

【欧州】【Common】

Aviation - policies on drones: Safety-evaluation confirms continued relevance of EU rules on follow-up procedures of occurrences in civil aviation, also including UAS (drones)

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【概要 : Summary】

The EU's civil aviation safety system's safety measures include, among others, the occurrence reporting, to learn lessons from incidents in order to avoid accidents. The collected information on occurrences is used as a basis for the improvement of aviation safety.

At the European level, a proactive aviation safety management system led to the adoption of Regulation (EU) No 376/2014 on the reporting, analysis and follow-up of occurrences in civil aviation, the advancements in aviation safety. It was expected to improve the collection of safety occurrences, better information-sharing between the EU Member States and better follow-up action to prevent aviation accidents.

On 17 February 2021, the European Commission published its evaluation of Regulation (EU) No 376/2014 on the reporting, analysis and follow-up of occurrences in civil aviation in its Commission staff working document (SWD(2021) 30 final). The purpose of the Commission's evaluation is to assess whether the main objectives of Regulation (EU) No 376/2014 to improve aviation safety by ensuring an occurrence reporting on relevant safety shortcomings have been achieved. The Commission's assessment found that the Regulation (EU) No 376/2014 has

clearly contributed to an improvement in reporting rates, completeness of reports and the amount of safety-relevant data available across the EU. It also has contributed to the protection of reporters of occurrences and the introduction of "just culture" principles, which aims at encouraging reporting of essential safety-related information. However, the Commission found that the Regulation only partially achieved its objective to protect the reporters of occurrences and the "Just Culture", because only a fraction of EU Member States established the relevant administrative arrangements to manage the use of occurrence reports. Nevertheless, with respect to the utilisation of Unmanned Aircraft Systems (UAS), the Regulation (EU) No 376/2014 remains relevant when considering the increased UAS traffic.

【記事 : Article】

1. Background of occurrence reporting in the EU civil aviation

Accidents in civil aviation are often a result of a combination of events, or occurrences. An occurrence is defined as any type of event significant in the context of aviation safety, which might or might not result in an actual accident. Occurrence reporting and the use of

occurrence information for the improvement of safety depends on a relationship of trust between the reporter and the entity in charge of the collection and assessment of the information. This requires strict application of rules on confidentiality. The purpose of protecting safety information from inappropriate use, and of limiting access to the European Central Repository solely to interested parties participating in the improvement of civil aviation safety, is to ensure the continuous availability of safety information so that appropriate and timely preventive action can be taken, and aviation safety is improved accordingly. In this context, sensitive safety information should be protected in an appropriate way and its collection should be ensured by guaranteeing its confidentiality, protecting its source and ensuring the confidence of staff working in civil aviation in occurrence reporting. Before the establishment of the occurrence reporting system with Regulation (EU) No 376/2014, the advancements in aviation safety relied mainly on lessons learned from the investigation of aircraft accidents.

On 13 June 2003, the EU introduced the Directive 2003/42/EC on occurrence reporting in the EU's civil aviation, which required each Member State to set up a mandatory occurrence reporting system (MORS). The EU Member States had to collect, store, protect and disseminate between themselves information on certain civil aviation incidents. The Directive, however, did not include provisions related to the analysis of the data collected, for the benefit of aviation safety. However, the aviation safety system was primarily reactive and based essentially on post-accident investigations. The experience with accidents in aviation had shown that they were often preceded by safety-related incidents and deficiencies revealing the existence of safety hazards. Safety information is therefore an important resource for the detection of potential safety hazards.

Consequently, the reactive system of accident investigation had to be complemented with a proactive system, which uses other types of safety information to achieve effective improvements in aviation safety. Additionally, a new Regulation on occurrence reporting envisaged that the future legislative should address the growing importance of the so-called "Just Culture", which aims at encouraging reporting of essential safety-related information. Therefore, the European Commission proposed a new regulation on occurrence reporting in civil aviation. This approach to encourage and achieve a more proactive aviation safety management system led to the adoption of Regulation (EU) No 376/2014 on the reporting, analysis and follow-up of occurrences in civil aviation. It was expected to provide full awareness of actual and potential risks in aviation safety by improving the collection of information on safety occurrences, better information-sharing between the EU Member States and better follow-up action to prevent accidents in aviation.

2. Regulation (EU) No 376/2014 on the reporting, analysis and follow-up of occurrences in civil aviation

Applicable since 15 November 2015, the "Regulation (EU) No 376/2014 of the European Parliament and of the Council of 3 April 2014 on the reporting, analysis and follow-up of occurrences in civil aviation, amending Regulation (EU) No 996/2010 of the European Parliament and of the Council and repealing Directive 2003/42/EC of the European Parliament and of the Council and Commission Regulations (EC) No 1321/2007 and (EC) No 1330/2007" introduced a new occurrence reporting system involving all actors in the aviation sector. By involving airlines, manufacturers, air traffic controllers, aircrew, mechanics, national authorities and the European Aviation Safety Agency (EASA), the Regulation aims at preventing

aircraft accidents and related fatalities through feedback and lessons learnt from occurrences. The Regulation seeks to ensure that relevant safety information associated with such occurrences is reported, collected, stored, protected, exchanged, disseminated and analysed. It is of prime importance that front-line aviation professionals report occurrences that pose a significant risk to aviation safety. Most importantly, the text makes it possible for whistle-blowers in countries where legal protection is lower to directly notify the problems to the EASA.

