Cost Of Non-Europe in Aviation (CONEA)

Executive Summary

ICCSAI
International Centre for Competitiveness Studies in the Aviation
UNIVERSITÀ DEGLI STUDI DI BERGAMO

The ‘Cost of Non-Europe’ in Aviation

(CONEA)

ICCSAI – University of Bergamo

February 2020

ICCSAI

International Centre for Competitiveness Studies in the Aviation

UNIVERSITÀ DEGLI STUDI DI BERGAMO

Executive summary

Over the last few years, the European Commission and the European Parliament have brought forth a number of studies aiming to identify and analyse the 'cost of non-Europe' in ten main areas: (1) the single market; (2) the digital economy; (3) the economic and monetary union; (4) the environment, energy and research; (5) transport and tourism; (6) social Europe, employment and health; (7) citizens' Europe; (8) migration and borders, justice and home affairs; (9) security and fundamental rights and (10) external European Union (EU) policy.

One of the latest studies, 'Europe's two trillion-euro dividend: Mapping the Cost of Non-Europe, 2019-24' by the European Parliament (2019), summarises the evidence found regarding the cost of non-Europe in different policy fields.

Although aviation is included in the cluster 'transport and tourism', thus far, no comprehensive studies have evaluated the cost of non-Europe derived from the aviation market's lack of complete unification. This dearth exists for two main reasons. The first is that the incomplete unification of the aviation industry (an economy enabler) at the European level influences many other areas; these include the free movement of people and international trade (the single market), the environment, migration, border controls and passengers' rights. The second reason is that previous studies have focused on specific components related to the cost of non-Europe in aviation (CONEA), while generally missing a complete overview of its direct effects on the industry, and its broader impact on European economic and social welfare.

Airlines for Europe (A4E) has commissioned the International Center for Competitiveness Studies in the Aviation Industry (ICCSAI) to gather findings from the existing literature in order to thoroughly assess the effects of aviation's incomplete unification from an industry perspective, as well as from the angle of European economic and social welfare.

In this study, we consider five areas as sources of inefficiency in the aviation industry and the overall economy, due to the lack of harmonisation/unfinished unification of the European aviation market. Table 1 summarises the results.

The annual overall impact of non-Europe on the aviation industry, pertinent to five spheres of interest, **ranges from €7.4 to €13.9 billion.**

Considering the socio-economic impact of non-Europe in aviation – including additional time-related costs for travellers, environmental expenses and wider economic benefits – **the amount ranges from €10.9 to €37.1 billion per year**. The annualised estimations are representative of the average annual effect for the next 15 years.

Table 1 – CONEA. Summary of previous estimations for the five different areas (annual values)

Annual values	Yearly impact for the aviation industry (€m)		Yearly overall impact (industry + socio-economic impact) (€m)	
Area of investigation	**Min**	**Max**	**Min**	**Max**
1-European airspace and the application of Single European Sky	4,480	8,090	9,400	17,400
2-Airport charges	1,200	2,000	1,200	2,000
3-Aviation taxes	1,700	3,800	0*	16,700
4-Border control	n.e.	n.e.	339	1,000
5-Union Customs Code	n.e.	n.e.	n.e.	n.e.
Total Impact	**7,380**	**13,890**	**10,939**	**37,100**

* In the absence of empirical evidence, the zero impact on gross domestic product (GDP), based on fiscal neutral assumption, still appears to be an unlikely scenario. n.e. = not estimated

Table 1 presents estimation ranges. The most important component is related to European airspace and the application of the Single European Sky (SES) initiative (see Figure 1), whose lack of harmonisation produces an annual overall economic effect between €9.4 and €17.4 billion (from €4.5 to €8.0 billion in terms of the impact on the aviation industry). The most relevant features are linked

to cost savings, including time- or fuel-efficient routes, capacity constraints, other cost inefficiencies, higher travel times for passengers, environmental expenses and broader economic benefits.

A further significant aspect is tied to airport charges. Completely applying the directive on setting airport charges could reduce charges applied in specific countries by an annual value between €1.2 and €2 billion, thereby generating savings for airlines and passengers and improving competitiveness.

Abolishing country-specific aviation taxes could trigger a positive annual impact from €1.7 to €3.8 billion for the aviation industry. Regarding general economic and social consequences, the reports we reviewed widely diverge, from a zero-net impact to €16.7 billion per year. Some studies (European Commission, 2019b) apply a neutral fiscal policy assumption, such that savings from less aviation taxes are assumed to be compensated by increases in other taxes, or by decreases in public spending, with a net neutral effect on the economy. However, the neutral fiscal policy is considered to be an ex-ante assumption and has not been subjected to ex-post verification. Given the divergence of the findings, we believe that the outcome determined by using the fiscal neutral policy assumption should be corroborated with stronger empirical evidence.

