

## MINUTES OF MEETING

**Subject** SAB C.COM meeting (1/2022)  
**Date** 8 March 9:00-17:00  
**Location** Cologne+Teleconference (Webex)

Organised by Certification Directorate

### List of Participants

<b>Attendees</b>	C.COM members/alternates: François DUCLOS, Gilles GARROUSTE, Eric PARELON, Belinda SWAIN, Francesco PISANTI, Patrick SCHERRER, Xavier VERGEZ Other participants from EASA: Markus GOERNEMANN, Dominique ROLAND, Anne SENECHAL, Eric DUVIVIER, Julian HALL, Juan ANTON, Grégory LIEVRE, Rodrigo PRIEGO, Youri AUROQUE, Jean-Pierre ARNAUD, Rachel DAESCHLER, Stephen FOY, Nicolas CHEVILLARD, Eric SIVEL, Christopher HOLGATE-ROMANOV, Stéphanie ROSTREN, Carl GARVIE, Francesco CARIDEI, Patrick HADOU
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## AGENDA

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MoM prepared by	Xavier VERGEZ (C.COM Secretary)	Date 21/03/2022
MoM endorsed by	François DUCLOS (C.COM Chairman)	Date 26/04/2022

## 1. Opening and Welcome

The meeting was held both in person (in the EASA building in Cologne) and via Webex teleconference. Four C.COM industry members were present in person (François Duclos, Belinda Swain, Eric Parelton, Francesco Pisanti). The meeting started at 09:00am.

The Chair François Duclos welcomed the participants and underlined the new concerns to the Industry triggered by the war in Ukraine, including the effects of the EU sanctions against Russia.

In the perspective of their soon coming retirement from EASA, special thanks and wishes were addressed to Markus Goernemann and Dominique Roland. Markus will retire at the end of March and Dominique at the end of July.

Julian Hall will take the role of Markus Goernemann in the support of the C.COM meetings.

- Approval of the agenda:

The agenda was approved, with the addition of one topic at the request of the Industry: 'Aircraft distress tracking'.

- Approval of the minutes of last meeting:

The minutes were approved and distributed on 25 February.

- C.COM membership:

Leonardo H. had proposed early February 2022 a change of membership. After discussion with EASA and with the ASD, it has been decided that the current two representatives (Member and Alternate) are maintained. Leonardo H. wishes to improve their participation in the C.COM activities.

## 2. B737 MAX lessons learnt

*Presented by: EASA (Stephen Foy and Nicolas Chevillard), Industry (François Duclos)*

### EASA presentation:

EASA presented a status of the four EASA work packages (WP).

#### **WP.1: Functional Hazard Assessment (FHA)/ System Safety Analysis (SSA) processes and addressing Human Factors in Functional Hazard Assessments:**

Comprehensive work-plan developed that includes the publication of a Certification Memo (CM), internal training and checklists for EASA system experts, discussions with bilateral partners.

Exchanges between the EASA Team and the ASD SAHF have been established.

Draft CM pre-consultation with ASD SAHF group done in February 2022.

CM public consultation planned for March 2022. Final publication expected in June 2022.

The next deliverable will be the guidance for system experts - SFHA/SSA Review Checklist template. Internal draft is ready.

#### **WP.2: Better integration of Human Factors in CAW process.**

Improve methodologies, regulatory requirements and processes to improve capturing crew behaviours in CAW not consistent with IAW assumptions and identify corrective actions in design, procedures and/or training.

The WG has proposed an initial implementation plan paper being currently reviewed internally.

Informal talk initiated with Richard Eson in view of setting more cooperation to align EASA and industry activities on WP2 in coming months.

Next major milestone is to get the plan validated in April 2022 by the ESC to launch the Priority 1 actions (e.g.: Cert Memo on Part 21.A.3 to address human performance related unsafe conditions).

Industry believes that April may be premature.



EASA considers to add FC training expert representation in the WG.

