# ${\color{red} \textbf{COMMISSION IMPLEMENTING REGULATION (EU) 2020/572} \\$

## of 24 April 2020

### on the reporting structure to be followed for railway accident and incident investigation reports

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive (EU) 2016/798 of the European Parliament and of the Council of 11 May 2016 on railway safety (¹), and in particular Article 24(2) thereof,

#### Whereas:

- (1) Directive (EU) 2016/798 provides a framework to ensure that the results of accident and incident investigations are disseminated by the national investigating bodies (NIBs) in charge of reporting on rail accident and incident investigation across the Union, in accordance with its Article 22.
- (2) The reports on investigations and any findings and subsequent recommendations provide crucial information for the future improvement of rail safety in the Single European Rail Area. In accordance with Article 26 of the Directive (EU) 2016/798, safety recommendations have to be acted upon by the addressees and actions reported back to the investigating body.
- (3) A common structure of the investigation report should facilitate sharing the reports. To this end a public database managed under the responsibility of the European Union Agency for Railways was established in accordance with Article 37(3)(e) of Regulation (EU) 2016/796 of the European Parliament and of the Council (²), and is accessible through the Agency.
- (4) To facilitate the access to useful information and its application to other European stakeholders, some parts of the report are requested in two European languages.
- (5) The structure should protect the NIB from external interferences, guarantee that the investigation has been carried in an independent manner in accordance with Article 21(4) of the Directive (EU) 2016/798.
- (6) Safety accident and incident investigation reports should ensure that lessons are learned from past accidents and incidents. They should facilitate the identification of safety hazards and elimination of similar safety risk in the future and allow actors in the rail sector to review their assessment of the risks related to their operations and update their safety management systems where necessary, including where applicable to adopt corrective measures, pursuant to point 7.1.3 of Annex I and point 7.1.3 of Annex II to Commission Delegated Regulation (EU) 2018/762 (³). For this purpose the information contained in such reports should be structured to be easily accessible.
- (7) The European Union Agency for Railways (the 'Agency'), which collects the reports, should maintain the appropriate informatics tool providing an easy retrieval, tailored on the specific needs of the user (e.g. using keywords).
- (8) The measures provided for in this Regulation are in accordance with the opinion of the Committee referred to in Article 28(1) of Directive (EU) 2016/798,

<sup>(1)</sup> OJ L 138, 26.5.2016, p. 102.

<sup>(\*)</sup> Regulation (EU) 2016/796 of the European Parliament and of the Council of 11 May 2016 on the European Union Agency for Railways and repealing Regulation (EC) No 881/2004 (OJ L 138, 26.5.2016, p. 1).

<sup>(3)</sup> Commission Delegated Regulation (EU) 2018/762 of 8 March 2018 establishing common safety methods on safety management system requirements pursuant to directive (EU) 2016/798 of the European Parliament and of the Council and repealing Commission Regulation (EU) No 1158/2010 and (EU) No 1169/2010 (OJ L 129, 25.5.2018, p. 26).

HAS ADOPTED THIS REGULATION:

#### Article 1

## Subject matter and scope

This Regulation lays down a common reporting structure for the accident and incident investigations referred to in Article 20(1) and (2) of Directive (EU) 2016/798.

#### Article 2

#### **Definitions**

For the purpose of this Regulation the following definitions apply:

- (1) 'causal factor' means any action, omission, event or condition, or a combination thereof that if corrected, eliminated, or avoided would have prevented the occurrence, in all likelihood;
- (2) 'contributing factor' means any action, omission, event or condition that affects an occurrence by increasing its likelihood, accelerating the effect in time or increasing the severity of the consequences, but the elimination of which would not have prevented the occurrence;
- (3) 'systemic factor' means any causal or contributing factor of an organisational, managerial, societal or regulatory nature that is likely to affect similar and related occurrences in the future, including, in particular the regulatory framework conditions, the design and application of the safety management system, skills of the staff, procedures and maintenance.

## Article 3

# Reporting structure

Without prejudice to the provisions of Articles 20, 24(1) and (2) of Directive (EU) 2016/798, the investigation reports shall be issued following the structure, as closely as possible, as set out in Annex I.