The Regulation (EU) No 376/2014 foresees a mandatory closed list of examples of incidents that must be reported if they occur. It also safeguards the possibility for a voluntary based mechanism of reporting incidents not included in the list. One important way of constantly improving safety is to analyse mistakes, learn lessons and adjust procedures and processes accordingly. In this context the “Just Culture” is an important aspect of the safety improvement in the ATM industry. The internal “Just Culture” rules adopted by organisations based on the Regulation (EU) No 376/2014 are expected to contribute in particular to the achievement of the safety improvements. The “Just Culture” principles need to be promoted in the entire organisation and with all parties. Staff, at all levels, should be, as a starting point, considered to act in the interest of safety. Therefore, organisations must foster a “Just Culture” in which staff know they will be treated fairly when they do report.

In addition, the limitation of the transmission of personal details, or of information allowing the identification of the reporter or of the other persons mentioned in occurrence reports and by clearly separating the departments, handling occurrence reports and the rest of the organisation, is believed to be an efficient way to achieve safety improvements.

By introducing this proactive, risk-based safety

management system, the occurrence reporting has given a more solid ground for protection of employees and crewmembers who report safety incidents. Thereby, the rules favour the notification of occurrences towards improving the aviation safety level in the EU. The Regulation will also introduce an appeal mechanism for employees who find themselves punished in some way for reporting an incident related to aviation.

3. The European Commission’s evaluation of Regulation (EU) No 376/2014 and main results

On 17 February 2021, the European Commission published its evaluation of Regulation (EU) No 376/2014 on the reporting, analysis and follow-up of occurrences in civil aviation in its Commission staff working document (SWD(2021) 30 final). The purpose of this ex-post evaluation of Regulation (EU) No 376/2014 is to support the preparation of the Commission’s Report on the implementation of this Regulation pursuant to Article 24 of Regulation (EU) No 376/2014, and to assess whether the expected effect on safety and the reduction of accidents and related fatalities in aviation throughout the EU have been achieved. The Regulation (EU) No 376/2014 has been evaluated regarding its effectiveness, efficiency, its coherence with the other relevant legislation, and the added value of the EU’s intervention.

The Staff Working Document evaluated whether relevant safety information relating to civil aviation is reported, collected, stored, protected, exchanged, disseminated and analysed. It also assessed whether the Regulation No. 376/2014 contributed to reducing the number of aircraft accidents and related fatalities.

The Commission’s staff working document (SWD(2021) 30 final) confirmed the continued relevance of the Regulation for the reporting, analysis, and follow-up of occurrences in civil aviation. It found that the Regulation has

contributed to the overall improvement of aviation safety in the EU. In particular, it has increased the number of reports on safety-related events and improved the quality of the safety data extracted from the occurrence reports.

The evaluation shows that some organisations still have to develop the mandatory reporting system requirement by the Regulation's entry into force. Similarly, in the field of voluntary reporting, some organisations had no voluntary reporting system in place. Finally, some organisations do not distinguish between voluntary and mandatory reporting systems.

Regarding the introduction of the "Just Culture", Regulation (EU) No 376/2014 lays down in Article 16(11) that there is an obligation for the organisations to adopt internal "Just Culture" rules. The evaluation found that the available information is not conclusive on whether this requirement has been fully implemented by all organisations.

The most significant shortcoming in the implementation of the Regulation (EU) No 376/2014 was found in relation to the obligation laid down in Article 16(12) for the Member States to designate a body responsible for the implementation of the "Just Culture" principles. According to the Commission's evaluation, 11 Member States that failed to designate a "Just Culture Body" responsible for the implementation of the Regulation's "Just Culture" rules. Only a limited number of EU Member States have complied with this requirement, which led the Commission to opening infringement proceedings and sent out 10 Letters of Formal Notice and one Reasoned Opinion to the non-compliant EU Member States. Similarly, there has been a limited progress in the implementation of Article 15(4) of the Regulation (EU) No 376/2014, which aims to ensure the cooperation of the competent authorities responsible for the collection, evaluation, processing, analysis and storage of the

occurrence reports and the judicial authorities in the Member States via advanced arrangements. However, according to the Commission's findings, only a limited number of Member States has introduced such arrangements and some of those arrangements do not comprehensively cover the details of the cooperation.

