

POLICY BRIEF

EUROPEAN TRANSPORT REGULATION OBSERVER

Streamlining Economic Regulation for Air Traffic Management in Europe

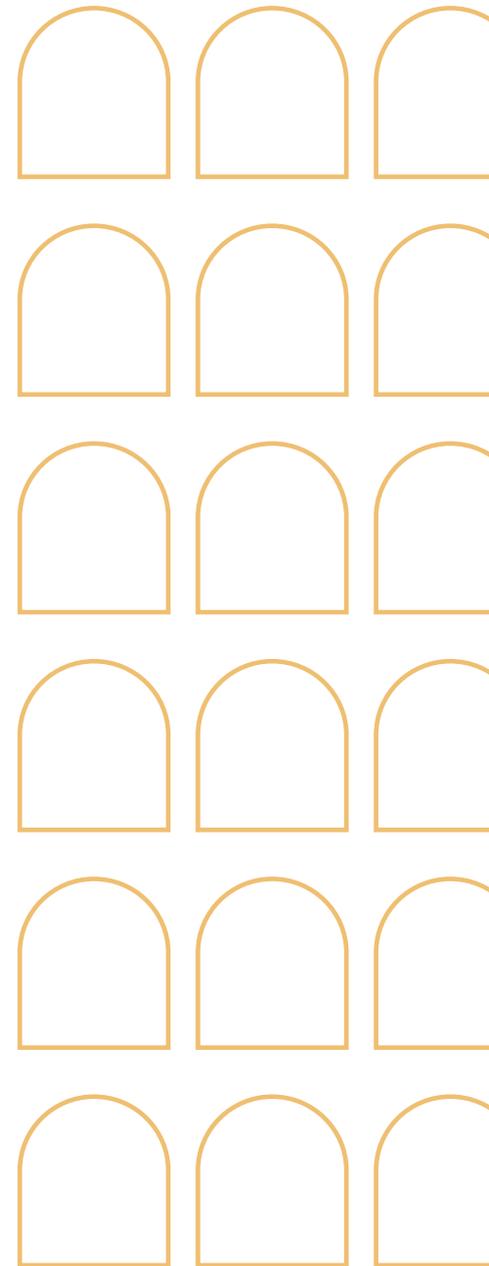
Highlights

European aviation has been confronted with serious capacity challenges and high levels of delay, in particular, during the two years (2018-2019) leading up to the onset of COVID-19. The pandemic has, subsequently, revealed that the European airspace system lacks resilience and the ability to absorb demand shocks, be these in the form of increases or drops in air traffic. In view of this, in September 2020, the European Commission proposed an [upgrade of the SES regulatory framework](#) in order to modernise the management of European airspace and to establish more sustainable and efficient flightpaths. The amended proposal calls for a strengthening of the European network and its management to avoid congestion and suboptimal flight routes, the creation of an EU market for agile Air Traffic Management (ATM) data services provision and incentives, the streamlining of economic regulation for ATM, and for enhanced coordination for the definition, development and deployment of innovative solutions, among others.

The [15th Florence Air Forum](#) discussed some of the central elements of the proposed SES regulatory framework pertaining to the streamlining of economic regulation for ATM, including: 1) the administrative integration of the Performance Review Body into EASA and the implications for the new distribution of tasks in relation to national economic regulators; 2) the distribution of tasks between the European regulator and the national supervisory authorities; and not the least, 3) the legal, technical and practical considerations surrounding the proposed modulation of air navigation charges based on the environmental footprint of the airspace user.

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The European Economic Regulator, a Catalyst for an overdue Change in ATM Governance

A comment by Matthias Finger and Juan Montero, Florence School of Regulation – Transport Area

The Commission is trying to reform the European Air Traffic Management (ATM) sector (not yet an industry) since 1999, with Single European Sky (SES) I in 2004, SES II in 2009, and now (2021) with the amended SES II+ proposal, which was originally presented already in 2013. The 15th Florence Air Forum focused on an important aspect of the SES project, namely economic regulation, and especially the institutional structure of economic regulation of air navigation service providers (ANSPs) in the SES. As a matter of fact, an EU ATM regulator could well constitute a catalyst for a long overdue change in ATM governance, and a boost for the SES.

To recall, already in 1998 Eurocontrol established a so-called “Performance Review Commission” (PRC). The PRC itself used the data gathered by Eurocontrol and is supported by its internal “Performance Review Unit” (PRU). With SES II in 2009, the PRC was designated to act as the Commission’s “Performance Review Body” (PRB). In 2016 the Commission created an own expert group and designated it as the PRB, which has, since, supported the Commission in managing the performance scheme of the Single European Sky (during part of Reference period 2 (2015-2019) and for Reference period 3 (2020-2024)). At the same time, the PRC continues to serve Eurocontrol’s Member States and both, the PRC and the PRB, use, at least partially, the same set of data provided by Eurocontrol.

In October 2019, we held a Florence Forum (actually in Budapest) to assess the progress made (or not made) towards a SES. Among others, the idea of creating an EU economic regulator for ATM was floated ... and pursued since. During this Florence Forum (virtual), we discussed the two key elements of the current amended SES II+ proposal. These are actually quite commonsensical, namely (1) to transform the PRB (which is currently simply an advisor to the Commission) into a full-fledged independent EU level regulator and (2) to place this new regulator within EASA (whereas EASA is only the host). Let us comment on each of those separately.