Points 1, 5 and 6 of the Annex I shall be written in a second official European language. This translation should be available no later than 3 months after the delivery of the report.

The reports shall be made available to the Agency in a digital format allowing access to it, its digital indexation and analysis.

#### Article 4

### Transition

With regard to accidents and incidents for which a decision to launch the investigations has already been taken in accordance with Article 22(3) of Directive (EU) 2016/798 at the time of entry into force of this Regulation, the investigation body may decide whether to follow the reporting structure as set out in Annex I, or to follow that of Annex V to Directive 2004/49/EC of the European Parliament and of the Council (4).

#### Article 5

# Entry into force and application

This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

<sup>(\*)</sup> Directive 2004/49/EC of the European Parliament and of the Council of 29 April 2004 on safety on the Community's railways and amending Council Directive 95/18/EC on the licensing of railway undertakings and Directive 2001/14/EC on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification (Railway Safety Directive) (OJ L 164, 30.4.2004, p. 44).

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 24 April 2020.

For the Commission The President Ursula VON DER LEYEN

#### ANNEX

## The structure to follow on the reporting

According to Article 24(1) of Directive (EU) 2016/798, accident and incident reports shall follow as closely as possible the structure here established, adapted to the type and seriousness of the accident or incident. This includes input, in principle, to all titles 1 to 6 including their subtitles in letters, where relevant. Where no relevant information is available or not required due to the circumstances of the occurrence, the statement 'not applicable' shall be introduced for the corresponding titles or subtitles, identifying them as not being considered relevant in the context of this investigation. The statement can be done in an aggregated manner either at the beginning or at the end of the relevant title or subtitle.

## 1. Summary

The summary is an integral part of to the report and shall be self-explanatory so that it can be read without further context.

It shall provide an outline of the basic facts of the occurrence: a short description of the accident or incident; when, where and how it happened; and a conclusion on its causes and consequences. The summary shall refer to all factors (causal, contributing and/or systemic) identified by the investigation. Where applicable, the summary shall list the safety recommendations and their addressees.

## 2. The investigation and its context

This part of the report shall give the objectives and the context of the investigation. It shall make reference to any factors such as delays that might have detrimental impact or otherwise influence the investigation or its conclusions.

1.	The decision to establish an investigation:	
2.	The motivation to the decision to establish an investigation, e.g. by reference to Art. 20.1 (serious accident) or Art. 20 (2) a) – d):	
3.	The scope and limits of the investigation including a justification thereof, as well as an explanation of any delay that are considered a risk or other impact to the conduct of the investigation or its conclusions:	Information on scope and limits may further be detailed under point 4.
4.	An aggregated description of the technical capabilities and the functions in the team of investigators. This includes those belonging to other investigation bodies or external parties involved, as well as evidence for their independence from parties involved in the occurrence:	If anonymity is granted to persons or entities please clarify.
5.	A description of the communication and consultation process established with persons or entities involved in the occurrence during the investigation and in relation to the information provided:	If anonymity is granted to persons or entities please clarify.
6.	A description of the level of cooperation offered by the entities involved:	If anonymity is granted to persons or entities please clarify.
7.	A description of the investigation methods and techniques as well as analysis methods applied to establish the facts and findings referred to in the report. The facts shall at least establish:  — events and conditions that led to the occurrence;  — any precursors that led to the above;  — instructions, mandatory procedures, feedback mechanisms and/or control mechanisms that led to the occurrence or otherwise played a role regarding it.	e.g. interviews, access to documentation and recordings on the operating system,

8.	A description of the difficulties and specific challenges encountered during the investigation.	
9.	Any interaction with the judicial authorities, where appropriate	
10.	Where appropriate, any other information relevant in the context of the investigation.	

# 3. Description of the occurrence

This part of the report shall contain a detailed description of the occurrence mechanism, based on the information collected during the investigation carried out.

