



Ticket Distribution in Aviation

vol. 26 | n°3 | 2024

« au service de l'analyse » — since 1998

networkindustries
quarterly

Network Industries Quarterly, December, Vol. 26 issue 3 'Ticket Distribution in Aviation'.

Innovation is closely linked to air transport, from the development of aircraft technologies to the creation of computer reservation systems. The latter led to the development of global distribution systems (GDSs) that consolidated airline supply and presented it clearly for travel agents to sell air tickets to passengers. Although there are many challenges, the development and regulation of ticketing distribution are relevant to this day. This issue of Network Industries Quarterly aims to untangle the complexity of ticket distribution in aviation by examining it from different angles.

In their contribution titled "Regulating Ticket Distribution in Aviation: What is at stake?", Juan Montero and Matthias Finger provide context for the ticket distribution system by discussing the key measures required for its regulation. Montserrat Barriga's contribution addresses how digitalisation has changed the aviation industry. It offers prospects to enhance connectivity, convenience and transparency for passengers, but it also reminds the industry and policymakers to be aware of possible challenges for regional airlines. The complexity of ticket distribution is also discussed by Attila Fodor in his piece "Behind the Sky: Air Ticket Distribution – a complex world". The author examines key challenges in air ticket distribution and proposes investigating solutions from other industries while considering all stakeholders involved. The fourth contribution from María Jesús Guerrero Lebrón examines whether regulation of GDSs is still needed. The European Union must find a balance between promoting innovation and implementing effective regulations that ensure all parties adhere to the same standards. In their contribution, Sabine Buchner and Roman van Alten discuss airline ticket distribution as a regulatory opportunity to enhance innovation and collaboration within the aviation industry. The final contribution is from Matthew Krasa, who emphasizes the importance of direct ticket distribution for airlines, enabling them to be more transparent with consumers and invest in innovation.

Editors of this issue:

Juan Montero and Elodie Petrozziello

dossier

- 3 **Regulating Ticket Distribution in Aviation. What is at Stake?**
Juan Montero and Matthias Finger
- 7 **The Digital Evolution Of Airline Ticket Distribution**
Montserrat Barriga
- 10 **Behind the Sky: Air Ticket Distribution – A Complex World**
Attila Fodor
- 13 **Global Distribution Systems in the European Union: Is Regulating Them Still Necessary?**
María Jesús Guerrero Lebrón
- 17 **Airline Ticket Distribution: A Vision Ahead of its Time**
Sabine Buchner and Roman van Alten
- 21 **Ticket Distribution in Aviation: An Airline Perspective**
Matthew Krasa
- 24 **Announcements**

Network Industries Quarterly | Published four times a year, contains information about postal, telecommunications, energy, water, transportation and network industries in general. It provides original analysis, information and opinions on current issues. Opinions are the sole responsibility of the author(s).

Subscription | The subscription is free. Please do register at fsr.transport@eui.eu or info@ic4r.net to be alerted upon publication.

Letters | We do publish letters from readers. Please include a full postal address and a reference to the article under discussion. The letter will be published along with the name of the author and country of residence. Send your letter (maximum 450 words) to the editor-in-chief. Letters may be edited.

Publication director | Matthias Finger

Managing editor | Elodie Petrozziello and Juan Montero

Publishing editor | Ozan Barış Süt

Founding editor | Matthias Finger

Publisher | Florence School of Regulation, Transport Area, Via Giovanni Boccaccio 121, 50133, Florence, Italy, phone: +39 055 4685 795, email: FSR.Transport@eui.eu and Istanbul Center for Regulation, Istanbul Technical University, Taşkışla, 34367 Istanbul, Turkey, email: info@ic4r.net

Websites | : <https://fsr.eui.eu/transport/>, <https://ic4r.net/>, <https://www.network-industries.org/>

Regulating Ticket Distribution in Aviation. What is at Stake?

Juan Montero & Matthias Finger, Florence School of Regulation | Transport Area, EUI

A complex and dynamic ecosystem Innovation has always been at the forefront in aviation, not the least in terms of distribution networks. Airlines were among the first companies to develop computer reservation systems (CRSs) back in the 1960s, namely Sabre (American Airlines) and Amadeus (Lufthansa, KLM, Air France and SAS). Amadeus was unbundled from the owner airlines in 2005 and Sabre in 2007, and they both became world-leading global distribution systems (GDSs). They aggregated supply by airlines and displayed it in a coherent form for travel agents to engage with passengers to sell air tickets. GDSs were clearly early innovators in digitalisation and among the first digital platforms. Airlines also sold tickets directly to passengers (the so-called direct channel), but the so-called indirect channel (using distributors in the form of GDSs plus a travel agent) was prevalent. This ticket distribution model was stable for decades and it is still relevant today, as around 20% to 25% of trips are booked through one of the three global GDSs (Syntesia 2024).

In the past three decades three main evolutions can be identified which have made the air ticket distribution ecosystem more complex. The first trend is endogenous to the aviation industry, as liberalisation has diversified airline business models. The traditional network carriers remain relevant but are no longer alone providing services. Low-cost carriers (LCCs) have come to lead in terms of numbers of passengers. Regional airlines specialise in providing connectivity services to under-served locations. As their business models are different, their ticket distribution needs and strategies are also different. Network carriers have a wider geographic reach (often global) and strongly rely on business users who work with travel agents. Low-cost carriers mostly rely on price-sensitive leisure passengers. Regional airlines tend to be smaller and have more difficulty connecting with their passengers.

The second trend has been a reinforcement of the direct channel thanks to digital technologies. Digitalisation has dramatically reduced the cost of information management, the main feature in ticket distribution. All airlines have developed reliable websites and apps enabling passengers to gather information and acquire air tickets di-

rectly from airlines. As a consequence, the direct channel has grown in relevance. Some airlines, mostly low-cost carriers, rely almost exclusively on their direct distribution channel so as to have full control of pricing, keeping prices low and implementing innovative pricing strategies (minimum service plus separate add-ons), including aggressive dynamic pricing. In some cases, they have refused to work with intermediaries. Network carriers have also reinforced their direct channels, even if they have never stopped working with intermediaries. Regional carriers are the carriers that rely the most on intermediaries. As a result, the direct channel has been growing, and in 2017 close to 50% of air tickets were sold directly in the EU (Infrata 2017).

The third trend has been a multiplication of new online intermediaries. As the internet grew in popularity, meta-search engines (MSEs) emerged (Google Flights, Skyscanner, Kayak). They look for and compare ticket conditions among airlines. It has been estimated that 10%-20% of trips are mediated by MSEs (Syntesia 2024). The most important of the new intermediaries, however, are online travel agents (OTAs). They not only enable identification and comparison of flying options but they also make it possible for passengers to acquire their air tickets online. The largest OTAs in the EU are eDreams and Etraveli. This is a quite concentrated market, as these two largest OTAs in the EU have a combined market share exceeding 50% of the flight tickets distributed. When accommodation is considered, Booking.com is the leader. OTAs intermediate around 20% to 25% of air trips in the EU (Syntesia 2024). Mergers and acquisitions have been common, and the line between OTAs and MSEs is increasingly blurred.

Tensions

The relationship between service providers and intermediaries is prone to conflict among industries, and tensions have grown as digitalisation has helped new types of intermediaries enter the market and sometimes grow to dominant positions. Air ticket distribution has been no different.

The tension between airlines and GDSs is not new. As GDSs became almost indispensable to distribute air

tickets, airlines lamented their market power, their high commissions and the risk of GDSs driving passengers to one airline rather than another. As the proportion of flights intermediated by GDSs has decreased over time, this tension has somewhat eased. However, regional airlines, and to a lesser extent network carriers, are still wary of GDS high commissions and discriminatory practices. On the contrary, GDSs lament that it is getting difficult for passengers to find information, as airlines are increasingly keeping some services and discounts for their direct channels, if not withdrawing completely from GDSs. Consequently, passengers (and their travel agents) can no longer rely on a single window to find all the available options.

In addition, the rise of OTAs has created new tensions. On the one hand, airlines have developed direct relations with OTAs to bypass GDSs. This has been made possible, for example, by a new distribution capability (NDC) standard that was developed by the IATA. As a result, OTAs can now directly contract with airlines to intermediate their flights without the involvement of a GDS. On the other hand, as OTAs have grown larger and more powerful, airlines have started to distrust OTAs and complain about them engaging in abusive practices.

OTAs have been particularly inventive in trying to replicate aggregation of all existing flying options into a single window, a role traditionally played by GDSs. They started out by building their inventories from GDSs themselves. Later they engaged in direct deals with airlines to complete their inventories, partially bypassing GDSs. However, OTAs are affected by airlines' strategies to reserve some (or all) of their inventories for their own direct channels. As a response, OTAs have increasingly started to intermediate services without agreement with the airlines by interfacing with the direct channel as fake passengers, a practice called 'screen-scraping,' thus triggering legal conflicts between airlines and OTAs. Up to 40%-50% of OTA content has been identified as originating from screen-scraping.

Finally, tensions have emerged between OTAs, airlines and online search engines, particularly Google Search, which is in a gatekeeper position. As passengers start out by looking for a flight on Google Search (the most common option for passengers), Google can drive passengers to one or another OTA, or directly to the airlines' websites. OTAs invest very heavily in search advertising on Google to attract traffic to their websites, but such traffic can be diverted to the airlines' websites, and even to

Google Flights, the meta-search engine owned by Google, a practice called 'self-preferencing.'

Passenger rights

From a regulatory perspective, digital intermediaries create new opportunities, but also new challenges. Public authorities have to balance these opportunities and challenges, taking into consideration public interest as well as the interests of various stakeholders.

Digital intermediaries bring obvious benefits for passengers in terms of aggregating supply. Aggregation enables passengers to: 1) identify existing supply by different airlines; 2) compare pricing and other conditions; 3) benefit from single window contracting with different airlines; and 4) build new services by connecting different flights and multimodal journeys (flight plus rail, for example). Digital platforms in aviation create new efficiencies as they exploit larger network effects, a disruptive practice we have already witnessed in other industries.