An EU ATM economic regulator

Creating sector-specific EU economic regulators is a logical evolution, which makes sense in all the network industries. And it would certainly make even more sense in ATM, as aviation is the most international of all the network industries. However, some of these European network industries are clearly more advanced along this process than is aviation. This is the case of the telecommunications industry, where an independent Body of European Regulators in Electronic Communications (BEREC) exists since 2009 and has been considerably strengthened in 2018 with a supporting permanent secretariat. It is also the case of the Agency for the Cooperation of European Energy Regulators (ACER) which was established in 2012. Since then, ACER has been considerably strengthened. For instance, this is evident in the evolution of the Agency’s voting rules over time, whereby today qualified majority voting rules apply for various decisions instead of unanimity.

But let us nevertheless note that the process that led to the creation of these EU regulatory bodies was somewhat different: in telecommunications and energy EU legislation had already led to strong and independent economic regulators at national level. Consequently, the Europeanisation of economic regulation was a somewhat natural bottom-up process with harmonisation of regulatory practices as the strongest argument in its favor.

In aviation, however, the situation is somewhat different: national “regulators”, called “National Supervisory Authorities” (NSAs) are institutionally not as well established as in the other network industries. NSAs are often not separate and even less so independent from government, which often owns the ANSPs. Sometimes, NSAs are not even properly separated from the ANSPs. Independent regulators – both independent from government and from the operators they regulate – are however a necessary condition for infrastructure markets to properly function. And even more so in ATM, as competition is non-existent in many countries, and the monopolistic service providers are almost exclusively State-owned. But so far, the Commission has shied away from pressuring Member States too much about the independence and power of their respective economic regulators.

This does not make the creation of a strong and independent EU economic ATM regulator

easy, as the support from the Member States is anyway weak for a variety of reasons (national sovereignty, employment, income). Quite to the opposite, the national regulators being so close to the regulated ANSP are often captured and might well oppose the process.

On the other hand, the Commission does not start from scratch: it already has the PRB, which simply needs to evolve, and more concretely to become independent from the Commission. This has already taken place in another than the economic domain, namely in safety where the European Aviation Safety Agency (EASA) has been created in 2002, and, since then, acquired a solid reputation of a competent, professional and independent EU regulator for aviation safety.

Hosting the EU economic ATM regulator inside EASA

There is no real precedent at the EU level for the proposed integration of the economic regulator into EASA, as both the telecommunications and the electricity sector have a less strong focus on safety, even though there is a lot of technical regulation.

Ideally, certainly, the economic regulator should be independent from the safety regulator, but this seems to be challenging in the light of the abundant landscape of already existing EU agencies. The danger could be that regulator loses over time its economic focus, or, the other way round, safety becomes secondary to economic considerations.

In conclusion, and if the ATM economic regulator cannot be a self-standing agency, EASA seems to be institutionally the more proper option, if one does not want to consider the creation of EU 'network' regulators dealing with multiple sectors. But independence must be paramount and enshrined in law.

Main takeaways from the discussions

By Teodora Serafimova, Florence School of Regulation – Transport Area

The backdrop against which the Air Traffic Management (ATM) industry is operating has dramatically changed over the past year. To put things into perspective, 2019 represented the busiest year in the civil aviation industry, marked by record delays and severe congestion problems. Subsequently, the [High-Level Conference on the Future of the Single European Sky](#), which took place in September 2019, culminated in a [joint declaration](#), expressing the industry's overwhelming consensus over the urgent need for reform in the ATM sector. The onset of the COVID-19 pandemic, however, transformed the record high traffic scenario into a historically low traffic scenario. What were previously capacity problems of the air navigation sector have now been transformed into cash liquidity problems across the entire aviation industry. While during the first couple of months, a 'crisis management approach' prevailed, this was followed by a realisation that the appropriate solution to the pandemic would resemble the one needed to handle high traffic capacity situations, namely a flexibilisation of the sector. In other words, the solution would entail enhancing the scalability of the sector and improving its ability to respond to variations in traffic.

Over time it has also become clear that the sector will remain a monopolistic one, whereby Member States are designating air navigation service providers (ANSPs) as the exclusive service providers. This absence of competition underscores the need for an independent Regulator to regulate these monopolistic service providers. ATM is, in fact, among the last of the network industries not to have its own Economic Regulator.

In view of the above, in September 2020, the Commission put forward its [legislative proposal](#) for an upgrade of the Single European Sky (SES). The [15th Florence Air Forum](#) examined, in particular, two key elements of the updated SES proposal. Firstly, the proposal puts forward the idea of establishing a European Regulator, which was also one of the recommendations of the [Wise Persons Group Report](#). In the absence of a European Regulator, the Commission has

been exercising this function to date. Being a political body, the Commission is not ideally placed to act in expert capacity for the economic regulation of the ATM sector.

The reform process will also have to ensure that the right balance is struck between the tasks and responsibilities of the EU Regulator and the national regulators. The Commission's proposal foresees that the role of national regulators focuses on terminal air navigation services, given their local dimension, whereas the EU Regulator would deal with the en route traffic, which is largely cross-border in the European context. The Commission's proposal, moreover, suggests that ANSPs or the designated providers (which are to be regulated) submit their plans themselves for review to Brussels, which would help to avoid potentially conflictual situations.

The second element, which was discussed at the Forum, pertains to the proposed modulation of air navigation service charges based on the environmental footprint of the airspace user with a view to support the uptake of more environmentally efficient flight routes and to accelerate the greening of the aviation sector. While the design and scope of this provision are yet to be defined, its implementation will have to consider existing EU initiatives as well as the broader international framework, namely ICAO. The 15th Florence Air Forum took place in parallel to the ongoing political process, whereby the co-legislators, namely the European Parliament and the Member States in the Council, are currently shaping their positions before they enter into negotiations with each other during the second half of 2021.

Institutionalising an independent European Regulator: the administrative integration of the Performance Review Body (PRB) into EASA, and implications for the new distribution of tasks in relation to national economic regulators?

