ranked first among the five most important areas to improve the competitiveness of the EU aviation. This was given further credence by the fact that in 2015, five of Europe's largest airline groups met and collectively agreed that there needed to be a reliable and efficient airspace in order to support the EU's objectives of enhancing the competitiveness of the EU air transport industry both at European and international level. It was also noted that this was a contributory to supporting growth and jobs across Europe.

3.2. Fragmentation and impact

As a result of a historical legacy flights undertake a patchwork route when flying across the EU, so despite the fact that land frontiers could be said to have disappeared, airspace frontiers have remained unchanged (Figure: 1). This means that flights do not take the shortest and most convenient straight-line route; so, on average, aircraft fly 49km longer than strictly needed due to airspace fragmentation. Without boundaries the 63% of current route inefficiencies could be removed with an estimated saving of save nearly 5 million tonnes of CO₂ per year.²⁸ This is a key factor in attaining the ambitious aims and targets set in the current Transport White Paper.

Note: the European Commission adopted, on 10 October 2001, a package of measures on air traffic management with a view to establishing the single European sky by the end of 2004.

²² Council Regulation (EC) No 219/2007 of 27 February 2007 on the establishment of a Joint Undertaking to develop the new generation European air traffic management system (SESAR) – calls for a ATM Master Plan. OJ L 64, 2 March 2007, p. 1.

²³ Single European Sky II - Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 25 June 2008: Single European Sky II: towards more sustainable and better performing aviation, COM(2008) 389 final. Brussels, 25 June 2008. ²⁴ Ibid. – at 3.

²⁵ Ibid. – at 1. Introduction.

²⁶ Ibid.- at 2.2.

²⁷ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions, An Aviation Strategy for Europe. Com(2015) 598 Final, 7 December 2015.

²⁸ European Commission Fact Sheet – July Infringements package: key decisions. Brussels, 16 July, 2015. Also see: http://ec.europa.eu/transport/modes/air/single_european_sky/

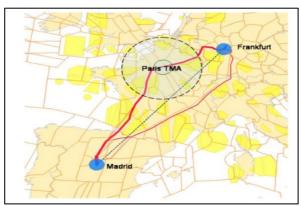


Figure 1: An example of a flight Madrid-Frankfurt route *Source*: COM(2008) 389 final.

Additionally, Member States allocate areas for military exercises and, historically remote areas have evolved into areas with the densest traffic. European airspace covers 10.8 million km² and has sixty control centres. Recent EU data states that currently the European ATM system is run by over 100 different air navigation service providers (ANSP). Whilst, the number of providers is identified as not being the primary issue, their ability to interface with other providers due, in part, to antiquated technology is however questioned. Concern is therefore raised as the economic performances of operating such a fragmented system, where efficiency varies greatly across the network. The similarly sized US system is able to handle much more traffic at comparable costs, resulting in a 70% efficiency difference between the US and Europe. Section 10.10 military exercises and, historically remove and, historically remove and, historically remove and historically remove and has sixty control centres. Section 2.00 military exercises and, historically remove and, historically remove and historically remove and historically remove and has sixty control centres. Section 2.00 military exercises and, historically remove and historically remove and has sixty control centres.

The five biggest ANS Providers (DFS for Germany, DSNA for France, ENAIRE for Spain, ENAV for Italy and NATS for the UK) assume 60 % of total European gate-to-gate service provision costs equating to operational responsibility for 54 % of European traffic. This alone creates a distortion, which, arguably, equally impacts upon fairness and equity; whereby, route frequency and volume determines income flows for air navigation service providers (ANSP).³³ This particularly brings into question the economic cost-effectiveness of the remaining ANSP's, which act in a supporting role.

The EU states within the background documentation to the SES, that, '[u]nder the Chicago Convention,³⁴ the concept of Flight Information regions (FIRs) defines homogenous regions of airspace, which should efficiently cover air route structures.

²⁹ See DG Move: http://ec.europa.eu/transport/modes/air/single-european-sky/

³⁰ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions. An Aviation Strategy for Europe. Com(2015) 598 Final, 7 December 2015.

³¹ See also the following discussions in:

K. J. Button & G. McDougall, (2006) Institutional and structural changes in air navigation service providing organizations. *Journal of Air Transport Management* 12, 236-252. K. J. Button, & R. Neiva, (2013) Economic efficiency across national air navigation systems. In: American Economic Association 124th Annual Meeting. San Diego. K. J. Button, & R. Neiva (2014) Economic efficiency of European air traffic control systems. *Journal of Transport Economics and Policy* 48, 65-80.

32 Ibid.

³³ See DG Move: http://ec.europa.eu/transport/modes/air/single_european_sky/

³⁴ Convention on International Civil Aviation, opened for signature 7 Dec. 1944. Chicago. 61 Stat. 1180, 15 U.N.T.S. 295 (entered into force 7 April, 1947)

Up to now, air frontiers have been fixed by reference to land and sea frontiers. Against this background, the International Civil Aviation Organisation (ICAO) recommends that the delineation of internal airspace should be related to the need for efficient service rather than to national boundaries.'35

Hence, whilst this represents a simplistic overview of the role of ICAO, the Chicago Convention and the related Annexes,³⁶ the fact remains that the EU provides this quoted overview as one of its arguments and reasoning for development of the SES, and therefore for FAB's. Further pointing to the fact that the delineation of internal airspace should be related to the need for efficient service rather than to national boundaries, and, as such, the EU-SES seeks to implement this concept.³⁷ Which in

Dr Jiefang Huang 'Aviation Safety and ICAO' (2009) https://openaccess.leidenuniv.nl/.../000-huang-diss-28-01-09.pdf

For further reading, also see Annex 11 to the Convention. Note: the Annexes were given the same force as the Convention, with the Annexes were designed to be flexible and hence amendable and were based upon the concept as with in the earlier Paris Convention (1919) which established CINA – *Commission international de la navigation aerienne*.