Finally, the Article 13 of Regulation (EU) No 376/2014 also lays down rules on the analysis of occurrence reports and on the adoption of preventive or corrective actions. EASA and the organisations across the EU fully implemented that provision. The Member States do use the analysis of the occurrence reports to identify potential or actual safety hazards. However, some Member States upload reports into the European Central Repository (ECR) that are relevant to other Member States, but they do not duly inform them. Consequently, the concerned Member States are not aware of those occurrence reports and cannot make use of the information contained therein. When it comes to the adoption of preventive or corrective actions, those are fully implemented by EASA and Member States who take preventive actions identified through the analysis of the occurrences.

The Commission's staff working document concludes that overall, the Regulation has contributed to aviation safety. However, it cannot make conclusions as to whether the Regulation has succeeded in achieving its overall objective of contributing to reducing the number of aircraft accidents and incidents, and related fatalities. Nevertheless, in the context of increased air traffic since Regulation (EU) No 376/2014 entered into force, the available data shows a decrease in the number of accidents and incidents. Therefore, considering the improved collection and analysis of the safety data from the occurrence reports, and the elaboration and implementation of relevant corrective and preventive measures, it can be concluded that Regulation (EU) No 376/2014 has contributed to

this decrease in the accident rate while at the same time, the air traffic increased.

However, the evaluation also acknowledged that the Commission Implementing Regulation (EU) 2015/1018 should be improved by updating the list of mandatorily reported occurrences and the mandatory data fields to better enable the gathering of safety data.

The Regulation has been found to be coherent and contains no overlaps, contradictions or inconsistencies, although it has been pointed out that there would appear to be an overlap between the Regulation's reporting requirements and similar requirements concerning the obligation to establish organisation's safety management systems (SMS) in aviation safety regulations. Furthermore, the Regulation (EU) No 376/2014 remains relevant as aviation evolves, taking also account of the increase of unmanned aircraft UAS or drones' traffic.

Nevertheless, the evaluation also highlights a number of areas and challenges that need improvement. This includes the analysis and follow-up of occurrences at the national level, the establishment of advanced arrangements between the competent and judicial authorities in the majority of the EU Member States, as well as the designation of a "Just Culture Body" in some EU Member States.

4. Regulation (EU) No 376/2014's evaluation regarding Unmanned Aircraft Systems (UAS)

The aviation sector has experienced some important developments since the Regulation (EU) No 376/2014 entered into force, notably the emergence of the wider utilisation of the Unmanned Aircraft Systems (UAS) as well as a growing importance of cybersecurity.

Regarding the occurrences or safety-related information involving unmanned aircraft, they fall within the scope of the Regulation (EU) No 376/2014 as amended by Regulation (EU) 2018/1139. UAS for which a certificate or declaration is not

required, the Regulation (EU) No 376/2014 only applies as long as the occurrence results in a fatal or serious injury to a person or it involves aircraft other than unmanned aircraft. However, given the novel nature of the UAS operations and the recent entry into force of the specific regulatory framework for UAS, an adjustment of the list of mandatory data fields to the Regulation (EU) No 376/2014 might be necessary in order to reflect the specificities of UAS operations. However, the Regulation (EU) No 376/2014 offers relatively simple solutions regarding an update of the list of occurrences. Therefore, in the light of the recent developments in the aviation sector, involving the rapid increase in the UAS operations and the increasing threats related to cybersecurity, the Regulation (EU) No 376/2014 continues to be relevant while some adjustments to the Regulation's provisions could be useful in order to better reflect the UAS occurrences.

5. Conclusions

As a part of the wider aviation safety policy, the Regulation (EU) No 376/2014 on the reporting, analysis and follow-up of occurrences in civil aviation has contributed to the overall improvement of aviation safety.

However, as the Commission's staff working document points out, it is difficult to draw exact conclusions of its impact on the reduction of accidents and fatalities in civil aviation. The Commission's staff working document underlines that the Regulation has contributed to better collection and storage of the occurrence reporting and at the EU level, the Regulation has facilitated the analysis of occurrence reports through the standardisation of requirements. The Regulation (EU) No 376/2014 also contributed to significantly improve the quality and completeness of the occurrence data in the ECR and national databases.

Nevertheless, some shortcomings relating to the big amount of mandatory data fields or too short reporting deadlines were identified in the Commission's staff working document.

The Regulation only partially achieved its objective to protect the reporters of occurrences and the "Just Culture", because only a fraction of EU Member States established administrative arrangements to manage the use of occurrence reports in their national databases. Moreover, a number of Member States failed to designate a "Just Culture Body" with the necessary competences to implement its duties and guarantees that reporters are not punished for reporting. Consequently, the Commission opened several infringement proceedings against EU Member States. The Regulation's main deficiency is the lack of clarity on the competent authority responsible for the oversight of the entire Regulation. Regarding the increased use of UAS, the Regulation (EU) No 376/2014 remains a relevant piece of legislation and its objectives are also meaningful regarding the increased utilisation of UAS and more intense UAS traffic.

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