

CRD - NPA 03/2004 - Proposals

Comment

Response

GM 21A.133 - General Comments

Paragraph

Cmt. 1 / CAA UK

UK CAA was involved in proposing two approaches to the Navigation Database question, differing mainly on whether an EASA Form 1 release should accompany each database. Although CAA maintains the principle that the output from a Production Organisation Approval should normally be an EASA Form 1, the CAA considers the level of control proposed by GM21A.133 and GM21B.220 to be appropriate in this case and encourages acceptance of that material without amendment.

Noted.

Comment	Response
Cmt. 66 / Transport Canada	
Dear Mrs. van Opzeeland: Upon review of the Agency's web site, the above-mentioned Notice of Proposed Amendment was circulated within Transport Canada for comments. Transport Canada would like to forward the following comments for your consideration. Explanatory Note, V. Discussion, Paragraph 16: The proposed guidance material does not address the option discussed in this paragraph. This option raises the question of who determines compliance to ED-76. Transport Canada (TCCA) would prefer that the determination be done by a Civil Aviation Authority rather than by the database supplier. If the determination is made by an accredited third-party, then TCCA has interest in the means of accreditation so that TCCA can recognize the determination. The proposed guidance material addresses conformity of the database to design data whereas ED-76 / DO-200A addresses the quality of the data. The conformity approach is more difficult to implement because of the problem of completely defining the initial design data (discussed in Guidance Material Section 21A.133 6.2). The quality approach seeks to revise the process in response to errors reported by users and changes in the supplier's process. This capability is reflected in the requirement for event-driven reviews and management reviews in ED-76 / DO-200A paras 2.5.3.1 and 2.5.5. These two requirements are only hinted at in Guidance Material Section 21B.220 6.2. They should be emphasized to encourage the database supplier to actively monitor and adapt the process for producing a database. The ED-76 / DO-200A process is not perfect and therefore it should continuously improve. GM 21A.133 Eligibility; Production Organization Approval of Navigation Database Providers While Transport Canada recognizes the need for reliable methods of control for these kinds of data, we do not believe that the production certificate is an appropriate way to do it. In Canada, production organizations only have one legal privilege: to issue a conformity certificate for their product. Issuing a conformity certificate for a dataset appears clumsy and impractical. We believe other means should be found to recognize organizations that are competent to collect and distribute this data. Thank you for the opportunity to comment on the draft Notice of Proposed Amendment. Maher Khouzam Chief, Regulatory Standards Aircraft Certification	First paragraph is responded to under explanatory note V.16 Agreed. Guidance material will be expanded to level of checking expected and action in case of errors Third paragraph is responded to under explanatory note V.16

Comment	Response
Cmt. 79 / Jeppesen	
The use of the term "transcribe" implies a different concept from the term "translate" which is used in ED-76. Propose to change the word to "translate"	Agreed. Text is amended.
Cmt. 82 / CAA Sweden	
From a safety point of view we regard it important that suppliers of navigation databases are subject to regulations aiming to ensure the quality (accuracy and integrity) of navigation data. The whole chain from the primary data supplier to the navigation database supplier must be included. The need for quality assurance is valid for all types of navigation databases. This should be regulated on a common European level. If currently it is not legally feasible to formulate European regulations, the MS should be encouraged to cooperate in this matter, for instance within the JAA, awaiting common regulations. The MS where a navigation database supplier is based should take the necessary actions to ensure that the quality of navigation databases is compatible with the draft proposal. We support the concept of POA as the form for the related approvals.	It is noted that the comment provider supports the use of an approval process. The Agency, in consultation with the Advisory Group of National Authorities and the Safety Standards Consultative Committee, has decided that POA approval is not appropriate but will offer an accreditation process leading to a Letter of Acceptance, consistent with the FAA approach.
Paragraph a) 17	
Cmt. 19 / Mads Linden	
just wanted to express my sadness for us privat pilots who wants an IR rating. I have a Swedish PPL + FAA IR, I am a privat person, I cant take 2 months out fulltime to study. = = make easier FAA >> EASA ppl + ir conversion for none commercial pilots. My plane is N-reged JUST because of this Cheers	Noted. This is a comment to NPA 2-2004 for which a comment-response document has already been produced.
Paragraph Missing	
Cmt. 67 / LBA	
Comment: The Guidance Material already references the FAA AC-DB. There is no statement provided that a data base manufacturer having a FAA LOA is seen equivalent to a manufacturer having a POA approval. Proposed Text: Non-EC data suppliers whose database production procedures have been shown to the satisfaction of the responsible national authority to meet EUROCAE ED-76 (or the direct equivalent RTCA/DO-200A) may be considered acceptable and equivalent to an POA approval as defined in this GM. The relevant authority and approval method (e.g., FAA Letter of Acceptance LOA) must be identified to customers of the data, and the suitability of that foreign supplier will ultimately be addressed as part of the operational approval of the flight procedure use (e.g. P RNAV Approval).	Noted. The Agency, in consultation with the Advisory Group of National Authorities and the Safety Standards Consultative Committee, has decided that POA approval is not appropriate but will offer an accreditation process leading to a Letter of Acceptance, consistent with the FAA approach. Currently, operational approvals and recognition of Letters of Acceptance remain a national responsibility. The Agency is maintaining liaison with the FAA on this matter to facilitate mutual recognition.

