



ECCAIRS CODING GUIDE – CHECKLIST

Version 1

Prepared by:
Aigars Krastins
Safety analysis, EASA
Aigars.Krastins@easa.europa.eu

Cologne, 2010



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ADMINISTRATION

The Coding Guide – Checklist is a standard for occurrence coding into ECCAIRS to facilitate data consistency and completeness at data capture stage.

This checklist will be amended and updated according to the relevant changes in rules, taxonomies, or ECCAIRS. This checklist is being maintained by EASA Safety Analysis section and the analysts' network. It will be available to ECCAIRS community via eccairsportal.jrc.ec.europa.eu.

PREFACE

Why do we code occurrences into ECCAIRS?

Having tons of electronic documents or paper format documents in our files containing occurrence information is a very inert and cumbersome way of information handling. The occurrence information has its value only, if it is used. Having a system (database) in place we have a tool where reported occurrences are combined in a way that makes it possible to retrieve the entered data using various attributes, e.g. to implement an analysis. By doing this we convert reports of occurrences into standardised, classified and categorized records by using a specific taxonomy.

Why a standardised coding approach is essential?

The safety data (occurrences) are entered by civil aviation authorities as well as various service providers (airlines, ANSPs, aerodromes, and maintenance organizations etc.). Data quality starts at the point when an occurrence is being entered into the system. People are different; each may have a different background, experience and perspective. Without any standardised rules the way an occurrence will be captured into a record will depend significantly on user bias. In other words, without a standardised data coding approach we will never attain the goal of having high quality data at hand. Consequently, results from analysis would be difficult to trust.

Data coding is the conversion of the narrative of the report into the ECCAIRS data format. This can be thought as the process of providing answers to certain questions using the facts and data at hand via ECCAIRS taxonomy. Please refer to the Figure 1 below.

What is the main target of standardised coding approach?

- Use of common definitions
 - Same term – same meaning
- Use of common collection standards
 - Same occurrence category – same fields of attributes filled in

How is this checklist organised?

The checklist consists of three chapters: *'Golden rules' – the main principles of coding, Coding guide – checklist* and, *Data Quality Check*.

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'Golden rules' are the main principles which should be followed during a whole coding process.

Coding guide – checklist is divided into two main parts. The first part is dealing with 'Basic occurrence data' – the attribute set which provides answers to the questions who, when, where. This includes such information as local/UTC date, State/area of occurrence, aircraft registration, aircraft category, mass group etc. The second part 'Specific occurrence data' deals with occurrence category related attributes which should be filled.

Data quality check will provide tips and instructions of a new data quality check tool. This tool will check coded occurrences against consistency and completeness criteria.

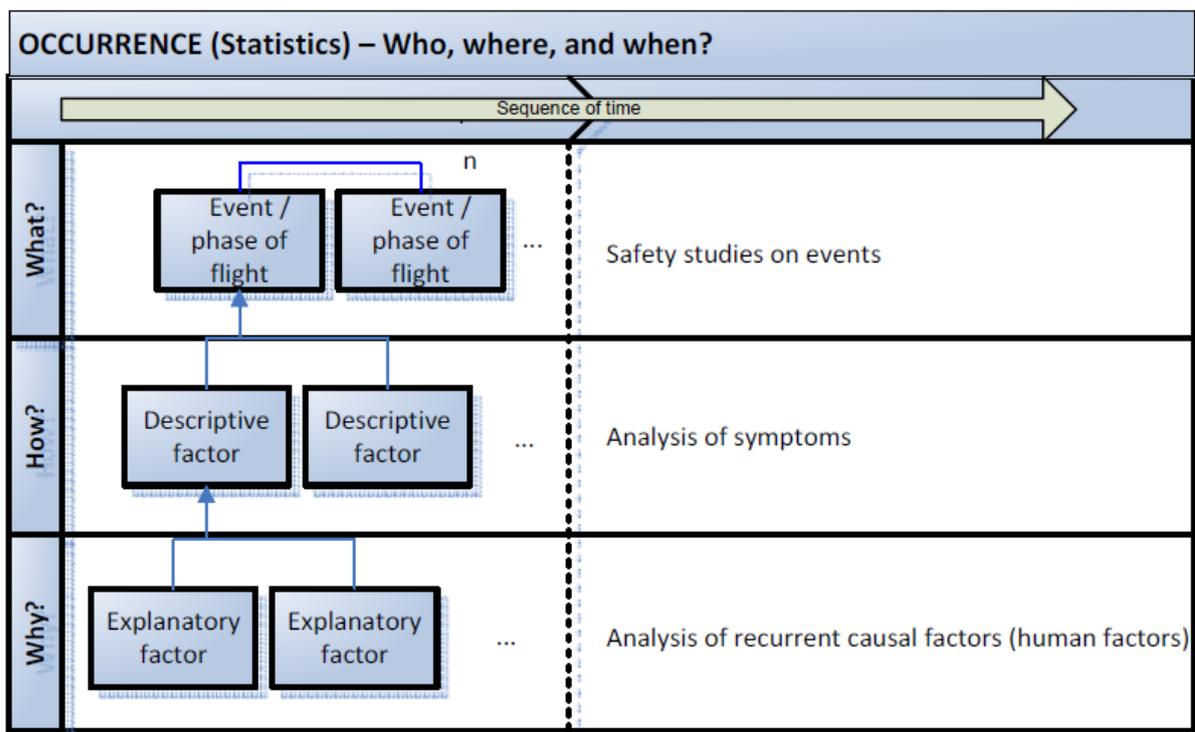


Figure 1: Occurrence content

DISCLAIMER: Do not consider this coding checklist as exhaustive or complete. Included are the main principles in order to standardise the data entry (synthesis). It is a working document that will be revised based on updates of ECCAIRS or the taxonomy and other relevant material.

HIGHLIGHTS OF REVISION

Date	Version	Section	Revision
03.06.2010	1	All sections	First edition



1 'GOLDEN RULES' – THE MAIN PRINCIPLES OF CODING

NOTE: These rules must be taken into account and followed throughout the process of occurrence coding/entering into data base. The rules were created through problems identified at the analysis stage. There is one general rule/question behind all that follow below: How should the data be coded to be best used for analysis.

When coding occurrences in ECCAIRS ask you: 'How should the data be coded to be best used for analysis?'

NO	RULE	DESCRIPTION
1.	Read the definitions¹	Not using definitions has serious effects Even most experienced users read the definitions when in doubt. Reading definitions shows experience not lack of knowledge. If definitions are not applied properly, data points are present, but values are incorrect or misleading – leading to incorrect conclusions Errors are usually difficult to catch – “manual” intervention required Computer assisted repair only possible in case of redundant data Be aware of common misunderstanding, such as following example. <i>For example: Occurrence category “GCOL”</i> <i>“Collision while taxiing to or from a runway in use.”</i> <i>Not to be used for collisions with ground while in flight!</i>
2.	Do not invent	Only code facts that you have at hand regarding a certain occurrence Only code what has been established/reported Add facts that can be derived from others <i>For example: light conditions during hours of daylight</i> <i>Aircraft characteristics based on the aircraft model</i>
3.	Be specific	Be as specific as possible (without speculating on details) <i>Example: The nose landing gear did not extend</i> Use: <i>“Nose/tail landing gear related event (ATA Code:3220)”</i> Not <i>“Landing gear related event (ATA Code:3200)”</i> This will allow you to retrieve the occurrence when looking for nose landing gear problems specifically, but also for landing gear problems in general.
4.	Enter causal factors not consequences	Causes and causal factors are more essential for analysis in order to find out deficiencies which led to an occurrence and determine needed actions for accident prevention. <i>For example: critical weather encounters, inadvertent or improper use of systems, etc.</i>
5.	Align Events and Occurrence categories	Occurrence categories assigned to the occurrence must be in line with Events and vice versa <i>For example: If SCF-NP, then there must be an event of failure of a non-powerplant component/system.</i>
6.	Align Events and Descriptive factors	Events and factors describe what Was wrong Did not work Was out of the ordinary Contributed to the occurrence <i>For example: An event “Central warning related event (ATA Code 3150)” for events where this system malfunctioned, and descriptive factor “Central computers (ATA Code 3140)” to specify the event.</i> Do not include What worked as advertised Emergency measures taken successfully “Positive” factors will be included in the future
7.	Complete The Sequence of events	Through the coding the occurrence must be described. It means that going through the events you must get the same image as reading the Narrative. Be cautious that some vital events are not omitted.

