

**Stakeholder Consultation Workshop on EUROCONTROL Specification for
the Origination of Aeronautical Data (DO)
Minutes**

Eurocontrol Headquarters, 27 September 2012, EUROPA conference room

1. GENERAL

A Stakeholder Consultation Workshop on the draft EUROCONTROL Specification for the Origination of Aeronautical Data (DO) took place on 27 September 2012 at EUROCONTROL HQ (EUROPA conference room). The workshop was attended by some 26 external delegates from national regulatory authorities, ANSPs, the military and industry – see participant list at Annex B.

The objective of the workshop was to present and discuss the results of the formal consultation on the draft EUROCONTROL Specification on DO, which was open for comments from 02 February to 27 April 2012, and to achieve a common understanding for the way forward.

Invitations to this workshop were sent to the members of the EUROCONTROL consultation distribution list in addition to the members of the ANSB, AAB, SRC, PRC and CMIC.

2. Agenda item 1 - Welcome and Introduction

The chairman welcomed the participants, introduced the agenda, the workshop objectives and provided an overview of the framework within which EUROCONTROL operates, notably with regard to EUROCONTROL Specifications as a means supporting the implementation of the Commission Regulation (EU) 73/2010.

Having introduced the team, and before passing the floor to the project lead, the Chairman took some questions from the floor with regard to the issue of the “dual purpose” of the document and also the lack of representation of the data originators at the workshop.

EUROCONTROL stated that extensive coordination at EUROPEAN level through the various working arrangements is being conducted to engage a maximum amount of data originators however, in order to reach all regulated parties; such efforts need also to be mirrored by the States.

The agenda was agreed without change.

3. Agenda item 2 – ADQ Implementation Support - Update

EUROCONTROL presented an overview of the current, past and future activities associated with the ADQ Implementation Support Cell in addition to an overview of the development of the specifications associated with ADQ Implementation Support.

Referring to the DO Spec, EUROCONTROL explained that key provisions are addressed through the introduction of the “dual approach” in order to provide not only a Means of Compliance but also to provide additional information ensuring a common understanding and a harmonised approach in support of the Means of Compliance, for all parties concerned.

The key benefits of the DO Spec were then outlined prior to presenting a general overview of Stakeholder comments received and reflected in the Summary of Responses (SOR).

4. Agenda item 3 - Results of the consultation on the draft Specification for Origination of Aeronautical Data (DO)

EUROCONTROL provided an overview of the 'General Responses' section of the draft SOR.

The main comments made during the consultation and EUROCONTROL's proposed responses were then reviewed under the following headings:

a) EUROCONTROL's Role in the Development of Means of Compliance:

- It was commented that ESOs were the appropriate body to draft MoC for the whole data chain as opposed to EUROCONTROL. EUROCONTROL stated that this could only be achieved through a mandate issued by the EC.
- In response to the comment with regard to the fact that it was incorrect to imply that the DO Spec would be MoC to EU 73/2010, EUROCONTROL explained that the development of this specification was in response to an urgent need stated by regulated parties and that it was therefore offered as possible MoC in support of the regulation.
- Referring to the comment that EASA's role in the drafting of the DO Spec should be reviewed, EUROCONTROL stated that EASA does not have a formal role in the development of the DO Spec which is developed by EUROCONTROL on behalf of the Member States. That said, safety aspects are of course taken into account and as such drafting of the Specification is in full support of EASA objectives.

b) Scope and Function of the Specification:

- It was stated that a MoC and guidance material should be distinguished separately and/or possibly split into two separate documents. EUROCONTROL explained that the DO Spec serves two purposes and therefore is formatted to address, on the one hand, a possible MoC and on the other, the provision of additional guidance material to ensure a common understanding of the subject matter, in particular amongst the non aviation-domain expert end-user community.
- It was queried whether EUROCONTROL would, in the interest of achieving a harmonised approach, consider including more requirements in the form of "shall" in the Specification as opposed to recommendations in the form of "should". EUROCONTROL confirmed that the structure and wording of the document would indeed be reviewed to achieve the necessary approach.
- It was further commented that in the interests of clarity, explanatory material should not be combined with the requirements for MoC nor should there be extensive repetition of the rule. EUROCONTROL confirmed that additional clarity may be necessary but, in response to a request from some Stakeholders to split the document into two, one a MOC and the other a guidance document, EUROCONTROL maintained its position that both MoC and guidance material can be contained within one document which would in turn reduce the effort required for future maintenance and updating.
- An extensive discussion ensued regarding the use of 'shall' and 'should' within the Specification and the possible issue of interpretation when demonstrating compliance. EUROCONTROL agreed that clarity within the Specification is essential and as such the document will be reviewed and the presentation enhanced with this in mind.
- In response to the comment that the DO Spec, as presented, lacked maturity, was complex and over-prescriptive, EUROCONTROL highlighted the fact that in order to facilitate the provision of appropriate responses, specific examples of over prescription would be welcomed. That said,