### **WP.3: Application and Oversight of Development Assurance (DA) Process**

#### *Short term objectives:*

Generic CRI Aircraft MOD: expected closure 04/2022,

Generic CRI – Engine MOD: to be reviewed at next WG meeting in March, closure expected 06/2022

AMC 25.1309 update: EASA and ASD review performed. Processing of comments in progress. Ad-hoc meeting if necessary in March. Expected closure 03/2022.

AMC 27/29.1309 NPA review: Comments reviewed and agreed. NPA released. Update will occur according to the agreement.

#### *Medium & long term objectives:*

CM Applicability: Under drafting. Expected closure 09/2022

DOA: Internal DOA technical policy being drafted. Initial presentation of the scope to ASD. DOA performance/LOI concept for DA not yet started. Expected closure 09/2022

CAW: Investigation on available databases performed => Very limited useful information. Initial results presented to ASD => action taken regarding SMS activities in DOA – discuss pilot cases. Expected closure 2023/2024.

Other AMCs/Coordination with other Cert. Auth.: Start expected from Q3/2022. Expected closure 2023/2024.

### **WP.4: Change Product Rule.**

Framework: CPR IWG

CMT authorities (FAA, EASA, TCCA, ANAC) + CAAC & JCAB.

Objective: harmonized approach to address gaps in the process of issuing Amended TC for derivative aircraft, as identified in various reports issued in the frame of the B737 MAX accidents investigations, and ultimately in the ACSA act.

The overall schedule was presented (see EASA presentation). The task is currently within Stage 1 (Review & Consultation phase). A draft recommendation report for this phase is targeted for Q2/2022.

#### **Industry presentation:**

Status of work initiated by the ASD. 4 working groups have been launched; mirroring EASA work packages breakdown.

#### **Safety Assessment & HF Bridge ASD Working Group**

KoM held 24 September 2021, followed by 4 Plenary meetings.

Organisation of the working group through 4 main streams.

ASD SAHF working group organised a first loop of comments in order to provide a common position to the draft CM from EASA before publication for consultation. Major points:

- Highlight the interconnexion between 1309 and 1302 related processes, and adjust the requested information considering that the level of maturity will increase over the development cycle
- Adapt the level of demonstration, formalisation and involved expertise depending on the degree of confidence (to be defined by the industry), keep flexibility on the expected documentation (not necessary within the FHA)
- Scope of application is to be agreed on case by case - considering also that the industry is working on adapted solutions targeting September 2023.



Good cooperation with EASA. Industry will provide more detailed recommendations as of June 2022.

Industry mentioned their concern that FAA and EASA 25.1309 regulations are not harmonised. EASA reminded that FAA is preparing an NPRM and a revision of the AC to be published this year. This action should bring harmonisation with EASA.

Action: EASA (Rachel Daeschler) to consider proposing the topic 'Alignment of 25.1309' for the agenda of the next COB meeting.

#### **ASD-AWC Change Product Rule Working Group**

6 meetings held.

ASD CPR WG activity is progressing as a function of Authorities CPR working Group, to timely feed EASA with industry inputs. These inputs are as far as possible synchronized with the Industry CPR Task Force, but may remain specific to ASD if no consensus can be reached at Task Force level.

An ASD report will be released at the end of each "focus area" review (regulations, guidance material, TC documentation, training), recapitulating the verbal inputs provided periodically to EASA as a support to authorities discussions.

Industry believes that there are not enough exchanges between EASA and Industry. The focus seems to be more on the input from the US side, the European input should be more emphasized (EASA and Industry).

Action: Industry to coordinate their position within ASD. Target date: end of April 2022.

#### **Development Assurance**

No WG status presented. However, ASD mentioned some concerns they have regarding the automatic recognition of TSO articles while they are not aligned with SW/AEH guidance and will most probably not be even if we include Development Assurance as well. ASD recommended to EASA to work on this issue with the FAA.

