

Air safety statistics in the EU

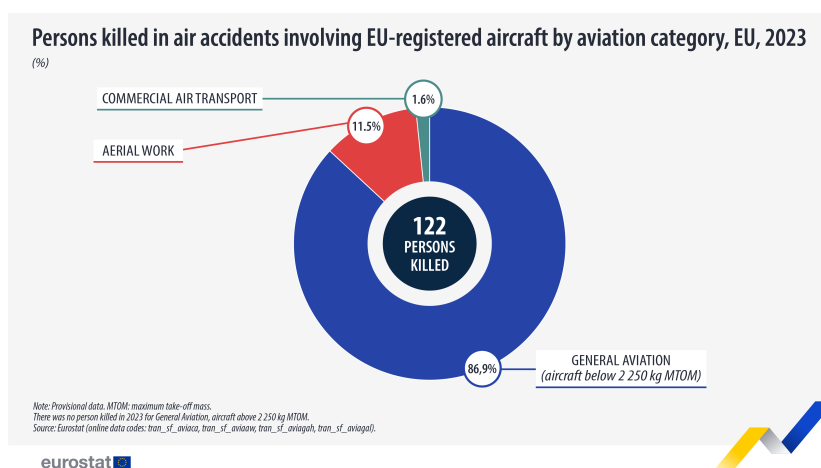
Statistics Explained

Data from September 2024.

Planned article update: 17 September 2025.

" There were 43 fatalities in commercial air transport accidents and 662 fatalities in other aviation category accidents in EU territory over the period 2019-23 involving EU-registered aircraft."

" Over the past 8 years, there have been no worldwide major accidents in commercial air transport involving EU-registered aircraft."



Detailed data from the [European Union Aviation Safety Agency \(EASA\)](#) show a good safety record for commercial air transport in the [European Union](#) over the past years. However, a single major accident, such as the one in 2015, can seriously affect this generally positive image. Most fatalities are recorded in general aviation and more specifically in light aircraft (below 2 250 kg maximum take-off mass (MTOM)).

The European Union Aviation Safety Agency (EASA) is a European Union agency, governed by European public law. EASA has created standard requirements for regulating safety and promoting environmental sustainability in civil aviation. It collects detailed data on aviation incidents and accidents and performs in-depth safety-relevant analyses.

Most of the air accident fatalities concerned general aviation

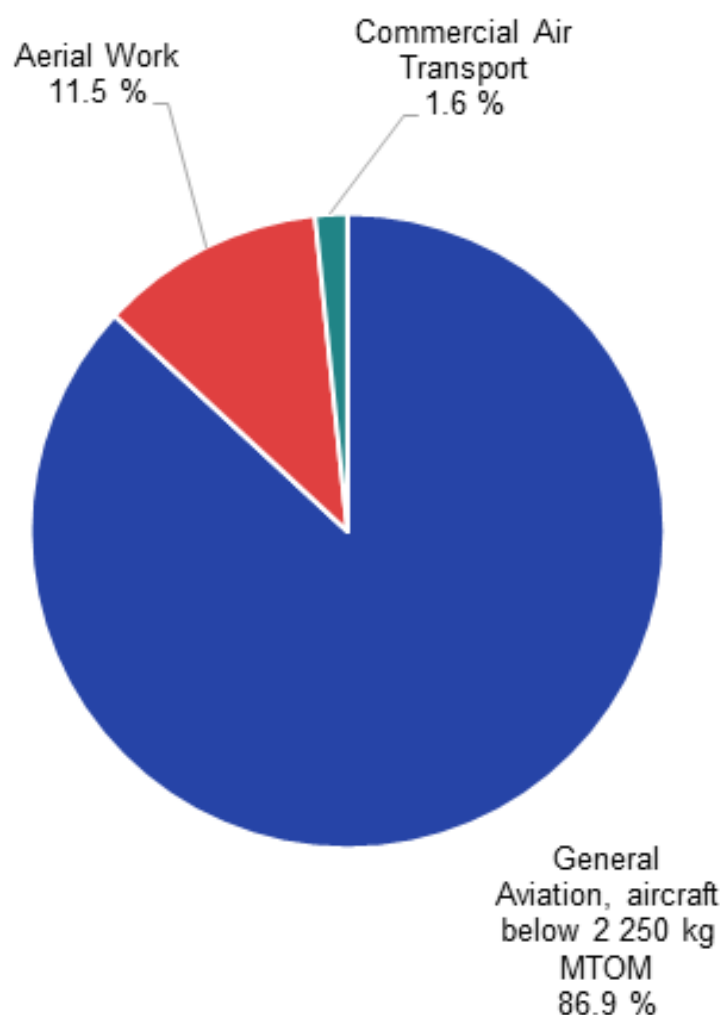
In its Annual Safety Review 2018, the EASA highlighted that 2017 was an exceptional year for global airline safety, with fewer fatalities than at any time in the industry's history (155 deaths). In the Annual Safety Review 2019, EASA reminded us that there is no room for complacency, following increase observed in 2018: 189 persons in total died in aviation accidents on EU territory in 2018, involving EU-registered aircraft. As highlighted in EASA's Annual Safety Review 2020, the COVID-19 pandemic brought new challenges to every aspect of life and industry on earth.

