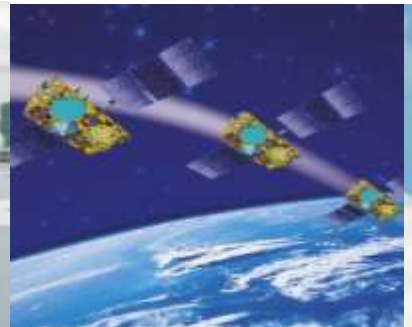
AeroSpace and Defence Industries Association of Europe

ASD Feedback on Occurrence Reporting Regulation EC 376/2014 implementation

IORS meeting – 22nd June 2017

P. CHASSARD




BACKGROUND

- 376/2014 Law was issued on April 2014
- In December 2014, ASD presented its “views”
- In June 2016 ASD presented its feed back on implementation since 2015, November.
- This presentation updates the ASD feedback (2017).
- Thanks to ASD members for their contributions

POSITIVE OUTCOMES

- ASD welcomes NPA 2016-19 and AMC 20-8 clarification for reporting criteria:

GM 21.A.3A(b) Occurrence reporting

For occurrence reporting, refer to the latest edition of AMC 20-8 (see AMC-20 document) and to the list of reportable occurrences provided in **Regulation (EU) 2015/1018**.

POSITIVE OUTCOMES

- In 2016, ASD complained on difficulty to lead investigations

DIFFICULTIES ENCOUNTERED

Investigation

- Law address the reporting (collection of events) but not the support of occurrence analysis (Investigate).
- No mandatory commitment from reporter to support investigation:
  - To provide removed parts instead of scrapping it
  - Recorders data files, erased during subsequent flights;
  - Damage description; Cracks length; orientation
  - Pictures
  - Maintenance history….
- More and more "Lack of Data" occurrences where closure is performed in only on suspected scenario.

POSITIVE OUTCOMES

- In 2016, ASD welcomed the support provided.

> **….this AMC clarifies among other items that any organization reporting to the organization responsible for the design is expected to actively support any investigations that may be initiated, to provide timely response to information requests, and to make available affected components for the purpose of the investigation…….**

- Less “Lack of Data” issues would result from this support thanks to the collaboration of all reporting organisations.

DIFFICULTIES ENCOUNTERED
Remaining issues

- Final investigation target
- Mandatory fields - Taxonomy
- Impacts on Tools
- Input data – Occurrences writers
- Occurrences “out of scope” (PMA/STC/others…)
- Interface with EASA – Mel saturation

DIFFICULTIES ENCOUNTERED

Final investigation - Target

- As per Article 13: “The organisation certified or approved by the Agency shall transmit to the Agency the final results of the analysis, where required, as soon as they are available and, in principle, no later than three months from the date of notification of the occurrence. “

- 90 days for final analysis remains considered not possible (Non sense) in the real life.

DIFFICULTIES ENCOUNTERED

IORS Spec - Mandatory fields

In Service Occurrences (ISO)

- Reports performed by Organisation responsible for the Design (ORD) is directly linked to Organisation Reporting (OR) feedback accuracy.

- Occurrences are reported by external bodies and for the majority outside European regulation scope.
  - Completeness of the reports not in line with 376/2014.
  - Some information required for mandatory fields are generally not included.

ORD can only “repeat” what is reported to them, with low possibility to validate data or collect additional information within the timeframe requested for report.

DIFFICULTIES ENCOUNTERED

IORS Spec - Mandatory fields

In Service Occurrences (ISO) – INITIAL REPORTING

- Performed by ORD, as a double reporting for OR in Europe.
- Performed by ORD, as relay (incomplete) for foreign (non EU) OR.

- **REPORT** the Potential "Unsafe Condition" considering the **"most worst probable case".**
  - Mandatory fields are linked to the event itself;
  - Reporting based on consequences and not on the root cause (ATA);

- ASD comments: Mandatory fields reported from ORD are incomplete (non EU OR), not adapted (MWPC), or useless as already reported (EU OR).