³⁷ Supra. Fn 35. Also see Commission Regulation (EU) No 255/2010 of 25 March 2010 laying down common rules on air traffic flow management [Official Journal L 80 of 26 March 2010]. Communication from the Commission of 20 December 2007 - First Report on the implementation of the Single Sky Legislation: achievements and the way forward. [COM(2007) 845 final – Not published in the Official Journal]. Also the following related EU legislation/documents:

Commission Regulation (EC) No 730/2006 of 11 May 2006 on airspace classification and access of flights operated under visual flight rules above flight level 195 [Official Journal L 128 of 16 May 2006].

Commission Regulation (EC) No 2150/2005 of 23 December 2005 laying down common rules for the flexible use of airspace [Official Journal L 342 of 24 Dec. 2005].

Regulation (EC) No 549/2004 of the European Parliament and of the Council of 10 March 2004 laying down the framework for the creation of the single European sky (the framework Regulation) [Official Journal L 96 of 31 March 2004].

Regulation (EC) No 550/2004 of the European Parliament and of the Council of 10 March 2004 on the provision of air navigation services in the single European sky (the service provision Regulation) [Official Journal L 96 of 31 March 2004].

Regulation (EC) No 552/2004 of the European Parliament and of the Council of 10 March 2004 on the interoperability of the European Air Traffic Management network (the interoperability Regulation) [Official Journal L 96 of 31 March 2004].

Communication from the Commission to the Council and the European Parliament of 1 December 1999: The creation of the single European sky [COM(1999) 614 final – Not published in the Official Journal].

Communication from the Commission to the European Parliament, the Council, the European and Social Committee and the Committee of the Regions Accelerating the implementation of the Single European Sky [COM(2013)408 of 11 June 2013].

Proposal for a Regulation of the European Parliament and of the Council on the implementation of the Single European Sky [COM(2013)410 final of 11 June 2013].

³⁵ Air traffic management: Organisation and use of airspace in the Single European Sky - EUR-Lex European upper flight information region (EUIR) http://eur-lex.europa.eu/legal-content/PL/ALL/?uri=uriserv:124046 [Accessed 11 November 2015, re accessed, 9-12 March 2016]. Single European Sky therefore is designed to provide for a single European upper flight information region (EUIR) and encompasses the upper airspace, which currently is under the responsibility of the respective EU Member State. SES (FAB) will also include adjacent airspace of European countries that are not EU members.

³⁶ It should be noted that this is a summary as provided by the EU as to their rationale for SES. However, as Professor Mendes has indicated it nevertheless provides a very simplistic interpretation of the relationship between ICAO and aviation safety, and specifically the EU's interpretation and simple justification in this regard. Readers are directed to the thesis of Huang so as to ensure the understanding of 'the relationship between (Art 28) Chicago Convention and SARPs laid down in Annex 11'... and hence subsequently, the legal force, and relationship to FIRs, which remains in this instance, outside the boundaries of this research.

essence is ultimately the overall aim of the EU – regardless of the specific elements of the Convention and related Annexes; for, whilst, for the most part, land frontiers across Europe have disappeared this is not the case in the skies. It is therefore stated, for these reasons that, 'the European Commission adopted, on 10 October 2001, a package of measures on air traffic management with a view to establishing the single European sky' initially by 2004. 38 That said, despite the EU advocating the advantages, and despite the fact that the EU states that this is based upon ICAO recommendations, in terms of creating more integration and cooperation for air transport in the sky, it remains a fact that the Member States are reluctant to tackle airspace fragmentation and undertake the creation of Functional Airspace Block's (FAB's). This hesitancy is inherently linked to retaining sovereign control and dominance over the sky above 'their nation,' so despite a recognized union within Europe – namely the EU, there remains reluctance to concede further control to the supranational power. No doubt this is linked to the very war (WWII) that was instrumental in leading to the creation of the EU in the first place. But this hesitancy is far from isolated to the EU, aviation constantly battles a legacy of distrust, which remains an obstacle to advancing civil aviation outside home countries.³⁹ This remains an irony given the fact that aviation, by its very nature, is international, and has played a significant part in advancing globalization. Ironically and paradoxically, the only industry/service, which has not reaped the full rewards, constantly remains aviation.40

4. Functional Airspace Block

Under the SES legislation, national air traffic control organizations would work together through nine regional airspace blocks (FAB's) leading to efficiency gains, cost reductions, emission improvements and safety benefits. The FAB's are designed to take into account traffic flow rather than state boundaries (Figure: 2).

Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EC) No 216/2008 in the field of aerodromes, air traffic management and air navigation services [COM(2013)409 final of 11.6.2013 - not published in the Official Journal].

Air traffic management: Organization and use of airspace in the Single European Sky - EUR-Lex European upper flight information region (EUIR) http://eur-lex.europa.eu/legal-content/PL/ALL/?uri=uriserv:124046 [Accessed 11 November 2015]

³⁸ Supra fn. 35.