Despite the downturn in air traffic observed today, stakeholders warned that the congestion levels of 2018-2019 will come back, environmental concerns will increase, and new types of air transport will emerge. The combination of these factors will act to increase the level of complexity in the entire aviation system. This inevitably also increases complexity for air navigation service provision and oversight, including the oversight of economic regulation of ANSPs.

The three main activities of the current Performance Review Body (PRB) and of the future Economic Regulator need to be well understood in order to define a better institutional set-up and accompanying processes. The first key task relates to the target setting. At present, recommendations from the PRB are submitted to the Commission, which, then develops its proposals on this basis and adopts them subject to voting in the Single Sky Committee (SSC), and eventually, the ANSPs apply them. There is an inherent conflict of interest in this current set-up, as delegates within the SSC are representatives of Member States and, as such, also owners of ANSPs, which, in other words, attributes them a 'double role' as rule makers and rule implementers. Here important learnings can be drawn from EASA, where structured processes on safety oversight have been established, which are free of conflicts of interest. The second major task pertains to the performance plans. These are fed with the relevant data provided by the ANSPs, and drawn up by the national supervisory authorities (NSAs). Subsequently, the PRB assesses them, and the Commission makes a decision as to whether the performance targets are consistent with the set EU-wide targets. Finally, a Commission Decision assessing the targets is returned to the SSC, where it is, once again, exposed to the above-mentioned conflictual situations. The third element relates to monitoring. This is done on the basis of data from NSAs, EASA, Eurocontrol and the Network Manager (NM), which is analysed and published by the PRB.

While the new Economic Regulator will play a role in target setting, the Commission will remain the body entrusted with adopting the EU-wide targets through comitology (SSC), whereas the ANSPs, as the regulated entities, will be those that have to comply with these targets. The need for substantial changes was underlined in how the performance plans are being established and assessed, as well as in the monitoring domain. Stakeholders stressed the importance of ensuring that the performance plans are submitted directly to the Economic Regulator, whose appeals procedure would safeguard that its decisions are subject to review, and in this way, that checks and balances are put into place. An appeals procedure would, moreover, ensure that processes are transparent and well structured. The monitoring of Member States' data, on the other hand, is to be submitted directly to

the Economic Regulator for review and analysis, following which the Regulator would issue a monitoring report. Stakeholders, furthermore, questioned whether the Comitology process is the adequate process to define targets for ANSPs, given that it has failed to set targets, which incentivise cost-efficient services and benefit the user. In view of this, support was expressed for overriding current procedures in order to pave the way for target setting by a genuinely independent and transparent body, which safeguards that political influences are sidelined.

The Wise Persons Group report issued a clear recommendation that the Economic Regulator needs to be an independent agency. What is more, there is broad agreement that its institutional set-up needs to reflect the scope of the SES. Stakeholders cautioned against placing the Economic Regulator in a body with different geographical coverage and membership, such as Eurocontrol, in order to avoid potential governance issues. In view of these considerations, the Commission's proposal foresees the administrative hosting of the Economic Regulator by EASA.

As an independent aviation regulator, it was argued that EASA could offer important synergies with the PRB. The missions of EASA are mandated by regulation and include, among others, ensuring the highest common level of safety protection for EU citizens; ensuring the highest common level of environmental protection; overseeing the single regulatory and certification process among Member States; facilitating the internal aviation single market and creating a level playing field through interoperability and standardisation efforts; as well as working with other international aviation organisations and regulators. EASA drafts implementing rules in all fields pertinent to the above missions.

To ensure that these rules are applied in a harmonised manner, EASA performs the oversight of the Member States. As one of the cornerstones of the legislative framework, EASA has to ensure that national authorities are devoid of any conflict of interest in the exercise of their functions, and typically in the field of ATM safety. To this end, EASA carries out reviews to ensure that safety decisions (e.g., certifying an ANSP or approving the implementation of new technology) are genuinely taken by national authorities, as opposed to by the ANSPs and merely 'stamped' by the national authorities. This, stake-

holders stressed, will no longer be possible in future. EASA furthermore certifies and oversees third country operators, which provide services to European airlines or organisations (e.g., maintenance organisations for airlines).

The difficult state that the ATM industry is currently operating in highlights the importance of eliminating duplications in the performance review and monitoring. Today, many duplications and inefficiencies exist, most of which are eventually borne by airspace users. Significant untapped potential exists to streamline and further improve processes in terms of data efficiency and technological realities. Stakeholders urged the need to adapt processes of economic regulation to the technological realities of today's data streams. In this regard, it was underlined that EASA disposes of significant amounts of data pertaining to safety, given its competencies in monitoring the safety performance of the ANSPs and overseeing NSAs from a safety perspective. All of these data and information, it was argued, could also be used to review economic performance. What is more, EASA's environmental portal provides data on aircraft noise performance. Resorting to these existing databases and processes, including working structures, methodologies, and stakeholder consultation arrangements, for the purposes of the Economic Regulator stands to reduce duplications and minimise costs to the community. These, in turn, place EASA in a good position to provide support to the PRB.

EASA's governance structure consists of a governance board, whereby each Member State has one vote and an Appeal Board, which enables the resolution of conflicts of interest. The prevention of conflicts of interest has been integral to their assessment of the NSAs, which is also being reported to the PRB. EASA is, furthermore, in charge of developing a plan for aviation safety, which defines priority areas for investments by both the Member States and EASA: something which resembles the target setting and the performance plans in ATM.

Participants, moreover, underlined the need for institutional reform efforts to ensure that professionals with the relevant expertise and training are attracted to work on the economic regulation of ATM. Here it was noted that EASA can offer a holistic systems approach to aviation in support of the overall performance of the civil aviation sector, thanks to its focus on the interdependen-

cies between the various technical domains of safety, environment, investments, and competition, among others.