In particular, the air transport industry was severely impacted as a consequence of the restrictive measures taken by countries around the world to prevent the spread of the pandemic. The Annual Safety Review 2022 pointed out the risk to safety due to the reduced flying time of pilots over an extended period, the traffic in Europe in 2021 being back around 85% of 2019 levels. The Annual Safety Review 2023 confirmed this trend for 2022, with traffic levels at around 93% of the pre-pandemic levels, with the share rising to 95.5% in 2023, according to the Annual Safety Review 2024.

In 2023, 122 fatalities were recorded in aviation accidents involving EU-registered aircraft and within the EU territory. In previous years, most of the air accident fatalities concerned general aviation. In 2023, 86.9% of the fatalities recorded also concerned this category (see Figure 1). General aviation (aeroplanes and helicopters) consists of all civil aviation operations other than commercial air transport and specific types of aerial work operations. General aviation has two sub-categories: operations with aircraft with a maximum take-off mass (MTOM) above 2 250 kg and below 2 250 kg. More specifically, the latter sub-category, which comprises small aeroplanes, dirigibles, para- and motor-gliders, 'microlights', small helicopters as well as hot air balloons, recorded all the fatalities in these categories in 2023. In most of the previous years, fatalities recorded in air transport were registered in this category. An exception to this was the year 2015, when a high number of fatalities were recorded in commercial air transport due to the crash of a German aircraft in the French Alps (150 fatalities). In 2023, there was no person killed in any general aviation accident involving EU-registered aircraft with a MTOM above 2 250 kg; this is below 2022 where 1 person lost their life and far below 2021 when 9 persons were killed. Since 2006, fewer than 10 fatalities were registered each year from accidents on EU territory involving such large aircraft registered in the EU.

Persons killed in air accidents involving EU-registered aircraft by aviation category, EU, 2023

(%)



Note: Provisional data. MTOM: maximum take-off mass.
There was no person killed in 2023 for General Aviation, aircraft above 2 250 kg MTOM