However, intermediaries add a new layer to contracting air services, thus increasing complexity at least in terms of passenger rights. Digital intermediaries make contracting so smooth that it is not always obvious for passengers who the service provider is (the airline or the intermediary). However, the same level of smoothness is not necessarily guaranteed once a ticket has been acquired: compensation for delays, for example, can become problematic. This is particularly the case when intermediaries 'screen-scrape' information from airlines' websites to commercialise their services.

Furthermore, some digital intermediaries use aggressive marketing techniques. For example, it has become quite common to display a low price for a service and increase it during the contracting process with extra fees. This and other unfair practices have become increasingly common, thus damaging the reputation of airlines. As a result, regulatory intervention has been called for to impose passenger rights not only on airlines but also on intermediaries.

Data sharing

One of the most heated regulatory debates in recent years has been over the potential introduction of an obligation on airlines to 'share data' with digital intermediaries. However, the term 'data sharing' is somewhat misleading, as airlines have modified their relationships with

intermediaries. Traditionally, airlines voluntarily made their inventories available for intermediaries such as GDSs to be sold to passengers by travel agents. With the rise of OTAs, airlines have reinforced their direct channels, and some of their discounts and services have been reserved for their direct channels. Passengers therefore are not able to benefit from such discounts and services when using intermediaries. Some low-cost carriers have decided not to work with intermediaries at all, or only in very limited circumstances.

As a result, the market has grown more fragmented, and passengers no longer have access to the entire airline inventory through their trusted travel agent (either physical or online). On the other hand, it has often been pointed out that aggregation of supply benefits passengers, and that digital intermediaries bring new efficiencies to the market, as they simplify comparability and facilitate contracting. Therefore, intermediaries have been asking for a regulatory intervention in order to force airlines (and other transport providers) to ‘share data.’ Compulsory data sharing would ensure that all the airlines’ inventories are available for intermediaries to aggregate supply for the benefit of passengers. While compulsory data sharing remains exceptional, it is increasingly considered to be an option for legislation. For example, the Data Act (Regulation (EU) 2023/2854) defines a general framework for compulsory data sharing under fair, reasonable and non-discriminatory (FRAND) conditions, including pricing conditions (Montero and Petrozziello 2024).

Summarising this regulatory debate under the label ‘data sharing’ is indeed confusing. In fact, digital intermediaries are not simply asking for an obligation to share (‘raw’ or ‘naked’) data about airline services (services, timetables, prices, etc.). Instead, they are asking public authorities to impose on airlines an obligation to contract with intermediaries. Consequently, airlines would not be allowed to distribute their services exclusively through their direct channel; rather, they would be forced to contract with any interested distributor. Furthermore, airlines would be forced to provide intermediaries with all their inventories, including all their services and discounts. This would amount to a universal ‘price parity’ clause (in antitrust terms), and airlines would be obliged to pass whatever discount they offer in their direct channel to all distributors.

There is currently no general rule that forces suppliers to contract with intermediaries for the distribution of their services. On the contrary, the general rule is that service

providers are free to choose and to design their distribution: they can either rely exclusively on their own direct channel or, if they work with intermediaries, they can reserve some of their inventories for their direct channel. In fact, price parity clauses are considered contrary to competition law when imposed by an intermediary in a dominant position, as the Court of Justice of the European Union stated in the *Booking.com* case (Case C-264/23) in 2024.

Nevertheless, ‘compulsory data sharing’ is on the rise. For example, compulsory data sharing has been imposed on incumbent railway undertakings by competition authorities in Spain and Germany (Montero & Petrozziello 2024). Compulsory data sharing is also increasingly imposed on transport service providers by public service obligation contracts. Finally, some member states (Finland and France) are imposing compulsory data sharing on transport service providers with legislation with the aim of enabling ‘Mobility-as-a-Service.’

As transport is at least partially in the general interest, there are good reasons to increase public intervention in favour of compulsory data sharing for the benefit of passengers and territorial connectivity. Facilitating aggregation of services by intermediaries can indeed create public value (more mobility options, ease of contracting). However, when doing so, we recommend thinking in terms of a ‘ladder of obligations,’ at least in the case of aviation if not more generally.

First, ‘naked data sharing’ obligations would certainly have beneficial effects in the entire aviation ecosystem. Meta-share Engines would be able to provide information and make comparisons. OTAs would be able to identify the best option and channel passengers to airlines’ direct channels.

Second, somewhat broader ‘content sharing,’ including perhaps an obligation to make most services available through intermediaries, could be considered. This would enable single window shopping and make screen-scraping largely unnecessary. It would also increase the reliability of the information received by passengers from all distributors. However, one would have to be cautious not to platformise service providers.

Indeed, third, the ultimate obligation would consist in forcing airlines to share all pricing options, including all discounts, along with all ancillary services. This would fully empower digital intermediaries to replicate

the services provided by airlines on their direct channels. However, it would platformise airlines and reduce them to simple ‘transporters,’ and eliminate their negotiating positions and commercial relationships with digital intermediaries. The problem would be exacerbated by the fact that digital intermediaries tend towards monopolisation because of the network effects that are at play in digital platforms, and so they call for regulation of platforms themselves.

Platform regulation

When it comes to platforms, the regulatory focus is of course not exclusively on OTAs or GDSs. The EU has recently adopted general legislation which applies to both providers of online intermediation services (Regulation 2019/1150 – P2B Regulation) and to digital ‘gatekeepers’ (Regulation (EU) 2022/1925 – Digital Markets Act).

When it comes to air ticketing, we have identified early forms of digital platform regulation in Europe (Montero & Finger 2021), namely the so-called Code of Conduct (Regulation 2299/89) and Regulation 80/2009, which regulates liability for illegal content (display of flights by non-airworthy airlines), self-preferencing, and ranking (following the so-called ‘neutrality principle’). It is widely accepted that the Code of Conduct is no longer fit for purpose, given that the air ticket distribution ecosystem has dramatically changed since it was adopted. Furthermore, there is no longer self-preferencing, as airlines and GDSs are no longer vertically integrated.

On the other hand, we now have platform regulation (in general), which can be fine-tuned to address the two remaining issues in aviation, which are ‘ranking’ and ‘recommending’ as provided by online intermediation service providers. For example, the P2B regulation imposes transparency obligations on all providers independently of their market power. When platforms use several recommendation options (such as price, time of travel, emissions, etc.), the Digital Service Act obliges platforms to enable users to select their preferred option. The Digital Markets Act goes even further and prohibits self-preferencing in the case of vertically integrated intermediaries. However, so far no neutrality obligation has yet been imposed on gatekeepers such as Google Search. Only FRAND access to services is currently being imposed.

‘Price parity clauses’ are prohibited not only by competition authorities in specific cases but as a general rule they

cannot be imposed by gatekeepers on underlying service providers according to the Digital Markets Act. The same Digital Markets Act furthermore imposes ‘sharing data back’ obligations. More precisely, it obliges platforms to: 1) provide intermediated companies with access to data that is provided or generated in the context of the use of the platform by end users engaging with the products or services provided by the intermediated company; 2) provide publishers with data on online advertising intermediation services; 3) provide advertisers and publishers with access to their performance measuring tools so they can carry out their own independent verification of the advertisements inventory; and 4) guarantee data portability.

We therefore consider that these and other regulatory obligations already defined by the EU in the Digital Markets Act and the Digital Service Act can and should also lead to sector specific obligations being imposed on digital platforms active in transport, and more specifically in air ticketing intermediation.

References

- Infrata (2017). *Airline Distribution Costs*, Research Report for ECTAA and ETTSA.
- Montero & Finger (2021), *The Rise of the New Network Industries*, Routledge.
- Montero and Petrozziello (2024). *Data sharing regulation in transport. Follow the money*, Forthcoming.
- Syntesia (2024). *Study on the impact of online intermediaries on consumers and carriers*, Report for Airlines for Europe.

The Digital Evolution Of Airline Ticket Distribution

Montserrat Barriga, Director General, European Regions Airline Association (ERA)

The aviation sector is undergoing a digital transformation that is reshaping the way passengers book flights and airlines distribute tickets. Online intermediaries, such as online travel agents (OTAs), which airlines partner with to reach as many consumers as possible throughout the world, metasearch engines (MSEs), including flight comparison websites, and global distribution systems (GDSs), which use computerised reservation systems to connect airlines with ticket vendors, have become pivotal in this shift. While the digital era has made flight booking easier and more accessible for consumers, it has also introduced significant challenges, particularly when it comes to fairness, transparency and the role of regional airlines in this evolving landscape.

As Director General of the European Regions Airline Association (ERA), I have witnessed the critical role regional airlines play in European connectivity, linking smaller communities and ensuring access to air travel by those outside major hubs. Regional airlines are integral to maintaining the economic and social fabric of Europe and it is essential that, as the landscape of air ticket distribution evolves, we advocate systems that promote fair competition and protect consumer rights.

In recent years, a shift to digital channels has radically transformed how passengers purchase airline tickets. While traditional travel agencies still play a role, it is widely acknowledged that the vast majority of bookings today are carried out online. This digital shift has been fuelled by the increasing use of the internet and smartphones along with a growing demand for flexible self-service travel solutions.

These developments are creating a more competitive and diverse air ticket distribution market, one that is increasingly focused on integration with other travel technology systems and adapting to evolving consumer preferences. As a result, the traditional distribution channel has significantly shrunk over the years, causing the distribution of airline content to be more costly and complex for small and medium-sized airlines.

Evolving distribution dynamics

While in the past GDSs relied on being key gatekeepers for airlines, this role has become less stable as airlines have

introduced new methods of connecting with intermediaries which better meet technical demands at a lower marginal cost. Today there are only three major GDSs (Amadeus, Sabre and Travelport) sharing the global market, which creates problems of market dominance.