DIFFICULTIES ENCOUNTERED

IORS Spec - Mandatory fields

In Service Occurrences (ISO) – RISK ASSESSEMENT

- **ASSESS** potential "Unsafe Condition" considering not the event itself but the **"most worst probable case".**

- Mandatory fields:
  - Are not relevant to describe the "most worst probable case", as it focus on the event itself.
  - For many of them, not helping in linking Occurrence reported by OR to RA produced by ORD.
  - Are not reliable as provided by Design office Engineers, with different interpretations of Values lists as shown in next slides.
    - Repetitive use of "Unknown" / blank status

DIFFICULTIES ENCOUNTERED

IORS Spec – **Highest Damage**

In Service Occurrences (ISO)

- Generally the one found in the first occurrence, when reported, is not the worst/highest damage.

- Classification as VL: “Destroyed, Minor, None, Substantial, Unknown”

  Difficulties to classify:

  - “Minor” cracks on Primary Structural Element or
  - “Substantial” damage on secondary structure with no risk of detachment.

- ASD interested in the way those fields are used.

DIFFICULTIES ENCOUNTERED

IORS Spec - **Injuries**

In Service Occurrences (ISO)

- Detailed very often not provided: “Some” injuries… without information on the level of injuries.
- Number of injuries, when reported, on a specific incident may be due to (lack of) Chance, specific environment or other aside effects…
- Injuries may not be linked to design issue (Falling on corridor…)
- ASD interested in the way those fields are used.

DIFFICULTIES ENCOUNTERED

IORS Spec – **Occurrence class**.

In Service Occurrences (ISO)

- Occurrence class: as per VL: Accident, Incident, Major incident, Not Determined, Observation, Occurrence with no flight Intended, Occurrence without Safety Effect, Serious Incident, Significant Incident.

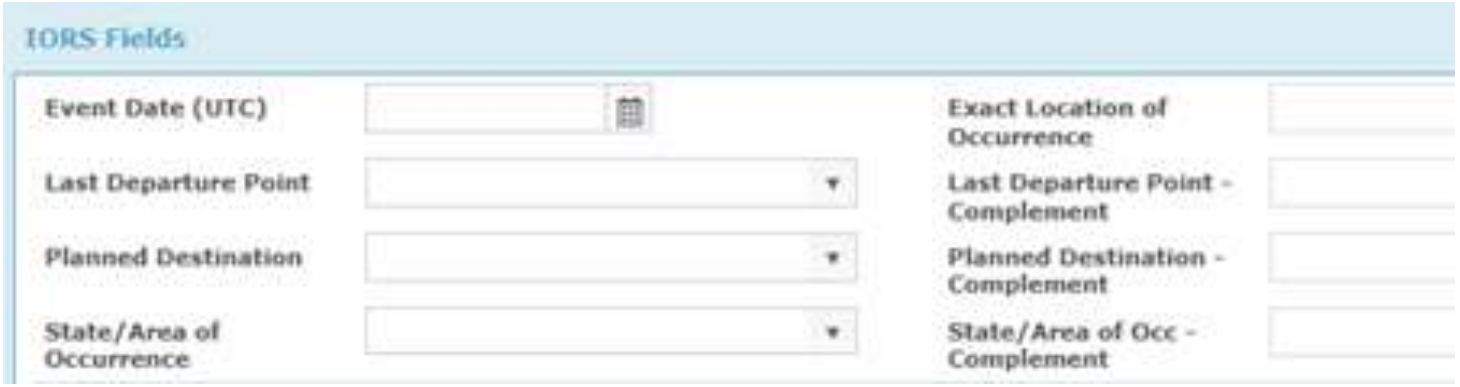
- Terms definition not part of the culture of the Reporters, mainly Customer Service Engineers for ORD.

- ASD interested in the way those fields are used.

DIFFICULTIES ENCOUNTERED

IORS Spec – **LOCATIONS**.

In Service Occurrences (ISO)



- Too detailed, and often not known by ORD (Last departure point, Planned destination and associated complements….).

- ASD interested in the way those fields are used.

DIFFICULTIES ENCOUNTERED

IORS Spec – **Other**

In Service Occurrences (ISO)

- ORD is not able to formally report:
  - Call sign
  - State of Registry that could be automatized directly in IORS with registration code as not known and not useful for ORD investigation.