#### **Continued Airworthiness / HF/OSD**

Action Plan of the WG:

- Identify precisely methodologies, regulatory requirements and processes to improve capturing crew behaviours in CAW not consistent with IAW assumptions,
- Better integration of Human Factors in CAW process.
- Identify corrective actions in design, procedures and/or training

Status:

Consensus on the areas requiring work or clarification:

- Updates on current guidance in Part-21 regarding application of HF during screening/sanctioning and subsequent analysis of in service occurrences. This should include guidance on recommended human factors competency levels required for stakeholders involved in this process.
- Look into the value of providing an HF reporting output to EASA similar to (though much lighter than) current ETOPS reporting, to facilitate industry wide data gathering.
- Key areas to look at are the structures around training courses. One specific area is guidance on the modification of training courses (pilot and maintenance) in light of HF occurrences and critically the need to develop some mechanism of feedback to show that modification has been implemented. It must be ensured that any structures that are put in place are not onerous given the cost competitive nature of the organisations that provide training.
- Finally it is recommended to develop guidance on checking the implementation of modification to operating manuals (of example updates to aircraft flight manual updates being correctly translated into FCOM)



### 3. International cooperation update

*Presented by: EASA (Grégory Lièvre, Stéphanie Rostren) and Industry (François Duclos)*

#### Russia-Ukraine conflict

Stéphanie Rostren (Head of EASA Legal & Procurement Department) explained that EASA and the EC are working together to address the concerns and questions from the EASA stakeholders in the light of the effects of the EU sanctions against Russia. The C.COM Industry was therefore invited to provide any questions they may have. They will be shared with the EC, and it is planned to publish questions and answers very soon, targeted by end of the week.

Industry mentioned that the first major impact is that they cannot deliver their ordered products to Russia. For example Airbus had 53 aeroplanes planned to be delivered to Russia in 2022.

Also, TC (STC) holders cannot anymore fulfill their continuing airworthiness obligations. No spare parts can be delivered, no Service Bulletin can be provided, etc. Russian operators cannot report encountered airworthiness issues such as unsafe conditions.

Various other issues were noted like problems to pay employees located in Russia, competition with the USA regarding the export of spare parts under license.

EASA noted the first questions from the Industry. Further questions can be raised after the meeting and be sent to Grégory Lièvre.

#### China:

EASA presented statistical figures on the TIP implementation. Industry suggested to add figures on the average duration of TCs validation activities.

Industry proposed to re-launch the EASA-CAAC safety conference, like done with the FAA this year. This may help to solve some projects blocking issues.

Belinda Swain asked if, from the certification directorate perspective, relevant EU-China Aviation Partnership Project (APP) activities play a part in the relationship with the CAAC and hence would it be appropriate to discuss them as part of the International Relations item on the C.COM agenda. There could be benefit in promoting/discussing certification related activities earlier, bringing them to the attention of the certification teams, not just the in-country representatives.

Action: EASA (Grégory Lièvre) to ensure that the programme of upcoming events (next months) is shared with the C.COM. Target date: ASAP after the meeting.

#### USA:

EASA mentioned on-going discussions with the FAA regarding a future Validation Improvement Roadmap (VIR) with the FAA. Industry was invited to provide strategic priority areas, regarding the EASA relation with the FAA.

Action: Industry to provide their proposal for topics. Target date: in the next weeks, latest end of May.

Industry suggested to include safety assessment harmonisation as one of the priority cooperation/harmonisation areas with the FAA.

Action: Industry to provide their top 5 priorities for the cooperation with the FAA and other CMT partners (this is an Open action dated March 2021).

### 4. Abstraction layer

*Presented by Eric Duvivier and Anne Senechal*

#### EASA presentation:

EASA presented the Workplan Phase II (rev 0.2). The document was distributed and is available on the C.COM SharePoint.



The status and schedule of the activities for the 3 recommendations were reviewed.

It is considered to extend the Task Force to include participation of Brazil and Canada in the 3 recommendations activities.

Overall, the schedule in place is ambitious, with a completion targeted October 2023.