¹ Use CTRL + LEFT MOUSE CLICK on the respective field in order to get description within the ECCAIRS Browser



NO	RULE	DESCRIPTION
8.	Events Must be in Time sequence	In chronological (time) order Frequently used in analysis Precursors, consequences Watch out for cause and effect: <i>Example: The aircraft was found beside the runway with a broken landing gear</i> <i>Did the a/c leave the runway because the landing gear broke (cause), or</i> <i>Was it broken because the a/c left the runway (effect).</i>
9.	Provide Precursors For Consequential events	It is not possible by definition to the consequential event to be as the first event of the occurrence. There always should be something that took place before. If you really do not know, enter an "UNKNOWN" event before a Consequential event.
10.	Complete Background data	Administrative: filing data, reporting organization, report status When: date, time Where: state, location, airport, runway Who involved: aircraft, operator, operation type Severity: injury level, damage Description: headline, narrative
11.	Check your spelling	Be careful with free text fields Search engines are used to search text fields Search engines rely on proper spelling If able use more than one term to describe something of importance. Avoid use of abbreviations Ensure that serial number and registration are correctly spelled For some key information of the report consider automatic lookup (such as aircraft registration database TARGA)
12.	Enter the history of flight – flight phase	Commonly used for statistics Evident if only one phase at hand When there are several different phases: Use the one related to the event that defines the occurrence Usually where the most damage/injury occurred
13.	Make an overall classification and categorization	Accident / incident Occurrence category Do read the definitions. NOTE: For ATM related occurrences any wrong categorisation will have an impact on ATM reports to EUROCONTROL (i.e. AST).
14.	Link the Events respectively²	Link to the aircraft when related to an aircraft Even if there is only one aircraft in the report Link ATM events to the ATM unit Events at the level of the occurrence intended for those events that set the scene and which are unrelated to an aircraft or a unit.
15.	Do factors sequencing	Background information (weather, terrain, etc) first To set the scene Others in time sequence (if that can be established) Otherwise use logical sequence
16.	Segregate system failures from false indications	Segregate whether there was a failure of certain system or whether it was a wrong indication according to the received report. It must be also segregated whether it was a system failure (technical issue) or operational (improper aircraft handling, procedure not followed etc.).
17.	Check the field units before entering values	Before entering such data like altitude, speed, runway length, verify that the field has been assigned with appropriate units. If not, right-click on the unit and select the appropriate one, e.g. <i>ft</i> instead of <i>m</i> , etc.

² One event may be linked with more than one instance (aircraft, aerodrome or Air navigation service provider)



The use of “UNKNOWN” versus leaving a value blank:

- Enter “UNKNOWN” only, if
 - information was sought but it was established that it cannot be obtained
 - this provides documentation of what has been considered
- “BLANK” entries indicate that work still needs to be done, or information is not available

TIP: For the purpose of having a nice checklist what should be entered into ECCAIRS use the *View → Options* and flag “*Occ tree/show all nodes*” at ECCAIRS browser. By doing so, the full list of Occurrence tree will be presented into browser.

Within the **free text fields** (narrative, headline, note, etc.), do not enter any sensitive information, such as names (individuals or operators), registrations, flight numbers, etc. This will contribute to making data sharing easy, if you will need to de-identify some of the information.



2 CODING GUIDE – CHECKLIST

The coding checklist is split into two layers: 'Basic occurrence data' and 'Specific occurrence data'

The coding guide – checklist is split into two layers: 'Basic occurrence data' and 'Specific occurrence data' as it is depicted in Figure Error! Not a valid link.. 'Basic occurrence data' cover the minimum set of data to be entered for every single occurrence as it is applicable. 'Specific occurrence data' provide occurrence category related information to be coded into ECCAIRS in addition to 'Basic occurrence data'. If more than one occurrence category is assigned to the occurrence, all respective specific category related data must be coded.



Figure 2: The schematic view of occurrence that has 3 occurrence categories assigned

Be specific as it is possible and enter all available or reported data into ECCAIRS, if applicable.

REMEMBER: During data coding refer to 'Golden rules of coding' for additional guidance.

The mandatory reportable attributes are marked with '➤' sign.

The mandatory reportable attributes are marked with '➤' sign. If relevant data were not reported, turn back to the source for additional information. While data are not available – leave BLANK. In case data were checked and they won't be available – select UNKNOWN.

2.1 BASIC OCCURRENCE DATA

'Basic occurrence data' cover the minimum set of data to be entered for every single occurrence as it is applicable. Basic occurrence data provide answers to the questions – WHO, WHERE, WHEN?

The reading of the checklist is done from left to right (→), then top – down (↓).
 '↕' symbol means that the attribute must be aligned/cross-checked with other attributes

The reading of the checklist is done from left to right (→), then top – down (↓)

'➤'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	REMARKS
	Filing information				
		Headline			
➤		State reporting ³			Checked by the system
		Date entered			Automatic value
➤		State file number			Checked by the system
➤		Reporting org.			Checked by the system
	When				
➤		Local date			↕ with UTC date (the max difference ± 1 day)

³ For attributes which have the same values for all occurrences (e.g. State reporting, Reporting org. etc.) use predetermined default template when adding a new occurrence (first fill in necessary attributes, second – perform File → Set occurrence as default at ECCAIRS browser editor).



ECCAIRS CODING GUIDE - CHECKLIST

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	REMARKS
		Local time			
>		UTC date			↕ with <i>Local date</i> (the max difference ± 1 day)
		UTC time			
	Where				
>		State or area of occurrence			
>		Location of occurrence			
	Classification				
>		Occurrence class ⁴			Assign occurrence class (See footnote) ↕ with <i>Severity</i> and <i>Narrative</i>
>		Occurrence category			More than one occ category may be assigned to one occurrence – it depends on the facts contained in the narrative. ↕ with <i>Narrative</i> and <i>Events</i>
	Severity				
>		Damage severity level			↕ Align with <i>Occurrence class</i>
		Third party damage			If applicable
		Damage on aerodrome			If applicable
>		Injury severity level			↕ Must be aligned with <i>Occurrence class</i> , <i>Injury totals</i> and <i>Injuries</i> sections
>	Injury totals				If applicable
		Injury totals			Fill in respective fields, if applicable. Do not indicate '0' values. ↕ with <i>Injury level</i> and <i>Injuries</i>
	ATM relation				
>		ATM contribution ⁵			Essential fields for ATM reports to EUROCONTROL
>		Effect on ATM service ⁶			Essential fields for ATM reports to EUROCONTROL
	Narrative				
>		Narrative language			

'↕' symbol means that the attribute must be aligned/ cross-checked with other attributes

⁴ When coding Occurrence class for ATM: ATM/CNS incidents make use of the full tree including Incident/Major Incident and Significant Incident.

