CRD - NPA 03/2004 - Explanatory Note

Comment	Response
General Comments	
Paragraph	
Cmt. ***60 / Lufthansa Systems FlightNav***	
It is definitely worthwhile to establish a certification mechanism to assure database integrity and provide subsequent benefits to RNP and RNAV airspace. ED-76/DO-200A was developed with a broad input of industry and regulatory agencies. Conformity to this document represents a concise and workable mechanism to assure integrity of navigation databases. It appears that the material in NPA No3/2004 ignores the deliberate separation of the responsibilities of the database supplier and the navigation system provider. This appears to create an unworkable situation where the database supplier is part of the navigation system approval process. It would be far better to return to the intent of ED-76/DO-200A.	Noted Noted. However, the intent is not to ignore the separation of responsibilities, but to recognise that there is an essential interface between database supplier and navigation system provider. This is consistent with the ED-76/DO-200A approach and FAA AC-20/DB. It does not imply that the database supplier is involved in navigation system approval.
Cmt. ***75 / DGAC, France***	
1. Conserver des dispositions réglementaires nationales pour l'agrément de production des fournisseurs de données. 2. Recommander l'auto reconnaissance à l'ED 76 ou l'accréditation d'organismes tiers 2. PROPOSED TEXT/ COMMENT: Nous proposons l'adoption de la proposition.	Noted. However, 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. ***76 / DGAC, France***	
1. premier doute relatif à la légalité de considérer les bases de données comme des éléments d'aéronefs 2. second doute relatif aux données de conception approuvées (approved design data) 2. PROPOSED TEXT/ COMMENT: Nous supportons l'approche préparée par les JAA et décrite dans la proposition. La question posée sur la légalité de l'action réglementaire envisagée revient à déterminer si une base de donnée est elle du logiciel ou du matériel. Nous préférons rester pragmatique et se concentrer sur l'enjeu de la proposition qui est de s'interroger sur l'exigence d' encadrement réglementaire du processus de production des données utilisées pour la navigation des aéronefs à des fins de minimiser le risque de non intégrité des données utilisées. De son côté l'Agence peut également s'interroger sur le risque juridique qu'elle prend en recommandant de délivrer des POA à ce type de fournisseurs de bases de données aéronautiques.	Agreed. The Agency will not consider a navigation database as an aircraft part or appliance.

Comment	Response
Paragraph *V. Discussion* **Cmt.** *72 / British Airways, A.E. Morgan* a) Explanatory Note Section V, Discussion, presents a reasoned case leading the reader to conclude that POA is not appropriate but that an ED76A/RTCA200A based approval process would be appropriate. Section VI. Regulatory Impact Assessment, then appears to neglect that reasoning and conclude that POA is appropriate – purely on an unsubstantiated cost/benefit argument which itself states "even a rough estimate of the implementation costs cannot be made." The document then goes on to demand compliance with ED76A/RTCA200A within a POA framework. BA supports the use of an approval process based on ED76A/RTCA200A but we are undecided on the benefits of requiring POA approval for the production of software as this approval seems to have been originally developed entirely for the production of hardware and the implementation of this proposal may therefore impose inappropriate and unnecessary requirements/ costs on the industry. b) The document quotes the definition of parts and appliance from Part 21 Subpart G and states that, "The Agency has serious doubts whether navigation databases fall within the above definition of parts and appliances." BA Comment: The agency may also wish to consider that the parts that comprise an aeroplane are those included in the aircraft drawings. This is therefore something that the aircraft manufacturer defines, and has been accepted by the regulator in the issue of a type certificate.	a) Agreed. 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. B) Agreed. The Agency will not consider a navigation database as an aircraft part or appliance.

Comment	Response
IV.6	
Paragraph	
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 has been changed.