Source: Eurostat (online data codes: tran_sf_aviaca, tran_sf_aviaaw, tran_sf_aviagah, tran_sf_aviagal)

eurostat 

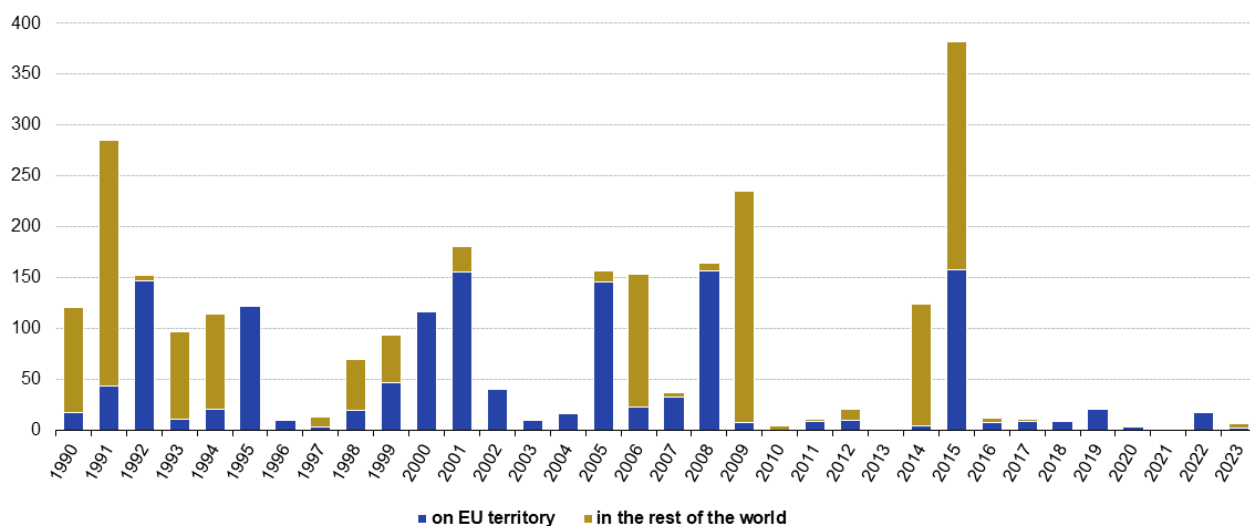
Figure 1: Persons killed in air accidents involving EU-registered aircraft by aviation category, EU, 2023 (%)
Source: Eurostat, (tran_sf_aviaca), (tran_sf_aviaaw), (tran_sf_aviagah), (tran_sf_aviagal)

In 2023, the second category with the most fatalities was aerial work, which represented 11.5% (14 persons killed) of all fatalities in aviation accidents. In comparison, there were 7 fatalities in 2022, 4 occurred in 2021 and 15 in 2020. Aerial work denotes the operation of aircraft for specialised services, such as agriculture, construction, photography, surveying, observation and patrol, search and rescue as well as aerial advertising. To complete the picture, fatalities involving commercial air transport accounted for 1.6% (2 persons killed) of all fatalities in aviation accidents, a sharp decrease compared with the 17 fatalities registered in 2022.

No major accidents involving EU-registered aircraft were recorded in commercial air transport over the last 8 years

Figure 2 shows the number of persons killed in commercial air transport accidents involving EU-registered aircraft for the period 1990-2023. Information on whether the accident took place on EU territory or elsewhere in the world is also presented in the figure. From 2016 to 2023 no major accidents were recorded in commercial air transport. However, 2015 was marked by the German aircraft crash mentioned above and the accident on the Sinai Peninsula (Egypt) involving an Irish-registered aircraft on a charter flight (224 fatalities). In July 2014, an aircraft registered in Spain, but leased to an Algerian operator, crashed in Mali (116 fatalities). In 2009, the accident over the South Atlantic Ocean involving a French aircraft on the way from Brazil claimed 228 lives, representing 91% of all fatalities registered that year. A year earlier, the crash of a Spanish jet during take-off from Madrid's Barajas airport resulted in 154 fatalities. In 2006, an accident involving a French-registered aircraft, operated by a Russian company, crashed in Irkutsk (Russia). This incident accounted for 125 deaths that year. In 2005, 121 fatalities were victims of a crash of a Cyprus-registered aircraft close to Athens.