⁵ An occurrence (other than accident) will be extracted when using the EASTER Application, only if the field "ATM Contribution" has a value (it could be Directly, Indirectly, None, Unknown). Therefore, if for an incident the ATM Contribution field is not coded, then the incident will not appear in the reports extracted through EASTER.

⁶ Be careful when coding this field, as it is easy to mistakenly "upgrade" a low severity occurrence with effect on the provision of ATM service, to the highest severity category ("Inability to provide service" WHICH Means: Total inability to provide safe ATM service).



'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	REMARKS
'>'		Narrative text	<p>As this is a free text field, be consistent and enter information providing the same format (fonts, font size, and layout) for all narratives. Use Copy + Paste via Notepad procedure for hidden formatting removal.</p> <p>In order to segregate different reports, it is suggested to add "Narrative" by right-clicking on OCCURRENCE topic in Occurrence tree and selecting "Narrative".</p> <p>In cases when additional information becomes available regarding the certain occurrence, this information should be entered into the NARRATIVE (could be an additional one) and EVENTS, OCCURRENCE CATEGORY, REPORT STATUS and other respective sections should be revised accordingly.</p> <p>Provide a reasonably short Occurrence Synopsis in English if the report language is different – this will contribute to the European Central Repository consistency.</p>		
	Events		<p>Describe the occurrence using adequate Events and phases in the sequence of time.</p> <p>Check whether Events are in line with assigned Occurrence categories.</p>		
		Events			
'>'			Event Type		<p>Provide the answers on the question What in the sequence of time?</p> <p>↕ Refer to 'Golden rules' – the main principles of coding chapter.</p>
'>'			Phase		<p>Provide the answer on the question When?</p> <p>↕ with Occ. On ground and Flight phase</p>
			Descr factor subject		If data are available
			Df modifiers		If data are available
			Organization/person		If data are available
			Expl factor subject		If data are available
			Expl factor modifier		If data are available
	Weather				
		General weather conditions			
'>'			Weather relevant		If applicable
			Weather conditions		If known
'>'			Light conditions		If applicable
	Aircraft⁷				If occurrence involves an aircraft
		Aircraft identification			
'>'			Aircraft registration		<p>If possible, use automated TARGA⁸ tunnel service.</p> <p>↕ other attributes within Aircraft identification</p>
'>'			Manufacturer/model		↕ with Aircraft description
'>'			State of registry		↕ with Aircraft registration

DID YOU KNOW: The Descriptive factors search may help to find an adequate event type

⁷ In case more than one aircraft is involved in occurrence, add the additional aircraft by RIGHT-CLICKING Occurrence topic at occurrence tree and choosing "Aircraft" from the menu

⁸ For more detailed TARGA description refer to <http://eccairsportal.jrc.ec.europa.eu/>



ECCAIRS CODING GUIDE - CHECKLIST

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	REMARKS
>			Year built		↕ with Aircraft registration
>			Aircraft serial number		↕ with Aircraft registration
>			Flight number		
			Call sign		
		Aircraft Operation			
>			Operator		
>			Operation type		Be specific
		Aircraft description			
>			Aircraft category		↕ with Propulsion type
>			Propulsion type		↕ with Aircraft category
>			Mass group		↕ with Maximum take-off mass
>			Maximum take-off mass		↕ with Manufacturer/model
>			Landing gear type		↕ with Manufacturer/model
>			Wake turb. category		↕ with Mass group and Maximum take-off mass
>			Number of engines		↕ with Manufacturer/model
		Events			
>			Events	Event type	Link the respective events to the aircraft
		Failures			
			Engine information	Engine model	If applicable.
		History of flight			
>			Itinerary	Planned destination	
>				Last departure point	
>				Flight phase	↕ with Occ. On ground and Phase (at Events)
>				Occ. on ground	↕ with Flight phase and Phase (at Events)
			Speed and altitude at first event	Speed (first event)	
				Type of speed	
				Aircraft altitude	
>			Landing	Type of landing	If applicable
>				Landing location	If applicable
>			Approach	Approach stabilized	If applicable
			Person at controls	Person at controls	If applicable
		Injuries			Fill in adequate fields if applicable ↕ with Injury level and Injury totals
		Fire			Fill in adequate fields if applicable
		Survival			Fill in adequate fields if applicable
			Survivability		If applicable ↕ with Occurrence class - Accident
			Evacuation		If applicable



ECCAIRS CODING GUIDE - CHECKLIST

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	REMARKS
		Ditch			Fill in adequate fields if applicable
		Air traffic services			
>			Flight level, altitude		Fill in adequate fields, if applicable
			Flight level, altitude (incl. RVSM - ECCAIRS 5)		Cleared and Actual FL for Altitude Deviations - Essential fields for the Altitude Deviations included in the ATM reports to EUROCONTROL
			Flight plan - Current Flight Rules (IFR/VFR)		Essential fields for ATM reports to EUROCONTROL
			Flight plan – Current Traffic Type (GAT/OAT)		Essential fields for ATM reports to EUROCONTROL, for civilian users 'GAT' might be set as a default for the occurrence
		Wreckage/impact			Fill in adequate fields if applicable
		Flight Crew			Fill in adequate fields if applicable
	Aerodrome				If applicable.
		Aerodrome identification			
>			Location indicator		If applicable.
		Events			
>			Events	Event Type	If applicable, link the respective events to the aerodrome
		Runway			
>			Runway description	Runway identifier	If applicable.
	Airspace				If applicable
		Airspace			
			FIR/UIR name		If applicable.
			Airspace name		If applicable.
			Airspace class		If applicable.
			Airspace type		If applicable.
		Events			
			Events	Event Type	If applicable, link the respective events to the airspace
	ATS Unit				If applicable.
		ATS unit identification			
			ATS unit name		If applicable. Caution: Free text field
		Events			
			Events	Event Type	If applicable, link the respective events to the ATC Unit
	Management				There are many fields that are fulfilled by the system itself. The rest must be fulfilled accordingly.
		Occurrence report			

DID YOU KNOW: You can add flight crew members by right-clicking on the 'Flight crew' value in occurrence tree



ECCAIRS CODING GUIDE - CHECKLIST

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	REMARKS
>			Report source		
>			Report status		The use of 'OPEN' and 'CLOSED'
>			Report identification		This field should be used for the received report number indication. If the ECCAIRS record is received from other organization, the data provider's file number should be put there.



2.2 SPECIFIC OCCURRENCE DATA⁹

'Specific occurrence data' are complementing 'Basic occurrence data'

Understanding that it is impossible to provide data entry minimum attribute list required for every type of occurrence, 'Specific occurrence data' checklist layout emphasises the attributes to be filled according to assigned occurrence categories in addition to 'Basic occurrence data'.

The 'Specific occurrence data' complies with *CAST – ICAO 'Aviation occurrence categories definitions and usage notes'* October 2008 (4.1.4).

If more than one occurrence category is assigned to the occurrence, all respective specific category related data must be coded.