Commercial partnerships between airlines and OTAs allow the distribution of airline tickets in a transparent way. The issue is that outside these commercial agreements there are opaque practices by some agencies selling tickets on behalf of airlines without consent. This unauthorised practice is known as screen-scraping. Screen-scraping involves using advanced technology to extract data from airline websites or systems without permission, enabling sales without proper ticketing authority. This can lead to abuse, data breaches and other problems. For example, passengers may not receive their flight booking because the airline is not aware of it, and difficulties for passengers to reach intermediaries in the case of disruption. The prevalence of screen-scraping varies depending on airline preventive measures, litigation and evolving relationships with OTAs, but it remains a challenge until it is effectively regulated.

Furthermore, the line between OTAs and metasearch engines (MSEs) is becoming increasingly blurred as many MSEs have been acquired by OTAs. This creates potential conflicts of interest in which platforms that once aimed to provide impartial price comparisons now favour the prices of their parent companies, further skewing the market and disadvantaging independent carriers.

As the dynamics of distribution continue to evolve the issue of transparency becomes increasingly critical, especially for smaller carriers, which face the compounded challenges of hidden fees and misrepresentation online.

The challenge of transparency

It is essential to ensure that digital ticket distribution methods operate in a fair and transparent manner without compromising the interests of passengers. In fact, concerns about misleading practices, a lack of transparency and exploitation have become more prevalent in recent years. These challenges are particularly significant for smaller regional airlines, which often lack the resources to fight back

against unfair practices or to ensure that their services are honestly represented in the digital marketplace.

Many online platforms advertise ‘budget-friendly’ flights but their prices exclude ancillaries like baggage fees, seat selection and taxes, which are only revealed later in the booking process. This lack of transparency not only frustrates passengers but also distorts their ability to make informed comparisons between carriers. The process often prioritises upfront fares while concealing the final cost, making true price comparisons more complex.

For regional airlines, this pricing dynamic poses unique challenges. Unlike low-cost carriers (LCCs), which excel at breaking down their pricing into separate components, regional carriers typically include more services in their base fares due to their business models. These higher operating costs reflect their focus on delivering high-level service to passengers, serving less-trafficked routes and ensuring connectivity for underserved regions. Consequently, when a passenger sees a regional airline fare alongside the heavily unbundled pricing of a LCC, they may perceive the regional fare to be disproportionately expensive, even though after hidden fees are accounted for the total cost might be similar or even competitive. Furthermore, these hidden fees often go unmentioned until late in the booking process, meaning passengers have already committed to the flight before they realise there are additional charges. This mismatch in how fares are presented disproportionately disadvantages regional airlines in online searches. As a result, regional airlines face a dual burden: to justify their pricing structure while competing on platforms that prioritise fragmented low-cost pricing models.

Addressing power imbalances

These market dynamics risk consolidating market power in the hands of large OTAs and GDSs. These monopolistic structures can limit competition and disproportionately affect regional operators. Therefore, the neutral display principle, which prevents discrimination between airlines, should remain a cornerstone of future regulations.

Neutral display ensures that consumers are presented with unbiased non-discriminatory information when booking flights, allowing them to make informed decisions based solely on the merits of the service offered – such as the price, schedule or environmental impact – rather than on commercial arrangements behind the scenes.

The neutral display principle has been a cornerstone of the CRS Code of Conduct for years, fostering transparency and ensuring a level playing field among airlines of all sizes. Removing or diluting it would have profound consequences. Without it, we risk creating a bidding war in which airlines with deeper pockets secure higher rankings in search results.

Neutral display is more than just a tool to ensure fairness; it is a safeguard against market failures that could arise from a dominance of a few large players in the distribution chain. By preserving this principle, we can ensure that the aviation sector remains competitive, innovative and consumer-focused, while allowing smaller carriers to maintain visibility in a market increasingly dominated by larger airlines and platforms.

Abandoning neutral display would reduce clarity for consumers, who would no longer be able to trust that the results they obtain reflect their best options. Instead, ticket prices could rise as airlines absorb the increased costs of securing beneficial positions in distribution platforms.

As policymakers consider the future of airline ticket distribution, I urge them to prioritise the preservation of neutral display in any future regulation – including the upcoming Single Digital Booking and Ticketing Regulation. Doing this will not only protect consumer trust but also sustain the diversity and resilience of Europe’s aviation sector.

A Single Digital Booking and Ticketing Regulation

Looking ahead, discussions in the European Union (EU) signal the potential introduction of a Single Digital Booking and Ticketing (SDBT) Regulation. This initiative would seemingly aim to streamline the travel experience and enable passengers to purchase a single ticket covering their entire journey, regardless of the transport operators involved.

However, while the regulation would promise benefits, significant concerns have already arisen. The primary concern for airlines lies in the requirement for mandatory data sharing. To make the SDBT Regulation platform functional, transport operators would need to grant the platform access to their content to facilitate bookings. For carriers, this would represent a significant challenge, as it would undermine the control they currently have. This shift is perceived as a potential threat to their commercial leverage and operational flexibility.

In addition, it is not yet clear if there will be a requirement and associated cost to implement the required technological infrastructure. The costs associated with developing and maintaining advanced digital platforms could put a strain on their operations and divert attention and funding from essential services.

Ultimately, it is crucial for regulators to consider the implications of the SDBT Regulation. Collaboration between regional airlines and EU policymakers will be vital to craft a framework that supports innovation while protecting the interests of all stakeholders.

Conclusion

The digital transformation of the aviation industry offers immense opportunities to enhance connectivity, convenience and transparency for passengers. However, it also presents significant challenges, particularly for regional airlines, which play a critical role by linking smaller communities and ensuring equitable access to air travel. The rise of online distribution channels, the complexities of evolving regulatory frameworks and the dominance of larger market players necessitate a balanced approach to ensure fair competition, consumer trust and the long-term sustainability of the sector.

To achieve this, it is imperative for policymakers, regulators and industry stakeholders to collaborate in shaping a framework that promotes innovation while safeguarding the interests of smaller operators. Preserving principles like neutral display to ensure transparency in fare presentation are vital steps to maintain a competitive and diverse aviation ecosystem.

By striking this balance, the aviation sector can continue to evolve in a way that empowers passengers, fosters innovation and upholds the essential contributions of regional airlines to the connectivity and economic vitality of Europe. The future of air travel depends on creating an environment in which all carriers regardless of size can thrive and deliver value to their communities and customers.

Behind the Sky: Air Ticket Distribution – A Complex World

Attila Fodor, Head of Global Regulatory Affairs, eDreams ODIGEO

I followed Mr Tsitsikostas’s confirmation hearing in the European Parliament with great interest. He said that he intends to make rail booking as easy as air booking “one ticket, one click on your cell phone, just like it happens today with airplanes and air tickets.” I agree with him. Today it is easy to search for plane tickets. However, we should not overlook the fundamental problems of air ticket distribution. At first glance, consumers have tons of options to choose from. In reality, distribution is fragmented, transparency was lost a long time ago and dominant air carriers continue their anti-competitive behaviour to the detriment of consumers. Air ticket distribution in Europe is facing deep-rooted structural problems.

Undoubtedly, the liberalisation of the European air market is a success story. Airlines are free to fly within the common market without route access or pricing restrictions and consumers have benefitted from better connectivity, greater choice and more competition, which have all resulted in significantly lower fares.

However, technology advances much faster than the legislator. In its golden era, the computerised reservation system Code of Conduct (CRS CoC) sought to “prevent abuse of competition and to ensure a supply of neutral information to consumers.” Historically, airlines heavily relied on travel agencies to reach customers with their offers. However, with the growth in internet penetration and online distribution, the role of the CRS changed significantly. Airlines developed their own distribution channels, which fall outside the provisions of the CRS CoC. As a result, the CRS CoC transparency objectives now cover an ever shrinking part of the ticket distribution market while outside its scope consumers are deprived of a ‘like for like’ comparison of air ticket offers. We are even witnessing an ever-growing attack on independent unbiased ticket distributors. Consumers rely on these independent channels, which are not owned and controlled by any airlines. However, these platforms have difficulty in carrying out their roles of providing fair transparent comparisons of the offers of hundreds of airlines, and providing visibility of all available deals and route combinations. In the past, intermediaries could rely on global distribution systems (GDSs) to source air travel content. This is no longer the case. Airlines have diversified their distribution and introduced alternative distribution channels which they

fully control. Ticket vendors have no choice but to connect to these new channels one by one. Otherwise they cannot source content to show consumers ticket options. Connecting to different channels not only adds technical complexity but is also financially burdensome as ticket vendors need to invest in developing the appropriate connections, which can vary from airline to airline. Imagine that in your old house you used to have one type of electric socket which sourced all your energy needs. In your new house each room has a different type of electric socket and you need to buy several appliances, each adapted to the specific electric socket.

In addition, airlines strategically make traditional GDS sourcing less attractive. The least expensive tickets (e.g. economy light) may not be made available and airlines add surcharges to tickets purchased on GDSs. Europe’s largest and most dominant airlines have introduced surcharges to tickets purchased on a GDS channel (‘distribution cost charges’). This undermines one of the core objectives of the CoC, “transparency of transport products and services,” and damages travel agents, whose ability to offer consumers ‘like for like’ comparisons of flight options is weakened. This fits well with airlines’ disintermediation strategies. Numerous times independent ticket vendors have raised concerns about these practices to the European Commission.