This first session of the Forum, moreover, provided an opportunity to draw on the experiences and lessons learnt from the telecommunications domain, which, too, was historically shaped by state-owned monopolies, including postal, telecommunications, and regulatory authorities. This was the case until the 1990s, at which point it was agreed that a separation of regulatory authority power from the operator functions was necessary. As a result, a split into multiple economic operators, including telecommunications, postal and broadcasting, was observed in many countries. Initially, however, it was not evident that these operators should operate in a competitive environment. In fact, many were in favour of retaining the monopolistic situation, designated operators or concession approaches due to the scarcity of resources (i.e., frequencies, infrastructure, pipes, cables and antenna towers). Eventually, a decision was taken that the European telecommunications market shall be competition based. Still today, not everything is regulated ex-post by competition authorities, and ex-ante regulatory measures are still needed.

Given that Member States tended to protect their respective telecommunications operators, the need to ensure regulatory authorities' independence was acknowledged as being crucial. In the same spirit, the Comitology process was deemed an insufficient mechanism for telecommunications. Therefore, a separate EU mechanism was established based on the independent national regulators and the independent body of the regulators on the European level. This, in turn, was further strengthened in the latest telecommunications framework review, as a result of which BEREC, the independent body, was given a more substantial role. The value of such an EU mechanism has become particularly evident in tackling cross-border and pan-European level challenges, such as the elimination of roaming charges, where it was crucial to ensure that technical expertise prevails over the different political interests.

What should be the distribution of tasks between the PRB and the national supervisory authorities?

This second session drew on experiences from energy transmission, which shares some of the same characteristics as ATM. Firstly, both are marked by strong national interests with important cross-border implications, which in turn render strictly national solutions difficult. As in ATM, electricity transmission is composed of monopoly organisations. Both sectors are confronted with environmental and security/safety issues and are considered of strategic importance to the economy.

In 2009-10 the EU framework for regulating energy utilities shifted from a so-called voluntary cooperation to a mandatory form of cooperation. Before that, energy had a very similar structure to telecommunications. This has consisted of a legal framework establishing a voluntary institution where all energy regulators, the so-called European Regulators' Group for Electricity and Gas (EREG), act in an advisory capacity to the Commission on internal energy market issues. In addition, there were industry associations representing electricity and gas network operators, and national regulators supervising the tariffs for the transport and distribution of electricity and gas.

The combination of two main events triggered the shift towards obligatory cooperation and gave rise to the current structure. Firstly, in 2003, a major blackout led to the realisation that robust international cooperation between countries is necessary as no single country could ensure a secure electricity network without guaranteeing that neighbouring countries' transmission systems were also secure. Secondly, a competition investigation, conducted by the Commission's DG Competition, criticised national transmission monopolies for being inefficient, thus underscoring the need for intervention in improving their performance.

As a result, the European Union Agency for the Cooperation of Energy Regulators (ACER) was created with a limited but increasingly important role. ACER has a similar structure to classical regulators, consisting of an electricity department, a gas department, its own Board of Regulators, and a Board of Appeal. In the face of limited readiness from Member States to endorse an EU Regulator, a balanced solution was struck,

whereby the 27 national energy regulators with relatively strong powers and independence act autonomously, but are also represented in the Agency. Some of the measures to ensure this have included the limitation to only one additional term of possible reappointment of the managers of the national regulators and the attribution of special legal status to prevent them from being removed by national governments without an adequate cause. In addition, legal requirements regarding financing have been put into place to prevent Member States from limiting the regulators' funding with a view to weaken them without violating EU law.

To address concerns regarding Member States' or national regulators' ability to effectively oversee the unbundling of network operators which are often state-owned entities, the EU was empowered to assure the network operators' independence by means of a harmonised unbundling regime.

The Agency's voting rules have also changed over time, whereby today, majority rules apply for various decisions (instead of unanimity). This has offered a good compromise in terms of ensuring that each Member State feels to have a voice in the decision making process, while at the same time, securing a functional system which allows for decisions to be reached even if a small number of regulators or Member States oppose them.

ACER has a general competence for all cross-border aspects of regulation. Nevertheless, the Agency's competencies are limited to a certain extent. ACER, thus, only provides a 'fallback' solution in the case that national regulatory authorities (NRAs) do not come to an agreement. Today, however, there is a growing tendency of resorting to ACER for decision-making, as national Regulators are unable to reach a consensus. When it comes to technical decisions, the working groups (on electricity and gas) provide inputs to ACER, which then request the drafting of rules by the TSOs. Subsequently, ENTSO-G or ENTSO-E, which were established as the formalised cooperation of TSOs, develop detailed technical rules, which are sent back to the Regulators for approval or re-directed to ACER for decision.

These analogies to other sectors and public utilities, such as rail, electricity and telecommunications indeed reveal that ATM is as an outlier in terms of business model and regulatory

framework. ANSPs are still mostly state-owned entities or semi-private corporations, which are not commercially oriented. Their closeness with national governments, coupled with the fact that they execute services of sovereign and national (infrastructure) interest, has rendered Member States reluctant to regulate them.

Stakeholders, therefore, stressed the need for unbundling of services to unlock untapped industry potential. To this end, services, which are not central to national sovereign interests, it was argued, could be liberalised. Whereas, ANSPs can continue to work in a regulated business area (e.g., for the provision of en-route ANS, Airspace Management, Emergency Response, Air Defense, Aeronautical Network Services, and Geofencing), the services of non-public interest could be provided on a competitive basis (e.g., terminal ANS, ATM data services, meteorological services, communication, navigation and surveillance services, aeronautical information services, training, etc.). The separation of services of national interest from commercial services, it was argued, could unlock market dynamics. What is more, a regulated service could become a commercial service (e.g., en-route ANS) over time as a result of technological dynamics and the emergence of new business models.