³⁹ S. J. Fox (2014) The evolution of aviation: *In times of war and peace – blood tears and salvation! IJWP* (2014) Vol. XXXI No. 4 Dec. pp. 49-79.

Fox, S. J. (2015) 'CONTEST'ing Chicago. Origins and Reflections: *Lest we forget! International Journal of Private Law*, (2015) Vol. 8, No. 1, pp. 73-98.

40 Ibid.

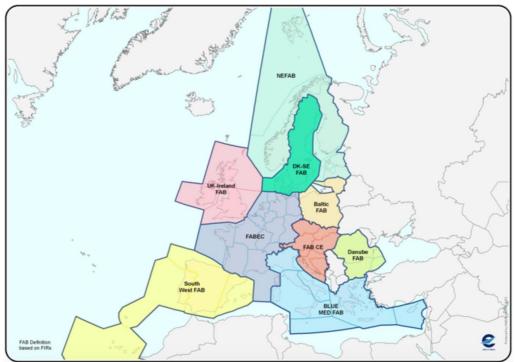


Figure 2: The Functional Airspace Blocks. Source: www.eurocontrol.int

The nine areas are now comprised as follows (although there have been several amendments since the original concept):

- UK-Ireland FAB;
- Danish-Swedish FAB (now out of North European FAB);
- Baltic FAB (Lithuania, Poland);
- BLUE MED FAB (Cyprus, Greece, Italy and Malta⁴¹);
- Danube FAB (Bulgaria, Romania);
- FAB CE (Austria, Bosnia & Herzegovina, Croatia, Czech Republic, Hungary, Slovak Republic, Slovenia);
- FABEC (Belgium, France, Germany, Luxembourg, the Netherlands and Switzerland);
- North European FAB (Estonia, Finland, Latvia, and Norway);
- South West FAB (Portugal, Spain⁴²).

The concept of FAB's was defined in the first SES legislative package (2004) with the second package amending the original four regulations (549/2004, 550/2004, 551/2004 and 552/2004). In many instances the amendments indicate the reluctance and difficulties encountered in driving through this regional approach to create a joined up sky – which is deemed the Single European Sky; although, technically still consisting of 9 regional bodies which incorporate the EU Member States, plus several adjoining countries.

The amending Regulation⁴³ clarifies the definition of a FAB as,

⁴¹ Now excludes Tunisia and Egypt.

⁴² Santa Maria FIR excluded.

⁴³ Regulation (EC) No 1070/2009 of the European Parliament and of the Council of 21 October 2009 amending Regulations (EC) No 549/2004, (EC) No 550/2004, (EC) No 551/2004

'an airspace block based on operational requirements and established regardless of State boundaries, where the provision of air navigation services and related functions are performance-driven and optimised with a view to introducing, in each functional airspace block, enhanced cooperation among air navigation service providers or, where appropriate, an integrated provider...,44

The FAB framework unusually covers both the civil and military sectors and has implications to the economic, safety, environmental, technological and institutional aspects of aviation, with the creation of FAB's remaining a fundamental cornerstone of the SES.

4.1. Implementation of the FAB's: delays!

Regulation (EC) No 549/2004⁴⁵ lays down the 'framework' for the creation of the Single European Sky; which, consists of a package of measures leading to the SES, 46 The 'SP' Regulation, No. (EC) 550/2004, 47 relates to the mandate for full implementation of FABs as defined in Article 2(25) of Regulation (EC) No 549/2004.

Article 1 of the Framework Regulation⁴⁸ however clearly states the objective of the SES and the timescale; namely, the

"..... initiative is to enhance current safety standards and overall efficiency for general air traffic in Europe, to optimise capacity meeting the requirements of all airspace users and to minimise delays. In pursuit of this objective, the aim of this Regulation is to establish a harmonised regulatory framework for the creation of the single European sky by 31 December 2004.'

However, it is Regulation (EC) 550/2004, as amended - with Article 9a having been inserted, which is specific with regards to setting a definitive date for implementation - stating,

'By 4 December 2012, Member States shall take all necessary measures in order to ensure the implementation of functional airspace blocks.'

Despite a 'regulatory obligation to enable optimum use of airspace in capacity and in flight efficiency, as well as an obligation to deliver optimized air navigation services across the EU' within the specified period, to date, and three years on - this still this has not been achieved. 49 The recent 2015 updated Aviation Strategy for Europe reinforced this fact by stating that 'progress on airspace reorganization into Functional Airspace Blocks (FABs) has been slow.' Adding that this 'lack of progress on FABs

⁴⁸ Regulation (EC) No 549/2004.

and (EC) No 552/2004 in order to improve the performance and sustainability of the European aviation system. OJ L 300 of 14.11.2009.

Ibid. Article 2(h) (referring to Reg. 549/2004 – point 25).

 $^{^{\}rm 45}$ As amended by Regulation (EC) No 1070/2009 - OJ L 300 of 14.11.2009.

⁴⁶ Article 3 Reg. 549/2004.

⁴⁷ Supra 43.