ADRM					Aerodrome	
'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Aerodrome					
		Aerodrome identification				
			Aerodrome latitude			
			Aerodrome longitude			
>			Location indicator			
>			Aerodrome status			
>			Aerodrome type			
		Helicopter landing area description				If helicopter is involved
			Helicopter land. area type			
>		Events ¹⁰				Link the respective events to the aerodrome
			Events	Event Type	Aerodrome & ground aids - Aerodrome systems	
					Aerodrome & ground aids - Aerodrome services / operations	
					Aerodrome & ground aids - Aerodrome security	⚡ In this case also SEC category must be selected
					Aerodrome & ground aids - Functioning/layout generally	
				Phase		

⁹ It is obvious that there will be more data available if it is an accident and investigation has been performed – if it is an occurrence without investigation, enter facts which are mentioned in the report.

¹⁰ Be specific as far as NARRATIVE supports it.



ADRM						Aerodrome
'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
		Runway				If runway is involved
>			Runway description	Runway identifier		

AMAN						Abrupt manoeuvre
'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Weather					
		General weather conditions				
			Wind speed			
			Speed measured at			
			Visibility			
		Clouds				
			Height of cloud base			
			Cloud amount			
		Temperature				
			Air temperature			
			Dew point			
		Precipitation and other weather phenomena				
			Precipitation intensity			
			Precipitation type			
			Characteristics			
		Weather reports				
			Report validity			
	Aircraft					
>		Events				
			Events	Event Type	Aircraft operation general - Aircraft handling - Abrupt manoeuvre	Please, select the appropriate event and link it to the aircraft
					Aircraft operation general - Injuries to persons - Injuries-abrupt manoeuvre	If applicable ⚡ with <i>Injuries</i> and <i>Injury totals</i>
					Consequential events - Evasive manoeuvre	If applicable
				Phase		
		Aircraft recordings				If applicable
>		Aircraft meteo				If applicable, fill in appropriate fields
			Visibility/Visibility restrictions			
		Flight Crew - Member				



Abrupt manoeuvre

AMAN

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
			Flight crew rest/duty	Rest before duty		

NOTE: If an abrupt manoeuvre (AMAN) was done intentionally to avoid a collision with terrain, objects/obstacles, weather or aircraft, consider adding the respective occurrence category and add respective 'Specific occurrence data' accordingly.

Abnormal runway contact

ARC

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Weather					
		General weather conditions				
			Wind speed			
			Speed measured at			
			Visibility			
		Clouds				
			Height of cloud base			
			Cloud amount			
		Temperature				
			Air temperature			
		Precipitation and other weather phenomena				
			Precipitation type			
			Precipitation intensity			
	Aircraft					
>		Events				Link the respective events to the Aircraft
			Events	Event Type	Aircraft operation general - Aircraft handling - Unstabilised approach	
					Aircraft operation general - Aircraft handling - Hard landing	
					Aircraft operation general - Aircraft handling - Aircraft landed fast	
					Aircraft operation general - Aircraft handling - Aircraft landed long	
					Aircraft operation general - Aircraft handling - Wheels-up landings	



Abnormal runway contact

ARC

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
					Aircraft operation general - Aircraft handling - Wheels down landing on water	
					Aircraft operation general - Aircraft handling - Over-rotation - tail scrape/strike	
					Aircraft operation general - Aircraft handling - Dragged wing/pod/float	
					Consequential events – Flapless landing	
					Consequential events – Bounced landing	
>				Phase	Landing	
					Approach	
					Take-off	
>		History of flight				
			Approach	Approach stabilized		
>		Aircraft meteo				If applicable, fill in appropriate fields
			Visibility/Visibility restrictions			

ATM/CNS

ATM

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
>	ATM relation					
		ATM contribution				Fill in appropriate value
>	ATS Unit					
		ATS unit identification				Fill in appropriate fields
		ATM ground safety nets				Fill in appropriate fields
>		Events				Link the respective events to the ATS Unit
			Events	Event Type	Air Navigation Services - Operational issues	
					Air Navigation Services - Aeronautical Info Service	



ATM **ATM/CNS**

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
					Air Navigation Services - ATFM	
					Air Navigation Services - Airspace management	
					Air Navigation Services - ATM/CNS serviceability	
					Air Navigation Services - ATM emergency situation	
					Air Navigation Services - Events affecting ATM	
>		Sector				Fill in appropriate fields if applicable
			Sector identification			
			Sector traffic			
			Sector workload			
			ATM Personnel			
>	Airspace					Fill in appropriate fields, if applicable

BIRD **Bird strike**

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Narrative					
		Narrative				
>			Narrative text			Insert occurrence narrative and add the information that is required by ICAO IBIS and can not be coded elsewhere
	Weather					
		General weather conditions				
>			Visibility			
	Aircraft					
>		Events				Link the appropriate event to aircraft
			Events	Event Type	Aircraft operation general - Aircraft - object/ground separation - Near collision with airborne object - Near collision - bird	



BIRD **Bird strike**

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
					Aircraft operation general - Aircraft collision obstacle - Aircraft collision - object aloft - Aircraft bird strike	
					Aircraft operation general - Object ingestion-engine - Turbine - bird	
	Aerodrome					
		Aerodrome identification				
>			Location indicator			Fill in, if occurrence occurred in the proximity of Aerodrome
		Runway				
>			Runway description - Runway identifier			Fill in, if occurrence occurred on or in the proximity of Runway
		Events				
			Events	Event Type	Aerodrome & ground aids - Aerodrome services / operations - Bird control	Link the appropriate event to Aerodrome, if applicable.

CABIN **Cabin safety events**

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Aircraft					
		Events				
>			Events	Event Type	Aircraft operation general - Cabin safety	Link the appropriate event value to aircraft

CABIN occurrence category excludes turbulence and other weather related events, which are covered under TURB, ICE, or WSTRW respectively

CFIT **Controlled flight into or toward terrain**

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Weather					
		General weather conditions				
			Visibility			
		Clouds				
			Height of cloud base			
			Cloud amount			
		Temperature				



Controlled flight into or toward terrain

CFIT						
'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
			Air temperature			
			Dew point			
		Precipitation and other weather phenomena				
			Precipitation type			
			Precipitation intensity			
			Characteristics			
		Weather reports				Fill in appropriate fields
	Aircraft					
		History of flight				
>			Itinerary - Flight phase			In case of CFIT this must be an airborne phase of flight, excluding <i>Take-off</i> and <i>Landing</i>
>		Events				Link the applicable values
			Events	Event Type	Aircraft operation general - Warning system triggered - Ground proximity warning	↕ with GPWS/TAWS warning at CFIT – specify the warning type
					Aircraft operation general - Aircraft collision obstacle - Collision aircraft-terrain	
					Aircraft operation general - Aircraft collision obstacle - Collision aircraft-object-ground	
					Aircraft operation general - Aircraft - object/ground separation - Near collision with terrain	
					Aircraft operation general - Aircraft - object/ground separation - Near collision -object on the ground	
>			Phase			Airborne phases only, excluding <i>Take-off</i> and <i>Landing</i> .
		History of flight				
>			Itinerary - Flight phase			Airborne phases only.
>			Itinerary - Occ. on ground		No	Airborne phases only.