- DATA not included in VL (ie: New A/C types…)
  - Proposed: To use additional free text (Manual input) instead than "unknown" option **automatized** when not in huge VL (reviewed each 3 years).
  - Additional repetitive workload

DIFFICULTIES ENCOUNTERED

IORS Spec - Mandatory fields

Occurrences from Engineering or Manufacturing

- Some Mandatory fields considered non relevant:
  - State/area of occurrence => ORD Country
  - Location name => Design office or FAL
  - Planned destination => NO FLIGHT
  - Last departure point => NO FLIGHT
  - Flight phase => NO FLIGHT
  - A/C Type – models - All => Not defined, potentially all

- Blank or Unknown are acceptable values in particular for MANO/ENGO that would not lead to systematic comments on reporting.

DIFFICULTIES ENCOUNTERED

IORS Spec – CONCLUSION

- ASD noticed number of comments on reporting quality, requesting explanations that put in question the first agreement on BEST EFFORT report.
- ASD finds the global Taxonomy as proposed
  - Too complex; not adapted to the culture of Reporters defined as “every person” in ORD, who cannot know the different precise definitions given by ICAO/ECCAIRS (VL).
  - **Time and Resources definitively** high consumers, (recurrent effort)
- ASD questioned its efficiency and require to review the mandatory lists or at least the ORD reporting method.

DIFFICULTIES ENCOUNTERED

IORS Spec – CONCLUSION

- ASD recognizes nevertheless the relevance of few fields in particular to allow Occurrence management at IORS level, and association of the Risk Assessment to Occurrence Initial Report(s).

- As example of agreed fields:
  - Location (simplified)
  - Event Date
  - Title of event
  - …

DIFFICULTIES ENCOUNTERED TOOL

- Tools update
  - Significant development costs performed since 3 years (2014) despite the low impact presented at the beginning and would continue in the future.
  - Optimisation performed in the tools to reduce the number of manual inputs by used of internal organisation data bases and transfer tables.

    => Impact when new IORS spec will be issued.
  - Other developments to be discussed on “Desirable” fields, now requested.
  - Tool update will not be immediate.

DIFFICULTIES ENCOUNTERED
INPUT DATA

- Input data
  - Mandatory fields are eithers
    - Automatized, and tool update needed at each new SPEC (VL ?)
    - Remains to be manually recorded and induced recurrent workload
  - Input writers trainings, Large populations (Every people…)
  - Effort to recover “useless” information (From foreign OR)
  - Liability issue to report not validated data.
  - Recurrent costs and resources impacts

DIFFICULTIES ENCOUNTERED

GLOBAL FEEDBACK

- ASD therefore would highlight the cost impacts linked to IORS implementation due to:
  - Tool development and
  - Recurrent additional workload
- ASD considers some useless reporting for ORD and requests some simplification, as Taxonomy; alternative through Text mining tools, more adapted to Big Data, exists.
- ASD expects a significant reduction in recurrent efforts and Tool development as done today.

DIFFICULTIES ENCOUNTERED
ORD out of scope

- **Regulation prescribes reporters to report occurrences they are aware of.**

- Case of issue linked to STC for Design organisation.
  - Often discovered by chance (investigation result).
  - Initial information can be done on assumption only.
  - **No analysis can be** provided as not informed on STC design.

- Case of issue linked to wrong Maintenance.
- Case of issues linked to PMA
- Case of issues linked to operator design change

⇒ Way to inform **without a formal IORS** report as no Risk Assessment can be issued by ORD, only responsible of its ICA and Design. (Today separate mail)

DIFFICULTIES ENCOUNTERED
FUTURE IMPROVEMENT

- Reporting files are currently sent by mails and analysed by an automate on EASA side.

- Linked to reporting rate increase, new Multi-media technologies (movies, animation…), reporting files will become bigger and will reach the mail capacity limit (10Mo).

  This is also a limitation for reporting with attachments

Questions

- Clarification on how the data collected are used?
- How results are analysed?
  - Possibility to let Stakeholders to interpret or clarify the context.
- How results are shared?
- Concerns remain on Data Security on information provided ?

CONCLUSION

- Significant investments were and are done by ORD to cope with the new regulations and IORS specification.

- ASD proposes to review the main following points:
  - To simplify reporting for ORD (Taxonomy – Mandatory fields)
  - To propose a new platform for report.

CONCLUSION

- ASD appreciates the continuous and valuable exchanges and support from EASA to ease the implementation of the Law in the different ORD, common target being to improve Safety in the most efficient manner.