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**COMMISSION STAFF WORKING DOCUMENT**

**SUMMARY OF THE IMPACT ASSESSMENT**

*Accompanying the document*

**Proposal for a Regulation of the European Parliament and of the Council on occurrence reporting in civil aviation**

{ COM(2012) 776 final }

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## SUMMARY OF THE IMPACT ASSESSMENT

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#### **Proposal for a Regulation of the European Parliament and of the Council on occurrence reporting in civil aviation**

#### **1. PROBLEM DEFINITION**

##### **1.1. Context and identified problems**

The current aviation safety system is primarily a reactive system relying on technological advances, sound legislation underpinned by effective regulatory oversight, and detailed accident investigations leading to recommendations for safety improvements. However, whilst the ability to learn lessons from an accident is crucial, purely reactive systems have now shown their limit in continuing to bring forward improvements, notably in the context of an air traffic growth which is expected to almost double by 2030.

Safety systems should therefore move towards more proactive evidence based safety processes which focus on preventing an accident occurring by analysing all available safety information, including information on civil aviation occurrences.

While the European Union (EU) has started this transition with the adoption of Directive 2003/42/EC<sup>1</sup> and its implementing rules<sup>2</sup>, the current efforts are insufficient to stop the number of accidents and fatalities increasing as a consequence of the expected traffic growth. The European Union and its Member States are currently not sufficiently able to use experience feedback for preventing accidents.

This issue is caused by a number of shortcomings.

Firstly it appears that, whilst data is vital to identify safety hazards, there is not sufficient awareness of all safety occurrences. This situation is partly due to the discrepancy in the scope of reportable occurrences between the Member States. It also comes from the fact that individuals are afraid to report (the "Just Culture" issue). Indeed to reach the goal of full reporting, individuals must have full confidence in the system because they are asked to report mistakes they may have made or contributed to. However, individuals are not equally protected among the Member States and they fear being prosecuted or being punished by their hierarchy. In addition, the lack of obligation to establish voluntary reporting scheme to

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<sup>1</sup> Directive 2003/42/EC of the European Parliament and of the Council on occurrence reporting in civil aviation; OJ L 167, 4.7.2003, p. 23.

<sup>2</sup> Commission Regulation (EC) No 1321/2007 laying down implementing rules for the integration into a central repository of information on civil aviation occurrences, OJ L 294 of 13.11.2007, p. 3; and Commission Regulation (EC) No 1330/2007 laying down implementing rules for the dissemination to interested parties of information on civil aviation occurrences, OJ L 295 of 14.11.2007, p. 7.

complete the mandatory schemes and the insufficient clarity in occurrence reporting obligations and in the flow of information are also contributing to the insufficient collection of occurrences.

Secondly, occurrence data integration is not harmonised and is unstructured causing a low quality of information and an incompleteness of data. This situation affects the consistency and the usefulness of information and limits its use for safety purposes. It also risks providing misleading trends which could lead to focusing efforts where they are not needed or worse failing to identify a safety issue.

Thirdly the exchange of information between Member States is limited because there are legal and organisational obstacles for ensuring adequate access to information contained in the European Central Repository (ECR), which regroups all national data. Indeed European legislation obliges the de-identification of certain information. Although the purpose of such provisions is to protect sensitive safety data, its practical consequence is that important safety related facts, such as the actual description of the occurrence, are not available to the authorities. This is notably due to Member States lack of confidence regarding the use of data.

Finally, there is no requirement regarding the use of occurrence data collected. Therefore this results in a lack of occurrence analysis and subsequently a lack of adoption of appropriate corrective and preventive actions in order to address safety deficiencies.

The main actors affected by this initiative are all persons and organisations involved in the civil aviation system or benefiting from air safety, both at national and European level.

## **1.2. Analysis of subsidiarity**

Occurrence reporting is essential to the proper functioning of air transport, in line with the objective of Article 91 of the Treaty on the Functioning of the European Union. As the subsidiarity principle applies, EU action on occurrence reporting has to be justified.

Firstly, the objectives of the proposed action could not be achieved sufficiently by Member States because there is a need to harmonise the rules applicable to occurrence reporting and therefore to ensure uniform and efficient rules in Europe. In addition rules related to a European database and an EU Agency can only be established by European legislation.