Persons killed worldwide in commercial air transport involving EU-registered aircraft, by area of occurrence, 1990-2023
(number)



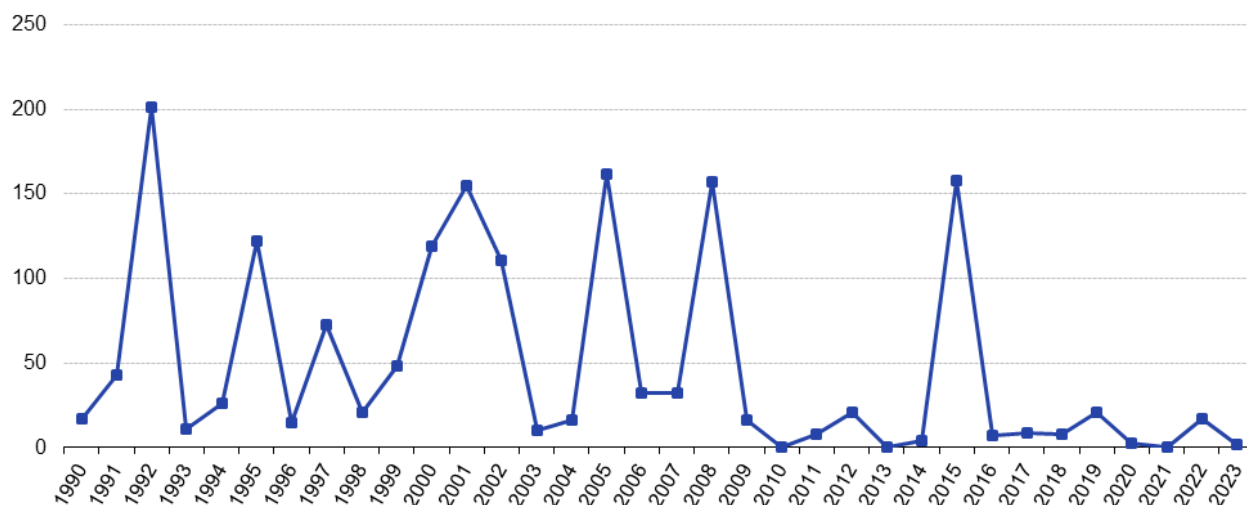
Note: 2021-23 provisional data. There was no person killed in 2013 and 2021.
Source: Eurostat (online data code: tran_sf_aviaca)

eurostat

Figure 2: Persons killed worldwide in commercial air transport involving EU-registered aircraft, by area of occurrence, 1990-2023 (number) Source: Eurostat, (tran_sf_aviaca)

There were also other fatal air transport accidents in EU airspace involving aircraft that were not registered in the EU. Figure 3 presents the number of all fatalities in commercial air transport accidents since 1990 on EU territory, regardless of whether the aircraft involved were registered in an EU Member State or in another country. Thus, the information in Figure 3 includes accidents such as the crash of a Ukrainian-registered passenger aircraft close to Thessaloniki/Greece in 1997 (70 fatalities) and the mid-air collision between a Russian passenger aircraft and a Bahraini-registered cargo aircraft over south Germany in 2002 (71 victims). However, the previously mentioned accidents involving an Irish-registered aircraft on the Sinai Peninsula (Egypt) and a French-registered aircraft in Irkutsk (Russia) are not included in the data presented in Figure 3, as these accidents occurred outside EU territory.

Persons killed in commercial air transport involving world-registered aircraft, EU, 1990-2023 (number)



Note: 2021-23 provisional data. There was no person killed in 2010, 2013 and 2021.
Source: Eurostat (online data code: tran_sf_aviaca)

eurostat

Figure 3: Persons killed in commercial air transport involving world-registered aircraft, EU, 1990-2023 (number) Source: Eurostat, (tran_sf_aviaca)

The year 1992 saw a particularly high number of fatalities. This was in large part caused by 3 major crashes: a French aircraft in the Vosges mountains in France (87 deaths), a Dutch aircraft at Faro (Portugal) airport (56 fatalities, 305 injured) and an Israeli-registered cargo plane in an Amsterdam suburb (47 fatalities, of which 43 occurred on the ground). The years when not a single person was killed in an air transport accident in the European Union were 2010, 2013 and 2021.