Comment		Response
Paragraph	Para 12, 13, 14 , 15, 16	

Comment	Response
Cmt. 20 / Mike Wildin	
a) para 12 "The Agency has serious doubts whether navigation databases fall within the above definition of parts and appliances". The dictionary defines "part" as "a piece or portion; one of several equal divisions; a component that can be replaced in a vehicle or machine", "appliance" as "a machine or device that has a specific function" and "accessory" as "a supplementary part or object". A navigation database can reasonably be argued is an essential part/appliance/accessory for the aircraft's flight management system without which it cannot operate. Therefore I think the argument in this para is unreasonable and made more so by the JAA apparently accepting that the database was just such an item. B) para 13. Here EASA seems to want to immerse itself into complexities of database structure and cloud the issue by doubting whether a similar regulatory/approval approach could apply to the data itself. I believe it would be more appropriate to look at what the navigation database delivers as an end product and this might be reasonably achieved by approving the process by which it is compiled allied to the requirements of EUROCAE ED76/RTCA Doc 200a both of which are capable of audit. C) para 14 line 1 says "if confirmed" yet there is no data when that confirmation will be sought or received. Given the absolute need for this measure speed is imperative as operators have been asking for this for some considerable time. D) Assuming EASA remain convinced they cannot bring this home are there any alternatives and these are explored in paras 15 and 16? I guess responsibility for approving these coders could, within Europe, be accepted by the States within which those businesses operated i.e. Germany, Switzerland and the UK. I suspect that a UK modus operandi is relatively easy to put together given the UK experience in safety regulation. Even so this will take time to accomplish and who will pay for this effort? However, unless the same or very similar modus operandi is used by the other 2 States, there may be a risk of an inconsistent approach being applied. The JAA seemed to have the answer to that specific problem in their proposal to use audit teams of appropriate competencies. What would the position be of global acceptance of a German, Swiss and/or UK approval? Lastly would the UK be content to accept the liability/risk that may arise from that action. E) para 16 We are aware from our work in TARA and NASG that TGL10 permits operators to check their databases and this is putting a burden on them. Indeed the purpose of approving database coders is to remove the need for extensive checking at 28 days periods from the operators. It is unfortunate that EASA did not show leadership in the second half of para 16 by providing an answer to the question it asked! It is infinitely preferable to comment on answers rather than questions unless the intention is to stimulate debate that may last for years! F) Generally speaking the navigation database must sit within a piece of equipment which will be subject to EASA regulation. Presumably, there are many pieces of equipment, the functionality and reliability of which depends very largely on the quality of the software. How does EASA deal with that issue? All the above is based only upon paras 11 to 16 inclusively and represent my views only. Regards Mike Wildin	a) Noted. The Agency will not consider a navigation database as an aircraft part or appliance. B) It is noted that the comment provider supports the use of an approval process. The Agency, in consultation with the Advisory Group of National Authorities and the Safety Standards Consultative Committee, has decided that POA approval is not appropriate but will offer an accreditation process leading to a Letter of Acceptance, consistent with the FAA approach. C) Noted. Confirmation was sought in the comments to the NPA. It is expected that the database suppliers should be accredited before 17 february 2005. d) See response to b) e) See response to b) f) Executable software that is an integral part of aircraft equipment is treated in the same way as a part. The navigation data itself is not executable software.