Independent distributor channels play an important role. They expand customer choice. Booking direct gives you access to one route on one airline at one price. This might work for some people but the majority of consumers are price sensitive and highly value choice and the ability to compare routes, prices, accommodation options and ancillaries. Intermediaries make products available to end users, ensure the availability of products, allow contact between suppliers and end users, and improve supply chain performance and product efficiency.¹ Online travel agencies (OTAs) drive competition among airlines and distribution channels. Even the Court of Justice of the European Union (CJEU) has recognised the important role of intermediar-

¹ B. Chesio and E.N. Makokha, Influence of distribution channels on supply chain performance – a case study of the new Kenya Cooperative Creameries Eldoret. *European Journal of Business and Management*, 8 (30) (2016), pp. 112-118

ies in a recent judgement.² Platforms have a positive effect on competition. Intermediaries enable consumers to have access to a wide range of offers and to compare these offers simply and quickly, and service providers have much better visibility of their offers. Healthy and fair data sharing is an indispensable and key condition to ensure inter- and intra-brand competition for the benefit of consumers. Ultimately, it is the consumer who loses out. Consumers are not able to find tickets including the most attractive fares of all the carriers serving the route that they are interested in. If the legislator envisages a revamp of the CRS CoC or intends to integrate it in other legislation, it will need to make sure that the provisions cover all CRS distribution channels whether they are traditional or new ones.

There are promising signs that these issues may be addressed. The Sustainable and Smart Mobility Strategy recognised that it is too cumbersome to plan and buy multimodal journeys and that “addressing this will involve overcoming the insufficient availability and accessibility of data, sub-optimal cooperation between suppliers and vendors (...)” The easiest and most straightforward way to achieve this is to give transport operators an obligation to make all their relevant tickets available for distribution, based on fair, reasonable and non-discriminatory (FRAND) terms. The multimodality project was promising but as the work advanced it became increasingly clear that the original idea to give consumers a wider choice with more travel mode combinations and better ‘like for like’ comparison between the offers of different transport modes was getting watered down.

I cannot help but compare rail and air ticket distribution. Article 10 of the Rail Passenger Rights Regulation requires railways to share real-time dynamic traffic data, all available fares and travel information with independent ticket vendors. The new Single Digital Booking and Ticketing Regulation is destined “to ensure that Europeans can buy one single ticket on one single platform and get passengers’ rights for their whole trip.”³ With FRAND access to rail content, this is already possible. If intermediaries had access to all railway ticket content in a fair, reasonable and non-discriminatory manner, independent ticket vendors would already be able to combine tickets. The principles of Article 10 go beyond rail transport. Equal rights for all passengers also means equivalent rights in all modes of

transport and on all distribution channels. There is no reason why the principles in Article 10 of the Rail Passenger Rights Regulation should not be applicable to other modes of transport. An Article 10-style obligation that is properly enforced in all transport modes would mirror a similar principle in Recital 16 of Regulation 1008/2008 on Common Rules for the Operation of Air Services in the EU, which states that consumers “should be able to compare effectively the prices of airlines.” The previous Commission started consulting the industry to revise Regulation 1008/2008. While the project is stopped for the moment, I hope that the new Commission will continue this work for the benefit of consumers.

Let us put ourselves in the consumer’s shoes. The European Union is proud to be an area in which consumers enjoy a high level of protection. Article 169 of the Treaty on the Functioning of the European Union states that “In order to promote the interests of consumers and to ensure a high level of consumer protection, the Union shall contribute to protecting the health, safety and economic interests of consumers, as well as to promoting their right to information, education and to organise themselves in order to safeguard their interests.” While the EU can indeed be proud of its achievement in consumer protection compared to other parts of the world, it does not mean that the work is done. European passengers are still not protected against airline insolvency. Airline insolvencies have significant financial impacts on passengers. It is imperative to introduce a mandatory insolvency protection scheme for airlines. This would ensure that consumers are protected against the financial risks associated with airline failures, and draw from the successful implementation of similar protections in the Package Travel Directive (PTD). In the PTD, consumers are truly protected in the case that the package organiser fails financially. However, if a consumer buys a stand-alone flight ticket, they are not protected if the airline goes under. I often hear that there is no need for airline insolvency protection as there are well functioning alternative risk management methods, such as Regulation 1008/2008, which gives authorities powers in relation to the financial fitness of airlines to ensure that they will be in a position to meet their obligations under the consumer acquis. More precisely, Article 9(1) of the regulation states that licensing authorities must suspend or revoke the operating licence of an EU air carrier if they are no longer satisfied it can meet its actual and potential obligations. Article 9(2) requires licensing authorities to make an in-depth assessment of the financial situation of a carrier and to review its licence when financial problems are identified or insolvency or similar proceedings taken against it. In addition,

² Case C-264/23

³ https://commission.europa.eu/document/download/e6cd4328-673c-4e7a-8683-f63ffb2cf648_en?filename=Political%20Guidelines%202024-2029_EN.pdf

the International Air Transport Association (IATA) has a risk management programme for airlines, which stresses that passengers' money would be well protected. None of these existing provisions have prevented airline failures in the past. Only in the last decade we have seen Malev, Air Berlin, Monarch, FlyBe and Germania go under, leaving thousands of passengers running after their money.

Consumers also need to navigate through the jungle of airline ancillary policy. The different policies on the size of hand luggage, the number of pieces of luggage, their weight, seat assignment, family seating and check-in rules are confusing and prevent a fair and 'like for like' comparison of prices. Ancillary fees play a huge role in airline revenue. A recent investigation by a US Senate Committee found that the price of ancillary fees of some major US airlines is not tied to the cost of providing a service.⁴ In the EU, the CJEU has ruled (case C-487/12) that a distinction needs to be made between check-in luggage and hand luggage. Airlines handle and take responsibility for processing and storing checked-in luggage, which is likely to lead to additional costs for them. That is not the case of hand baggage that a passenger keeps with themselves throughout the journey.

The same committee also found that airline consolidation has led to worse passenger experiences in the United States. There is no such airline concentration in the EU yet. However, we can observe such a tendency. With three large airline groups (IAG, AirFrance/KLM and the Lufthansa Group) and a handful of major low-cost carriers (Ryanair, Easyjet, Wizzair) we are not very far from the American situation.

Despite all the above, there are promising signs here and there. The Swedish Competition Authority has investigated anti-competitive restrictions that Finnair forced on OTAs. As a result of this investigation Finnair has committed to end an abusive policy that forbade OTAs from advertising ticket prices below Finnair's reference price on metasearch engines. This is an important victory. Furthermore, the upcoming Polish presidency of the EU Council is showing willingness to take up work on the long-awaited air passenger rights reform, which has been pending since 2013. There is a great opportunity here to introduce a targeted insolvency obligation for airlines.

Lessons can be learnt from the rail sector, too. The Commission established in the Renfe case that third party ticketing platforms are competitors of the state-run rail operator's own ticketing channels and must be allowed to compete fairly. In its investigation into Deutsche Bahn's (DB) abusive practices against ticket platforms, the German Bundeskartellamt decision stated that DB abused its dominant position to restrict competition from third-party vendors that sell DB tickets. As a result, DB is now obliged to share its ticketing data, including the cheapest available tickets on the route, with ticket vendors. I cannot help but interpret this as clear confirmation of the principles of Article 10 of the Rail Passenger Rights Regulation, which should be clearly mirrored in the revision of the Air Passenger Rights Regulation.

If we tackle the underlying problems in air ticket distribution, European passengers will fully enjoy the benefits of the liberalisation of the European air transport market and will continue to have access to an even wider and more transparent choice of air tickets and more price competition between air carriers and intermediaries.

⁴ The Rise of Junk Fees in American Travel, Majority Report, Senator Richard Blumenthal.

Global Distribution Systems in the European Union: Is Regulating Them Still Necessary?

María Jesús Guerrero Lebrón, Professor of Commercial Law at Universidad Pablo de Olavide

Introduction

The evolution of Global Distribution Systems (GDSs) has significantly influenced the air transport industry as they have become critical intermediaries between airlines and travel agencies. Initially governed by strict regulations to ensure fair competition, transparency, neutrality and access for carriers, the question arises whether these regulatory frameworks remain necessary in the current market scenario. This article explores developments in the GDS market, the applicable legal frameworks and their comparative evolution in the USA and Canada, while assessing whether deregulation in the European Union is a feasible option.

The Historical Evolution of GDSs and the Legal Framework in the EU

GDSs, initially known as Computer Reservation Systems (CRSs), were developed as tools for airlines to manage bookings through travel agents. Over time, they expanded into independent systems offering diverse functionalities.

As in the early days airlines controlled these systems, the European Union introduced a series of regulations to address potential anti-competitive practices and ensure fair access by all carriers. The cornerstone of this effort was Regulation (CEE) No. 2672/1988 and subsequent updates of it. This regulation aimed to create a level playing field by preventing airlines from misusing their ownership of CRSs to distort competition and restrict market access by other carriers. The framework established transparency, non-discriminatory practices and equitable access as foundational principles for the operation of CRSs and set the stage for further refinements of EU transport regulations.

The system supported agreements reached in 1987 between Lufthansa, Air France, SAS and Iberia to establish Amadeus. Similarly, in 1988 it facilitated the creation of the Apollo system by British Airways, KLM and Swiss Air, which later partnered with Covia, a U.S.-based CRS, and eventually formed Galileo International.

Although the block exemption regulations focused more on controlling the behavior of CRS providers than on regulating agreements for their creation, it was nonetheless deemed necessary to issue a specific regulation that would comprehensively set out these conditions. Consequently, Council Regulation (EEC) No. 2299/89 was enacted on 24 July 1989 to establish a code of conduct for CRSs. This code included procedures for handling complaints, conducting investigations and ensuring mandatory compliance with its provisions. Despite being referred to as a 'code,' it remains a binding legal instrument.

The 1989 Code of Conduct was amended twice (Council Regulation (EEC) No. 3089/93 of 29 October 1993 and Council Regulation (EC) No. 323/1999 of 8 February 1999) and was eventually replaced by Regulation (EC) No. 80/2009, which introduced a new code of conduct and repealed the original regulation.