There were 732 fatalities in aviation accidents involving EU-registered aircraft over the period 2019-23

Table 1 presents the cumulated number of persons killed in aviation accidents over the period 2019-23, by country of registration, area of occurrence (worldwide or in EU territory) and aviation category. Worldwide, there were 626 fatalities in general aviation accidents involving EU-registered aircraft. More specifically, 606 concerned aircraft below 2 250 kg MTOM. Over the same period, 59 persons were killed in aerial work accidents and another 47 persons in commercial air transport accidents involving EU-registered aircraft. Out of all those killed worldwide, 43 fatalities in commercial air transport accidents, 59 in aerial work and 589 in the general aviation category occurred in the EU territory.

Persons killed in aviation accidents by country of registration, area of occurrence and aviation category, 2019-23

(number)

| Country of registration | Occurrence: worldwide (incl. EU territory) | | | | Occurrence: EU territory | | | |
|-------------------------|--|-------------|--|--|--------------------------|-------------|--|--|
| | Commercial Air Transport | Aerial Work | General Aviation, aircraft above 2 250 kg MTOM | General Aviation, aircraft below 2 250 kg MTOM | Commercial Air Transport | Aerial Work | General Aviation, aircraft above 2 250 kg MTOM | General Aviation, aircraft below 2 250 kg MTOM |
| EU | 47 | 59 | 20 | 606 | 43 | 59 | 14 | 589 |
| Belgium | 0 | 1 | 0 | 2 | 0 | 1 | 0 | 2 |
| Bulgaria | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| Czechia | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 33 |
| Denmark | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| Germany | 7 | 0 | 6 | 167 | 7 | 0 | 0 | 166 |
| Estonia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ireland | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| Greece | 4 | 0 | 0 | 3 | 4 | 0 | 0 | 2 |
| Spain | 3 | 0 | 2 | 40 | 3 | 0 | 2 | 40 |
| France | 8 | 10 | 1 | 215 | 4 | 10 | 1 | 200 |
| Croatia | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| Italy | 23 | 8 | 2 | 33 | 23 | 8 | 2 | 33 |
| Cyprus | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Latvia | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| Lithuania | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 10 |
| Luxembourg | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hungary | 1 | 14 | 0 | 5 | 1 | 14 | 0 | 5 |
| Malta | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Netherlands | 0 | 3 | 0 | 20 | 0 | 3 | 0 | 20 |
| Austria | 1 | 8 | 1 | 9 | 1 | 8 | 1 | 9 |
| Poland | 0 | 4 | 0 | 19 | 0 | 4 | 0 | 19 |
| Portugal | 0 | 2 | 0 | 5 | 0 | 2 | 0 | 5 |
| Romania | 0 | 0 | 8 | 12 | 0 | 0 | 8 | 12 |
| Slovenia | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| Slovakia | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 7 |
| Finland | 0 | 2 | 0 | 5 | 0 | 2 | 0 | 5 |
| Sweden | 0 | 7 | 0 | 7 | 0 | 7 | 0 | 7 |
| Iceland | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 |
| Liechtenstein | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Norway | 8 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| Switzerland | 4 | 2 | 0 | 25 | 0 | 0 | 0 | 2 |

Note: Provisional data. MTOM: maximum take-off mass.