We report an estimated cost of non-Europe related to aviation border controls from €339 million to €1 billion per year for the general economy. The elements of this approximation are linked to additional time costs for passengers involving the temporary re-introduction of border controls in the Schengen area, as well as higher times and expenses for border controls and visa policies for air travel to non-Schengen regions. In this realm, it was not possible to identify estimations tied to the impact on the aviation industry.

In the area of the Union Customs Code (UCC), CONEA has not yet been quantified, although prior studies widely acknowledge its relevance.

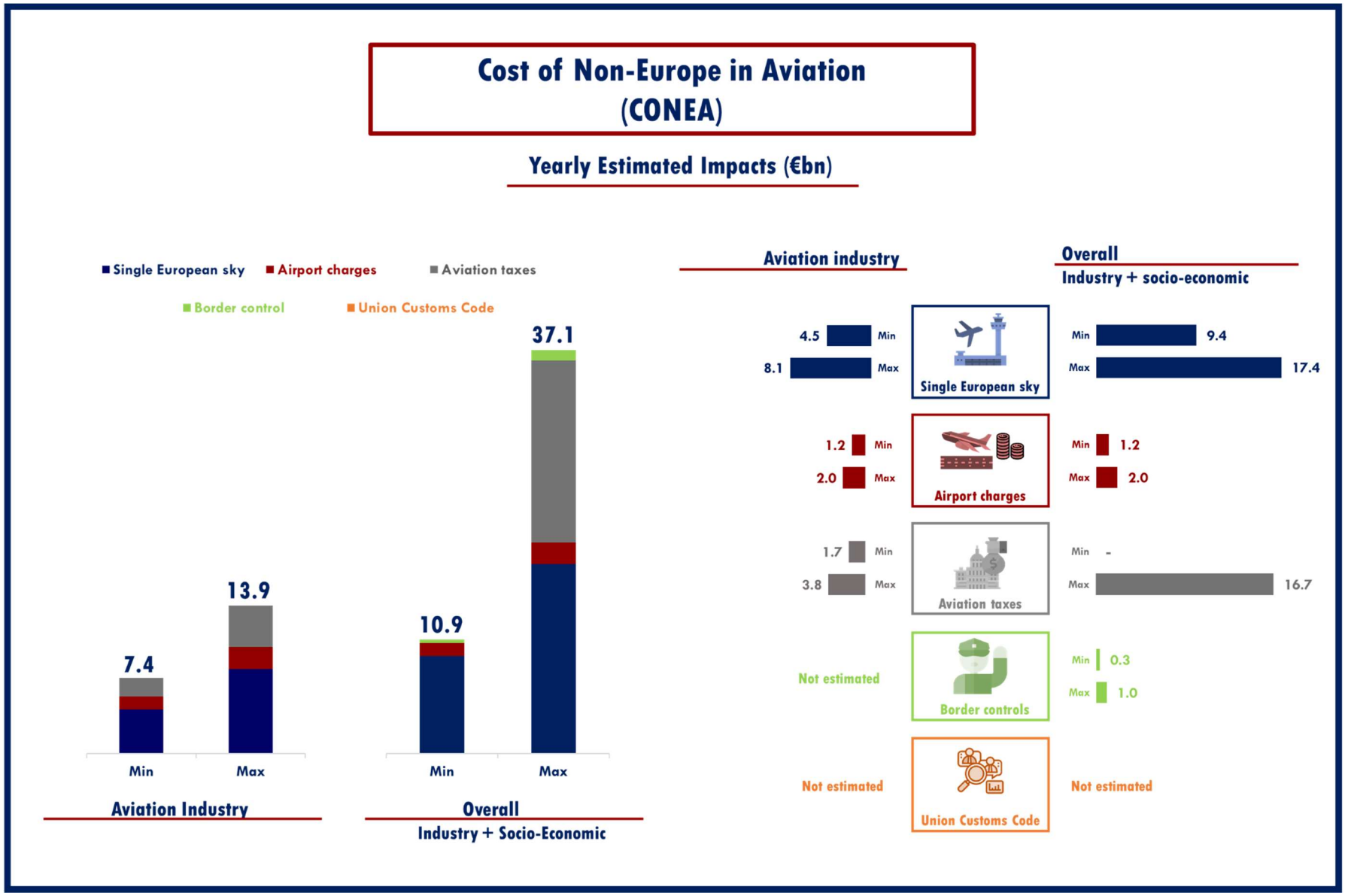

Figure 1 – CONEA. Min-max annual impacts for the aviation industry and the overall economy, related to the five different areas of interest (annual values –€m)

The next paragraphs briefly describe the five areas analysed.