- EUROCONTROL reiterated the fact that the DO Spec is not a Community Specification and does not provide presumption of conformity. On this basis the statement that demonstration of conformity to the DO Spec would bring about presumption of conformity will be removed from the text.

c) References to and Relationship With Other Documentation

- The repetition of content and the referencing within the document were queried and considered unsuitable for a MoC. EUROCONTROL explained that reference to a subject as opposed to an Article number was used to put the subject into context for ease of reading; however it noted the importance of using static referencing.
- It was commented that the DO Spec should be aligned with both the DAL and DQR Specs. EUROCONTROL agreed to align wherever possible in the interests of consistency and clarity, notably in terms of the terminology used.
- EUROCONTROL agreed with the suggestion that the EUROCONTROL Terrain and Obstacle Data Manual will be optional and not be considered as a mandatory element in this context.
- In response to the comment that the mandatory use of ISO 19100 standards is too stringent, EUROCONTROL explained that the use of the ISO 19100 series is required by the ADQ regulation itself and that the series of standards behind it have to be considered either directly or indirectly within the context of the DO Spec.
- The issue of accessibility to the ISO standards was raised and the concern that sufficient access to revisions may be an issue. EUROCONTROL explained that all updates are widely available for purchase via the ISO website. Alternatively, EUROCONTROL stated that the ADQ Implementation support cell could in fact monitor for updates and inform the Stakeholder Community of any changes relevant to the ADQ regulation.

Referring back to the discussion on the structure of the document, the Chairman re-iterated the fact that the draft Spec would be reviewed and proposed to divide the document into two parts, the first containing the MoC and the second containing the technical specification. He explained that this would address the majority of the comments received on the issue, would provide for ease of use and also ease of maintenance.

d) Data Quality Requirements:

- In response to a comment regarding the accuracy requirements for calculated or derived data, EUROCONTROL explained that estimating accuracy of such data is currently a standard task for a surveyor and as such no additional specifics were considered necessary.
- It was commented that requirements for data origination should take into account the criticality of the onboard function using data. EUROCONTROL explained that there appears to be some confusion with regard to DQR in wider sense and data quality requirements within the DO spec and therefore the Spec will be amended to eliminate this confusion.
- The issue of possible duplication of data quality requirements within the DQR/DAL spec and the DO Spec was discussed. EUROCONTROL explained that in principle there should be no duplication, unless there is a specific

e) Reference Systems:

- The existence of local reference systems was emphasized by the Stakeholders. It was also commented on the need to distinguish between DO and data publication and the use of local reference system at the beginning of data origination chain. This should be considered as guidance material and not MoC.
- The reference to INSPIRE and the EU regulation requirement to use ETRF as opposed to ITRF was discussed. It was proposed to refer only to the requirement to avoid confusion amongst the surveyor community. EUROCONTROL explained that within ADQ the requirement is for WGS-84 and not ITRF however, it was deliberately included following previous Stakeholder comments in order to understand the obligations for European directives. EUROCONTROL agreed that in the interests of clarity, it may be removed from the DO Spec.
- It was queried whether there was a program or software available for the task of data transformation to ensure compliance with ADQ. EUROCONTROL explained that such tools are not provided by EUROCONTROL and that industry solutions would be relied upon. A discussion ensued on whether EUROCONTROL could provide a set of transformation parameters to ensure that each country used the same parameters. EUROCONTROL explained that it would be inappropriate to provide such information and proposed that the bodies responsible for the origination of such data would be considered more appropriate.
- EUROCONTROL agreed with the comment that it would be beneficial to use common datum for spatial data sets and publication of aeronautical information and committed to modifying the text of the DO Spec to reflect this.
- Similarly in response to the comment that the information on reference systems in the Specification is too detailed, EUROCONTROL explained that this information is provided for the surveyor community and as such is considered relevant, however the comment on the vertical reference systems chapter will be reviewed to eliminate any redundancy and the text will be modified to include the stipulation that the common geoid model should be used.

f) Metadata:

- It was commented that the reference system should be recorded as metadata for the data set. EUROCONTROL explained that metadata for data set should record reference systems used however, not all data in the data set may be originated using the same systems. Therefore, EUROCONTROL agreed to add a requirement for reference system at data set level and to amend the requirement at data level.
- In response to the request to permit the provision of metadata in non ISO 19115 format, EUROCONTROL explained that this is in fact a requirement from the ADQ regulation and as such it will be maintained.
- The need for parametric data in metadata was queried. EUROCONTROL agreed to review the text to clarify and differentiate between what should be contained within the surveyors report and what should ultimately be included in the metadata.
- EUROCONTROL disagreed with the comment that the recording of methods used in calculation and derivation goes beyond the scope of the Commission Regulation (EU) 73/2010.