Comment	Response
Manager Terminal Airspace DAP.	

Comment	Response
GM 21A.133 - 1.1.a	
Paragraph	
Cmt. 25 / AEA	
The AEA proposes to add the RNP-RNAV definition	Noted. Specific mention of P-RNAV has been removed from the document in order to be more generic. A definition of P-RNAV or RNP-RNAV is therefore no longer necessary

Comment		Response
GM 21A.133 - 1.1.b		
Paragraph		
Cmt.	42 / <i>Garmin International, USA</i>	
References are made to Appendix 1, but there is no Appendix 1. (The paragraph references are there.)		Agreed. Reference is corrected.

Comment	Response
GM 21A.133 - 1.1.c	
Paragraph	
Cmt. 42 / <i>Garmin International, USA</i>	
References are made to Appendix 1, but there is no Appendix 1. (The paragraph references are there.)	Agreed. Reference is corrected.

Comment	Response
GM 21A.133 - 1.1.e	
Paragraph	
Cmt. 26 / AEA	
The AEA proposes to amend e) to read as "e) PRNAV – Precision RNAV as defined by JAA TGL nr 10"	Noted. Specific mention of P-RNAV has been removed from the document in order to be more generic. A definition of P-RNAV is therefore no longer necessary.

Comment	Response
GM 21A.133 - 1.1.g	
Paragraph	
Cmt. 43 / <i>Garmin International, USA</i> There are two references to ED-76 here which we believe should instead be coupled with DO-200A. For example, instead of a reference for compliance with ED-76, we think it should be "ED-76/DO-200A". This comment applies throughout the document.	Agreed. Reference to DO-200A is added.

Comment	Response
GM 21A.133 - 2	
Paragraph	
Cmt. 16 / ERA	
2. Applicability The primary objective of this guidance is to support regulatory oversight of navigation database providers. This guidance material applies to the production activities associated with receiving, assembling, translating, selecting, formatting, integrating and distributing navigation data in electronic format for subsequent loading into aircraft navigation or flight management systems. It does not apply to the origination of data for publication into a national AIP. Notes: 1. Production activities specific to aeronautical Data are elaborated in the standard referenced in 3.3. 2. However, it is recognised that the underlying principles may be applicable to the production of airborne databases used for other purposes.	Agreed. Text amended accordingly.
Cmt. 27 / AEA	
The AEA proposes to delete Note 2 which states that "the underlying principle may be applicable to the production of airborne databases used for other purposes."	Agreed.
Cmt. 38 / Austrol Control	
The approval of a POA as a Navigation Database Provider is one means of compliance to verify the quality of the navigation data. Another option would be that the operators perform the required quality checks to ensure safe operational practices under a procedure approved by the competent Aviation authority.	Agreed. This guidance addresses one of the options already given in JAA TGL 10.
Cmt. 48 / Garmin International, USA	
Are all of these submittals necessary if you have an LOA for AC-20DB? Perhaps a statement at the end along the lines of: "Alternatively, an applicant may submit a copy of their LOA granted under DO-200A."	It is not the intent to use the EASA accreditation system for a site where an FAA LoA is already in place, however operational approvals and recognition of Letters of Acceptance remain a national responsibility.
Cmt. 58 / MOT Austria, Mr. Dundler	
Add to the notes: Notes 3: Navigation data produced from an AOC-holder and used only for own organisation duties could be released without POA according standards referenced in 3.3 following procedures accepted by the Competent Authority issuing the AOC.	As POA is no longer being considered this concern does not arise. The guidance material addresses operator's tailored data in GM 21B.220 paragraph 3.3.

Comment	Response
GM 21A.133 - 3.1	
Paragraph	
Cmt. 49 / <i>Garmin International, USA</i>	
We suggest that language be added that restricts this requirement to Type 1 applicants. Specifically, if the words "For Type 1 applicants....." were added to the start of the section, it would clarify things.	(this comment is related to GM 21B.220) Noted. Type 2 LOA holders may also have direct interface with State AIP providers. Additional explanatory text has been provided.