⁴⁹ Press Release: Single European Sky: Commission urges eighteen Member States to make a decisive move towards common airspace management. European Commission, Brussels, 10 July 2014

is holding back the full implementation of the project, which in turn generates inefficiencies in the entire European ATM. '50

Arguably, this is a major failing, and until such a time as all FAB's are fully functioning the advantages listed within the SES framework as well as the aims and objectives of the common transport policy (CTP) cannot be realized. Meantime the European skies become even more congested, flight times are increased, emissions fail to be reduced and costs remain higher than they need be.⁵¹ This affects the airlines and, ultimately, also the customers, who bear the brunt of the additional overhead, which burdens the airlines, both in terms of costs and time. The preamble of the amending regulation⁵² refers to the 'bigger picture,' namely the alignment to both the CTP and to other adjacent areas, specifically the 'freedoms.' It is unequivocally stated that the facilitation of the free movement of goods, persons and services, 'requires an efficient air transport system allowing the safe, regular and sustainable operation of air transport services, optimizing capacity' of such movements.⁵³

After the first SES (I) package, it became quite clear that there were a number of barriers to overcome, mostly emanating from State reluctance to drive this project forward. In many ways this is more a matter of achieving a united governance agreement for concerted 'operational' action, rather than having the methodology of revising the ATM system, and having the necessary conditions for the Community to create a Single European Flight Information Region (SEFIR), confined to a paper exercise. For, despite the fact that a legislative framework exists, and there remains the drive by Brussels - this clearly does not translate through into action from the Member States.

In November 2006 a high-level group on the future of the European aviation regulatory framework (the High Level Group) was established. This group consisted of major stakeholders who submitted a report in July 2007 on how to improve both the performance and governance of the EU aviation system. Whilst the group endorsed the importance of safety and efficiency the underlying message was that the industry and regulators needed to work together to achieve the overarching aims.

However, despite the second SES clearly providing the impetus for a united front, there remains the obvious stumbling block of states reticence to concede control (or part control) of 'their' skies through this initiative. The revisions made to Regulation (EC) No 549/2004 intimated that States were reluctant on this front and needed reassurance as to their 'sovereign' control above their land.

Article 1 Regulation (EC) No. 549/2004 addresses this in several ways, firstly it reinforces that the framework is without 'prejudice to Member States' sovereignty over their airspace and to the requirements of the Member States relating to public

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⁵⁰ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions. An Aviation Strategy for Europe. Com(2015) 598 Final, 7 December 2015.

⁵¹ See additional comments within Baumgartner, Marc & Finger, Matthias, 2014. The Single European Sky gridlock: a difficult 10 year reform process. *Utilities Policy* Vol. 31 (2014) 289-301.

⁵² Preamble Regulation (EC) No 1070/2009.

⁵³ Ibid.

order, public security and defence matters. ⁵⁴ In this way it also reduces the reference to military matters reaffirming that the Regulation and the measures referred to in Article 3 do not cover military operations and training. An amended Article 11 is added which addresses 'relations with military authorities' and reaffirms that it is for the Member States to establish the appropriate relations and reassurance for operational effectiveness.

Secondly, the amendments adds emphasis to the Chicago Convention and stresses that the Member States have obligations under this international agreement in relation to Civil Aviation. This is a particularly interesting point, as, Article 1 of the Chicago Convention states that 'The contracting States recognize that every State has complete and exclusive sovereignty over the air space above its territory.' However, whilst all Member States are a signatory to the Convention, they have ratified it on a countryby-country basis, which means that the European Union, as an entity, is not a member.⁵⁵ On this basis, there remains the possibility for conflict between the requirements of the EU and the actions internationally – as occurred for instance with the EU Emissions Trading System (ETS). In this instance, whilst the EU introduced a scheme within Europe to tackle aviation emissions it also had implications to airlines outside of the EU operating to any county forming part of the union. However, as a consequence of international pressure, it was obliged to amend the legislation so that only emissions from flights within the EEA fell under the EU-ETS, whilst suspending the scheme for flights from non-EU countries during the period 2013-2016 whilst negotiation occurred.⁵⁶

The Chicago Convention remains the primary source of public international law and arguably reinforces the right to sovereign control by the contracting states, however, what the EU added within the amended objectives and scope Article, was the fact that the EU was assisting 'Member States in fulfilling their obligations under the Chicago Convention, by providing a basis for a common interpretation and uniform implementation of its provisions.⁵⁷ The Preamble in particular emphasizes the 'responsibility' of the Member States to address ICAO standards, which includes the organization of airspace. This has subsequently also included the EU including a later Regulation laying down the common Standardized European Rules of the Air (SERA) and operational provisions regarding services and procedures in air navigation based on ICAO Standards And Recommended Practices (SARPS)⁵⁸ as well as other regulations to form part of the SES framework and apply the concept of

⁵⁴ Also referring to Article 13, which addresses essential safeguard concerning security or defence

policy matters. ⁵⁵ S. J. Fox (2014) 'Security: *The influence of 9/11 to the EU Framework*.' Research in Transportation Economics – Special Edition DOI: 10.1016/j.retrec.2014.07.004 Vol. 45 (2014), pp. 24–33.

⁵⁶ Climate action: Reducing emission from aviation

http://ec.europa.eu/clima/policies/transport/aviation/index_en.htm

⁵⁷ Regulation (EC) No 1070/2009 Preamble (points 22-23).