- Referring to the comment that recording survey observations is considered too stringent by Stakeholders, EUROCONTROL explained that the capture of additional observations is recommended and as such a justification will be added to the text.
- It was commented that some requirements for metadata for survey go beyond the ADQ regulation. EUROCONTROL explained that not only is this requirement considered to be within the scope of the Commission Regulation (EU) 73/2010, but it also addresses the request of the DAL ad-hoc group to include it in the DO Spec.

g) Units of Measurement:

- It was commented that the ADQ regulation is not the correct tool to ensure publications are in line with ICAO Annex 5. EUROCONTROL explained that the development of the rule did consider the ICAO SARPs, including Annex 5, as the baseline during drafting.
- Having analysed the text of the Specification, EUROCONTROL requested specifics relating to the comment that the requirements for units of measurement are conflicted, as this was not detected during the analysis.
- Referring to the comment querying the use of KMs vs NMs for distances over 4000m, EUROCONTROL explained that this is currently a stipulation of the ICAO Annex 5.
- A query was raised regarding the terminology used and EUROCONTROL stated that clarification will be provided in this regard.
- In response to the comment that military operations use different data format, EUROCONTROL explained that the requirements allow for publication of information to resolution required by DQRs and that AGL will be included for vertical dimensions.

h) Validation and Verification of Data:

- EUROCONTROL accepted the comment relating to the requirement for independent verification as being too stringent and explained that it should in fact depend on the criticality of the data. For this reason, the references within the DO Spec will be amended to take this into account.
- It was commented and agreed by EUROCONTROL that independent verification may be carried out by means other than different personnel and as such the DO Spec will reflect this.
- Referring to the comment that validation and verification requirements are too vague, EUROCONTROL explained that it is not considered possible to make requirements more specific as this varies from one State to another depending on the local environment. A conversation ensued in relation to how independent verification of data is ensured, with a request from one Stakeholder to address this point within the MoC. EUROCONTROL agreed to consider including this within the guidance material however, it should be noted that this would mean moving further down the data chain and away from data origination.
- It was commented that further guidance for validation and verification was required. EUROCONTROL explained that this was not considered possible due to the strong variation from one State to another.
- Definitions and application of validation and verification for procedure design were queried. EUROCONTROL stated that the guidance for procedure design is considered to be correct as both designer and supplier can verify and validate.

i) Survey Principles and Requirements:

- It was commented that a minimum number of measurements for 'critical' survey data should be specified. In response, EUROCONTROL explained that the number of survey points varies depending on the circumstances and as such the surveyor is considered capable of determining the number of survey points on an ad-hoc basis.
- EUROCONTROL explained that the use of UTM in the Spec was in fact made purely as an example, that a note will be added to the text stating that some States have National Geodetic Control Networks in place which meet the requirements and that GBAS requirements will be aligned with ICAO SARPs.
- EUROCONTROL disagreed with the comment that the method for checking co linearity of runway is over-prescriptive; however, they agreed with the comment that some sections related to derived thresholds require further clarification and that Annex L will be removed.
- In response to the comment concerning the encouragement of collection of more data points, EUROCONTROL stated that it is not considered to be of benefit to survey more points for curved and compound sections. A discussion ensued on this subject with one Stakeholder querying the need for defining this as a requirement. In conclusion, EUROCONTROL agreed to review the text taking on board the comment made.
- Referring to the comment requesting the addition of further mandatory requirements in the Annexes, EUROCONTROL explained that the Annexes are in support of the main body and as such mandatory requirements will not be included in the Annexes.

j) Conformity Material:

- In response to a comment from the States, requesting that Annex B includes the Stakeholder to which each conformity item applies to, EUROCONTROL explained that would be inappropriate as it is up to the NSA to determine as they deem appropriate.

k) Description of Airport and Heliport Facilities:

- EUROCONTROL agreed with the Stakeholder comment that a zoomed in section would more accurately show the points to be surveyed in the diagrams in Annex I and as such the Spec will be reviewed to include such a section.
- Similarly, given that that runway threshold in ICAO Annex 14 is defined differently to in the DO Spec, EUROCONTROL confirmed that all diagrams will be reviewed and updated to accurately reflect the detailed survey position.
- In response to the comment that ILS end-fire antenna systems and GBAS guidance is missing, EUROCONTROL confirmed that this will be added to the DO Spec.