Comment	Response
IV.10	
Paragraph	
Cmt. ***21 / AEA***	
In order not to jeopardize the European plans to implement Precision-RNAV, the European Aviation Safety Agency (EASA), is urged to come forward - without any further delay - with a practical and pragmatic solution for the regulatory oversight of NAV database suppliers that have been successfully audited against the requirements of Eurocae ED-76 / RTCA DO-200A. The AEA believes that the EASA has a clear responsibility to play taken into account its competence on airworthiness matters of CNS/ATM systems, which includes NAV databases. Taking into account the fact that NAV databases can not be treated entirely like aircraft parts, a pragmatic solution could be to follow the FAA's Letter of Acceptance (LoA) concept e.g. to issue an EASA Letter of Acceptance (LoA) to European NAV database suppliers that have been successfully audited. The AEA feels that this issue can not be left to the regulator of the state in which the data supplier resides since this could undermine European P-RNAV implementation plans in case of reticence from these states about issuing any form of compliance statement. Self-regulation by the industry might also not be a good solution, since it would seem prudent to have some form of external assessment. Finally, the AEA would like to stress the need for EASA and FAA to mutually recognize each other approvals (FAA has already committed to accept JAA/EASA approvals of European suppliers).	Agreed. It is noted that the comment provider supports the use of an accreditation 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. Agreed. The Agency will not consider a navigation database as an aircraft part or appliance. Agreed. The Agency is acting to facilitate this process. At this stage the Agency considers that self regulation is not appropriate.
Cmt. ***22 / AEA***	
Under point 10 of the explanatory note it is stated that "the approach used to establish the EASA proposal is compatible with the FAA proposals in AC20-DB". The AEA stresses the need for mutual recognition of the approvals between EASA/JAA and the FAA. The FAA has already promised such recognition of European (EASA/JAA) approvals., as outlined in the final draft FAA AC20-DB. The AEA requests EASA to recognize as well the FAA approvals. Such a commitment was also made at the US/Europe 2004 International Aviation Safety Conference (Philadelphia, 7-11 June 2004).	Noted. The Agency is maintaining liaison with the FAA on this matter to facilitate mutual recognition. Currently, operational approvals and recognition of Letters of Acceptance remain a national responsibility.
Cmt. ***80 / Jeppesen***	
This document is more limited in scope than the FAA document as indicated in the last paragraph of Section IV of the Explanatory Notes. The work of both agencies should be harmonized and bilateral acceptance put in place.	Noted. The Agency is maintaining liaison with the FAA on this matter to facilitate mutual recognition. Currently, operational approvals and recognition of Letters of Acceptance remains a national responsibility.

Comment	Response
V.12	
Paragraph	
Cmt. ***2 / CAA UK***	
This question was discussed in detail by the Production Sub Certification Sectorial Team, the JAA Certification Sectorial Team and in liaison with Industry and FAA representatives. Presentations were received by PSCST and Eurocontrol on error levels in Navigation Databases in light of the introduction of PrNAV. The CAA supports the conclusion of these discussions, i.e. that a navigational database is a part, apparatus, appurtenance or accessory installed in an aircraft and used in operating or controlling an aircraft in flight and is therefore subject to approval. This is consistent with the FAA position.	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. The Agency will not consider a navigation database as an aircraft part or appliance.
Cmt. ***11 / ERA***	
In the Basic Regulation there is a definition for "parts and appliances" – EASA's concerns as to whether a navigation database will fit this definition is based purely on the words used; if the definition was different then it appears that this categorization would be acceptable, and indeed desirable. One solution is to change the definition in the Basic Regulation! On the other hand, the Regulation is not so well written as to be without its own problems in definition; for instance in Annex 1 there are numerous references to "systems", yet no definition is provided. "System" is used within the Annex in conjunction with "equipment" and "appliance", there is no reference to "part". "Equipment" itself is only introduced within the definition of parts and appliances as "equipment", it has no definition itself either. Our proposal is therefore to define navigation databases within the "parts and appliances" qualification.	Noted. The Agency will not consider a navigation database as an aircraft part or appliance.
Cmt. ***12 / ERA***	
A navigation database is "used or intended to be used in controlling an aircraft in flight" and it is "installed in the aircraft"; therefore it is appropriate to classify it, as proposed, as a " part or appliance". When the airworthiness aspect is investigated, this definition is supported and reinforced. To quote Annex I to the Basic Regulation: Paragraph 1.c.2 – "Other systems, equipment and appliance not required for type-certification, or by operating rules (NB: there is a need to define and clarify what these operating rules are), whether functioning properly or improperly, must not reduce safety and must not adversely affect the proper functioning of any other system". Paragraph 2.c – "Product operations must be protected from hazards resulting from adverse external and internal conditions, …". A corrupted or inaccurate navigation database would "reduce safety" and would "adversely affect the proper functioning of other systems". Similarly a corrupted or inaccurate nav database is an "internal condition" from which the aircraft (product) must be protected. As these criteria are airworthiness specifications established to ensure compliance with the ERs, and as it is desirable that navigation databases meet these specifications, according to Article 5, 2.(b) a database "may be issued with specific certificates" and would also be compliant with the Basic Regulation.	Whilst the Agency has concluded that navigation databases are not aircraft parts or appliances and POA is not appropriate, it has decided to offer a central accreditation process. This accreditiation process in itself will provide for P-RNAV an enhancement to current database integrity assurance practices.