Comment		Response	
GM 21A.133 - 3.3			
Paragraph			
Cmt. 50 / <i>Garmin International, USA</i>			
We suggest that the first sentence be changed to: "When the applicant has an interface with an aircraft operator as its direct customer, and that customer is supplying tailored source data, the applicant will need to demonstrate that a robust and effective interface exists with the data originators."		(This comment is related to GM 21B.220 para 3.3) The intent of the paragraph 3.3 is wider than that implied by the comment. Comment not accepted.	

Comment	Response
GM 21A.133 - 4	
Paragraph	
Cmt. 51 / Garmin International, USA	
“...with specific emphasis on the essential needs of a Data Service Provider....” – What are “essential needs?”	(this comment relates to GM 21B.220 para 4) Comment accepted. Text is clarified.
Cmt. 52 / Garmin International, USA	
“...will need to be undertaken by appropriate Specialist Authority personnel.” – Who are the appropriate Specialist Authority personnel? Garmin? The FAA? EASA?	(this comment relates to GM 21B.220 para 4.1) EASA will nominate the members of the audit team.
Cmt. 53 / Garmin International, USA	
“...continued surveillance should be carried out by the Competent Authority....” – Who is the Competent Authority?	(this comment relates to GM 21B.220 para 4.2) EASA.

Comment		Response
GM 21A.133 - 5.1		
Paragraph		
Cmt.	54 / <i>Garmin International, USA</i>	
"...The applicant will need to submit a completed checklist...." – Is this the same checklist mentioned in section 6.1? We suggest adding the following note: "The compliance matrix specified in AC-20DB also meets this requirement."		(this comment relates to GM 21B.220 para 5.1) No, the text has been amended to distinguish between the Checklist showing compliance with the Agency accreditation conditions and the Matrix required to show compliance with ED-76/DO-200A.

Comment	Response
GM 21A.133 - 5.2	
Paragraph	
Cmt. 44 / <i>Garmin International, USA</i>	
What is a "Production Organisation Exposition?"	This is a document defined by Part 21A.143 for a Production Organisation Approval. The Agency will define an equivalent document for the LOA accreditation.
Cmt. 55 / <i>Garmin International, USA</i>	
We suggest adding the following note: "An assessment against DO-200A resulting in an LOA also meets this requirement."	(this comment relates to GM 21B.220 para 5.2) It is not the intent to use the EASA accreditation system for a site where an FAA LoA is already in place, however operational approvals and recognition of Letters of Acceptance remain a national responsibility.

Comment		Response
GM 21A.133 - 6.1		
Paragraph		
Cmt. 45 / <i>Garmin International, USA</i>		
Instead of referring to "up-to-date" data, we believe "current" is a more correct term.		Agreed. Text is amended accordingly.
Cmt. 56 / <i>Garmin International, USA</i>		
"The applicant will need to produce a Compliance Matrix detailing how his data production processes relate to EUROCAE ED-76." – Again, a statement of clarification is needed if the extensive compliance matrix for AC-20DB is acceptable. We suggest adding the following note: "The compliance matrix specified in AC-20DB also meets this requirement."		(this comment relates to GM 21B.220 para 6.1) It is not the intent to use the EASA accreditation system for a site where an FAA LoA is already in place, however operational approvals and recognition of Letters of Acceptance remain a national responsibility.

Comment	Response
GM 21A.133 - 6.2	
Paragraph	
Cmt. 57 / <i>Garmin International, USA</i>	
"For the purposes of this guidance material, RTCA DO-200A is accepted as equivalent to EUROCAE ED-76." – We fully agree with this statement, but think it should be emphasized and highlighted at the front of the document instead of tucked away as a note in this part of the document.	(this comment relates to GM 21B.220 para 6.2) Agreed. Reference to DO-200A is added throughout the guidance.

Comment		Response
GM 21A.133 - 6.3.a		
Paragraph		
Cmt. 68 / LBA		
Comment: The responsibility of the holder of the approval for an equipment design to define data requirements shall explicitly be addressed. Proposed Text: The responsibilities of the holder of the approval for an equipment design to ensure correct and timely transfer of up-to-date airworthiness data and instructions that concern compatibility of data with the target equipment. This includes the definition of data requirements.		Agreed. Text amended accordingly.