As there was some time remaining, the 'Other Issues' part of the SOR was opened for discussion. The issue of the appropriateness of using geodesic distances was raised by one Stakeholder. EUROCONTROL explained that whilst they agreed that this was not always suitable, an action to address this issue through guidance material should be raised within the NAV domain of EUROCONTROL.

Clarification was requested with regard to the section on noise abatement within the DO Spec. EUROCONTROL stated that this section within the Draft Spec is erroneous and as such will be reviewed and replaced.

A discussion ensued with regard to the calibration of surveyor equipment which was concluded by EUROCONTROL confirming that the topic is indeed addressed within the text of the Draft DO Spec.

5. Agenda item 4 - Closing:

Summary:

The chairman summarised the outcome of the workshop with the following main points:

- a) Outcome of consultation presented.
- b) Main issues discussed.
- c) A good common understanding was achieved.
- d) Agreed in principle :
 - To keep the document structure integral for ease of usability.
 - Provide clear and consistent presentation of mandatory (MoC) items versus recommended items.
 - Enhance the regulatory compliance table accordingly.

An extensive discussion ensued on the proposed structure of the document and the terminology to be used within the MoC and the guidance material. The Stakeholders expressed concern with the proposed approach of including the word "shall" within the guidance section of the Spec, the main concern being the issue of interpretation of the regulator when demonstrating compliance with ADQ regulation. EUROCONTROL explained that the inclusion of the word "shall" in the guidance material is in the interest of harmonisation and that the requirements to demonstrate compliance would be clearly defined in the first part of the document.

EUROCONTROL stated that the DO Spec would remain in one document and that the text would be evolved to ensure clarity, notably with regard to the issue of requirements when demonstrating compliance. In response to further queries from one Stakeholder, with regard to how mandatory elements would be dealt with in the Spec, the Chairman re-iterated the fact the overall status of the DO Spec is not mandatory as it is adopted on a voluntary basis.

Two Stakeholders expressed concern as to whether or not a consensus on the way forward had been reached.

EUROCONTROL stated that they would ensure a full review of the Spec including a consistent use of terminology notably with regard to the use of 'shall' whilst avoiding the use of different levels of 'shall'. Part one will be fully dedicated to serve as MOC whilst the second part of the DO Spec, containing the guidance material addressing a very wide audience, will explicitly explain the convention to be applied ref. the underlying terminology. The revised document will be distributed for further Stakeholder review but will not be subject to further formal consultation under the ENPRM process.

Next Steps

The Chairman proceeded to present the Next Steps as follows:

- Meeting minutes to be provided to the participants for comment.
- Revise and circulate the updated draft SOR for comment allowing 2 weeks for final comments.
- Publish the SOR on the website.

- Revise draft Spec as discussed and circulate to full consultation distribution list giving 4 weeks for comment.

The chairman informed the meeting that a paper will be presented to the Single Sky Committee 47 regarding the recent ad-hoc session on the ADQ Regulation. The paper refers to the five specifications presented in Agenda Item 1, with the Commission referring to them as possible MoC. The Chairman went on to say that this demonstrates the fact that both the Single Sky Committee and the States are keen for the specifications to be published as quickly as possible in order to provide the States and the regulated parties with the means of compliance and that a copy of the paper may be forwarded to Stakeholders should they so wish.

In closing the Chairman thanked the meeting participants for their constructive and comprehensive comments and extended a special thanks to the EUROCONTROL team for developing the document and for the input provided to reflect the modifications discussed in the workshop.

Stakeholder Consultation Workshop on the EUROCONTROL Specification for the Origination of Aeronautical Data (DO)

**27 September 2012
EUROPA Conference Room**

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AGENDA

item	09h30	Registration (Europa Lobby)	-
1	10h00	Welcome and Introduction: <ul style="list-style-type: none">• Presentation of the Workshop Objectives• Means supporting the implementation of 73/2010	Peter GREEN (Head of DSS/REG/SES)
2	10h20	<ul style="list-style-type: none">• ADQ-Implementation Support - Update• The need for the Specification for the Origination of Aeronautical Data (DO)	Manfred UNTERREINER (DSS/REG/SES)
3	10h30	Results of the consultation on the draft Specification for Data Origination (DO) <ul style="list-style-type: none">• Main comments and draft responses• Discussions	Manfred UNTERREINER, Subject Matter Experts
	11h30	Coffee break	-
	11h45	Continuation of the results of the consultation	Subject Matter Experts
	13h00	Lunch	-
	14h00	Continuation of the results of the consultation	Subject Matter Experts
	15h30	Coffee break	-
4	16h00	<ul style="list-style-type: none">• Summary• Next steps• Closing	Peter GREEN

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