Controlled flight into or toward terrain

CFIT

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
			Landing			If applicable, fill in respective fields
			Approach			If applicable, fill in respective fields
>			Person at controls			
>		Aircraft recordings				Fill in, if applicable
		Aircraft meteo				
			Visibility/Visibility restrictions			Fill in appropriate fields
		CFIT				
>			Altimeters			Fill in respective fields
>			Charts			Fill in respective fields
>			Call outs			Fill in respective fields
>			GPWS equipment			Fill in respective fields
>			GPWS/TAWS warning			Fill in respective fields ↕ with Events
		Wreckage/impact				
>			Wreckage position			Fill in appropriate values if applicable
			Ground impact			Fill in appropriate values if applicable
			Terrain at wreckage			Fill in appropriate values if applicable
			Ground impact			Fill in appropriate values if applicable
		Flight Crew				
			Member			Fill in appropriate values if applicable

COLLISION WITH OBSTACLE(S) DURING TAKE-OFF AND LANDING

CTOL

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
>	Classification					
		Occurrence category			CTOL	↕ not to be used together with CFIT, LOC-I, or SCF-PP
	Aircraft					
>		Events				
			Events			
				Event Type	Aircraft operation general - Aircraft collision obstacle - Collision aircraft-object-ground - ...	Link the appropriate value to the aircraft
>				Phase	Take-off	Whilst airborne
					Landing	Whilst airborne
		Wreckage/impact				If applicable, fill in appropriate fields



EVAC						Evacuation
'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
>	Injury totals					Fill in, if applicable.
	Aircraft					
		Aircraft Operation				
>			Operation type		Commercial Air Transport - Passenger	According to category description
>		Events				
			Events	Event Type	Consequential events - Evacuation	Make sure, that there are indicated the precursors for evacuation
>			Phase			Phases when Aircraft is on ground only.
		Injuries				
>			Injuries			Fill in applicable fields.
			Injury types			Fill in applicable fields.
			Incapacitation			Fill in applicable fields.
		Survival				If applicable, indicate appropriate values for the Survival
>			Evacuation			Fill in
		Ditch				Fill in appropriate fields in case of ditching – when evacuation is carried out on water
		Wreckage/impact				In case of wreckage, fill in appropriate values
		Flight Crew				Indicate the information regarding the flight crew ¹¹
		Other Personnel				Indicate the information regarding the other personnel

EXTERNAL LOAD RELATED OCCURRENCES						
EXTL						
'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
>	Classification					
		Occurrence category			EXTL	↕ whether RAMP should be added

¹¹ Add more crewmembers by RIGHT-CLICKING on the Flight crew section in occ tree for flight crewmember and other personnel section for others (e.g. Cabin crew).



EXTERNAL LOAD RELATED OCCURRENCES

EXTL

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
>	Aircraft					
		Events				
			Events			
				Event Type	Aircraft operation general - External load operations	If applicable, link the appropriate value to aircraft
					Aircraft operation general - Injuries to persons - Injuries hoist/sling operations	If applicable, link the appropriate value to aircraft ↕ with <i>Injury totals, Injury level, Occurrence class</i>
					Aircraft operation general - Injuries to persons - Injuries-propeller/jet blast/downwash	If applicable, link the appropriate value to aircraft ↕ with <i>Injury totals, Injury level, Occurrence class</i>
					Consequential events - Sling load dropped	If applicable, link the appropriate value to aircraft
	Aerodrome					
		Aerodrome identification				
			Aerodrome type			If applicable, fill in applicable values
		Helicopter landing area description				If applicable, fill in applicable values

Fire/smoke (non-impact)

F-NI

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
>	Aircraft					
>		Events				
			Events	Event Type	Aircraft/system/component - Non-component specific events - Explosions / fire/ fumes / smoke	Link appropriate values to the aircraft. Make sure that the reason for fire is indicated, if known
		Fire				
>			Fire start			Fill in appropriate fields
>			Fire warning system aircraft			Fill in appropriate fields
>			Crew smoke protection			Fill in appropriate fields
>			Fire suppression system aircraft			Fill in appropriate fields
			Aerodrome Rescue Fire Service			If occurred at Aerodrome, fill in appropriate fields
>			Dangerous	Dangerous goods		If applicable



F-NI **Fire/smoke (non-impact)**

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
			goods	involved		
		Survival				If applicable, fill in appropriate fields

F-POST **Fire/smoke (post-impact)**

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Aircraft					
>		Events				
			Events	Event Type	Aircraft/system/component Non-component specific events - Explosions / fire/ fumes / smoke	Link appropriate values. Make sure that the reason for fire was an impact related event before
>				Phase	Post-impact	Post impact only. Make sure that event related to fire is assigned with Post-impact phase of flight
		History of flight				
>			Itinerary - Flight phase		Post-impact	If applicable
		Fire				Fill in appropriate fields
>			Fire start			Fill in appropriate fields
>			Crew smoke protection			Fill in appropriate fields
>			Fire suppression system aircraft			Fill in appropriate fields
>			Aerodrome Rescue Fire Service			If occurred at Aerodrome, fill in appropriate fields
		Survival				If applicable, fill in appropriate fields ⚡ with <i>Occurrence class</i>

FUEL **Fuel related**

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
>	Weather					Fill in appropriate fields indicating the existing weather conditions
	Aircraft					



Fuel related						
FUEL						
'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
		Fuel				
>			Fuel type used			
>			Recommended fuel type			
>			Fuel volume on board			
>			Fuel mass on board			If applicable
		Events				
			Events	Event Type	Aircraft/system/component - 2800 Fuel system - 2801 Fuel leak	If applicable, link the respective event to Aircraft
					Aircraft/system/component - 7200 Turbine engine - 7201 Turbine engine – generally - Turbine engine - fuel starvation	If applicable, link the respective event to Aircraft
					Aircraft/system/component - 7300 Engine fuel system	Link if applicable and add <i>SCF-NP</i> occurrence category. ↕ Occurrence category (<i>SCF-NP</i>)
					Aircraft/system/component - 8500 Reciprocating engine - 8501 Reciprocating engine general - Reciprocating engine - fuel starvation	If applicable, link the respective event to Aircraft
					Aircraft/system/component - 8500 Reciprocating engine - 8501 Reciprocating engine general - Reciprocating engine – carburetor icing	If applicable, link the respective event to Aircraft
		History of flight				
			Itinerary - Duration of flight			If applicable
		Aircraft meteo				Fill in appropriate fields indicating the existing weather conditions
	Aerodrome					
		Events				
			Events	Event Type	Aerodrome & ground aids - Ground handling services – Servicing - Fuelling	Link if applicable and add <i>ADRM</i> occurrence category ↕ occurrence category – <i>ADRM</i>



Ground Collision

GCOL

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Weather					
		General weather conditions				
>			Visibility			Provide the value for visibility
>			Light conditions			
		Precipitation and other weather phenomena				If applicable
	Aircraft					
>		Events				
			Events	Event Type	Aircraft operation general - Aircraft collision obstacle - Aircraft collision - moving aircraft - Aircraft collision - both aircraft on ground	If applicable. Make sure that the phase of flight is taxi to/from runway.
					Aircraft operation general - Aircraft collision obstacle - Collision aircraft-object-ground	Link the appropriate event value to the Aircraft. Make sure that the phase of flight is taxi to/from runway.
					Aircraft operation general - Aircraft collision obstacle - Aircraft - object/ground separation - Near collision -object on the ground	Link the appropriate event value to the Aircraft. Make sure that the phase of flight is taxi to/from runway.
>				Phase	taxi	
		History of flight				
>			Itinerary - Flight phase		Taxi	If applicable
>			Itinerary - Occ. on ground		Yes	
		Aircraft meteo				
>			Visibility/Visibility restrictions			If applicable, fill in appropriate fields
		Survival				If applicable, fill in appropriate fields
		Wreckage/impact				If applicable, fill in appropriate fields