Comment	Response
Cmt. *30 / IAA*	
In reference to the following statement "The Agency agrees that the structure of a database can be understood as the design but doubts that this applies to the data itself, which in fact constitutes the database." One of the main concepts of ED-76/DO-200A is the development of data quality requirements for the data included in the navigation database. These data quality requirements include accuracy, resolution, assurance level, timeliness etc of the aeronautical data, and the degree that a data element meets these requirements determines its fitness for use for the intended function. On the basis that the data quality requirements are produced from an approved source (namely the equipment manufacturers) they could then be considered as applicable design data under 21A.131, and the POA must show conformity of the data in his navigation database with this design data.	Noted. Such demonstration of conformity will be part of the Agency accreditation process.
Cmt. *32 / Bruce DeCleene/Brad Miller/Jeff Meyers*	
The FAA recommends that the EASA should not identify the database as a part and to consider the option of authorization under the operating rules.	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.
Cmt. *39 / Garmin International, USA*	
"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.	Agreed. Text amended.
Cmt. *65 / Lufthansa Systems FlightNav*	
We concur with content of paragraph 12. The intent of Part 21 Subpart G appears to provide approval to suppliers of hardware equipment to be installed or used on the aircraft. Navigation databases do not fall into such a classification.	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.
Cmt. *69 / LBA*	
LBA recognises the concerns regarding the definition of parts and appliances and believes that Article 3(d) of the Basic Regulation does not cover navigation databases. However, regulatory oversight of navigation database production is considered to be necessary in order to establish navigation database integrity as required by JAA TGL No. 10. Furthermore the concept of a production organisation approval as specified in Part 21G is thought to be the appropriate tool to fulfill the regulatory responsibilities for the following reasons: • The production processes for navigation databases are similar to those for an aircraft part. • Procedures for granting, maintaining and supervising production organisation approvals are well established. • The POA certificate is a fully recognised and accepted document. • Audit teams are readily available. Therefore LBA proposes to adapt the regulatory framework in order to accommodate production of navigation databases. It is recognised that adapting the regulations might require a considerable period of time so that the use of the flexibility provisions in Article 10 of the Basic Regulation could be envisaged, in particular paragraph 1(b). Another possibility could be to cover the requirement for the approval of navigation database providers (in accordance with the NPA proposal) under operational rules like the FAA.	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.

Comment	Response
Cmt. *77 / ALPA, Mark Shuba*	
Databases should not be considered a part.	Agreed. The Agency will not consider a navigation database as an aircraft part or appliance. 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.

Comment	Response
V.13	
Paragraph	
Cmt. ***3 / CAA UK***	
The question of design data was also subject to detailed discussion with the same bodies. Analyses presented to Eurocontrol and the PSCST showed that although the design data was indeed outside the usual scope (i.e. in the case of State AIP data there is no supporting DOA), 50% of database errors were simply caused during the transcription process. It was considered that the safety improvement by bringing the transcription process under regulatory control and requiring POA holders to check data and advise errors to the State AIP provider of the raw data was worthwhile. We understand that that matter of control of State AIP data to be under discussion in Eurocontrol. The provision of a POA approval is considered an essential link in the end-to-end data assurance process that Eurocontrol is seeking to achieve.	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. ***13 / ERA***	
The data "itself" must conform to a "specific design" in order for it to be accepted into the database "structure" at all, or to be entered into the "structure" in a condition in which its original meaning is not altered. Therefore, we could be talking about 2 separate applicable design data: one for the database structure (unaffected by entered navigation data), and one for the navigation data itself, which must conform to a specific standard before it can be entered into the database structure (framework). NB: I assume that there are industry standards already applicable to formatting geographical positions in such a way so as to eliminate ambiguities – this formatting requirement and protocol is surely a type of "design data". Therefore the requirement of Part 21 can be complied with.	The Agency accreditation scheme will differentiate between data which needs to be initially formatted to an industry standard such as ARINC 424 for which a Type 1 LoA would be applicable, and data which needs to be formatted for integration into "the specific design" of the target equipment for which a Type 2 LoA would be applicable. As part of the accreditation process the applicant will need to demonstrate effective interface to the source for both types of data.
Cmt. ***31 / IAA***	
In reference to the following statement "The Agency agrees that the structure of a database can be understood as the design but doubts that this applies to the data itself, which in fact constitutes the database." One of the main concepts of ED-76/DO-200A is the development of data quality requirements for the data included in the navigation database. These data quality requirements include accuracy, resolution, assurance level, timeliness etc of the aeronautical data, and the degree that a data element meets these requirements determines its fitness for use for the intended function. On the basis that the data quality requirements are produced from an approved source (namely the equipment manufacturers) they could then be considered as applicable design data under 21A.131, and the POA must show conformity of the data in his navigation database with this design data.	As part of the accreditation process the applicant will need to demonstrate compliance with documented Data Quality Requirements.
Cmt. ***33 / Bruce DeCleene/Brad Miller/Jeff Meyers***	
The FAA does not agree that Annex 15 constitutes design data. The only appropriate application of design data in this context is the Data Quality Requirements defined as part of a new certification of RNAV equipment or extracted from previous software documentation for previous certifications.	This issue is one of the reasons why it was determined that POA was not appropriate. The accreditation scheme will recognise Annex 15 as a standard applicable to the source data, but not to constitute design data itself.