Secondly, the added value of EU action comes from the safety benefits of strengthening and developing proactive measures based on occurrence analysis at national and EU level. In addition, an event that appears to be an isolated occurrence in a Member State, when looked at across the Union as a whole, can point to a need for action.

## **2. OBJECTIVES OF EU INITIATIVE**

The main objective of the initiative is to contribute to the reduction of the number of aircraft accidents and fatalities, through the improvement of existing systems, both at

national and European level, using civil aviation occurrences for correcting safety deficiencies and prevent them from reoccurring.

The specific objectives (SO) are:

- To ensure that all occurrences which endanger or would endanger aviation safety are collected and are providing a complete and clear picture of safety risks in the EU and its Member States (SO1)
- To make sure that occurrence reports stored in the national databases and in the ECR are complete and contain high quality data (SO2)
- To make sure that all safety-critical information stored in the ECR is accessed adequately by competent authorities and that they are used strictly for safety improvement purposes (SO3)
- To ensure that reported occurrences are effectively analysed, that safety hazards are identified and addressed where relevant and that the safety effectiveness of the actions taken is monitored (SO4).

### **3. POLICY OPTIONS**

The first option identified is the repealing of the existing EU legislation. In view of the serious risk this option would pose to citizens' safety, this option has not been pursued further and has been discarded.

To solve the problem drivers a number of policy measures have been identified and regroups in three policy packages:

Policy package 1 (PP1) aims at improving the current system in establishing the basic elements of a complete occurrence reporting system and its contribution to aviation safety improvement through amendment to the legislation only to the necessary minimum and adoption of recommendations and guidance wherever possible. It contains the less intense policy measures identified above.

Policy package 2 (PP2) consists of a more ambitious package of policy measures entailing a substantial revision of EU legislation on occurrence reporting. PP2 seeks to improve the current system by establishing the necessary legislative requirements for ensuring an efficient occurrence reporting system at all levels and to contribute to the reduction of aircraft accidents through the establishment of processes for the analysis of data collected, the adoption of appropriate measures and monitoring of the system efficiency in terms of safety improvements.

Policy package 3 (PP3) aims at improving the current system by transferring Member States occurrence reporting competencies to the EU level and establish, as in PP2, requirements for occurrence analysis together with the adoption of necessary safety actions and improvement monitoring. Under PP3, the responsibility to establish and manage occurrence reporting scheme(s) would be transferred to the European Aviation Safety Agency (EASA).

The tables below detail the policy measures included in the different policy packages.

Issues identified in section 2.2	Policy measures	Detail of the policy measure
<b>Problem driver 1: The collection of occurrence data is not optimal (PD1)</b>		
<b>A: The scope of reporting, regarding the type of occurrences, is different between the Member States creating discrepancies in the reporting level</b>	1. Clarify the scope of occurrences to be collected through guidance – <i>PP1</i>	
	2. Harmonise the scope of reporting specifying what should be reported in an Annex – <i>PP2 and PP3</i>	
<b>B: Individuals are afraid to report (the "Just Culture" issue)</b>	1. Guidance regarding interpretation and implementation of Article 8 – <i>PP1</i>	
	2. Clarify and complement existing rules (define "Just Culture", establish a national focal point, no blame principle, disidentify reports) - <i>PP2 and PP3</i>	
<b>C: There is no obligation to establish Voluntary Occurrence Reporting Scheme (VORS) and there is no clarification on what should be reported under VORS</b>	1. Commission Recommendation to implement the International Aviation Civil Organisation (ICAO) Standard imposing the establishment of VORS; guidance on Mandatory Occurrence Reporting Scheme (MORS) / VORS – <i>PP1</i>	
	2. Implement into EU law the ICAO Standard imposing the establishment of VORS; clarify what should be reported under MORS/VORS – <i>PP2</i>	
	3. Replace national VORS by an unique European VORS; clarify what should be reported under MORS/VORS – <i>PP3</i>	
<b>D: There are too many occurrence reporting lines in various EU legislations which create duplication and confusion</b>	1. Guidance specifying all reporting lines and the requirements applicable for each reporting line; organise trainings – <i>PP1</i>	
	2. Simplify and harmonise all reporting requirements; modify reporting requirements in other relevant EU legislations – <i>PP2 and PP3</i>	
<b>E: The flow of information is not clear and there is no requirement for organisation to collect occurrences in the Directive</b>	1. Commission Recommendation to implement the ICAO Standard requesting States to ensure the establishment of a Safety Management System (SMS) within their industry – <i>PP1</i>	
	2. Implement into EU law the occurrence reporting related part of the ICAO Standard requesting States to ensure the establishment of an SMS within their industry – <i>PP2</i>	
	3. Implement into EU law the occurrence reporting related part of the ICAO Standard requesting States to ensure the establishment of an SMS within their industry; transfer the obligation to collect occurrences from States towards a unique body which will collect directly, mainly from the industry, all occurrences coming from the MORS – <i>PP3</i>	