GLIDER TOWING RELATED EVENTS

GTOW

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
>	Aircraft					
>		Events				



GLIDER TOWING RELATED EVENTS

GTOW						
'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
			Events			
				Event Type	Aircraft operation general - Sailplane/gliders specific events - Aircraft towing	Link the most appropriate value to the aircraft
					Aircraft operation general - Aeroplane - deviations from flight path - ...	For airborne towing only. Link the most appropriate value to the aircraft
					Aircraft operation general - Weather encounters - Wake turbulence	For airborne towing ops only. Link the most appropriate value to the aircraft
>				Phase		Airborne phases only

Icing

ICE						
'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Weather					
>		General weather conditions				
		Clouds				
>			Height of cloud base			
>			Cloud amount			
		Temperature				
>			Air temperature			Relevant value
>			Dew point			Relevant value
>		Precipitation and other weather phenomena				Relevant values
>		Weather reports				
	Aircraft					
>		Events				
			Events	Event Type	Aircraft operation general - Weather encounters - Icing conditions	Link respective events with Aircraft
					Aircraft operation general - Object ingestion-engine - Ice	If applicable, link respective events with Aircraft
					Aircraft operation general - Material off aircraft - Ice	If applicable, link respective events with Aircraft



ICE **Icing**

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
					Aircraft/system/component - 3000 Ice/rain protection system	If applicable, link respective events with Aircraft and ⚡ add SCF-NP occurrence category
		Aircraft meteo				Fill in appropriate fields
>			Icing			
		Survival				If applicable fill in appropriate fields
		Ditch				If applicable fill in appropriate fields
		Wreckage/impact				If applicable fill in appropriate fields
	Aerodrome					
		Events				
			Events	Event Type	Aerodrome & ground aids - Aerodrome services / operations - Snow/ice removal	If applicable, link respective events with Aerodrome and ⚡ add ADRM occurrence category
					Aerodrome & ground aids - Ground handling services - De-icing	If applicable, link respective events with Aerodrome and ⚡ add ADRM occurrence category

LALT **Low altitude operations**

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Weather					
		General weather conditions				
>			Light conditions			
>			Visibility			
		Clouds				
			Height of cloud base			If applicable
			Cloud amount			If applicable



Low altitude operations

LALT

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
		Precipitation and other weather phenomena				If applicable
	Aircraft					
		Events				
			Events	Event Type	Aircraft operation general - Aircraft handling - Altitude related - Too close to ground	Link the appropriate events to aircraft
					Aircraft operation general - Aircraft collision obstacle - Collision aircraft-object-ground	If applicable, link the appropriate events to aircraft, e.g. Collision aircraft-cable/wire/power line
					Aircraft operation general - Aircraft - object/ground separation	If applicable, link the appropriate events to aircraft
		Aircraft meteo				
>			Visibility/Visibility restrictions			If applicable, fill in appropriate fields
		Fire				If applicable fill in the necessary information
		Survival				If applicable fill in the necessary information
		Wreckage/impact				If applicable fill in the necessary information

Loss of control - ground

LOC-G

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Weather					
>		General weather conditions				Fill in the appropriate fields
>		Temperature				Fill in the appropriate fields
>		Precipitation and other weather phenomena				Fill in the appropriate fields
		Weather reports				Fill in the appropriate fields
	Aircraft					
>		Events				



LOC-G **Loss of control - ground**

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
			Events	Event Type	Aircraft/system/component	If applicable, link the appropriate event value, which rendered to LOC-G and ⚡ SCF-PP or SCF-NP as appropriate
					Aircraft operation general ¹²	If applicable, select the appropriate event value, which rendered to LOC-G.
					Warning system triggered - Configuration warning	If applicable, select the appropriate event value, which rendered to LOC-G.
					Consequential events - Uncommanded movement of the aircraft	If applicable, select the appropriate event value, which rendered to LOC-G.
>				Phase	taxi	If applicable. Phases when Aircraft is on ground only.
					Take-off run	If applicable. Phases when Aircraft is on ground only.
					Landing roll	If applicable. Phases when Aircraft is on ground only.
		Aircraft recordings				If applicable
		Aircraft meteo				
>			Visibility/Visibility restrictions			Fill in appropriate fields
>			Wind			If applicable, fill in appropriate fields
>			Wind at take-off & landing			If applicable, during take-off roll and landing roll

¹² See descriptive factors for more detailed coding



Loss of control - ground

LOC-G

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Aerodrome					
		Runway				
>			Runway surface - Contamination			If applicable, during take-off roll and landing roll
>			Runway surface - Braking action			If applicable, during take-off roll and landing roll

Loss of control - inflight

LOC-I

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Weather					
		General weather conditions				Fill in applicable fields
		Clouds				Fill in applicable fields
		Temperature				Fill in applicable fields
		Precipitation and other weather phenomena				Fill in applicable fields
	Aircraft					
>		Events				If applicable link the appropriate event to the Aircraft.
			Events	Event Type	Aircraft operation general - Aircraft handling	
					Warning system triggered - Stall warning triggered	
					Aircraft operation general - Aeroplane - deviations from flight path - Aeroplane - mush/stall	
					Aircraft operation general - Aeroplane - deviations from flight path	
					Aircraft operation general - Helicopter flight path deviation	
					Aircraft/system/component - 2700 Aircraft flight control	
					Aircraft operation general - Weather encounters - Loss of visual reference	
					Aircraft operation general	
					Aircraft operation general - Cargo related	E.g. the movement of



Loss of control - inflight

LOC-I

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
						untied cargo.
					Aircraft operation general - External load operations	
					Aircraft operation general - Aircraft collision obstacle	E.g. Uncontrolled descent.
					Aircraft/system/component	↕ add SCF-NP or SCF-PP occurrence category as appropriate.
>				Phase		Airborne phases of flight only.
>		Aircraft recordings				Fill in appropriate fields
>		Aircraft meteo				Fill in appropriate fields

LOSS OF LIFTING CONDITIONS EN-ROUTE

LOLI

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Classification					
		Occurrence category			LOLI	↕ whether LALT is not more appropriate – intentionally flying in a low height above terrain
>	Aircraft					
		Aircraft description				
			Aircraft category			Aircraft that rely on static lift to maintain or increase flight altitude only: e.g. Dirigible, Balloon, Glider
>		Events				
			Events			
				Event Type	Aircraft operation general - Sailplane/glider specific events - Missing lift	Link the most appropriate value to the aircraft

AIRPROX/near miss/midair collision

MAC

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	ATM relation					



AIRPROX/near miss/midair collision

MAC

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
>		ATM contribution				Indicate whether ATM contributed to the occurrence.
	Aircraft ¹³					
>		Events				If applicable, link the event to the Aircraft involved.
			Events	Event Type	Aircraft operation general - Aircraft collision obstacle - Aircraft collision - moving aircraft - Aircraft collision- both aircraft aloft	
					Aircraft operation general - Aircraft - object/ground separation - Near collisions - loss of separation - Loss of separation - aircraft- both airborne	
					Aircraft operation general - Aircraft - object/ground separation - Near collisions - loss of separation - Separation minima infringement ¹⁴	
					Aircraft operation general - Warning system triggered - ACAS/TCAS triggered	↕ with ATM contribution and Effect on ATM service ↕ with Separation - ACAS
>				Phase		Airborne phases of flight for both aircraft only.
>		Aircraft recordings				Fill in appropriate fields for both aircraft

¹³ In order to add one more aircraft to the Occurrence tree, right-click the Occurrence topic and select "Aircraft" from menu. In order to add subsections for newly added "Aircraft", right-click the "Aircraft" topic in the Occurrence tree and select the desired subsection from menu.