Comment	Response
GM 21A.133 - 6.6	
Paragraph	
Cmt. 46 / <i>Garmin International, USA</i>	
We propose a new paragraph 6.7: "For the purposes of this guidance material, acceptance to RTCA DO-200A is accepted as equivalent to EUROCAE ED-76."	Noted. Reference to DO-200A is added throughout the guidance.

Comment	Response
GM 21A.133 - 7.1	
Paragraph	
Cmt. 36 / Bruce DeCleene/Brad Miller/Jeff Meyers	
Under NPA proposal, mutual recognition between POA and FAA LOA is at risk.	The Agency, in consultation with the Advisory Group of National Authorities and the Safety Standards Consultative Committee, has decided that POA approval is not appropriate but will offer an accreditation process leading to a Letter of Acceptance, consistent with the FAA approach. The Agency will not consider a navigation database as an aircraft part or appliance. Currently, operational approvals and recognition of Letters of Acceptance remain a national responsibility. The Agency is maintaining liaison with the FAA on this matter to facilitate mutual recognition.

Comment	Response
GM 21A.133 - 7.3	
Paragraph	
Cmt. 17 / ERA	
Having referred to some form of "certificate of conformity" it would be wise to provide guidance as to the mandatory information that should be included, eg the POA approval number; approving agency and any validity dates etc. The same would apply to those organisations approved under the FAA system with a LOA. Perhaps an example form could be included in an appendix?	Given the limited number of applicants for accreditation and the timescales for implementation it is not considered practical to develop a standard format. Organisations will need to demonstrate control of the release process, configuration management and appropriate record keeping. Para 7.3 will be amended to make the Agency position more relevant now that POA has been considered inappropriate. Note for consistency that the FAA is not establishing a standard format in its AC.
Cmt. 28 / AEA	
The AEA welcomes the fact that there would be no need for an EASA Form 1.	Noted.
Cmt. 37 / Austro Control	
Change the text of the third sentence: This statement/certificate may be an EASA Form 1 or in a manner of an EASA standardized letter of acceptance as agreed company-defined document agreed with the Competent Authority and identified in the Exposition.	Given the limited number of applicants for accreditation and the timescales for implementation it is not considered practical to develop a standard format. Organisations will need to demonstrate control of the release process, configuration management and appropriate record keeping. Para 7.3 will be amended to make the Agency position more relevant now that POA has been considered inappropriate. Note for consistency that the FAA is not establishing a standard format in its AC.
Cmt. 59 / MOT Austria, Mr. Dundler	
Change the text as follows - in third sentence: This statement / certificate may be made in form and manner standardized by EASA and identified in the exposition.	Given the limited number of applicants for accreditation and the timescales for implementation it is not considered practical to develop a standard format. Organisations will need to demonstrate control of the release process, configuration management and appropriate record keeping. Para 7.3 will be amended to make the Agency position more relevant now that POA has been considered inappropriate. Note for consistency that the FAA is not establishing a standard format in its AC.

Comment	Response
GM 21A.133 - 7.4	
Paragraph	
Cmt. 47 / <i>Garmin International, USA</i>	
"The authority to release databases to the field will only be held by certain qualified individuals...." – Do these "qualified individuals" need to meet the requirements specified in ED-76, DO-200A, or company standards? An explanation statement such as "Qualified individuals are those who have met the applicant's internal qualifications to release databases."	The qualified individuals will have to comply with company standards for training and authorisation. Paragraph 7.4 will be amended to reflect the Agency position that POA is not appropriate.

Comment	Response
GM 21A.133 - 7.5	
Paragraph	
Cmt. 7 / Ellen McGaughy	
Add text: "Alternatively, the navigation data may include internal protections, such as CRC checks, that will inhibit use of the duplicated database if the data were not correctly duplicated."	Noted. This is considered an operations issue and outside the scope of the Agency accreditation.

Comment		Response
GM 21A.133 - 8		
Paragraph		
Cmt. 29 / AEA		
The AEA proposes to rewrite the text as: " Parts Airborne Navigational Databases produced by a Type 1 POA Parts Airborne Navigational Databases produced by a Type 2 POA 		(this comment relates to GM 21B.220 para 8) Agreed. Text amended accordingly.