Issues identified in section 2.2	Policy measures	Detail of the policy measure
<b>Problem driver 2: Data integration: The low quality of information and the incompleteness of data (PD2)</b>		
<b>A: Occurrences come in very different forms and are not encoded and classified into databases in a harmonised way</b>	1. Guidance regarding the filling of occurrence; training and to ensure a better harmonisation of classification within and among national databases – <i>PP1</i>	
	2. Harmonise the reporting process and standardise the data entry process among States; develop guidance material and organise trainings – <i>PP2</i>	
	3. Impose the use of an unique data format for occurrence reports; replace the Member States collection of occurrences by a collection at EU level through a single entity – <i>PP3</i>	
<b>B: There is often no quality checking process to ensure the consistence of data</b>	1. Guidance about data quality; develop automatic data quality checker tools and make them available to Member States; organise trainings and workshops – <i>PP1</i>	
	2. Impose both on organisations and on Member States the principle of quality checking; develop and complement the existing guidance material about data quality; develop automatic data quality checker tools; organise trainings and workshops – <i>PP2 and PP3</i>	
<b>C: Not all information is sent to the ECR and the data collected is not always reflecting the actual safety performance</b>	Continue to ensure the oversight of the data contained into the ECR and launch procedures where necessary; the legislation could enter in the scope of EASA standardisation inspections – <i>PP1, PP2 and PP3</i>	
<b>D: Not all key data fields are filled into the ECR for many occurrences</b>	1. Guidance material on what should be filled and develop a list of fields for each relevant category of occurrences – <i>PP1</i>	
	2. Modify the legislation in order to establish the principle of mandatory fields; annex to the revised legislation the list of mandatory fields for each relevant category of occurrences – <i>PP2 and PP3</i>	

Issues identified in section 2.2	Policy measures	Detail of the policy measure
<b>Problem driver 3: The legal and organisational obstacles for ensuring adequate access to ECR information (PD3)</b>		

<b>A: Important occurrence information (narrative) is not accessible</b>	Ensure broader access to ECR data notably in order to give define competent authorities access to pertinent safety information – <i>PP1, PP2 and PP3</i>	
<b>B: Member States lack of confidence regarding the use of ECR data</b>	Limit the use of ECR data to safety enhancement purposes – <i>PP1, PP2 and PP3</i>	
<b>Issues identified in section 2.2</b>	<b>Policy measures</b>	<b>Detail of the policy measure</b>
<b>Problem driver 4: Lack of occurrence analysis at national and at European levels and of appropriate safety measures (PD4)</b>		
<b>A: No systematic analysis of occurrences at Member States and EU level</b>	1. Recommendation to implement ICAO Standard requesting States to analyse data issued from MORS and VORS and to determine appropriate action required – <i>PP1</i>	
	2. Implement the ICAO Standard requesting States to analyse data issued from MORS and VORS and to determine appropriate action required; impose this obligation on organisations, Member States and at EU level – <i>PP2</i>	
	3. Implement the ICAO Standard requesting States to analyse data issued from MORS and VORS and to determine appropriate action required; impose this obligation on organisations and at EU level – <i>PP3</i>	
<b>B: No policy framework to achieve safety improvements based on occurrence analysis</b>	1. Recommendation to implement the ICAO Recommendation requesting to implement appropriate corrective and preventive actions identified from occurrence analysis and to monitor their effectiveness – <i>PP1</i>	
	2. Implement the ICAO Standard requesting to take appropriate corrective and preventive actions identified from occurrence analysis at organisation, Member States and at EU level and to monitor the effectiveness of these actions at Member States and EU level – <i>PP2</i>	
	3. Implement the ICAO Standard requesting to take appropriate corrective and preventive actions identified from occurrence analysis at national and at EU level and monitor the effectiveness of these actions at EU level – <i>PP3</i>	
<b>C: No tool to prioritise occurrence analysis</b>	1. Develop at EU level a common EU risk classification scheme in order to classify occurrences in an harmonised way; make this tool available; recommendation to Member States to classify their occurrences according to this tool – <i>PP1</i>	
	2. Obligation for Member States or EU entity to classify occurrences according to a common EU risk classification tool; develop this tool at EU level and make it available to Member States and industry – <i>PP2 and PP3</i>	