⁵⁸ Commission Implementing Regulation (EU) No 923/2012 of 26 September 2012 laying down the common rules of the air and operational provisions regarding services and procedures in air navigation and amending Implementing Regulation (EU) No 1035/2011 and Regulations (EC) No 1265/2007, (EC) No 1794/2006, (EC) No 730/2006, (EC) No 1033/2006 and (EU) No 255/2010. OJ L 281, 13.10.2012, p. 1-66. Amended by, Commission Regulation (EU) 2015/340 of 20 February 2015 laying down technical requirements and administrative procedures relating to air traffic controllers' licences and certificates pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council, amending Commission Implementing Regulation (EU) No 923/2012 and repealing Commission Regulation (EU) No 805/2011. OJ L 63, 6 March 2015, p. 1-122.

harmonization which adheres to the principle of seamless, interoperable and safe air traffic movements.

The SEFIR facilitates common planning and integrated operations, which overcomes regional bottlenecks, whilst creating more equality of access as well as the freedom of movement within the Community airspace. The objective is to create flexible airspace that reflects the specific needs for operational requirements, such as traffic density. By harmonizing community rules, inline with ICAO recommendations, harmonized classification of EU airspace is also factored in. Yet, whilst the EU has clearly indicated, stressed and reinforced these point to the Member States, developments leading to implementation have been disappointing to say the least, despite arguably the positive slant put on the SES advancements, for instance as reported during the visit of Violeta Bulc, the European Commissioner for Transport, to NATS (London).⁵⁹ During this visit it was stated that she experienced, first-hand, 'the tangible and positive changes' that the SESAR Joint Undertaking had provided.⁶⁰ Whilst technology advancements might be said to be arguably impressive, the fact remains that for SESAR is only part of SES, which ultimately necessitates FAB's being realized. That said, it is acknowledged that undoubtedly implementation and revisions are complex, however what should be recalled is that there have been considerable negotiations spanning well over ten years and that the completion date was set following this interaction and liaisons. Despite an amendment package, which was said to facilitate this implementation process, the delays appear to be excessive, and must surely be a frustration to the aims and objectives, not only for SES, but for the development of the European CTP. It would have to be therefore questioned why the EU has been hesitant in taking infringement proceedings which the Commission has constantly raised and firmly indicated it had the intention to take as a means to ultimately achieve the objective of integrated skies.

4.2. Reactions and Infringements?

On 4 December 2012, the day the FAB's should have been implemented, the airline industry, as one of the affected stakeholders, was quick to issue a letter criticising the Member States for their failure to act. The first paragraph read,

'The Association of European Airlines (AEA), the European Low Fares Airline Association (ELFAA), the European Regions Airline Association (ERA) and the International Air Carrier Association (IACA) are united in condemning EU Member States for their reluctance to properly implement Functional Airspace Blocks (FABs), a key ingredient for the successful delivery of Single European Sky II (SES II).'61

The letter was indeed hard hitting and denouncing, criticizing the Member States for their inability to create the FAB's within the stipulated period.

⁵⁹ See http://www.sesarju.eu/newsroom/all-news/commissioner-bulc-sees-sesar-action and http://nats.aero/blog/2015/10/sesar-innovation/

⁶⁰ http://nats.aero/blog/2015/10/sesar-innovation/

⁶¹ Letter, dated 04 Dec. 2012. Press release: Airline industry condemns EU Member States on lack of progress on FABs to date.

Available at - http://www.elfaa.com/121204 Joint press release FABs.pdf

The Heads of the airline associations stated: '[t]he current situation is scandalous......' continuing,

'We are dismayed that lack of political will by Member States has stalled any hoped-for progress. We remind Member States that, together with the Parliament, they themselves signed up to the Single European Sky Regulation, admitting that the current highly inefficient situation is unacceptable and must be addressed urgently.'

Within the letter it was advocated that the then Transport Commissioner needed 'to follow-up on his warning and launch infringement procedures against defaulting states.'

This remains a highly relevant point, for despite countless advice and warnings to the Member States, informal commencement of infringement proceedings was arguable slow to commence.⁶²

As the letter from the industry clearly also indicated, the non-adherence to the deadline was due, in the airlines belief, to a defensive stance by the Member States concerning sovereignty. And yet, it would have to be recalled that this came after the 2009 amendments, which clearly took measures to address this aspect.

As this article has also identified this is arguably more of an excuse than justifiable cause and reason for non-implementation. Political willing is ultimately required in order to achieve the Single European Sky, which would arguably be advantageous to all stakeholders (maybe with the exception of some ANSP's).

Other related criticism has been directed at the Air Traffic Controllers (ATC's/ANSP's), which according to David O'Brien, a director at Ryanair, stated were 'national monopolies.' Sentiments also echoed by Riccardo Rubbini, AT Committee President at the European Transport Workers' Federation, who commented that air traffic control had all the features of a natural monopoly which needed to be opened up to more competitive practices and market principles, a factor, which '[t]he Commission has failed to realise ...' Also, furthermore adding, however, that another important factor of perceived delays was due to the European Commission's 'obsession' with cost-cutting, which had led it to an unrealistic target for the implementation of FAB's being set. Arguably, this could be identified as a reason for the reluctance of the European Commission to commence more formal infringement proceedings.

In 2012 Siim Kallas, the former Transport Commissioner vowed to take 'every possible action' 64 to ensure implementation. It was also stated that the failure to meet the deadline had additionally angered Members of the European Parliament, with the Chair of the Transport Committee advocating that the Commission should be prepared to take action to compel governments to live up to what was agreed under

⁶² As indicated below.