1. European airspace and application of Single European Sky initiative

The European Organisation for the Safety of Air Navigation (EUROCONTROL) has pointed out several inefficiencies that directly and indirectly affect EU aviation markets due to the lack of harmonisation/complete unification of the aerospace management system. One major issue involves the greater flight distances that aircrafts undertake compared to what they would fly if they could follow the user-preferred trajectory (UPT) between departure and destination airports, thus leading to extra travel time for passengers and freights, as well as extra fuel consumption and pollution.

The influence of non-Europe in this sphere is tied to: inefficient operations and environmental impacts resulting from extra fuel consumption; lower air traffic management (ATM) productivity and higher charges; capacity constraint effects; airlines' operational costs due to extra time (fuel costs, efficient operations and the ability to maximise airlines' productivity); costs associated with delays and non-unified technology (training, safety, procedures); and costs for passengers (out-of-pocket expenses, time costs and a lower level of services).

In fields involving technology, a key problem is the difficulty of separating the positive effects linked to unifying technology from those related to modernising it, which could at least be partially obtained, even without successful unification. However, in the case of technology that supports European airspace management (AM), the high fixed costs of introducing the latest technology increase the minimum scale necessary to make its introduction economically feasible. Furthermore, the asymmetric introduction of new ATM technology among EU member states could produce transaction costs and reduce their net benefits.

2. Airport charges and regulatory processes

Although a European directive on airport charges has been in place since 2009, its application varies widely between EU member states, which have interpreted and implemented it differently. For example, some have granted more or less power to regulators, while others have let regulators impose economic rules. This lack of harmonisation affects the level of airport charges, which in some cases are estimated to be even higher due to the regulation setup adopted by some member states. Moreover, the directive established a process-oriented framework (involving consultation and transparency) so that the regulations member states have adopted are their own choice.

Other possible impacts in this area regard potential effects caused by the lack of transparency in setting charges, the different rules of engagement and procedures from the national Independent Supervisory Authority (ISA), the link between concession agreements and airports' framework for determining charges, as well as costs (administrative costs, uncertainty, delays in decision-making) arising from consultation processes.

3. The lack of a homogeneous tax scheme and the presence of different ad hoc aviation taxes

European aviation does not have a uniform taxation regime. In many countries, specific taxes and charges vary depending on ticket taxes, value-added taxes (VATs), taxation on aircraft fuel, environmental taxes and taxes for air cargo. The presence of different tax schemes in EU member states generates extra costs for the continent's aviation industry. In this study, we focus on effects resulting from the presence of ad hoc aviation taxes, which could reduce total intra-European demand, and the increasing administrative burdens on both airlines and airports.

4. Re-introducing border controls

Introducing border controls remains a member state prerogative. The Schengen Borders Code allows for the short-term re-introduction of controls at internal borders for serious threats to public policy or internal security. Since 2015, several controls, both landside and in the aviation industry, have been temporarily re-introduced.

These changes typically affect airline operations since they can generate extra direct costs required to be compliant with provisional rules. They necessitate extra time and consequently lead to more inefficient schedules. They also impact passenger direct time and cost of travel, with adverse effects on the level of demand.

5. Implementing the Union Customs Code

After the UCC legal package came into effect in May 2016, attempts to standardise customs information and processes have played a key role in homogenising practises. Potential deviation from completely unifying the European aviation system implies disorganisation and extra expenses. Executing fully electronic customs within a non-homogeneous framework could cause inefficiency costs due to: (1) higher customs times and costs for freight operators and their customers; (2) greater compliance and transaction costs for airports and airlines (due to a heavier administrative burden); (3) safeguarding the financial and economic interests of the EU and its member states and operators; and (4) sub-optimal choices by freight operators in terms of network configuration and service levels.

Assessment

For each area we consider evidence from the literature, which can be broadly classified into the following sources:

- Academic scientific literature (large databases of peer-reviewed literature, such as Scopus and Web of Science)
- Policy papers released by the European Commission's Directorate-General (DG) for Mobility and Transport
- Databases of EU projects
- EUROCONTROL
- Other sources (the International Air Transport Association [IATA], Airports Council International [ACI] Europe, A4E, reports from consulting companies).

Several reports and investigations refer to other original sources or are previous versions of more updated analyses. In those cases, while including all available documents in our study, the final estimations are based on the more recent sources.

We take into account all independent estimations made regarding the cost of non-Europe for the areas of interest. Some calculations resulted in different estimations for the same effects due to applying different methodologies, scenarios or underlying assumptions. **We do not question the validity of the different evaluation processes,** and we include minimum and maximum ranges to account for variability in the estimations of each component.

iccsai@unibg.it

ICCSAI

International Centre for Competitiveness Studies in the Aviation

UNIVERSITÀ DEGLI STUDI
DI BERGAMO