Unlike in the United States, where the sector was fully deregulated in 2004, in the European Union this regulation remains in force. However, considering the evolution of the market, as we will now discuss, a more liberal approach to this matter might seem more appropriate (I anticipated this in a 2005 article: Guerrero Lebrón, M.J., *Los Sistemas Informatizados de Reserva: la aplicación del Derecho de la competencia al mercado liberalizado del transporte aéreo*, *Diritto dei Trasporti*, 1/2005, p. 65).

Various consolidation operations carried out in this market have resulted in what can now be described as an oligopolistic market dominated by the three main global CRSs: Amadeus, Sabre and Travelport. Another significant shift has occurred. While these systems were historically developed by airlines that owned the majority of the shares in the companies managing the CRSs, today airlines are either no longer among their owners or the companies are publicly traded. Consequently, improper use of these systems by airlines is no longer the primary concern of regulatory authorities. Moreover, advances in technology and a diversification of booking channels – such as direct distribution models (New Distribution Capability – NDC), meta-search engines and online travel agencies – have transformed the air distribution market, raising questions about the continued relevance of these rules.

A Market Transformation and the Enduring Role of GDSs

As we can observe, the air transport market has undergone substantial changes due to technological innovations and evolving consumer behaviour.

From the passenger's perspective, access to airline services can take place through a wide variety of channels. Users can directly visit the websites of various airlines, use online travel agencies (OTAs) that provide a comprehensive booking experience or rely on comparison tools and search engines that facilitate evaluating prices and conditions. These comparison tools often limit their role to redirecting users to websites where they can complete their reservations, thus focusing solely on simplifying the decision-making process.

However, this diverse landscape can be confusing for consumers, who are not always aware of the type of operator they are interacting with. They may not know whether they are dealing directly with an airline, an online travel agency or a price comparison tool. Furthermore, questions arise regarding the regulations governing each type of operator and the implications that such legal frameworks may have for passenger rights.

Therefore, we have transitioned from a market in which civil aviation was restricted to legacy carriers, and ticket distribution to end users was always channeled through travel agencies using CRSs, to one that is significantly more complex and competitive, with technology and intermediaries playing a crucial role in the consumer experience.

Despite this, travel agencies and corporate travel management companies continue to rely on GDSs for their operational needs. GDSs, which for a time were the sole intermediaries, have managed to maintain their prominence in the air transport distribution market and are now beginning to play a role in offering routes on major low-cost airlines. However, it should be noted that the integration of low-cost airlines in GDS offerings occurred quite late (Ryanair in 2014 and Southwest in 2020), and not all airlines or all GDSs have been included.

The complexity of the market has grown with new stakeholders like meta-search engines and content aggregators, which are expected to be neutral but this is not guaranteed. These developments have prompted debates about whether the current regulatory framework adequately

addresses market realities or imposes unnecessary restrictions. The growing diversity of operators and platforms makes it important to advocate regulations that ensure a fair and accessible experience for all passengers, regardless of the operator with which they access the service.

Comparative Perspectives: the USA and Canada

In the USA, the CRS market was deregulated in 2004. This allowed biased displays with mandatory disclosures. Similarly, Canada implemented substantial regulatory changes in 2004, which were aligned with market evolution while retaining some oversight. In both markets there was a shift towards lighter regulatory approaches emphasising transparency and competitive practices.

According to a European Union report, an analysis shortly after the market was deregulated found that deregulation had led to reductions of 20% to 30% of booking fees as a result of renegotiations of contracts between airlines and CRS providers (European Commission, 2007). This was because of the newly acquired freedom of contract after deregulation, as the principle of no price discrimination no longer applied and CRS providers and airlines were free to negotiate booking fees. As part of these changes, full content agreements became a common feature of contracts between legacy airlines and CRS providers in the US. In the early 2000s, US airlines started to withhold some fares from CRSs. These fares were sold exclusively on the airlines' own websites or on Orbitz, an OTA created by five major US airlines (US Department of Transportation, 2002). Because of the no price discrimination clauses in the CRS rules in the European Union, CRS providers were not able to persuade airlines to provide these fares on their CRSs (for example, by offering discounts or other tailored deals).

Since 2016, transparency requirements for platforms involved in air transport ticket distribution in the United States have been governed by a broad comprehensive regulation. This approach differs significantly from the fragmented framework in the European Union. Part 256 of Title 14 of the Code of Federal Regulations (14 CFR, Part 256) entitled 'Electronic Airline Information Systems' establishes guidelines on displaying flight options on electronic airline information systems. These include but are not limited to global distribution systems (GDSs), corporate booking tools and internet flight search platforms. The aim is to prevent unfair or deceptive practices in the distribution and sale of air transport.

The regulation requires information displayed on screens to adhere to the user's search criteria and prohibits hidden bias (§ 256.4). If preferential treatment is given to fares, schedules or availability information, this must be clearly disclosed at the beginning of each search (§ 256.5).

Two key factors distinguish this U.S. regulation from its European counterpart. First, it has broad scope and encompasses all operators in the air transport distribution market. In contrast, the EU's Code of Conduct only applies to CRSs and its transparency requirements are not consolidated in a single comprehensive regulation but are instead scattered among various sector-specific, general and cross-cutting legal instruments. Second, the U.S. regulation does not mandate neutrality but prioritises transparency. This transparency-focused approach has effectively contributed to a 20% to 30% reduction in booking fees in the deregulated North American market.

Conclusion: Open Questions and Challenges in the EU

The European Union faces the challenge of striking a balance between fostering innovation and maintaining effective regulation. While the existing GDS framework has historically promoted fair practices, the emergence of alternative booking channels and the reduced ownership and control by airlines of GDSs underscore the need for this regulatory approach. The necessity of regulating GDSs in the European Union is increasingly being questioned. Lessons from North America raise the question of whether it is still essential to maintain this regulation to ensure transparency, competition and consumer protection.

Regarding the GDS framework, the situation remains largely unchanged compared to 15 years ago, when the European Economic and Social Committee pointed out that "maintaining the neutrality of displays is ineffective in today's market, especially given that there are no provisions on neutrality for online distribution channels, such as airline websites and self-booking systems for corporate travel" (Opinion of the European Economic and Social Committee on the 'Proposal for a Regulation of the European Parliament and the Council establishing a Code of Conduct for Computerised Reservation Systems,' 2008).

However, the result of the latest revision of Regulation 80/2009 was merely cosmetic, leaving the core issue untouched. It only eliminated the obligation for CRSs to

submit reports detailing their ownership structure and governance models every four years and on requests from the Commission (Article 12).

On the other hand, regulation of the transparency – rather than neutrality – of other operators in the air transport distribution market is scattered among various rules at both the EU and national levels. These operators, such as search engines, online travel agencies, flight consolidators and airlines' direct distribution channels, are subject to a range of different regulations. Key frameworks encompass consumer protection laws – such as those implementing the reforms introduced by Directive (EU) 2019/2161 – sector-specific rules – e.g. Article 23 of Regulation (EC) No 1008/2008 – and Regulation (EU) 2019/1150 on promoting fairness and transparency for business users of online intermediation services. More recently, additional provisions in the digital platform regulatory framework have been introduced, such as Article 6(3) of the Digital Services Regulation (Regulation (EU) 2022/2065) and Article 6(5) of the Digital Markets Regulation (Regulation (EU) 2022/1925).

The Digital Markets Regulation (DMR) applies exclusively to platforms designated as gatekeepers by the European Commission, among which Booking.com is included. In such cases, operators must be both transparent and neutral. According to Article 6(5), "gatekeepers shall not favour, in their core platform services, their own products or services over similar ones offered by third parties in a way that adversely affects competition."

Despite their fragmented nature, which often adds complexity and confusion, the ultimate aim of these regulations is to ensure that potential passengers receive unbiased, complete and accurate information that faithfully reflects the characteristics of the service they intend to purchase. However, unlike GDSs, these operators are not bound by a neutrality obligation when selling airline tickets, with the only exception of Booking.com because it is considered a gatekeeper.

In conclusion, these reflections raise critical questions. Why are GDSs required to maintain neutrality while other operators only need to be transparent? Does it still make sense to uphold this specific regulation in the current market context, particularly when general competition law already addresses potential anti-competitive risks? Would deregulation lead to a more dynamic market and, by extension, deliver greater benefits for air transport users?

References

European Commission, *Support study for the ex-post evaluation of Regulation 80/2009 on a Code of Conduct for Computerised Reservation Systems*. Final report. Study contract no. MOVE/E1/SER/2017-537/SI2.776900, 2020, p. 147.

Guerrero Lebrón, M.J., 'Los Sistemas Informatizados de Reserva: la aplicación del Derecho de la competencia al mercado liberalizado del transporte aéreo,' *Diritto dei Trasporti*, 1/2005, pp. 25-65.

Report on the application of Article 4a and paragraph 3 of Article 6 of Council Regulation (EEC) No. 2299/89 as amended by the Regulation establishing a Code of Conduct for Computerised Reservation Systems, COM (95) 51 final. Brussels, 7 March 1995.

Report on the application of Council Regulation (EEC) No. 2299/89 on a Code of Conduct for Computerised Reservation Systems, Brussels, 9 July 1997, COM (97) 246 final.

Mietus, J.R., *European Community Regulation of CRS*, in *Law and Policy in International Business* 21/1989, 107 ss.

Opinion of the European Economic and Social Committee on the 'Proposal for a Regulation of the European Parliament and of the Council establishing a Code of Conduct for Computerised Reservation Systems,' COM(2007) 709 final – 2007/0243 (COD), OJ C 224/57, 30 August 2008.

Ricardo, *Support study for the ex-post evaluation of Regulation 80/2009 on a Code of Conduct for Computerised Reservation Systems*, Study contract no. MOVE/E1/SER/2017-537/SI2.776900, April 2019.

The Brattle Group y Norton Rose, 'Study to Assess the Potential Impact of Proposed Amendment to Council Regulation 2299/89 with Regard to Computerised Reservation Systems,' October 2003.