It was, furthermore, underlined that national ANSPs should be allowed to offer commercial services, as long as unbundling is achieved. Unbundling and competition were said to have enabled cost savings in the range of 30-40% in various markets over the years. Interestingly, even in the markets, where incumbent legacy providers operate, costs have come down, demonstrating that the mere threat of competition can lead to more efficiency. Airports have reported an increased customer focus, innovation and price transparency as a result of the competitive pressure.

Following its initial 2013 proposal, which Member States rejected, the Commission is now adopting a more cautious approach, whereby unbundling is no longer mandated. Still, a minimum level of transparency of accounts and benchmarking are being requested. In the absence of market forces, economic regulation in the regulated business area would act as a 'surrogate' for a competitive market to ensure prices do not exceed certain levels. Conversely, in the commercial business area, the Economic Regulator would need to

impose a level playing field, prevent any abuse of monopoly power, and cross-subsidisation. The performance regulation of the SES would, thus, only affect the national ANSPs in the regulated business area, given that market forces would ideally be taking care of the services in the commercial business area.

The Spanish experience, in particular, was referred to when addressing the distribution of tasks between the PRB and the NSAs. In Spain, the regulatory policies are formulated by the Ministry itself, whereas the NSA is an independent agency with a mandate to supervise. As the supervisor usually is not well placed to put forward a performance plan, this is done by the ANSPs, who in turn can only do so within the framework provided by the Ministry. Subsequently, it is up to the policymakers to present the performance plan at the EU level, and if needed, to impose additional measures to ensure the EU-wide reference is met. Ensuring a clear distinction between the policymaker and the Regulator, as discussed in the first session, is central. In other words, the policy needs to be separated from the regulatory aspects, which in turn are primarily techno-economical in nature. What is more, participants highlighted that achieving independence at the EU level will depend upon the existence of independent regulators at the national levels.

When it comes to the separation of supervisory functions between the PRB and NSAs, it was argued that the EASA model for safety and certification could serve as a reference. The PRB could integrate all the information that NSAs generate in the scope of their oversight functions, not only data from ANSPs. The oversight undertaken by the NSAs at the national level is to be standardised by means of common EU-wide requirements and procedures, and conflicts of interest are to be prevented. Participants underlined that support may need to be given, in particular, to the smaller NSAs with limited economic resources, for the execution of their economic oversight functions.

Modulation of charges: how can such or similar tools make a contribution to provide decarbonisation incentives without adding unnecessary complexity?

Modulation of charges is already foreseen in the current EU regulatory framework, which stipulates that it can be used to reduce the environmental impact of flying, though that it cannot change the overall revenue of the ANSPs (i.e., the modulation of charges needs to be revenue-neutral). In practice, however, and given its 'optional' nature, the modulation of en route charges has not been used to date. The Commission's new SES proposal seeks to transform the currently optional provisions on the modulation of charges into an obligation. The rationale behind this new provision is to incentivise airspace users to reduce their environmental and CO₂ footprint. Notwithstanding, a number of important open questions remain to be clarified in relation to the design, scope and administration of the modulation of charges.

Firstly, it is yet to be determined how large the modulated element of the charges would need to be in order to have a tangible impact on airspace users' behaviours. Equally important will be a clarification on the amount of the modulated portion in relation to the charge that airspace users are already paying (e.g., in relation to the cost of fuel or the investments airspace users would need to make to improve environmental performance). Some stakeholders cautioned that the provision's implementation would require exogenous funding, at least on a temporary basis, to effectively incentivise a sufficient change in airlines' behaviour pattern.

The geographical coverage of the provision should also be clarified (i.e., only EU landings and take-offs or any traffic that transits EU airspace). Regarding the more technical aspects, it will have to be clarified whether the proposed provision is to be administered through the current ANS charging formula or, conversely, whether it would fall outside the current charging formula. Some stakeholders cautioned that changing the existing formula to accommodate modulation might be challenging. Because the bill issued for route charges constitutes a single bill, airspace users' payments cannot be broken down, which in turn, it was argued, could threaten the funding of the entire EU system in case airspace users would contest the payment of the modulated bit of the charge. A possible solution could consist

of a system, which runs in parallel to Eurocontrol's existing Route Charges System but uses its established billing and collection capacity. In general, participants agreed that the administration of the charges would have to strike an adequate balance between excessive simplicity and complexity. In other words, failure to ensure that the charges are administered in an understandable, transparent, and easily verifiable manner for airspace users may risk undermining the effectiveness of the provisions.

Another central element that needs to be refined pertains to the criteria to be used in the design of the charge (e.g., sustainable aviation fuels (SAFs), effective fuel burnt, efficiency of the engine, the EASA green label etc.). The modulation of charges based on SAFs criteria, for instance, is currently not a possibility in the current ICAO context, given that the necessary data flow does not exist. Instead, participants supported broader modulation metrics, which consider the overall aircraft or airline performance, such as the CO₂ emissions per passenger, as opposed to only looking at SAFs, which, they argued, fails to reflect the operation in its entirety. There was support among participants for the modulation of charges based on ATM technology (i.e., airline equipment, sufficient engine) and airspace efficiency. In view of the fact that the price of SAFs is ca. 2.8 times higher than that of conventional jet fuel, stakeholders supported the idea of providing financial incentives to bridge this price differential.