Source: Eurostat (online data codes: tran_sf_aviaca, tran_sf_aviaaw, tran_sf_aviagah, tran_sf_aviagal)



Table 1: Persons killed in aviation accidents by country of registration, area of occurrence and aviation category, 2019-23 (number) Source: Eurostat, (tran_sf_aviaca), (tran_sf_aviaaw), (tran_sf_aviagah), (tran_sf_aviagal)

In the period 2019-23, there was not a single fatality due to accidents involving aircraft registered in Estonia, Luxembourg and Malta. Over the same period, there were less than 10 fatalities in accidents involving aircraft registered in 12 other EU Member States. The number of fatalities was between 10 and 50 in accidents involving aircraft registered in 9 additional Member States. Most fatalities in aviation accidents occurred with aircraft registered in France and Germany (234 and 180 persons killed, respectively) between 2019 and 2023. When looking at commercial air transport, the highest number of fatalities involved aircraft registered in Italy over the same period (23 persons killed).

Table 2 presents the cumulated number of persons killed in aviation accidents over the period 2019-23, by country of occurrence and aviation category, for all aircraft regardless of their country of registration.

Overall, there were 710 fatalities in air transport accidents that occurred in the EU territory. Amongst these, 43 concerned commercial air transport accidents, 59 aerial work accidents and 608 general aviation accidents (14 concerned aircraft with a MTOM above 2 250 kg and 594 for aircraft with a MTOM below 2 250 kg). As small aircraft are involved, accidents involving aircraft with a MTOM below 2 250 kg often occur in the country in which the aircraft is registered. However, in the other aviation categories, differences between the country of registration of the aircraft and the country of occurrence of the accident can be higher.

Persons killed in aviation accidents by country of occurrence and aviation category, 2019-23

(number)

| Country of occurrence | Commercial Air Transport | Aerial Work | General Aviation, aircraft above 2 250 kg MTOM | General Aviation, aircraft below 2 250 kg MTOM |
|-----------------------|--------------------------|-------------|--|--|
| EU | 43 | 59 | 14 | 594 |
| Belgium | 0 | 0 | 0 | 8 |
| Bulgaria | 0 | 0 | 0 | 6 |
| Czechia | 0 | 3 | 1 | 28 |
| Denmark | 0 | 0 | 0 | 3 |
| Germany | 0 | 1 | 0 | 128 |
| Estonia | 0 | 0 | 0 | 0 |
| Ireland | 0 | 0 | 0 | 2 |
| Greece | 4 | 0 | 0 | 9 |
| Spain | 9 | 0 | 2 | 47 |
| France | 4 | 12 | 1 | 191 |
| Croatia | 0 | 0 | 0 | 11 |
| Italy | 23 | 8 | 10 | 39 |
| Cyprus | 0 | 0 | 0 | 1 |
| Latvia | 0 | 0 | 0 | 0 |
| Lithuania | 1 | 0 | 0 | 10 |
| Luxembourg | 0 | 0 | 0 | 0 |
| Hungary | 1 | 14 | 0 | 3 |
| Malta | 0 | 0 | 0 | 0 |
| Netherlands | 0 | 0 | 0 | 11 |
| Austria | 1 | 6 | 0 | 23 |
| Poland | 0 | 4 | 0 | 23 |
| Portugal | 0 | 2 | 0 | 6 |
| Romania | 0 | 0 | 0 | 16 |
| Slovenia | 0 | 0 | 0 | 2 |
| Slovakia | 0 | 0 | 0 | 13 |
| Finland | 0 | 2 | 0 | 5 |
| Sweden | 0 | 7 | 0 | 9 |
| Iceland | 0 | 0 | 0 | 4 |
| Liechtenstein | 0 | 0 | 0 | 0 |
| Norway | 8 | 0 | 0 | 4 |
| Switzerland | 4 | 2 | 0 | 25 |

Note: Provisional data. Accidents involving all aircraft regardless of their country of registration. MTOM: maximum take-off mass.