⁶³ European Economic and Social Committee report, VP Krawczyk calls on aviation industry and decision-makers to deliver. 21 January 2013. http://www.eesc.europa.eu/?i=portal.en.news.25890 ⁶⁴ EurActive: 05 Dec 2012 - 07:41. http://www.euractiv.com/transport/kallas-threatens-national-leader-news-516436.

the SES – reportedly describing their behaviour as 'deceitful.'65

In June 2013 the SES II+ (or SES2+) initiative was launched by the Commission as a means to speed up the implementation of the Single European Sky, but the main obstacles arguably remain unchanged, with even this third proposal 66 – again, ineffectively being able to tackle the issues of sovereignty, control and governance, which inevitably remains a key factor and one which has even delayed the adoption of this later revision. SES2+ aims to strengthen the governance system, whilst reinforcing the need for independence of the National Supervisory Authorities from the ANSP's which they oversee. It advocates co-operation arrangements at an EU level to save resources and increase expertise. The primary objective being on removing conflicts of interest, whilst also improving safety oversight and increasing performance targets. SES2+ proposes to give ANSP's freedom to organise their support services by separating them from the core services whilst reinforcing the need for proper tendering processes to be used. In this respect it should be noted that the cost of the support services remains the single biggest element in the efficiency gap between the US and Europe.

However, the first reading in Parliament, in March 2014, led to the overall proposed package being reduced with concerns being raised over the disputed question of Gibraltar airport. Again another link to sovereignty and territorial jurisdiction over borders, and, in itself was somewhat ironic, given that in 2008 only one official notification expected completion on time - this being the UK/IR FAB. ⁶⁷

In April 2014, the Commission formally requested Germany, Belgium, France, the Netherlands, and Luxembourg to improve their Functional Airspace Block (FABEC). At the same time it was also stated that FABEC was to be the first FAB where Member States were to receive 'Letters of Formal Notice' from the Commission. However, other FABs, namely DANUBE, BLUEMED, FABCE, SOUTHWEST, UK-IRELAND, BALTIC were also advised that having failed to

⁶⁶ In total there have been two packages (SESI and SESII) plus the SES2+ proposal, aimed at building on the earlier two sets of measures (SES I and SES II).

SES I (2004)	SES II (2009)	SES 2+ (2013)
 SES Framework Reg. EC No. 549/2004 Air Navigation Service Reg. EC No. 550/2004 Air Space Reg. EC No. 551/2004 Interoperability Reg. 552/2004 	- Amend. Reg. EC No. 1070/2009	- Proposal for a Reg. Com(2013)410 Recast

⁶⁷ DG Move presentation: Single European Sky and Functional Airspace Blocks Directorate-General for Energy and Transport. Available at -http://www.icao.int/safety/information-management/transition%20library%20for%20aim/documentation/single%20european%20sky%20and%20functional%20airspace%20blocks.pdf

⁶⁵ Ibid

⁶⁸ European Commission Press Release: Single European Sky: Commission urges Germany, Belgium, France, the Netherlands, and Luxembourg to make a decisive move towards a common airspace. 16 April, 2014. Brussels.

comply with Regulation (EC) No 550/2004, active consideration was being given, at that time, to the issuing of 'Letters of Formal Notice.'

In July 2014, the European Commission provided an update of the SES implementation and urged another eighteen Member States - Austria, Bulgaria, Croatia, Cyprus, Czech Republic, Greece, Hungary, Ireland, Italy, Lithuania, Malta, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and United Kingdom to improve their FAB's. Whilst in relation to the following FAB's - BLUEMED, DANUBE and FABCE, 'Letters of Formal Notice' from the Commission were sent to the Member States. Since this time further action has been taken against several other FAB's (see Table 1).

4.2.1. The infringement process

Any infringements are taken under Article 258 of the Treaty on the Functioning of the European Union (TFEU) which gives the Commission, acting as Guardian of the Treaties, the power to take legal action against a Member State that is complying with its obligations under EU law.

The first stage is the 'Letter of Formal Notice,' which has been sent to the respective FAB Member States: this must be answered within a specified period, usually two months.

The Commission then reviews the information. If, the Commission is not satisfied with the information and concludes that the Member State has failed to fulfil its obligations under EU law, the Commission may then send a formal request to comply with EU law (a "Reasoned Opinion"). This requires the Member State to inform the Commission of the measures taken to comply within a specified period, usually again another two months. ⁶⁹

If then a Member State fails to ensure compliance, the Commission may then decide to refer the Member State to the Court of Justice. The EU Commission however reports that, in around 95% of infringement cases, Member States comply with their obligations before they are referred to the Court. Based upon these statistics, it would perhaps be logical to conclude that the Member States are at the stage of responding formally to the letter and equally to complying with, and implementing the means to apply, FAB's. ⁷⁰

The current position of the infringement process, and/or implementation of the FAB in respect to the FAB's and Member States remains somewhat unknown; as shown in Table 1 (as at November 2015).

It should be noted that is viewed as a major complaint and area of frustration for third parties trying to elicit up-to-date information regarding infringement proceeding, since it proves difficult to obtain documents and updates regarding the ongoing process - with the Commission advocating exceptions to the EU transparency rules, which has generally upheld by the Ombudsman⁷¹ and the Court.⁷²

⁶⁹ As detailed within the DG Move site: http://europa.eu/rapid/press-release_MEMO-12-12 en.htm?locale=en

⁷⁰ Ibid.

 $^{^{71}}$ For example see the Ombudsman's decisions on Complaints 2821/2004/OV, 3732/2005/JMA and 443/2008/JMA – contrasted against, Complaint 3193/2005/TN.