# (a) The occurrence and background information:

1.	The description of the occurrence type:	
2.	The date, exact time and location of the occurrence:	
3.	The description of the occurrence site, including weather and geographical conditions at the moment of the occurrence and if any works were carried out at or in the vicinity of the site:	
4.	Deaths, injuries and material damage:  — passengers, employees or contractors, level crossing users, trespassers, other persons at a platform, other persons not at a platform,  — cargo, luggage and other property,  — rolling stock, infrastructure and the environment.	If anonymity is granted to persons or entities please clarify.
5.	The description of other consequences, including the impact of the occurrence in the regular operations of the actors involved:	
6.	The identification of the persons, their functions, and entities involved, including possible interfaces to contractors and/or other relevant parties:	If anonymity is granted to persons or entities please clarify.
7.	The description and identifiers of train(s) and their composition including the rolling stock involved and their registration numbers:	
8.	A description of the relevant parts of the infrastructure and signalling system – track type, switch, interlocking, signal, train protection systems:	
9.	Where appropriate, and any other information relevant for the purpose of the description of the occurrence and background information:	

# (b) The factual description of the events:

1.	The proximate chain of events leading up to the occurrence, including:  — actions taken by persons involved,  — the functioning of rolling stock and technical installations,	e.g. starting point of a train ride, beginning of the shift of an involved staff member e.g. measures taken by staff for traffic control and signalling, exchange of verbal messages
	— the functioning of the operating system:	and written orders in connection with the oc-
		currence

		e.g. signalling and control command sys- tem, infrastructure, communications equip- ment, rolling stock, maintenance, etc.
2.	The chain of events from the occurrence until the end of the actions of the rescue services, including:  — measures taken to protect and safeguard the site of the occurrence,  — the efforts of the rescue and emergency services.	e.g. trigger of the railway emergency plan, trigger of the emergency plan of the public rescue services, the police and the medical services and its chain of events

## 4. Analysis of the occurrence, where necessary in respect of individual contributing factors

This part of the report shall analyse the established facts and findings (i.e. performance of operators, rolling stock and/or technical installations) which caused the occurrence. The analysis shall lead to the identification of the safety critical factors that caused or otherwise contributed to the occurrence, including facts identified as precursors. An accident or incident may be caused by causal, systemic and contributing factors which are equally important and should be considered during an investigation.

The analysis may be extended to conditions, feedback mechanisms and/or control mechanisms throughout the entire railway system that were identified as actively influencing the development of similar occurrences. This could comprise the functioning of safety management systems of involved parties and regulatory activities covering certification and supervision.

The following items shall be covered for each of the identified events or factors (causal or contributing) that appear safety critical, in line with the flexibility offered by the structure (see above).

## (a) Roles and duties

Without prejudice to Article 20(4) of Directive (EU) 2016/798 this part of the report shall lead to the identification and analysis of roles and duties of individual persons and entities, including if necessary relevant staff and their defined tasks and functions, identified as having been involved in the occurrence in a safety critical manner, or any activity leading to it.

1.	Railway undertaking(s) and/or infrastructure manager(s):	If anonymity is granted to persons or entities please clarify.
2.	The entity/entities in charge of maintenance, the maintenance workshops, and/or any other maintenance suppliers:	If anonymity is granted to persons or entities please clarify.
3.	Manufacturers of rolling stock or other supplier of rail products:	If anonymity is granted to persons or entities please clarify.
4.	National safety authorities and/or the European Union Agency for Railways:	If anonymity is granted to persons or entities please clarify.
5.	Notified bodies, designated bodies and/or risk assessment bodies:	If anonymity is granted to persons or entities please clarify
6.	Certification bodies of entities in charge of maintenance mentioned under 2:	If anonymity is granted to persons or entities please clarify.
7.	Any other person or entity relevant to the occurrence, documented or not in one of the relevant safety management systems or referred to in a register or relevant legal framework:	If anonymity is granted to persons or entities please clarify e.g. keepers of vehicles, terminal providers, loaders or fillers

# (b) Rolling stock and technical installations

Causal factors to or the consequences of an occurrence that were identified as relating to the condition of rolling stock or technical installations, including possible contributing factors related to activities and decisions, such as:

1.	Stemming from the design of the rolling stock, railway infrastructure or technical installations:	
2.	Stemming from the installation and taking into service of the of rolling stock, railway infrastructure or technical installation:	
3.	Laying with the manufacturers or other supplier of rail products:	
4.	Stemming from the maintenance and/or the modification of the rolling stock or technical installations:	
5.	Laying with the entity in charge of maintenance, the maintenance workshops and other maintenance suppliers:	
6.	And any other factors or consequences considered relevant for the purpose of the investigation:	