¹⁴ Use Separation minima infringement when there is a standard separation defined (e.g. IFR/IFR in controlled airspace) and "Loss of separation -aircraft- both airborne" in the other cases (e.g. IFR/VFR encounters)



AIRPROX/near miss/midair collision

MAC

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
>	Separation					Fill in appropriate fields for both involved aircraft.
		Separation				
>			RA Type			If applicable, indicate for each Aircraft involved.
	Airspace					
		Airspace				
			Airspace class			If applicable
			Airspace name			If applicable
			Airspace type			If applicable
			FIR/UIR name			If applicable
	ATS Unit					
>		Events				
			Events	Event Type	Air Navigation Services - Operational issues - Separation provision	If applicable, link the event to the ATS involved. ↕ with <i>Occurrence category</i> whether it has <i>ATM</i> value

Ground Handling

RAMP

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
>	Classification					
		Occurrence category			RAMP	↕ whether <i>EXTL</i> should be added
	Weather					
>		General weather conditions				Fill in appropriate fields.
		Temperature				Fill in appropriate fields.
>		Precipitation and other weather phenomena				Fill in appropriate fields.
	Aircraft					
>		Events				If applicable, link the event to Aircraft.
			Events	Event Type	Aircraft operation general - Damage to aircraft - Struck/damaged by equipment on ground	
					Aircraft operation general - Damage to aircraft - Propeller/rotor/jet blast	



Ground Handling

RAMP

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
					Aircraft operation general - Injuries to persons - Injuries-propeller/jet blast/downwash	
>				Phase	Standing	
>					Taxi - Push-back/tow	
>					Taxi - Powerback	
		History of flight	Itinerary - Flight phase		Standing	
					Taxi	Pushback/powerback/towing only
	Aerodrome					
		Aerodrome identification				Fill in the respective fields.
>			Location indicator			
>		Events				If applicable, link the event to Aerodrome
			Events	Event Type	Aerodrome & ground aids - Aerodrome services / operations - Vehicle/equipment operations	↕ whether occurrence category has <i>ADRM</i> value
					Aerodrome & ground aids - Ground handling services	↕ whether occurrence category has <i>ADRM</i> value
					Aerodrome & ground aids - Cargo related	↕ whether occurrence category has <i>ADRM</i> value

Runway excursion

RE

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Weather					
		General weather conditions				
>			Visibility			Fill in appropriate field.
		Precipitation and other weather phenomena				If applicable, fill in respective fields.
	Aircraft					
>		Events				If applicable, link the respective events to aircraft.
			Events	Event Type	Aircraft operation general - Aircraft off movement	



RE **Runway excursion**

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
					area - Runway side excursion	
					Aircraft operation general - Aircraft off movement area - Aircraft overrun	
					Aircraft operation general - Aircraft handling - Swerve-take-off/landing	
					Aircraft operation general - Weather encounters - Crosswind	↕ with occurrence category
					Aircraft operation general - Warning system triggered - Configuration warning	
>				Phase	Take-off	If applicable.
>					Landing	If applicable.
		Aircraft meteo				
			Wind at take-off & landing - Crosswind comp.			
		Aircraft meteo				
>			Visibility/Visibility restrictions			If applicable, fill in appropriate fields
		Wreckage/impact				
>			Wreckage position			Fill in appropriate fields
>			Runway excursion	Aircraft exited runway at		Select the value
>				Threshold to a/c exit		Fill in, if known
	Aerodrome					
		Aerodrome identification				
>			Location indicator			Fill in the field.
		Runway				
>			Runway description	Runway identifier		Fill in the field.
>				Runway width		Fill in the field.
>				Runway length		Fill in the field.
>			Runway surface	Braking action		Fill in the field.
>				Contamination		Fill in the field.



Runway incursion - animal

RI-A

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Weather					
		General weather conditions				
>			Visibility			Fill in appropriate field.
		Precipitation and other weather phenomena				If applicable, fill in respective fields.
	Aircraft					
>		Events				Link the respective event to the Aircraft.
			Events	Event Type	Aircraft operation general - Incursions generally - Runway incursions - By an animal	If the runway incursion is done by donkey or horse with the person (rider) riding on it, code it as <i>RI-VAP</i> – runway incursion by person.
					Aircraft operation general - Aircraft collision obstacle - Collision aircraft-object-ground - Collision aircraft-animal	
					Aircraft operation general - Aircraft - object/ground separation - Near collision -object on the ground - Near collision - other ground object	
					Consequential events - Evasive manoeuvre	⚡ whether <i>AMAN</i> occurrence category value is added
>				Phase	Take-off	If applicable.
>					Landing	If applicable.
		Aircraft meteo				
>			Visibility/Visibility restrictions			If applicable, fill in appropriate fields
	Aerodrome					
		Aerodrome identification				
>			Location indicator			Fill in the field.
>		Events				
			Event Type	Aerodrome & ground aids - Aerodrome services / operations - Wildlife control		If applicable, ⚡ add <i>ADRM</i> occurrence category and link the respective event to the Aerodrome.



RI-A Runway incursion - animal

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
		Runway				
>			Runway description - Runway identifier			Fill in the field.
>			Runway surface - Braking action			Fill in the field.
>			Runway surface - Contamination			Fill in the field.

RI-VAP Runway incursion - vehicle, a/c or person

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Weather					
		General weather conditions				
>			Visibility			Fill in appropriate field.
		Precipitation and other weather phenomena				If applicable, fill in respective fields.
	Aircraft					
>		Events				If applicable, link the respective events to the Aircraft.
			Events	Event Type	Aircraft operation general - Incursions generally - Runway incursions - By an aircraft	
					Aircraft operation general - Incursions generally - Runway incursions - By a vehicle/equipment	
					Aircraft operation general - Incursions generally - Runway incursions - By a person	
					Aircraft operation general - Aircraft collision obstacle - Collision aircraft-object-ground - Collision aircraft-person	



Runway incursion - vehicle, a/c or person

RI-VAP

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
					Aircraft operation general - Aircraft collision obstacle - Collision aircraft-object-ground - Collision aircraft-vehicle	
					Aircraft operation general - Aircraft collision obstacle - Aircraft collision - moving aircraft - Aircraft collision - both aircraft on ground	
					Aircraft operation general - Aircraft - object/ground separation - Near collision -object on the ground - Near collision-with person	
					Aircraft operation general - Aircraft - object/ground separation - Near collision -object on the ground - Near collision - vehicle	
					Aircraft operation general - Aircraft - object/ground separation - Near collisions - loss of separation - Loss of separation with aircraft - both on ground	
					Consequential events - Evasive manoeuvre	↕ with AMAN occurrence category, if applicable
>				Phase	Take-off	If applicable.
>					Landing	If applicable.
		Aircraft meteo				
>			Visibility/Visibility restrictions			If applicable, fill in appropriate fields
	Aerodrome					
		Aerodrome identification				
>			Location indicator			Fill in the field.
>		Events				



Runway incursion - vehicle, a/c or person

RI-VAP

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
			Events	Event Type	Aerodrome & ground aids - Aerodrome services / operations	If applicable, ↕ whether occurrence category has <i>ADRM</i> , select the most appropriate value and link it to Aerodrome.
		Runway				
>			Runway description - Runway identifier			Fill in the field.
>			Runway surface - Braking action			Fill in the field.
>			Runway surface - Contamination			Fill in the field.