Stakeholders agreed on the value in drawing inspiration from existing schemes, such as the modulation of airport charges, where we have observed the application of varied charges based on noise and time of travel to stimulate quieter aircraft and discourage late evening flights. The potential interplay of the modulated charges with other existing schemes and instruments, such as the EU ETS, CORSIA, and the ReFuelEU initiative, which seeks to incentivise the production and uptake of SAFs, will have to be well understood.

Moreover, Member States' existing international obligations will have to be taken into account to ensure that the administration of the modulated charges is compliant with the broader international framework, namely ICAO. In this context, analogies were drawn to the EU ETS. Though its implementation was preceded by an assessment by the ECJ, which deemed the scheme

to be compatible with the international aviation legal framework, it was nevertheless met with resistance from foreign air carriers who threatened to take the case to the ICAO level. Besides the need to take into account the overall ICAO framework, participants emphasised the need to closely scrutinise each bilateral air transport agreement given that these normally contain provisions on charges and taxes. The current ICAO framework allows for modulation as long as it is related to the provision of ANS. Guaranteeing acceptance in the ICAO context can significantly increase airspace users' acceptance and, as such, reduce the risks of litigation in front of a court for being unrelated to ANS.

In sum, there was agreement over the fact that if implemented, despite general hesitations by airspace users, a modulation of ANS charges should be mandatory for all airspace users in order to avoid competitively disadvantaging only some players. Caution should be exercised to avoid creating a European framework, which disadvantages European carriers as compared to international players.

Economic Regulation of the European ATM Sector

A comment by Regula Dettling-Ott¹

European aviation is still in its deepest crisis and is hit harder than other parts of the world. The travel restrictions imposed to contain the COVID-19 pandemic continue to impair cross-border travel. All stakeholders of the aviation value chain have suffered an unprecedented loss of revenues in the past months.

Discussing economic regulation of European air traffic management during such a crisis is difficult. Many stakeholders are fighting for survival. Policy issues or discussions about the legal framework seem remote. At the same time, the historic downturn sharpens issues and displays the strengths and weaknesses of the current economic regulation of air traffic management in Europe.

In most parts of the world, air traffic management is understood as a public service and as part of infrastructure. Often, it is linked to the sovereign rights of a country and art. 28 of the Chicago Convention is invoked to explain why certain structures of air navigation service providers are a given. However, it is often overlooked that the lean wording of art. 28 leaves States considerable freedom in how they organise air traffic management to control their airspace, as long as the offered services comply with international or national standards and are safe.

Many countries consider air navigation services as part of the government; air traffic controllers are public servants and airlines pay a public fee as for any utility. The EU took a different approach: EU law defines the basic structures and the performance and charging scheme, providing a mechanism to determine the quality and the price of the services for monopoly providers, compensating the lack of competition. EU law also implements the users pay principle and limits the financial risk of ANSPs in case of loss of revenues and additional revenues through a retroactive adjustment mechanism. Member States decide how they organise their air traffic management. Almost all opted for a company owned by the government; only two of the European ANSPs are stock listed. Regular monitoring ensures an assessment of performance.

Most stakeholders agree that the current system has severe shortcomings. This is as far as the consensus goes. Discussions on how to cope with the current crisis indicate how deep the differences of opinion run. Air Navigation Service Providers point out that they can only provide essential services if they get paid to cover the cost of their services, including for times when it is not used. Airlines argue that users should not pay for services they cannot use due to governments restricting cross-border travel and that they should not pay for essential infrastructure. Governments as the owner of the companies providing air traffic management struggle with their multiple roles: they define the legal framework, have a say in targets setting, are the oversight body and as shareholders decide about the strategy of the ANSP as a company. The biggest limitations of the current system persist irrespective of the crisis: the lack of cross-border cooperation allowing more flexibility and more efficiency, overcoming fragmentation.

The intense discussions on how to regulate air traffic management in the EU disguise the fact that we have also learned about the things that work: it is possible to define the quality and price for air traffic management services at the European (SES) level, available data can be converted into targets both for EU-wide services (En-Route) and into national (local) targets based on a unified method. Reliable EU-wide monitoring of performance is available. Transparency is mandatory and airspace users must be consulted. There are decision making processes at the EU level and in the Member States to carry out the tasks required for targets setting and monitoring. So far so good. The shortcomings laid out above show that the system can and should be improved. As in other industries (e.g., energy), the network aspects of air traffic management in the SES states needs strengthening, because EU aviation is inherently cross-border, as the current crisis painfully demonstrates. The past years also show that the current system cannot overcome severe shortcomings of environmental performance, capacity and cost-efficiency. Last but not least, enforcement mechanisms and penalties for underperformance are needed to enforce the targets.

Other sectors show – and aviation can learn from them – that a minimum of institutional mandatory cooperation is essential to establish a functioning EU-wide economic regulation,

¹ Prof. Dr. iur., Chair of the Performance Review Body. This article expresses her personal opinion.

mirroring that aviation is a cross-border network industry. This regulator needs independence. As long as Member States own the ANSPs, there is an inherent conflict of interest which must be deflected with institutional safeguards, ensuring that the bodies defining the quality and price of the service are independent.

Discussing how to manage the current crisis, some have advocated going back to the full-cost recovery principle also in the EU. This is an option – but comes with a price tag. It may mean that ANSPs can no longer be private companies, their employees would return to being public servants and – as the past has shown – the quality and the price of the services could be impacted.