FAB	Letter of Formal Notice (Or W – warning)	Letter received from FAB	 Further action (Art. 258) Implementation stage of FAB
UK-Ireland FAB	W	Expected at the end of 2015 (Nov)	According to Eurocontol this has been implemented. 73 However, DG Move confirms 74 formal letters have now been sent – 25 September, 2015
Danish- Swedish FAB			Implemented. ⁷⁵
Baltic FAB	W		
BLUE MED FAB	July 2015	(i) Due Sept. 2015 (ii) Expected at the end of 2015 (Nov)	DG Move confirms formal follow-up letters have now been sent – 25 September 2015. ⁷⁶
Danube FAB	July 2015	Due Sept. 2015	No further action known
FAB CE	July 2015	Due Sept. 2015	No further action known
FABEC	April 2015	Due June 2015	A 'Reasoned Opinion' was sent to FABEC on 17 July 2015. And replies have been received. ⁷⁷
North European FAB			
South West FAB	W	Expected at the end of 2015 (Nov)	DG Move confirms formal letters have now been sent – 25 September 2015.

Table 1: Position of the implementation of FAB's Source: author (as November 2015)

As of 25 February 2016, a spokesperson at the Commission (DG Move) stated: 'There are no new developments concerning FAB level in the last months, as far as the infringement process is concerned.

⁷² See, for example, Case T-36/04 P Sweden and API v Commission [2007] ECR II-3201.

⁷³ Eurocontrol website [November, 2015] https://www.eurocontrol.int/functional-airspace-block-fabsdefragmenting-european-airspace

⁷⁴ Email received 18 November 2015 – to author of paper.

⁷⁵ Eurocontrol website [November, 2015] https://www.eurocontrol.int/functional-airspace-block-fabsdefragmenting-european-airspace.

It should be noted that as of October, 2015: 'Several of these direct routes also connect with other direct routes in neighbouring Functional Airspace Blocks (FABs), namely the UK-Ireland FAB, the North European FAB, FAB Central Europe and Blue Med FAB, extending the connectivity of the European direct route network.' [Accessible - https://www.eurocontrol.int/news/fabec-free-routenetwork-improves-european-connectivity].

⁷⁶ Email received 18 November 2015 – to author of paper. ⁷⁷ Ibid.

The Commission is now evaluating the progress FABs made from the operational and technical perspectives since December 2012, the target date in the legislation for their creation.

In this context we are also evaluating recent replies received from FABs following the last round of additional letters. '78

This would tend to indicate that whilst letter have been received from Member States further formal procedures have not yet been pursued, whilst it should be concluded that this has not been discounted, the EU Commission tends to imply that the contents of the letters are being evaluated alongside the goals of the FAB's and the respective legislation.

Whilst there are grounds to no doubt levy criticism against the Commission for the delay in commencing infringement proceedings, Craig and De Búrca⁷⁹ state that this is a frequent issue of debate. Identifying, that this has been identified in relation to the extent of the Commission's discretion to bring formal proceedings, with points of view ranging from criticism levied at the excessive lenient approach, to the arbitrary selectiveness of doing so, or selecting which Member States to take action against. Whilst it is also identified that this leads to unfairness and perceived favouritism, which is often viewed as being politically oriented – despite when there being clear violation of the EU law; which, appears to be clearly the case in the instance regarding implementation of the FAB's.

Article 258 TFEU is phrased as follows:

'If⁸⁰ the Commission considers that a Member State has failed to fulfill an obligation under the Treaties, it *shall* deliver a reasoned opinion on the matter after giving the State concerned the opportunity to submit its observation.

If the State concerned does not comply with the opinion with the period laid down by the Commission, the latter may^{81} bring the matter before the Court of Justice of the European Union.'

In this regard the situation officially, as of April 2015, was that the Commission felt compelled to take action and elicit a response from the relevant States, therefore clearly considering that the respective FAB members had failed to implement the requirements. The phrasing in the first paragraph of the Article would indicate that the Commission *must* (*shall*) now deliver a reasoned opinion, but as Craig and De Búrca⁸² identify, the Commission in practice normally takes up to a year to decide whether to keep a case open and proceed or to close it. If during this exchange period the issue remains unresolved then the Commission *may* proceed to the stage of issuing a *reasoned opinion*. (Note: the '*may*' is somewhat different to the wording used within the Treaty, which appears more definitive, as to the next phase of action).

⁷⁸ Email to author.

⁷⁹ Paul Craig and Gráinne De Búrca, EU Law – Text, Cases and Materials 5th Ed. 2011. Oxford University Press. (Chapter 12).

⁸⁰ Emphasis added.

⁸¹ Emphasis added.

⁸² Supra n. 79.

However, the Commission has always shown that it would prefer to work cooperatively with Member States; so, perhaps in this regard, the need to result to official *formal action* shows the seriousness of the situation with respects to non-implementation of the FAB's. The initial phase of advice and warnings is very much viewed as the *pre-contentious* stage and so it would have to be concluded that, at the current time, implementation of all of the nine FAB areas, creating one Single European Sky, may yet still be a little way off, with the possibility of Court actions still a likelihood.

5. CONCLUSION

As was stated by the EU Commission – 'we have to finally overcome national borders in the European airspace. FABs are a necessary, vital component of the Single European Sky;'83 and, arguably, therefore of a competitive functioning European Union. The very concept of a Single European Sky remains an essential element of the single market, which ultimately allows citizens to freely travel, live and work anywhere in the EU.