System/component failure or malfunction [non-powerplant]

SCF-NP

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Aircraft					
>		Events				
			Events	Event Type	Aircraft/system/component	Select and link the respective events (excluding power plant issues) to Aircraft
					Consequential events	If applicable, select and link the respective events to Aircraft
		Failures				
			Part failures	Part number		If applicable, fill in appropriate field.
				Part name		If applicable, fill in appropriate field.

Powerplant failure or malfunction

SCF-PP

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Aircraft					
>		Events				Select and link the respective power plant/rotor/propeller related events to Aircraft
			Events	Event Type	Aircraft/system/component	Link the appropriate Powerplant failure or malfunction related events
					Consequential events	↕ with occurrence categories
		Failures				
>			Engine information	Engine model		If applicable, fill in appropriate field.



Powerplant failure or malfunction

SCF-PP

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
>				Time since overhaul		If applicable, fill in appropriate field.
>				Engine cycles		If applicable, fill in appropriate field.
>			Propeller information	Make of propeller		If applicable, fill in appropriate field.
>				Propeller model		If applicable, fill in appropriate field.

Security related

SEC

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Aircraft					
>		Events				
			Events	Event Type	Aircraft operation general - Security generally	Select and link the respective events to Aircraft
	Aerodrome					
		Aerodrome identification				
>			Location indicator			If applicable, fill in the field.
>		Events				
			Events	Event Type	Aerodrome & ground aids - Aerodrome security - Other aerodrome security related event	If applicable, ⚡ whether occurrence category has <i>ADRM</i> , select and link the respective event to Aerodrome
		Aircraft recordings	Cockpit voice recorder			If applicable, fill in appropriate fields

Turbulence encounter

TURB

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Weather					
>		General weather conditions				Fill in appropriate fields.
>		Clouds				Fill in appropriate fields.
>		Temperature				Fill in appropriate fields.
>		Precipitation and other weather phenomena				Fill in appropriate fields.
>		Weather reports				Fill in appropriate fields.
	Aircraft					
>		Events				If applicable link the events to Aircraft.



Turbulence encounter

TURB

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
			Events	Event Type	Aircraft operation general - Weather encounters - Wake turbulence	
					Aircraft operation general - Weather encounters - Turbulence	
					Aircraft operation general - Damage to aircraft - Turbulence damage	
					Aircraft operation general - Injuries to persons - Injuries from turbulence	
		Aircraft meteo				
>			Turbulence - Turbulence type			Fill in the field.
>			Turbulence - Turbulence intensity			Fill in the field.

UNINTENDED FLIGHT IN IMC

UIMC

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
>	Classification					
		Occurrence category			UIMC	↕ whether it is followed by <i>CFIT</i> , <i>LOC-1</i> or <i>LALT</i> occurrence categories
	Weather					
		General weather conditions				
>			Weather conditions			
>			Weather relevant		YES	
>			Visibility			
		Clouds				
			Height of cloud base			If known
			Cloud amount			If known
		Precipitation and other weather phenomena				Fill in appropriate attributes
		Weather reports				Fill in appropriate attributes
>	Aircraft					
		Events				Link appropriate events to the aircraft
			Events			



UNINTENDED FLIGHT IN IMC

UIMC

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
				Event Type	Aircraft operation general - Weather encounters - IMC	
					Aircraft operation general - Weather encounters - Loss of visual reference	
		Aircraft meteo				Fill in appropriate fields
>			Visibility/Visibility restrictions			
		Flight Crew				
			Member			Fill in appropriate fields
>				Flight crew licences - Instrument rating	No instrument rating <i>or</i> No, rating expired	Fill in appropriate

DID YOU KNOW: You can add additional crew members by right-clicking on *Flight crew* and selecting *'Member'*

Undershoot/overshoot

USOS

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Weather					
		General weather conditions				
>			Visibility			Fill in the field.
>			Light conditions			Fill in the field.
>			Weather conditions			Fill in the field.
>		Precipitation and other weather phenomena				Fill in respective fields.
	Aircraft					
>		Events				
			Events	Event Type	Aircraft operation general - Aircraft handling - Undershoot	Link the respective event to the Aircraft. Consider that there something could happen before (event).



Undershoot/overshoot

USOS

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
					Aircraft operation general - Aircraft handling – Beside landing surface	Link the respective event to the Aircraft. Consider that there something could happen before (event).
>				Phase	Landing	Landing phase only.
		Aircraft meteo				
>			Visibility/Visibility restrictions - Visibility restrictions			If applicable, fill in the field.

Windshear or thunderstorm

WSTRW

'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Weather					
>		General weather conditions				Fill in appropriate fields.
>		Clouds				Fill in appropriate fields.
>		Temperature				Fill in appropriate fields.
		Precipitation and other weather phenomena				
>			Precipitation type			Fill in appropriate field.
>			Precipitation intensity			Fill in appropriate field.
>			Characteristics			Fill in appropriate field.
>		Weather reports				Fill in appropriate fields.
	Aircraft					
>		Events				If applicable link the respective events to Aircraft. ↕ with <i>Weather relevant</i>
			Events	Event Type	Aircraft operation general - Weather encounters - Windshear	
					Aircraft operation general - Weather encounters - Hail encounter	



Windshear or thunderstorm

WSTRW

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
					Aircraft operation general - Weather encounters - Lightning strike	
					Aircraft operation general - Damage to aircraft - Lightning strike damage	
					Aircraft operation general - Damage to aircraft - Hail damage	
		Aircraft meteo				
>			Weather briefing/forecast - Pilot aware-sig weather			Fill in the field.
>			Wind - Wind gusts			If applicable, fill in the field.
>			Wind - Maximum gust			If applicable, fill in the field.
>			Wind at take-off & landing			If applicable, fill in the fields.

Other

OTHR¹⁵

'>	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
	Aircraft					
>		Events				
			Events	Event Type (to capture the type of incidents mandatory to be reported through the Directive 2003/42 and ESARR 2 and to be included in the ATM Report – AST - to be sent to EUROCONTROL)	Aircraft operation general – Flight Crew/ANS - Deviation-ATM Regulation	To code the Aircraft deviation from applicable ATM regulation.
					Aircraft operation general – Flight Crew/ANS - Deviation/ATC clearance (any subcategory)	To code Aircraft deviation from ATC clearance

¹⁵ These examples are not complete.



OTHR ¹⁵						Other
'>'	1 ST LEVEL	2 ND LEVEL	3 RD LEVEL	4 TH LEVEL	POSSIBLE VALUES	REMARKS
					Aircraft operation general – Flight Crew/ANS - Deviation/ATC clearance - Deviation-flight level	To code Altitude Deviations (or Level Bust as they are more commonly known)
					Aircraft operation general – Flight Crew/ANS - Deviation/ATC clearance (any subcategory)	To code Aircraft deviation from ATC clearance
					Aircraft operation general – Flight Crew/ANS - Flight crew deviation	To code Aircraft deviations from applicable published ATM procedures
					Aircraft operation general – Flight Crew/ANS – Airspace Infringement	To code Unauthorised penetration of airspace/ Airspace infringements



3 DATA QUALITY CHECK

The description of the new tool will be added.