Comment	Response
GM 21B.220 - General Comments	
Paragraph	
Cmt. 1 / CAA UK	
UK CAA was involved in proposing two approaches to the Navigation Database question, differing mainly on whether an EASA Form 1 release should accompany each database. Although CAA maintains the principle that the output from a Production Organisation Approval should normally be an EASA Form 1, the CAA considers the level of control proposed by GM21A.133 and GM21B.220 to be appropriate in this case and encourages acceptance of that material without amendment.	It is noted that the comment provider supports the use of an approval process. The Agency, in consultation with the Advisory Group of National Authorities and the Safety Standards Consultative Committee, has decided that POA approval is not appropriate but will offer an accreditation process leading to a Letter of Acceptance, consistent with the FAA approach.
Cmt. 81 / Jeppesen	
The term "competent authority" is used and indicates that States where the POA seeker resides will be providing the approval. This raises two difficult issues: first, consistency in the interpretation of the standard and second, it does not address organizations with multiple sites internationally. For example, Jeppesen has main sites in the USA and Germany that process the data used in our navigation databases. Who will be doing the approval of Jeppesen? The FAA or the LBA, or both? If both, how will the assessments be reconciled? The proposed solution is an international approval team that not only approves multiple sites for a company but also approves all the companies applying for a POA (or FAA LOA). This would ensure consistency in the application of the standard.	It is not the intent to use the EASA accreditation system for a site where an FAA LoA is already in place, however operational approvals and recognition of Letters of Acceptance remain a national responsibility. The Agency is maintaining liaison with the FAA on this matter to facilitate mutual recognition.

Comment	Response
GM 21B.220 - 3.2	
Paragraph	
Cmt. 8 / Ellen McGaughy	
Suggested rewording: "In particular, procedures will be audited to confirm that the procedures are adequate for the Type Design holder to communicate in a timely manner any issues and constraints concerning compatibility/ eligibility for installation between their equipment and the databases to the applicant."	Concern noted. It is not the function of this guidance material to ensure that Type Design holders perform their existing obligations. Rather it is to demonstrate by review of the applicants procedures that the appropriate interfaces are in place. Where responses are not received in a timely manner the Agency may decide on further discussions with the Type Design holder to facilitate improvements. Text is modified to clarify these aspects.
Paragraph 3.3	
Cmt. 9 / Ellen McGaughy	
: 3.3 Interface with Aircraft Operators Comment: Please add text to clarify the criteria for "written authority." Reference text: "Further, the applicant's procedures will be audited to ensure that the aircraft operator's instructions for tailored data are confirmed as originating from a person with written authority within the operator's organisation."	Agreed. Text modified.
Cmt. 18 / ERA	
....."a person with written authority within the operator's organization." Clarification is sought as to the definition and requirements of "written authority". We propose that reference is made to "nominated post-holders" within the operator's organization.	Noted. Text modified.

Comment	Response
GM 21B.220 - 6.1	
Paragraph	
Cmt. 73 / British Airways, A.E. Morgan	
Proposals section 6, Guidance, paragraph 6.1, discusses the need for the Data Service Provider to report errors detected within the AIP data. The mechanism by which the same Data Service Provider is empowered to deviate from AIP data that is known to be in error is not clear.	(this comment relates to GM 21A.133 para 6.1) Agreed. Text will be amended consistent with FAA AC-20DB para 11.b(3).
Paragraph Para 6	
Cmt. 10 / Ellen McGaughy	
Add the following: "A Type 2 LOA in accordance with [AC 20-DB, when released] is an acceptable means of compliance with ED-76 for a Type 2 POA. A Type 1 LOA acceptance in accordance with [AC 20-DB] is an acceptable means of compliance with ED-76 for a Type 1 POA."	It is not the intent to use the EASA accreditation system for a site where an FAA LoA is already in place, however operational approvals and recognition of Letters of Acceptance remain a national responsibility. Currently, operational approvals and recognition of Letters of Acceptance remain a national responsibility. The Agency is maintaining liaison with the FAA on this matter to facilitate mutual recognition.

Comment		Response
GM 21B.220 - 7.1		
Paragraph		
Cmt.	74 / British Airways, A.E. Morgan	
Proposals section 7, The Release of Navigation Databases section, BA supports the proposed contents of this section, in particular, that there will be no requirement for a JAR form one for the delivered database and there is no requirement to control the delivered database as an aircraft part.		Noted.