#### 4. ASSESSMENT OF IMPACTS

The policy packages impacts are summarised in the table below:

	Policy Package 1	Policy Package 2	Policy Package 3
<b>Safety impact</b>	LOW POSITIVE	HIGH POSITIVE	LOW POSITIVE
<b>Economic impacts</b>			
Impact on the industry	ZERO	MEDIUM POSITIVE	LOW NEGATIVE
Impact on Member States	ZERO	LOW NEGATIVE	HIGH POSITIVE
Impact on internal market and competitiveness	LOW POSITIVE	HIGH POSITIVE	LOW POSITIVE
Administrative burdens /year	ZERO	LOW NEGATIVE - €31,133	MEDIUM NEGATIVE - €2.235 MILLION
Impact on EU budget / year	CLOSE TO ZERO - €165,000	LOW NEGATIVE - €30,000	HIGH NEGATIVE - €12.1MILLION
<b>Social impacts</b>			
Standards and rights related to job quality	LOW POSITIVE	MEDIUM POSITIVE	HIGH POSITIVE
Employment	NEUTRAL	LOW POSITIVE	LOW POSITIVE
Personal data	ZERO	MEDIUM POSITIVE	MEDIUM POSITIVE
Public health and safety	LOW POSITIVE	HIGH POSITIVE	LOW POSITIVE
<b>Environmental impacts</b>	CLOSE TO ZERO	CLOSE TO ZERO	CLOSE TO ZERO
<b>Impacts on fundamental rights</b>	LOW POSITIVE	HIGH POSITIVE	LOW POSITIVE
<b>Impacts on simplification of exiting legislation</b>	ZERO	HIGH POSITIVE	HIGH POSITIVE
<b>Impacts on third countries</b>	LOW POSITIVE	HIGH POSITIVE	LOW POSITIVE

## **5. COMPARISON OF OPTIONS**

The policy packages are assessed against the criteria of effectiveness, efficiency and coherence.

From an effectiveness point of view, PP2 offers the highest potential achievement of all specific objectives, while PP3 offers a good effectiveness in general. PP1 achieves only SO3 in full.

PP1 contains measures requiring very low implementation or administrative costs and contribute to achieve the SO but in a limited way which does not make this policy the most efficient in achieving the objectives.

In terms of efficiency, PP3 is the mostly costly and less efficient than PP2. PP1 is the cheapest but the less efficient.

In terms of coherence, all policy packages are more or less equivalent and present a limited trade-off between the different types of impacts, but PP2 presents the most limited trade-off.

In view of the above the recommended package is PP2 as the benefits obtained are far greater than the costs. It is expected to contribute to the improvement of aviation safety through a better collection of occurrences, an improved quality of data, a more appropriate access to information and the introduction of requirements regarding the use of occurrences for contributing to a reduction of aircraft accidents.

## **6. MONITORING AND EVALUATION**

The Commission would evaluate the implementation of the Regulation three years after its adoption by the legislator and would continuously monitor a set of core transport indicators that are already available. These indicators will be used to measure to what extent the adopted policy option achieves the specific objectives.