#### Industry presentation:

Industry (Cyril Marchand) made a presentation on the status of the first recommendation activities.

The ToR was released on 28 January 2022.

Good involvement and participation from all members, including strong interest from ISO experts, invited for a 2h slot (NVIDIA, Daimler).

Work breakdown and initial schedule for 2022 established.

Full participation to the first visio meeting to set up the start of the ISO26262 learning phase.

The assessment should start beginning of April.

## **5. SMS / ISMS**

*Presented by: Industry (François Duclos), EASA (Rodrigo Priego, Juan Anton)*

### SMS:

The Industry presented a summary of the current status of the EASA-ASD cooperation and the issues identified by ASD.

- Definition of Finding Level 1 for POA and MOA: Industry proposal discussed with EASA specialists on Dec. 06th, 2021: agreement reached for Part 21 POA. EASA decision not to issue GM for L1 findings in Part 145. Action closed.
- Organisation safety governance as detailed in Draft AMC1 21.A.139(c)(2)/239(c)(2): Reworked AMC shared with industry on Dec. 10th, 2021. Comment from ASD released on Feb. 11th, 2022 and discussed with EASA specialists on Feb. 15th, 2022. Convergence not yet reached. ASD is working on a counter proposal.
- Application of HF principles as detailed in Draft AMC1 21.A.139(c)(1)/239(c)(1): AMC under rework by EASA RMT stakeholders, not yet shared with industry. Action open.
- Structure of the control of subcontractors in Draft AMC1 21.A.139(c)(3)/239(c)(3): reworked AMC shared with industry on Dec. 10th, 2021. Comment from ASD released on Feb. 11th, 2022 and discussed with EASA specialists on Feb. 15th, 2022. Good progress, but convergence not yet complete. ASD is working on a counter proposal.
- EASA Additional topics for SM-0001 recognition: SM-0001 draft rev. B updated to consider agreement reached with EASA specialists. Next step: EASA and industry joint review of the other revised AMC once available. Including the AMC that will recognise the SM-0001 rev. B as a standalone MoC with SMS requirements.

Post meeting note: EASA shared a new version of the AMC with ASD on 11 March 2022.

Industry Standard SM-0001 schedule: Two revision approach (rev. B & rev. C):

Rev. B :

- Remove EASA “additional topics” from Part 21 draft AMC to accept SM-0001 as standalone MoC with SMS requirements
- Onboard lessons learnt from first implementation of Initial SM-0001 rev. A
- Consider feedback from Authorities (mostly EASA)
- Add some specifics/examples for scalability, maintenance organisations & SMS maturity assessment

Status:



- All comments from ballot (incl. from EASA) dispositioned
- Publishing: before end of March 2022

Rev. C to address any issues from FAA, TCCA or ANAC and all other outstanding topic areas by Q3-Q4/2022, in particular its recognition as AMC to SMS requirements in Part-145.

EASA highlighted that, although the industry standard SM-0001 at revision B will be recognised as standalone means of compliance with the Part 21 SMS requirements (21.A.139(c)(2) and 21.239(c)(2)), the EASA AMCs/GMs under preparation may present differences compared to the industry standard.

#### ISMS:

The Opinion 03/2021 on a Part-IS is being discussed with EASA Member States in the frame of the EASA Committee. Juan Anton mentioned that an adoption could happen in Q4/2022 (vote from MS in June 2022). The date of applicability is currently estimated (from the current status of discussion) to be 2 years after the entry into force (EIF).

AMC/GM to Part-IS are being drafted by the ESCP and could be sufficiently matured in Q1/2023 to be shared with the Advisory Bodies (MAB and SAB).

Action: EASA to present the status of the AMC/GM development at the next C.COM meeting.

#### SMS/ISMS Pilot projects:

EASA shared the list of the design organisations that have been selected.