Looking ahead, there may be events that trigger changes much faster than one may think: As in all sectors, technology will – even if incrementally – change air traffic management, as it has done in the past. Also, certain legal assumption may impact the provision of services. In 2018 the European Court of Justice (Case T-818/14) confirmed its earlier decisions that an Instrument Landing System is not an essential equipment of an airport but “the commercial operation of the infrastructure” (N 91) as “it plays no part either in the control or supervision of airspace” (N102). The distinction that only certain installations and services of air traffic management are part of the control and supervision of airspace (as a sovereign task) and thus are in the public policy remit may also play a role when defining the scope of economic regulation of European air traffic management and assessing which of the services could be public infrastructure financed by public funds and not by users’ fees.

Single European Sky – lessons from EU energy regulation

A comment by Walter Boltz, European Energy and formerly E-Control

The EU internal energy market with its regulatory framework and organisational structures can be considered a good example of how an EU-wide harmonised and coordinated regulatory framework can work. Both the air transport and energy sectors face broadly comparable structural issues such as

- A strong national interest in the sector;
- The high importance of the sector for the economy and the society;
- Global competition/sector and pressure on costs;
- A historically inflexible monopoly organisation;
- Affordability of services, scalability of costs, lack of cost control;
- Environmental pressure;
- Security/Safety aspects; and
- Resistance to implement the needed restructuring.

The objectives of EU energy regulation include the establishment of a functioning internal energy market², cost reductions, encouraging competition of energy costs, maintaining and improving the security of supply, strengthening network user rights as well as achieving decarbonisation in a cost-efficient way.

At the European level, energy regulatory efforts significantly increased with the 1st (1998) and 2nd (2003) liberalisation packages. The 3rd energy package (2009), then, was designed to fill gaps left by its predecessor, focusing on the cooperation and coordination between strengthened national regulatory authorities (NRAs) and truly independent and unbundled³ transmission system operators (TSOs).

The Agency for the Cooperation of Energy Regulators (ACER) was established to deal with all cross-border aspects of regulation. In essence, ACER is the fallback solution if NRAs cannot agree, whereas further revisions of the legal

framework delegated additional tasks and competencies to ACER since its foundation. The voluntary cooperation of NRAs was formalised with ACER and is since then obligatory within defined procedures. The NRAs are actively contributing to ACER's decision making via the Board of Regulators, where decisions are being made by qualified majority votings, as well as at the working level.

In many areas, Member States retain their responsibility, and ACER's role is very limited as long as all NRAs agree on a solution. Only when there is no agreement, ACER's competencies can be exercised, but again with the strong involvement of NRAs.

In general, ACER's competencies are limited by the Meroni (13.06.1958) and the Romano (14.05.1981) doctrine to making recommendations to the European Commission only. More recently the CFI decided less strictly in the ESMA judgement (22.01.2014), extending ACER's scope for action to the transfer of responsibilities, if NRAs cannot agree.

The EU energy regulatory framework also foresees so-called network codes, which are very detailed but legally binding regulatory and operational rules. Network codes are being drafted by the network of European TSOs (ENTSOs), a dedicated organisation for the obligatory cooperation of TSOs under EU rules. These technical experts develop detailed rules and procedures within a general ACER guidance (framework guidelines). The formal legal approval of these rules and procedures is then done by the Member States via Comitology proceedings, but only after a favourable opinion on the ENTSOs drafts by ACER. Thus, ensuring the maximum coordination and cooperation between the regulators and the regulated companies.

From a high-level perspective, ACER's objective is the EU market oversight and the establishment of a functioning EU market structure driven by 27 national energy policies, 13 energy specific EU Directives and Regulations, as well as 14 network codes and guidelines. ACER took 40 individual decisions in 2020 alone with a tendency to grow year on year. Market participants do have the possibility to appeal against ACER decisions at the ACER Board of Appeal, which is increasingly happening in the last two years. A further appeal to the European Court is also possible.

² Meaning, in essence, a single liquid and open market.

³ The supply and generation activities are separated from the network operation.

In a nutshell, the European approach towards energy regulation is mandatory cooperation to achieve the internal energy market. Member States do have limited interest to surrender competencies; thus, energy is still a national competency. However, at the European level, a strong need for harmonisation to establish the internal energy market was identified, and thus, cooperation was made mandatory. Today strong and mostly independent NRAs (also from the Member State administrations) have to collaborate at cross-border and EU level to achieve agreements. Technical experts (TSOs) have to cooperate on a daily (operational) basis and within an EU network (ENTSOs) to develop solutions for technical and market issues. Furthermore, the ENTSOs develop, under the guidance of ACER, technical and market rules (network codes) which are made legally binding at the EU level under Member State involvement.

Despite all complexities, the EU energy regulatory system works relatively well, measured against the general objectives of the EU Energy Union and the internal energy market.

PRB and NSAs: What should be the appropriate distribution of tasks?

A comment by Eduardo Abia, Spanish Aviation Safety and Security Agency

As the regulatory framework for the Single European Sky is yet in another attempt of being reconfigured, one question arises: which is the appropriate distribution of tasks between the Performance Review Body (PRB) and the National Supervisory Authorities (NSAs)?

Before such an important question can be addressed, it is important to take a step back to look at the role of the NSAs in the Single European Sky (SES) framework and how this role fits within the Member States. According to the SES Regulation, the primary tasks of the NSAs are related to ensuring the appropriate supervision of the common requirements for air navigation services provision. In the execution of these tasks, the NSAs are required to be independent from the air navigation services providers (ANSPs).

This means SES drew a line separating service provision and supervision / oversight, and consequently regulation. ANS provision in Europe has since then been subject to this rather obvious principle: the authority responsible for the oversight has to be independent from service provision.

However, this distinction does not explain everything that happens in the NSA world at national level, where we find three dimensions:

- Policy maker and regulator: the body that is entrusted with the political power to push forward the strategy for the air navigation services and the competence to draft the regulations.
- Supervisor: the entity responsible for the oversight of the compliance of the services provider with the regulation set out by the EU and national regulators, as well as other related competencies.
- Services provider: essentially the organisation that provides one or several of the various air navigation services.