Source: Eurostat (online data codes: tran_sf_aviaca, tran_sf_aviaaw, tran_sf_aviagah, tran_sf_aviagal)

In the period 2019-23, no fatalities were recorded in Estonia, Latvia, Luxembourg and Malta. Over the same period, there were less than 10 fatalities in 8 other EU Member States. The number of fatalities was between 10 and 50 in 11 additional Member States. Most fatalities in aviation accidents occurred in France and Germany (208 and 129, respectively) between 2019 and 2023. When looking at commercial air transport, Italy registered the highest number of fatalities over the same period (23 persons killed).

Source data for tables and graphs

- [Air safety statistics](#)

Data sources

On 30 March 2015 an administrative arrangement between Eurostat and the European Union Aviation Safety Agency (EASA) was signed regarding the technical cooperation in the field of air transport safety statistics.

The data presented in this article stem from the European Union Aviation Safety Agency (EASA). The EASA is an agency of the European Union that is governed by European public law and establishes common requirements for the regulation of safety and environmental sustainability in civil aviation. EASA was set up by a Council and Parliament regulation (Regulation (EC) 1592/2002 repealed by Regulation (EC) No 216/2008 and amended by Regulation (EC) 1108/2009). The EASA collects detailed data on aviation incidents and accidents and performs detailed safety-relevant analyses as far as possible. The agreement between EASA and Eurostat allows for the dissemination of selected statistical data through Eurostat's dissemination database.

All data displayed in this article are annual, with available time series going back to 1990 for commercial air transport and general aviation with aircraft over 2250 kg MTOM. For the other categories, data are somewhat less reliable and are only available since 2006. Data for 2020, 2021 and 2022 should be considered provisional, as accident investigations may still be ongoing. The conclusions of the final investigation reports might therefore slightly alter the data.

Data are collected by EASA under the frame of the [Commission Regulation \(EU\) No 965/2012](#). The so-called 'Air Ops Regulation' contains provisions for the following types of air operations with aeroplanes and helicopters:

- commercial air transport (CAT) operations,
- non-commercial operations with complex motor-powered aircraft (NCC),
- non-commercial operations with other-than complex motor-powered aircraft (NCO), and
- specialised operations (e.g. aerial work), both commercial and non-commercial (SPO).

The Air Ops Regulation is applicable to all the EU Member States and to all operators of aeroplanes and helicopters which have their principal place of business, are established or reside in an EU Member State. More information about [Specialised Operations](#) and [General Aviation](#) are available on EASA website.

Context

The implementation of the [Single European Sky](#) (various legislative packages, 2004-2014) resulted in a considerable increase in air traffic and the number of air carriers. Aviation safety in the European Union is based on close cooperation between the European Commission, the EASA, [Eurocontrol](#) and the national civil aviation authorities, but also with aircraft manufacturers, airlines, and, considering the inherently international nature of air transport, the [International Civil Aviation Organisation \(ICAO\)](#). The backbone of this cooperation is a set of common safety rules, directly applicable in a uniform manner across the EU. Safety checks are performed at European airports on a random basis, but with particular attention to companies which have previously shown safety deficiencies. This can lead to restrictions or even the banning of non-compliant air carriers from flying to Europe.

Other articles

- [Passenger transport statistics](#)

Tables

- [Transport](#)

Database

- [Transport](#) , see:

Multimodal data

Transport safety (tran_sf)

Dedicated section

- [Transport](#)

Publications

- [All transport publications online](#)
- [Energy, transport and environment statistics - 2020 edition](#)
- [Key figures on European transport - 2023 edition](#)

Methodology

- [Metadata relating to Eurobase air safety tables](#)
- [Illustrated Glossary for transport statistics, Fifth edition, 2019](#)

Legislation

- [Regulation \(EC\) No 2018/1139](#) on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency

External links

- [EASA Annual Safety Review 2024](#)
- [DG Mobility and Transport – Air Transport policy](#)
- [DG Mobility and Transport – European Aviation Safety Policy](#)
- [List of banned airlines](#)
- [DG Mobility and Transport – European Aviation Safety Rules](#)