### **6. Non-Installed Equipment (NIE) and ETSO concept revision**

*Presented by: Industry (Francesco Pisanti) and EASA (Rodrigo Priego, Markus Goernemann)*

Industry explained that according to them the scope of NIE is unclear. Non-installed equipment could be classified depending on the intended operational use and the need for certification.

Industry offered to come up with a list of potential NIE including a risk assessment to identify the ones that need to be certified for further discussion.

EASA noted that some ETSO articles can be considered as NIE.

In addition EASA is currently reviewing the possibility to introduce some proportionality in the ETSO system. The new concept could be used to address some NIE categories, e.g. with lower risk. EASA could not yet present this new concept as it is not yet approved by senior management.

Action: EASA to present the new ETSO concept to C.COM once the green light from senior management is received (ad hoc teleconference). Target date: 28 April 2022.

Out of meeting note: presentation postponed to the next C.COM meeting scheduled on the 19<sup>th</sup> May 2022.

### **7. Pre Application Contract**

*Presented by: EASA (Alain Leroy)*

EASA presented an update on the development of the 'Pre Application Contract' (PAC) (previously called 'Pre Application Process').

The goal of this new tool is to secure the step between innovation and application for certification of a new product entailing novelties.



EASA showed a flow chart on the proposed process that includes the Pre Application option for information, in the frame of the draft Working Instructions being developed. The WI still needs to be approved by the EASA Legal department.

EASA underlined the need to perform a public consultation (i.e. Special Condition). This particular point was challenged by industry, as it does not relate to official projects yet, but often to confidential ones. Some Industry members suggested that a two levels approach could be envisaged: with consultation and certainty on applicability to future certification projects, or without consultation but with less certainty.

EASA provided to the C.COM Industry the draft template for the PAC for their comment by end of next week (latest on 18 March).

A position of the EASA Legal Department is expected by end of March.

## **8. Research projects – Call for Tenders**

*Presented by: Industry and EASA (Emmanuel Isambert)*

Industry explained that some CfT are opened without awareness of the C.COM members. Industry would like to understand how the topics are selected along with the corresponding timing. Industry believes that the budgetary volume of some contracts may not be sufficient to correctly investigate the issue at stake.

EASA made a presentation on the EASA research and innovation objectives.

This included an explanation of the role of the EASA research and innovation committee (RIC), some key information on the EU Horizon Europe programme (budget of 14 M€ in 2022), and the involvement of stakeholders.

The schedule of the next prioritisation exercise was shared, and on this basis EASA proposes to have a session with the C.COM in Q3/2022. Industry welcomed this offer.

Action: EASA (Emmanuel Isambert) to propose a date for a meeting with the C.COM members in Q3/2022.

Industry suggested to consider having regular exchanges with EASA on the needs and priorities of research items, possibly like done in the domain of standards development. EASA agreed to analyse this proposal, Alain Leroy will discuss this question with the SM Directorate colleagues.

## **9. SAB reorganisation**

*Presented by: All*

No news could be presented by EASA at this point in time.

A presentation is planned during the next SAB plenary meeting (16-17 March).

## **10. Digital exchanges with EASA**

*Presented by: Industry (Gilles Garrouste) and EASA (Eric Sivel, Christopher Holgate-Romanov)*

Industry (Gilles Garrouste, TF leader) made a presentation on the status of the SAB TF-DIGIT, a task force on digital exchanges with EASA.

Two meetings of the SAB task force:

- Activities to be covered by digital exchanges.
- Key features of an environment supporting improved digital exchanges with EASA (and MS).
- End-users to be represented in the next discussions with EASA, organised by clusters.

Third meeting with EASA:

- Agreement on the clustering of activities subject to digital exchanges.





- Understanding of the expected key features supporting digital exchanges
- Agreement to seek nominations for the groups covering the clusters.

The composition of the clusters was also shown.

Industry repeated (refer to last meeting) that they would like to have more interaction with EASA on the EASA digitalisation plan. The recently created SAB TF-DIGIT is a good tool to convey the voice of the Industry.