Across the SES regulation, including associated implementing rules, there are several references to the NSAs as well as Member States when functions are defined. As clear as the separation with the services provision function is established, the one between the policy making and regulatory functions versus the supervisory ones is more blurred.

Each Member State has decided on its own model for the NSA. Some of them have gone for a Civil Aviation Authority model in which an independent organisation is empowered to direct the policy, regulate and supervise the ANS provision. Some others have inserted the supervisory function in the core Administration, i.e., the Ministry. Some others have configured an independent supervisory entity retaining the policy making in the Ministry. These elements have to be considered to illustrate that there is not necessarily the same understanding when discussing concepts like “Regulator”.

A supervisory model:

As the discussion normally goes in the direction of the policy maker / regulator, it is important to put some focus on the supervisory and oversight functions in the performance and charging regulation environment. This comment addresses the distribution of tasks between the PRB and the NSAs in this supervisory context.

Several proposals have been put forward recently regarding the oversight, in the midst of concerns regarding the actual independence of NSAs from the ANSPs in the performance and charging domain. However, these concerns become irrelevant when the goggles are shifted to the oversight functions of the NSAs under the EASA regulation umbrella (safety and operations). In this common requirements context, there is no doubt the independence is there and that the model works and has been working for several years now.

Considering this, the sensible way forward is to replicate the functions and distribution of tasks between EASA and the NSAs in the common requirements context and translate them to the performance and charging domain where the PRB would assume the EASA role in the supervision.

The first step would be to transform the performance and charging implementing rule to follow the EASA regulations model, in which there are

a set of coded requirements that are clearly structured and organised for the NSAs to meet in the oversight tasks and for the ANSPs to comply with.

Under this model, the NSAs would report on the draft performance plans at national level while the PRB assists the European Commission on the validity of the plans adopted by the Member States. Once the framework is set for the reference period, the NSAs would focus on the oversight of the compliance with the rule at national level, on the basis of a systematic approach that includes audits.

This way, the airspace users and the aviation community as a whole have the guarantee that the costs, charges and the mechanisms involving the performance that affect the service that is being provided, are actual and compliant with the regulation in the framework of a consistent performance plan.

The systematic approach is granted by having the PRB on top of the oversight model, in which the body would:

- Establish the common acceptable means of compliance and guidance material for elements as relevant as cost-based audit, verification of investment mechanisms, review of operational KPIs, etc.
- Conduct standardisation audits on the NSAs and secure access to all their oversight records to ensure that the supervision is carried out across the EU in a uniform manner.
- Provide support to the NSAs, particularly to those who are smaller or do not have enough resources to undertake their tasks, either directly or by organising a pool of NSA experts that are willing to collaborate.
- Develop and organise training for the oversight in the performance and charging domain.

Widen the scope to include the standardisation of requirements that are not part of the charging regulation, but are in the economic and performance domain, affect competition in the private sector and are currently in the service provision regulations where EASA is not taking standardisation actions (i.e., plans, reports, insurance cover, financial strength, etc.).

Such a supervisory model would be widely accepted by the ANSPs given that they are used to it in the safety and operational domain and would only need to become familiar with it in performance and charging. It would also increase the efficiency of the oversight, putting the experts where they can best contribute (at national level) and ensuring they have the best tools and the backing of a standardised model at EU-wide level mastered by the PRB. Finally, the approach would also create added value for the private ANSPs that are currently providing ANS under market conditions.

Overall, this would contribute to providing confidence to the airspace users and the aviation community on the competence and independence of the supervision and hence, the compliance with the performance and charging regulations in the best of their interests.

FSR Transport

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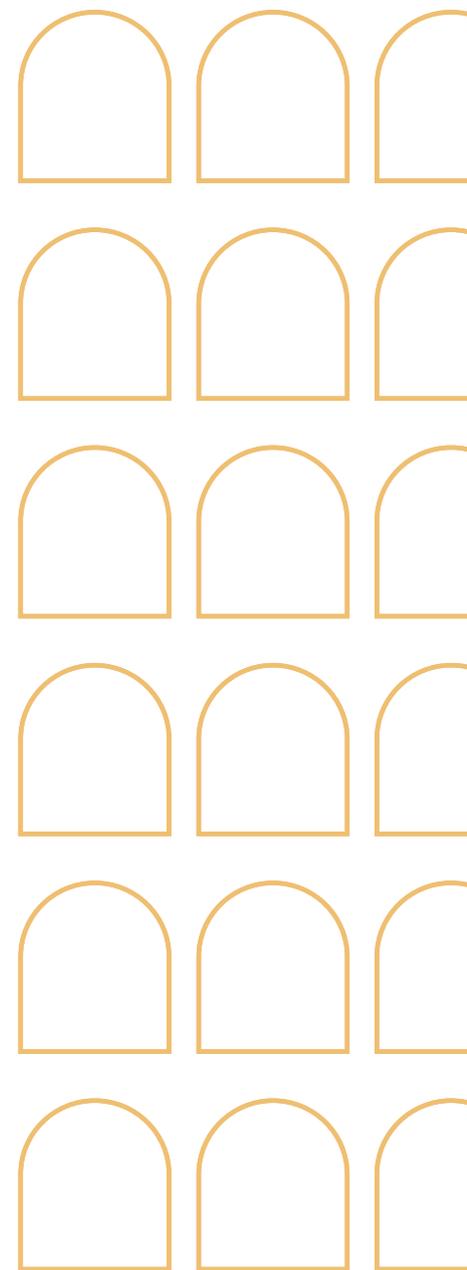
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