

Safety Statistics of EU operators

During the last general assembly of JEDA Mr Natale di Rubbo of EASA emphasised the importance of collecting safety statistics to the attendants of CG1. He made the same request to the Dutch Trade Association (DCRO) during his visit to the Netherlands last August when he learned that we had been collecting these statistics for over ten years.

Since the incorporation of the trade association, DCRO has made it a mandatory condition for all members to collect and share safety statistics. We make it mandatory as safety is a key element for professional and safe drone operations. Members have shared data as far back as 2011 till present and these were based on collecting a very simple set of figures per calendar year and these were:

- Number of flights
- Number of crashes
- Number of incidents with injuries
- Number of fly-aways.

The following statistics have been collected by DCRO.

Year	# Flights	# Crashes	# Incidents with Injuries	# Fly-aways
2011	100	2	0	0
2012	4130	2	0	0
2013	4781	3	0	0
2014	3642	4	0	0
2015	4233	4	0	0
2016	5138	3	0	0
2017	4529	6	0	0
2018	7231	5	0	0
2019	4001	3	0	0
2020	3176	6	0	0
2021	5279	4	0	0
2022	4983	3	0	0
2023	Collection not yet finalised			
Total	51223	45	0	0

Note that the above figures only reflect the figures for certified operators (currently the specific category) with trained and certified pilots.

Current EASA regulations are risk based. From the above figures we can see that some of these risks are perceived to be realistic/probable such as the risk of a UAS crashing and posing a ground risk. On the other hand, the risk of a fly-away on which the entire step #9 of containment in the SORA is based is seen as a highly improbable risk for professional and certified UAS operators.

Our aim is the following:

- With the help of JEDA collect as much safety statistics from its members up to and including 2023. We can then present these around October at the European Drone Forum to EASA. These will be the simple statistics as DCRO have collected up to 2023 which only have the number of flights, number of crashes, fly-aways and incidents with injury.
- In cooperation between Laurent Geeraerts of the JEDA workshop “Reporting for occurrences’ come to a more comprehensive method of collecting safety statistics as from 2023 where more relevant data can be collected whereby a distinction is made as to the category in which a flight was conducted, the type of drone etc..

We believe that collecting extended statistics from the past is most likely a task that is too difficult to accomplish. We thus ask each of the trade associations per member states to ask their members if they can provide the following data:

Year	# Flights	# Crashes	# Incidents with Injuries	# Fly-aways

For the collection of these (simple statistics) up to and including 2023, it is important that everyone uses the same definitions. At DCRO have created and used the following definitions:

Definition of Loss of control

Loss of control includes all operations whereby the pilot was unintentionally unable to control the UAS or the UAS deviated significantly and unintentionally from a planned route.

Definition of Fly-away

A Fly-away includes all operations where a loss of control occurred and the UAS flew beyond the operational volume and ground risk buffer.

Definition of UAS crash

An occurrence whereby the UAS falls to earth due to a malfunction or due to striking an object ,vegetation, bird.

A crash is not:

- A faulty or hard landing leading to damage on the UAS

Accident with injury

An occurrence in which a person has been injured due to a UAS in flight.