# (c) Human factors

Where causal or contributing factors or the consequences of an occurrence were related to human actions, attention shall be paid to the particular circumstances and the manner in which routine activities are performed by staff during normal operations and the human and organisational factors that may influence actions and/or decisions, including:

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1.	Human and individual characteristics:  (a) training and development, including skills and experience,  (b) medical and personal circumstances with influence on the occurrence, including existence of physical or psychological stress,  (c) fatigue,  (d) motivation and attitude.	
2.	Job factors (a) task design, (b) design of equipment with impact on the man-machine interface, (c) the means of communication, (d) practices and processes, (e) operating rules, local instructions, staff requirements, maintenance prescriptions and applicable standards, (f) working time of the staff involved, (g) risk handling practices (h) context, machinery, equipment and instructions shaping work practices.	
3.	Organisational factors and assignments:  (a) workforce planning and workload, (b) communications, information and team working, (c) recruitment and selection, resources, (d) performance management and supervision, (e) compensation (remuneration), (f) leadership, power issues, (g) organisational culture, (h) legal issues (incl. relevant EU and national rules and regulations), (i) the regulatory framework conditions and the application of the safety management system.	

4.	Environmental factors: (a) working conditions (noise, lighting, vibrations,), (b) weather and geographical conditions, (c) works carried out at or in the vicinity of the site.	
5.	And any other factor relevant for the purpose of the investigation in the above points (1),(2),(3),(4):	

(d) Feedback and control mechanisms, including risk and safety management as well as monitoring processes

1.	The relevant regulatory framework conditions:	
2.	The processes, the methods, the content and the results of risk assessment and monitoring activities, performed by any of the involved actors: railway undertakings, infrastructure managers, entities in charge of maintenance, maintenance workshops, other maintenance providers, manufacturers and any other actors, and the independent assessment reports referred in Article 6 of Implementing Regulation (EU) No 402/2013 (¹):	
3.	The safety management system of the involved railway undertaking (s) and infrastructure manager(s) including the basic elements stated in Article 9(3) of Directive (EU) 2016/798 and any EU legal implementing acts:	
4.	The management system of the entity/entities in charge of maintenance and maintenance workshops including the functions stated in the Article 14(3) and Annex III of Directive (EU) 2016/798 and any subsequent implementing acts:	
5.	The results of supervision performed by the national safety authorities in accordance with Article 17 of Directive (EU) 2016/798:	
6.	The authorisations, certificates and assessment reports granted by the Agency, the National Safety Authorities or other conformity assessment bodies:  — Safety authorisation/safety certificates of the involved infrastructure manager(s) and railway undertaking(s),  — Authorisations for the placing in service of fixed installations and vehicles authorisations for placing on the market,  — Entity in charge of maintenance and maintenance workshops (incl. certification).	
7.	Other systemic factors:	

 $<sup>\</sup>label{eq:common_safety} \begin{tabular}{ll} \begin{tabular}{ll}$ 

(e) Previous occurrences of a similar character, if available.

## 5. Conclusions

The conclusions shall contain:

(a) A summary of the analysis and conclusions with regard to the causes of the occurrence

The conclusions shall summarise the identification of the causal and contributing factors to the occurrence, including both immediate and deeper systemic factors, as well as missing or inadequate safety measures for which compensatory measures are recommended. Moreover, it shall refer to the capability of the involved organisations to address this via their safety management systems, in order to prevent future accidents and incidents.

- (b) Measures taken since the occurrence
- (c) Additional observations:

Safety issues identified during the investigation, but without relevance to the conclusions on causes and consequences of an occurrence.

## 6. Safety recommendations

Where appropriate this part of the report shall set out safety recommendations for the sole aim to prevent similar occurrences in the future.

The absence of recommendations shall be explained.

Safety recommendations shall be based on established facts and additional observations thereof, as well as their analysis leading to conclusions on safety relevant causes and consequences of an occurrence.

Safety recommendations may also be issued in relation to additional observations in no causal or contributing context to the occurrence.