The very reasons cited for creating a SES has not changed and FAB's remain a fundamental part of attaining this goal.

The objectives for restructuring the European airspaces according to the function of air traffic flows, rather than in line with national borders, were cited as:

- Creating extra capacity;
- Increasing the overall efficiency (both in terms of time, money and Co₂ and GHG emissions);
- Enhancing safety standards.

These remain goals as within the current Transport White Paper and as reinforced within the more recent publication on the EU Aviation Strategy. And yet, the increasing delay in advancing the ATM through a Single European Sky has impacted on not only this achievement, but ultimately adjoining policy areas, which inevitably affect the free movement of persons, goods and services – in terms of costs, time, efficiency and also safety. The CTP depends upon an efficient air transport system, which provides for safe and regular operation of air transport services; which ultimately facilitate the free movement of goods, persons and other services.

European airspace users pay annually some €10.5 billion for ANS – this incorporates not only user charges, but delay costs and flight-inefficiencies. This equates to unit costs being nearly 50% above those in the US, which inevitably is due to fragmentation in the skies as well as the use of old technology.

To say the implementation of the FAB's has been slow – would perhaps be only too clearly obvious and would therefore be a very much understated phrase to summarize the last 10-years of political lethargy. Far from being a fabulous achievement, it has been a staggering example of a lack of coordination, cooperation and political willing,

⁸³ Comments of the former Transport Commission Vice-President Siim Kallas. As reported in the first Press Release notifying of infringement procedures against FABEC. Brussels, 16 April 2014.

resulting in the consumption of an unnecessary amount of excessive fuel. This ineptitude has led, according to the Commission's reports, to an extra 30% to 40% costs for air navigation charges being levied, which represents a loss of some 5 billion euros annually. 84 Even the slow progress on the FABEC alone has affected 55 % of European air traffic. 85 Flights continue in general to travel more than 42-49km longer than strictly needed due to airspace fragmentation. Without boundaries 63% of route inefficiency could be removed. 86 And these delays also continue to affect planned safety enhancements in the Single European Sky - with all these negative effects ultimately being borne by the customer – who is 'paying' for the political inabilities and reticence. Criticism for which could also perhaps be levied at the EU Commission - either in terms of setting an unrealistic implementation schedule (as has been suggested) and/or, for being to cost-driven; or, for not drafting the first and arguably second framework package in a manner which addressed the Member States concerns (for example in terms of Sovereignty or compatibility with ICAO and the Chicago Convention) and, lastly, for being over generous in terms of discretion before commencing Article 258 TFEU proceedings, which ultimately may have seen adherent early to a policy which all Member States had actually signed up to.

In the meantime European traffic growth, in the year 2015, has continued on average to grow by 1.2% more than it did in 2014. In the summer months (May – August 2015) this was closer to 2% more. ⁸⁷ This means that there is an even greater call and urgency for restructuring the already crowded skies above Europe.

For Europe to indeed be united, the Union needs to encompass the airspace and remove the fragmentation, which necessities full interoperability including of the European ATM Network (systems, constituents and associated procedures) which should also extend to uniform and transparent charging and competition of the ANSP's (ATC's – away from some monopoly systems still employed by Member States).

Summarized the benefits far exceed any outstanding issues, which now need to be overcome, to realize the overall advantages: (Table 2).

Safety	Efficiency			
	Economic	Operational	Technical	
Airspace events per flight-hour;		Capacity/delays	Interoperability of ATM systems	
ingiit-iloui,	Financial cost-	Routing extension	711W Systems	
Safety maturity of	effectiveness		Safety maturity of	
Regulators and		Environmental	Regulators and	
ANSPs;		impact	ANSPs	
Compliance (risk assessment and		Airspace use and	Commonality of	

⁸⁴ Press Release: Brussels, 10 July 2014.

⁸⁵ European Commission – Fact Sheet. July Infringements package: key decisions. Brussels, 16, July 2015.

87 Eurocontrol data: https://www.eurocontrol.int/air-traffic-growing-again

⁸⁶ European Commission Fact Sheet – July Infringements package: key decisions. Brussels, 16 July, 2015. Also see: http://ec.europa.eu/transport/modes/air/single_european_sky/

mitigation) (ATM's)	design	ATM systems

Table 2: Expected performance advantages from FAB's *Source: Author - Based on DG Move presentation – following FAB-SES II amendments*

There is perhaps the argument that, the EU, as it currently stands, due to the extensive liberalization of the EU internal market and its strict rules on fair competition and State aid, is potentially being harmed and disadvantaged – as against its competitors. But arguably, the EU has only liberalized certain factors and certainly not the skies above the Member States. Whilst the Member States still resist conceding any form of Sovereignty (or arguably subsidiarity) – they need to overcome protecting their own national interests, in terms of airspace unity, for in many ways the Member States are the ones disadvantaging EU carriers and the customers. The time may yet come when the EU Commission needs to further pursue action through the Treaty and enforce penalties for non-compliance, only then may we see the *FAB* in the skies above Europe become a reality.

⁸⁸ Frederico Bergamasco. State Subsidies and Fair Competition in International Air Services: The European Perspective. *Issues in Aviation Law and Policy*. Vol. 15, Issue 1, Autumn, 2015, pp. 29-75.