EASA explained the overall strategy put in place:

- First priority for short term: continue to exchange documents like we used to do until now,
- Second priority for middle to long term: exchange data, but we first need to define a common taxonomy harmonised among the different stakeholders.

Industry should provide their priorities on the needs for data exchange.

Industry suggested to use the 'Clean Aviation' programme to test a prototype on exchange of certification related data, instead of certification compliance documents.

## 11. Recurrent topics in C.COM meetings 2022

*Presented by: Industry*

Industry listed the topics they wish to discuss regularly during C.COM meetings this year:

Digitalisation, NIE/ETSO concept, 737 MAX LL, Abstraction Layer, International cooperation, SMS/ISMS.

## 12. C.COM Open actions

*Presented by: All*

There was 2 Open actions discussed. Action 2021-5 was closed while action 2021-1 remains Open.

Action Nr.	C.COM Date	Action	Owner	Deadline	Status	Remark
2021-1	02 March 2021	EU Industry to provide their priorities on design and production matters at ICAO level.	Industry	30 April 2021	In progress	5/5/21: Industry will provide an answer by the end of June. 7/9/21: Action open. 8/3/22: Industry intends to provide their priorities by the May 2022 C.COM meeting (in the frame of the preparation of the Sept ICAO assembly)
2021-5	07 September 2021	International cooperation with China: Industry to make proposals on how to improve the situation.	Industry	18 November 2021	Closed	Topic addressed on a recurrent manner under International Cooperation at each C.COM meeting

## 13. EASA/FAA International Aviation Safety Conference (June 2022)

*Presented by: Industry*

Industry would like to coordinate with EASA the messages to be delivered at the conference.

EASA explained that the decision to organise this conference was taken recently and that there is no agreed agenda yet. EASA is currently collecting topic proposals.

EASA will share the draft agenda with Industry as soon as it is available. Comments from Industry will be welcome.

It was reminded that this event is organised by the EASA SM.3 Department (International Cooperation), and that the CT focal point is Grégory Lièvre).

## 14. Autonomous distress tracking

*Presented by: Industry (François Duclos)*

Industry explained the reasons why they will not be able to support the compliance with ICAO Annex 6 and EU Air OPS regulation rules on autonomous distress tracking which are applicable on 1.1.2023:



- COVID related reduction of resources,
- Final EASA requirements were released 27 May 2021 allowing only 18 months to complete development and installation across all current production models,
- Availability of entire ADT system for Testing and Integration

The following action plan proposal is made by Industry:

- Ongoing work with ICAO to propose an amendment to Annex 6, Part I that would postpone the applicability date of ADT equipage to 1 January 2025 with an effective date not later than 1 Jan 2023
- Starting activities with EU/EASA to propose a postponement of the ADT applicability date in EU regulations on Air Operations (Regulation (EU) No 965/2012), CAT.GEN.MPA.210 of Part-CAT in accordance with the ICAO proposal
- OEMs will finalise the development of ADT solutions for all production types as soon as possible and continuously ramp up the ADT equipage of the newly produced (and affected by a mandate) aircraft to 100% before 1 January 2025

The European regulators are invited to:

- note the information in this presentation,
- support the industry approach on ICAO level to postpone the ADT mandate,
- consider a similar update of the European legislation with regards to a postponement of the ADT applicability date.

EASA reminded that the EASA FS Directorate is in charge of the Air OPS Regulation and that the FS.2 Air Operations & Aerodromes Department must be contacted.

Action: Industry took the action to write a letter to FS.2 about the postponement of the Autonomous 10Distress Tracking 10equipment implementation date.

#### **15. Briefing to EASA Certification Director Rachel Daeschler**

*Presented by: François Duclos*

François Duclos presented a summary of the discussions of this meeting to Rachel Daeschler.

#### **16. Closure of the meeting and next meetings**

The meeting and the teleconference were closed at around 17:00.

The next C.COM meeting is scheduled on **19 May 2022**.