Truxal, *Competition and Regulation in the Airline Industry: Puppets in Chaos*, Routledge, 2013.

Airline Ticket Distribution: A Vision Ahead of its Time

Sabine Buchner and Roman van Alten, Lufthansa

Airline ticket distribution stands at a crossroads shaped by its pioneering past, complex present and uncertain future. From the groundbreaking CRSs (Computerised Reservation Systems) of the 1960s to today's fragmented digital ecosystem, the industry has continually adapted to technological and market forces. The interplay between innovation, accelerating modernisation across the entire travel ecosystem, and potential regulation will determine its trajectory in the years to come. To thrive, airlines and both B2B and B2C intermediaries must embrace modern standards while advocating regulatory frameworks that support flexibility and experimentation. Policymakers, in turn, must recognise the risks of overregulation and work collaboratively with the industry to ensure a balanced approach. By fostering an environment that rewards creativity and customer-centricity, the industry can continue to lead in shaping how the world connects. The stakes are high – not just for airline distribution but for the broader future of global travel. In a world that increasingly values seamless personalised sustainable experiences, airline ticket distribution has the potential to redefine itself once again and become a beacon of innovation for the industries it has inspired for decades.

Digital Trailblazers

Airline ticket distribution has long been a quiet pioneer, laying the groundwork for global digital connectivity well before many other industries turned to digitising their processes. In the mid-20th century, as demand for air travel grew rapidly, most businesses relied on telephone lines and manual processes. Airlines, however, turned to computers to solve internal complexities of visualisation of scheduling, flight ticketing and pricing calculations. This foresight not only revolutionised aviation but also influenced other industries.

The introduction of CRSs, like Sabre in the 1960s by American Airlines, marked the beginning of this transformation. Many airlines followed suit and launched their own CRSs, such as United Airlines's Apollo, and Swissair and British Airways's Galileo. In the 1970s, airlines began allowing travel agencies to access their CRSs, enabling real-time bookings and inventory updates. They recognised the value of broader distribution. It was a radical departure from the traditional heavily manual methods previously

used which relied on early version teletype transmissions. This move significantly extended the reach of airlines beyond their direct ticket counters and so increased sales volumes. This led to intense competition among airlines to have their flights featured most prominently on CRSs. Since each system was biased toward its airline operator, it created a fragmented and distorted landscape from the perspective of travel agencies.

Soon afterwards, global distribution systems (GDSs) emerged with extended capabilities to combine the itineraries of multiple airlines and essentially all geographical regions. They were driven by regulations such as the 1997 U.S. Civil Aeronautics Board (CAB) rules requiring the provision of unbiased displays of flight options. By the late 1980s, several additional airline-created GDSs had established themselves such as Amadeus and Galileo in Europe and Abacus in Asia. Later in the early 2000s they were joined by TravelSky in China. Again, this was revolutionary. Airlines were the first to adopt what could be called an early form of e-commerce, creating interconnected networks that daily supported millions of transactions and allowed travel agencies to sell to and service their customers on a variety of airlines and geographies using a single system. The GDS model became a template for global logistics. It influenced industries like shipping, hospitality and retail.

This innovation came with challenges. Over time, the reliance of airlines on GDSs created a dependence that stifled flexibility as the great majority of bookings and revenue came via GDS systems and these systems proved cumbersome to upgrade to handle airline specific content. This meant airlines struggled to adapt to changing customer needs and evolving technology in a timely manner. Examples of this include introductions of new cabins (e.g. premium economy), which in some cases could take years. The very systems that made airlines leaders in distribution now became barriers to innovation.

Today's Patchwork of Innovation and Legacy

Nowadays, the airline distribution landscape is an intricate mix of both legacy systems and emerging technologies. Airlines operate in an ecosystem that is both fragmented yet highly interconnected, characterised by varying busi-

ness models, technologies and customer expectations. While this diversity has fostered creativity and new approaches, it also suffers from the challenges of managing such a multifaceted system.

The internet brought new players into the distribution space, such as OTAs (online travel agencies) and metasearch platforms. These platforms promise to offer customers unparalleled convenience and transparency by allowing them to compare prices and itineraries among airlines. However, they often reduce airlines to commoditised service providers. Airlines must navigate this dynamic carefully and balance the benefits of visibility on these platforms with the costs of customer acquisition. Technological disparities compound the complexity. While airlines can display and sell their full range of products and services on their websites, this is far from commonplace via intermediaries. This uneven adoption creates a patchwork ecosystem in which innovation coexists with inefficiency.

The Rise of Direct Distribution

The internet fundamentally reshaped the airline distribution model, giving airlines a direct channel to customers. Many low-cost carriers built their business models around this, focusing on sales on their websites and mobile apps. By minimising their dependence on intermediaries, these airlines reduced costs and exerted full control over customer interactions, from pricing to branding.

Full-service airlines face a more complex scenario. They must balance direct distribution with the need to maintain relationships with travel agencies and business travel agencies servicing corporate clients. For these airlines GDSs remain critical as they continue to provide access to a global audience and allow them to reach into markets where their brand recognition might be minimal. In addition, business travel tends to be more complex and for years GDSs have been specialised in offering a suite of front- and back-end solutions for these customers. However, the cost of using GDSs – often in the form of segment fees (i.e. a fee per passenger per flight segment) – continues to strain profit margins. In addition, the GDS model with its standardised offerings limits the ability of airlines to differentiate their products and offer personalised services.

Online travel agencies often use their own proprietary front end on top of their content aggregation layer (this is often powered by a single or multiple GDSs) and other content aggregators that integrate content from various

(e.g. low-cost) airline APIs. In many cases, these tech intermediaries and/or OTA customer facing interfaces are not capable of offering the full suite of airline brands (e.g. branded fares such as 'light' fares) and/or the full range of ancillary products. This is why an airline's own direct distribution outlets remain critical to ensure consumers have access to all the products and services the airline may offer.

The Role of Technology Standards

International standards play a major role in aviation, from passenger and cargo operations through to navigation. Distribution is no exception. The EDIFACT (Electronic Data Interchange for Administration, Commerce and Transport) was officially launched in the late 1980s and has enabled intermediaries such as GDSs to simplify the aggregation of hundreds of airlines on single platforms for travel agencies to use. In the 2000s, with many processes being digitised such as the transition from a paper ticket to an e-ticket, full-service airlines began to unbundle products (i.e. sell baggage separately) and many airlines introduced new cabins (such as premium economy), which required much development time and airline investment to bring them to life in the once pioneering but now rigid selling environment. As enhancements to these platforms often involve substantial cost, many airlines opt to not invest in making all their ancillary products sellable via B2B channels. For those that do have ancillary products available on these platforms, they still depend on B2C sellers to implement this in their front ends and/or workflows. Often this is not the case.

Emerging standards like [IATA's XML-based New Distribution Capability \(NDC\)](#) are attempting to address these limitations. NDC enables airlines to distribute rich content, such as seat maps, baggage options and tailored promotions. This allows greater customisation, mimicking the experience on airline websites. Travel agencies can elect to access this content by establishing a direct API connection to the airline, or by connecting via an intermediary such as a traditional GDS which has a NDC platform, or via the dozens of newly established travel technology intermediaries that have sprung up in recent years. There is currently more choice than ever before in how travel agencies access airline content. Despite this, adoption of NDC has been uneven and slow. Many travel agencies remain reliant on legacy systems, as implementing NDC requires a significant investment in technology and retraining, as once digitised paper-based processes are slowly making way for more modern digital processes. For airlines, the coexist-

ence of old and new systems will create inefficiencies and additional costs for some time to come.

In addition to NDC, long-term complimentary initiatives like 'ONE Order' aim to simplify the booking and fulfilment process. By consolidating passenger records into a single order, airlines may be able to streamline operations and enhance customer service. NDC is part of a [broader 'Airline Retailing'](#) initiative beyond distribution, which also focuses on delivery and fulfilment.

The Road Ahead: Regulation in Support of Innovation and Fair Competition

As the industry looks to the future, regulation is one factor which could significantly shape its flight path once again. While regulation aims to ensure fairness, transparency and consumer protection, it can create tension between fostering innovation and enforcing compliance. Innovation has been a major struggle for airlines in recent years. With few distribution intermediaries the costs are often high, and the need for intermediaries to compete is minimal, making the time-to-market for new products or functionality slow to the detriment of consumers.

The 1978 Airline Deregulation Act in the United States opened up the American aviation industry to increased competition and this proliferated CRSs, eventually giving rise to many of the distribution systems that still exist today. In Europe, the 'Code of conduct for use of computerised reservation systems' introduced by the European Commission in 1989 aimed to regulate the operation of CRSs. Its purpose is to ensure fair competition between airlines and prevent CRS providers (often owned or controlled by airlines at the time) from favouring their parent airline in search results. It aimed to do this by mandating a neutral display of flight options and prohibiting discriminatory practices regarding pricing or access to CRSs. After this, airline involvement in CRSs faded away as these companies became independent enterprises, with many of them later consolidating. CRSs generally became split into GDSs on the distribution side, providing the link between airlines and travel agencies, and PSSs (passenger service systems), which provide the operational backbone for airlines. Today only three globally operating GDSs remain. These three largest GDS providers are also the largest PSS providers. This indicates the interconnectedness between these two platforms, and also how market consolidation in the sector remains high with limited choice of providers and with great historical dependencies between airlines and their long-standing PSS providers.

MDMS: Opportunity or Obstacle?

A main influence on the pace and nature of the evolution of airline distribution is the regulatory environment. Striking the right balance will be key in new legislative proposals like the European Multi-Modal Digital Mobility Service (MDMS) initiative. MDMS aims to create an integrated platform for all modes of transport, including flights, trains and buses, to promote sustainable and seamless travel while allowing consumers to transparently compare transport options. Its potential implications for airlines are complex and multifaceted.

MDMS seeks to standardise data sharing and interoperability among transport providers, enabling customers to plan and book more multimodal journeys on a single booking platform. For airlines, this could open new opportunities for collaboration and customer acquisition. It is important to note, however, that multi-airline itineraries on a single ticket have already been possible for almost 80 years now. In addition, many airlines already have connections with key rail operators, and in some cases even bus operators. These have been in place in many cases for 15-20+ years already and besides airlines directly building connections with rail and bus operators there have been specialised intermediaries active in this area since the 1990s.

In addition, MDMS also raises concerns about data sharing, innovation, fairness in competition and its overall feasibility. Requiring airlines to adhere to standards (other than what the industry is heavily investing in already) could undermine their ability to differentiate themselves and could play into the hands of incumbent intermediaries as it will discourage competition and new entrants from bringing new innovations to life. It should not be forgotten that as this is an EU initiative it could harm the competitiveness of European airlines with their non-European competitors. This may severely erode the ability of airlines' ability to compete and could lead to an eventual reduction in consumer choice in Europe. Moreover, the regulation risks reinforcing the dominance of legacy systems like GDSs, which may be deemed compliant with MDMS standards, thus again stifling innovation for newer technologies and processes and ultimately raising costs for consumers.

Striking a Balance

The challenge for regulators is to foster innovation while ensuring fair competition and consumer protection.

Heavy-handed regulation can inadvertently hinder progress by imposing rigid frameworks that favour established players rather than creating the forward momentum for which it was designed. Instead, policymakers can consider adopting a balanced approach, perhaps with sandbox environments in which airlines, transport operators not currently working with them, technology providers and B2C platforms (i.e. travel agencies) can test new models without regulatory constraints.

For airlines, navigating in this landscape will require a proactive approach. Engaging with regulators, investing in new technologies and collaborating with industry stakeholders will continue to be essential. The industry must advocate frameworks that incentivise innovation and flexibility to ensure that regulation is an enabler rather than a barrier.

The Role of Emerging Technologies

Despite the challenges, airlines are exploring transformative technologies to redefine distribution. Artificial intelligence (AI) may be used in the future to help create personalised experiences, in particular in relation to real-time customer service and its ability to support customer service departments.

Another area of interest is advanced analytics and machine learning. Airlines are leveraging these tools to gain deeper insights into customer behaviour, enabling them to design more effective marketing campaigns and loyalty programmes. Predictive analytics also help demand forecasting, route optimisation and resource allocation. EDIFACT-based technology, which is predominant in the industry today, is ill-suited for this as airlines are generally in the dark on things like the shopping context and it is generally unable to cater personalised experiences.

Technology also enables sustainability initiatives to intersect with airline ticket distribution. Offering customers the ability to offset carbon emissions, for instance is, already happening more and more on airline websites, and on XML-enabled channels. Many airlines already integrate rail journeys in their itineraries and as standards become more accessible this will only become more common.

Beyond the Horizon: Redefining Airline Distribution

The road ahead for airline ticket distribution will not be without obstacles, but the opportunities are immense. The ability to leverage XML-based technology once it is adopt-

ed at scale in combination with AI and advanced analytics will be critical to stay competitive. Airlines that successfully integrate emerging technologies while balancing the demands of regulation and market competition will set the standard for the future. For consumers, an increasingly competitive airline environment will mean more and better options to choose among, and as new technology standards become more widely adopted enhanced servicing capabilities will enable improved customer experiences.

The Importance of Collaboration

Certainly, collaboration across the entire ecosystem will be key. Airlines, other transport operators, technology providers and travel agencies must continually work together to establish common standards, ensure interoperability and foster innovation. Partnerships with non-traditional players such as tech startups and software vendors could also unlock new possibilities. The airline industry is about to finally see XML-based standards such as NDC become more prominent. As traditional GDSs, now down to only three, join the many new entrants in the airline distribution marketplace with their own NDC based solutions, the hope is that migration of their EDIFACT platforms will see this transformation rapidly accelerate in the next few years.

Ticket Distribution In Aviation: An Airline Perspective

Matthew Krasa, Director of Public Affairs, Ryanair

Introduction

Freedom of contract is a fundamental principle enshrined in EU law. The rights to choose one's trading partners and to freely dispose of one's property are generally recognised principles in the laws of the member states, in some cases with constitutional status.¹ As a corollary, undertakings – including those with significant market power – are free to choose for their products the distribution model they expect to maximise their economic and financial results. In the air transport business, airlines can therefore adopt a commercial strategy of direct online distribution bypassing intermediaries and connecting directly with customers.

Since its entry in the European market, Ryanair has reserved for itself the distribution of its tickets on its internet website. Agencies and other intermediaries which provide a resale service merely duplicate Ryanair's one and, being devoid of any innovative character or added value, have not been allowed to engage in distributing tickets (except GDSs used by traditional 'brick-and-mortar' agents, from 2014).² Ryanair's refusal to broker its own flights is not harmful to consumers and is even pro-competitive. By reducing its operating costs by eliminating agent fees, over the years Ryanair has been consistently able to ensure that its prices remain among the lowest in the market. Consumers can avoid paying the (often hidden) commissions required by OTAs for each transaction concluded.

Moreover, the absence of unauthorised intermediaries allows Ryanair to have a direct channel of communication with passengers so as to fulfil its information and compensation obligations under EC Regulation No. 261/2004 (notification of flight cancellations or delays and processing refunds to passengers in the case of disruptions).

¹ See A.G. Jacobs's Opinion in 7/97, Oscar Bronner, § 56, and the Charter of Fundamental Rights of the European Union, Art. 17 (Right to property).

² Ryanair allows GDS operators Amadeus, Sabre, Travelport (trading as Galileo and Worldspan) and Kyte to provide traditional brick and mortar travel agents (operating offline) and closed corporate travel booking platforms with access to its fares. Moreover, since 2023 Ryanair has been offering online travel agents the opportunity to enter in Direct Distribution Agreements (see below, Section 4).

Contract law: screen scraping breaches the terms of use of Ryanair's website

Ryanair encourages genuine price comparison websites (meta-search engines), which refer consumers to the selected airline's website in order to book at the original fare. Ryanair offers such websites licensed access to its flight schedules and pricing information.

The ability of OTAs to display this information on their websites generally depends on the approval of the airlines concerned in contractual agreements or looser arrangements granting OTAs 'ticketing authority.' However, certain OTAs may offer tickets without an agreement or ticketing authority by engaging in 'screen-scraping' i.e. using bots mimicking human behaviour to circumvent security systems, which typically causes huge increases in web traffic on airline websites, which trigger higher IT costs and at times disruptions. Thanks to screen scraping, an OTA can access airline databases at scale and display the information to consumers on its own website – in violation of the airlines' terms and conditions – and purchase tickets and ancillary services on behalf of its customers, in effect impersonating them without them being aware of it.³

Ryanair has been involved in legal proceedings in several jurisdictions against screen-scraping websites which extract its proprietary data (prices, timetables, other flight details) and sell to customers at prices which include intermediary mark-ups on top of Ryanair's fares, including by creating 'dynamic' travel packages. The airline's objective is to prevent consumers paying inflated prices and the resulting reputational damage that may arise from the failure of certain screen-scraping websites to provide Ryanair with passengers' genuine contact and payment method details.

For example, in March 2018 the Commercial Court of Paris dismissed a damage action brought against Ryanair by OTA Voyages sur Mesure/LMnext FR (Lastminute).

³ See, generally, B. Rohmer et al., Study on the impact of online intermediaries on consumers and carriers (a report prepared for A4E by Syntesia, Sept. 2024) at 16.

com).⁴ The OTA submitted, inter alia, that Ryanair's conduct in reaction to its unauthorised screen scraping amounted to unfair competition and caused it financial harm. Siding with Ryanair, the court took the view that the defendant's strategy to operate the distribution model of its choice was constitutionally protected by French law, provided competition was not unlawfully restricted. In this respect, it found no evidence that Ryanair's practices inflated ticket prices, restricted consumer choice or created barriers to competition, given that consumers could easily access price comparison websites. Moreover, the court held that Lastminute.com redirecting traffic and sales from Ryanair's website deprived the airline of the opportunity to fully monetise its substantial investments in its flight data infrastructure – which also supported its sales of non-aviation ancillary services (such as hotels and car rentals). The court concluded that OTAs exploiting the airline's investments without bearing the corresponding costs constituted commercial free riding and granted Ryanair's counterclaim for an award of damages.

Moreover, in November 2023, the Irish High Court found in favour of Ryanair against Flightbox, a Polish IT company accused of unauthorised screen scraping and providing the extracted data to OTAs such as the Romanian company Vola.⁵ The Court found that Flightbox was bound by the terms of use of Ryanair's website (the 'ToUs'), which expressly prohibit screen scraping and limit the unauthorised use of its IP,⁶ and that the defendant's actions caused Ryanair commercial harm. As a result, the court granted the airline a permanent injunction prohibiting Flightbox from breaching its ToUs. It is noteworthy that the High Court's conclusions seemed to fully align with the public policy considerations made by courts in other jurisdictions.⁷

⁴ See Case 13/31969, *OTA Voyages sur Mesure et LMnext FR/Ryanair*, Judgment of 20 March 2018 (upheld on appeal. See Paris Court of Appeal, Case 18/7621, Judgment of May 20, 2022).

⁵ See Case 2020/1644P, *Ryanair/Flightbox*, Order of 6 November 2023.

⁶ Ryanair presented evidence demonstrating that access to its website necessitated explicit acceptance of its ToUs. The court found that 'click-wrap' agreements are standard in online commerce and comply with Irish and EU contract law.

⁷ See, e.g., U.S. District Court for the District of Delaware (US), *Ryanair DAC v. Booking Holdings Inc. et al.* (2024), in which Ryanair won a unanimous Computer Fraud and Abuse Act (CFAA) jury verdict. Ryanair accused Booking.com of several CFAA violations based on the defendant accessing the password-protected 'myRyanair' portion of the airline's website through a third-party partner. The jury found that Booking.com was vicariously liable for accessing this protected portion of Ryanair's website to obtain and sell Ryanair flights.

Irish courts have consistently held that the jurisdictional clause in Ryanair's ToUs is binding.⁸ In a judgment delivered in January 2019,⁹ defendant Vola, an OTA based in Romania, contested the jurisdiction of the Irish courts to hear and determine Ryanair's case concerning alleged screen scraping. The High Court engaged in fact-finding to determine the nature of Vola's interaction with the airline's website and held that it constituted acceptance of the jurisdiction clause in the ToUs on the basis of a 'click-wrap' agreement (i.e. explicit acceptance by clicking 'I Agree,' as is recognised in international trade).¹⁰

Competition law: Ryanair's distribution policy is not anti-competitive and benefits consumers

The pro-competitive nature of Ryanair's exclusive distribution model was also recognised by the Court of Appeal of Milan in judgments it delivered in February 2024 in the 'twin' civil damage cases instituted by OTAs *Viaggiare* and *LastMinute*.¹¹ Contrary to the plaintiffs' claim that Ryanair's refusal to deal was abusive, the court found that OTAs did not require access to essential infrastructure or input necessary for the distribution of a new and diversified product. Access to Ryanair's ticketing system was deemed not indispensable since the OTAs, having refused to enter into inexpensive licensing agreements with the airline, could access Ryanair's flight prices and schedules by screen scraping. Moreover, since 2005 the plaintiffs had had continued access to these data and maintained strong positions in the downstream market for travel and tourism agency services, their revenue being primarily driven by bookings for non-aviation ancillary services. Therefore, Ryanair's refusal to contract did not foreclose competition or harm consumers. In fact, its business strategy was found to be economically rational and justified, and to have resulted in competitive fares, from which consumers undoubtedly benefit, together with the possibility of having a direct channel of communication with the airline. Therefore, Ryanair had not violated Article 102 TFEU.

⁸ See, e.g., Supreme Court (Ireland), *Ryanair v Billigfluege/Ticket Point and Ryanair v On the Beach* (2015).

⁹ See High Court, *Ryanair v. Vola* (2019). The proceedings on the merits are still ongoing.

¹⁰ As opposed to a "browse-wrap" agreement (i.e. implied acceptance through continued use after notice).

¹¹ See Case Nos. 516/2020 *Viaggiare v. Ryanair* and 517/2020 *LMNEXT CH v. Ryanair*, judgments of 23 February 2024. The litigation in question started before the Court of Milan in 2010. The case was remanded back to the Court of Appeal of Milan by the Court of Cassation in 2019.

Direct Distribution Agreements

Since 2023 Ryanair has been offering OTAs the opportunity to enter in direct distribution agreements ('DDAs').¹² While aligning with Ryanair's exclusive on-line distribution model, DDAs allow OTAs to access the airline's price, flight, timetable and ancillary data with the only purpose to display them. Ryanair grants the OTA partner a licence to use this information on its website. Passengers can select accurately priced Ryanair products and are redirected to the Ryanair.com website to confirm the purchase, resulting in full price transparency. DDAs also ensure that Ryanair obtains passengers' real contact details, allowing them to directly manage their booking with the airline and to receive all relevant service e-mails. DDAs also provide a mechanism to ensure passengers are promptly refunded in the event of cancellation or disruption.

Therefore, DDAs prevent consumers from being misled, as no hidden mark-up can be applied. Partner OTAs, however, remain perfectly free to charge commission on their packages even if they include a ticket or ancillary service sold directly by Ryanair, or alternatively to return to the buyer, in the form of a discount on the package price, a portion of the price the buyer paid to Ryanair. It is noteworthy that DDAs fully encourage sales of non-aviation ancillary services by OTAs, to the extent that passengers will go through the entire booking flow on an OTA website. Thanks to a pop-up linking to the Ryanair.com website, during the booking process consumers can confirm the purchase of their flights on Ryanair.com without having to leave the OTA's booking flow. The way a Ryanair reservation is made under a DDA 'looks and feels' identical to the way a reservation would have been made on the OTA's site prior to the agreement.¹³

Conclusion

¹² In the wake of the Flightbox ruling discussed above, Ryanair was approached by a number of OTAs interested in entering in agreements that respected Ryanair's exclusive online distribution model – including On The Beach (OTB) and Kiwi, with which Ryanair had been in litigation with for several years. The first DDA was concluded in January 2024 with Love Holidays. Similar agreements were later been entered into by Ryanair with other OTAs (namely TUI, El Corte Inglés, eSky, Expedia, Etraveli Group, lastminute.com, Omio, Braganza and Trip.com) and OTA aggregators Paxport e Travelfusion.

¹³ In fact, in a DDA Ryanair cannot rely on any technological solution to present its non-aviation ancillaries to the passenger at the time the flight is booked. The passenger will have already chosen each element of his or her package on the OTA website before the white-label page opens.

Direct online ticket distribution has been a crucial element of Ryanair's business model, which has required substantial investments aimed at developing an increasingly efficient reservation management system and a user-friendly interface. Its business model has allowed fare innovation (i.e. unbundling the price of a flight into different components to be chosen by consumers), expansion of the fleet and opening new routes by focusing on connections to regional airports. Ryanair's strategic policy choices have led to the creation of new demand to the benefit of the entire travel and tourism industry. Against this background, the imposition of supply obligations on Ryanair (and other airlines exclusively operating a direct distribution system), which many OTAs have long been trying to achieve through the enforcement of competition rules, would be unreasonable and unwarranted as it would lower incentives to invest and innovate. In the long run this would harm consumers.

Moreover, from the airline industry perspective, screen scraping and other pricing practices by certain OTAs seem to threaten the welfare of passengers and fair competition. Opaque and misleading OTA practices at the flight booking stage typically include non-transparent mark-ups and charges that are not shown as made by the OTA, confusing displays of offers, misleading promotions of loyalty schemes and 'locking in' consumers by making them invest time and effort in the booking process (usually by requiring them to input personal details) that would be lost if they pursued the purchase directly on the relevant airline's website. Other unfair practices relate to communication flows between airlines and consumers (failures to provide up-to-date information and withholding refunds, a practice made possible by OTAs frequently using their own means of payment to purchase tickets on behalf of their customers).¹⁴

In the light of the above, the time seems ripe for the EU legislator to adopt stricter rules ensuring that consumers using OTA intermediation services may benefit from transparency, fairness and effective redress,¹⁵ in particular by laying down obligations on OTAs to display airline prices separately from their commission, and to provide airlines with complete and correct passenger details, making it possible for consumers to receive better assistance and quicker refunds in the case of disruption.

¹⁴ See Study on the impact of online intermediaries on consumers and carriers, note 3 at 35.

¹⁵ See EC, Proposal for a Regulation on enforcement of passenger rights in the Union (COM(2023) 753 final, 29 November 2023).

OPEN CALL FOR PAPERS

The liberalisation and more recently the digitalisation of the network industries have brought various challenges to incumbent firms operating in sectors such as air transport, telecommunications, energy, postal services, water and railways, as well as to new entrants, to regulators and to the public authorities. Therefore, Network Industries Quarterly is aimed at covering research findings regarding these challenges, to monitor the emerging trends, as well as to analyse the strategic implications of these changes in terms of regulation, risks management, governance and innovation in all, but also across, the different regulated sectors.

Published four times a year, the Network Industries Quarterly features short (2000-2500 words) analytical articles about these topics in both the industrialised and the emerging countries. It provides original analysis, information and opinions on current issues. Articles address a broad readership made up of university researchers, policy makers, infrastructure operators and infrastructures services providers. Opinions are the sole responsibility of the author(s). Contact info@ic4r.net or fsr.transport@eui.eu to subscribe. Subscription is free.

Network Industries Quarterly is jointly published by the Transport Area of the Florence School of Regulation (European University Institute) and the Istanbul Center for Regulation (Istanbul Technical University). It is an open access journal funded in 1998 and merged with Network Industries Quarterly Turkey in 2022. Prof Matthias Finger is its foundational and current director.

ARTICLE PREPARATION

Network Industries Quarterly is a multidisciplinary international publication. Each issue is coordinated by a guest editor, who chooses four to six articles related to the topic chosen. Articles must be high-quality, written in clear, plain language. They should be original papers that will contribute to furthering the knowledge base of network industries policy matters. Articles can refer to theories and, when appropriate, deduce practical applications. Additionally, they can make policy recommendations and deduce management implications.

Detailed guidelines on how to submit the articles and coordinate the issue will be provided to the selected guest editor.

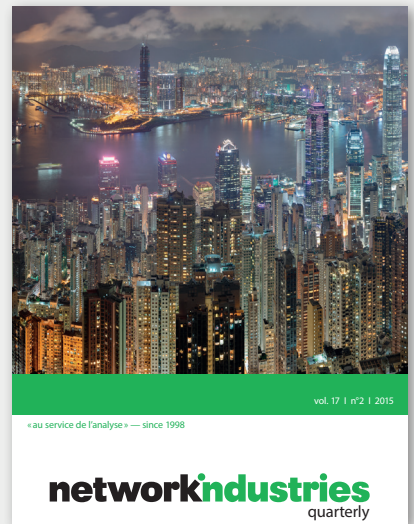
ADDITIONAL INFORMATION

MORE INFORMATION

- network-industries.org
- fsr.eui.eu
- ic4r.net

QUESTIONS / COMMENTS?

Elodie Petrozziello Managing Editor:
elodie.Petrozziello@eui.eu
Ozan Barış Süt, Designer:
ozanbarissut@gmail.com



PAST ISSUE

Vol 26 Iss 2 (June)

Urban Nodes

Urban Nodes The European Union is strongly urbanised, with 432 urban nodes identified. This vast array of urban hubs has a significant economic and geographical value.