Comment	Response
Cmt. *61 / Lufthansa Systems FlightNav*	
We concur with the content of paragraph 13. Database suppliers provide a generic dataset that is intended to be used on a variety of systems. Database suppliers have only a casual knowledge of the design approval of any specific navigation system. A requirement that the database supplier have specific design knowledge of the airborne navigation systems is not a workable situation due to the proprietary and diverse implementations of navigation systems.	The Data Quality Requirements are determined by the end-use of the data in the context of a specific navigation system. The DQR will therefore be set by the data application integrators (subject to LoA 2 accreditation). Whilst not being expected to have specific design knowledge of the airborne navigation system a Type 1 database supplier has to satisfy the DQRs specified by the relevant Type 2 integrator. NOTE for the Agency: amend terminology accordingly
Cmt. *70 / LBA*	
A navigation database consists mainly of navigation data established in accordance with ICAO Annex 15 and Data Quality Requirements associated with the navigation equipment itself. The latter does have an approved design, hence approved design data too. The navigation data derived from AIP documentation is not approved in itself but comes from an approved source.	This issue is one of the reasons why it was determined that POA was not appropriate. The accreditation scheme will recognise Annex 15 as a standard applicable to the source data, but not to constitute design data itself.

Comment	Response
V.14	
Paragraph	
Cmt. ***4 / CAA UK***	
For reasons stated in discussion items 12 and 13, CAA Interpretation is that the existing regulation is applicable to this activity.	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. ***40 / Garmin International, USA***	
This concern needs to be fully resolved before this regulation takes effect.	Noted.
Cmt. ***62 / Lufthansa Systems FlightNav***	
We strongly concur with the content of paragraph 14.	Noted.

Comment	Response
V.15	
Paragraph	
Cmt. ***5 / CAA UK***	
CAA interpretation is that the existing regulation is applicable to this activity and should therefore be subject to EASA regualtion. However, CAA would expect that the Agency would request a competent authority to carry out the work on its behalf in the normal manner. With regards to overseas databases, the FAA will be using its Advisory Circular (with which every effort has been made to maintain a harmonized approach in the NPA proposal). At present, UK CAA is not aware of any other Navigation Database Providers operating outside the areas for which the FAA or EASA have regulatory responsibility.	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 accreditation system will allow the Agency to accreditate non-EU applicants.
Cmt. ***14 / ERA***	
Converting this NPA into recommended guidance for NAAs, or recommending industry self-regulation are not viable options and should not be considered.	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.
Cmt. ***34 / Bruce DeCleene/Brad Miller/Jeff Meyers***	
The FAA agrees with this conclusion and further asserts that the authority to control the data is already embedded in the operating rules. The FAA recommends that the JAA/EASA take the lead on this issue and develop implementation guidance that is compatible with FAA AC 20-DB.	Agreed. 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. ***63 / Lufthansa Systems FlightNav***	
We believe that (as suggested in paragraphs 15 and 16) that a certification mechanism that is based on the conformity to ED-76/DO-200A is the best situation and such should be adopted.	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. Conformity to ED-76/DO-200A will form part of the accreditation process.
Cmt. ***71 / LBA***	
LBA does not recommend using the proposed guidance material as best practice for national aviation authorities.	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. ***78 / ALPA, Mark Shuba***	
ALPA is in favor of guidance compatible with FAA AC-20DB.	Agreed. 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.

Comment	Response
V.16	
Paragraph	
Cmt. ***6 / CAA UK***	
In light of the above and in view of the complimentary position held by the FAA, UK CAA Believe that regulatory approval of Navigation Database Providers is the correct approach.	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.
Cmt. ***14 / ERA***	
Converting this NPA into recommended guidance for NAAs, or recommending industry self-regulation are not viable options and should not be considered.	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.
Cmt. ***23 / AEA***	
Under point 16 of the explanatory note it is stated that "the burden to operators could be alleviated if suppliers of databases have shown to comply with Eurocae ED-76/ RTCA DO-200A standards for processing aeronautical data". The reference to "alleviation' is not correct.	It is the intent of the proposal to alleviate the burden on the operator by providing an approved source of data per JAA TGL 10. For this reason the comment is disagreed. It should be noted that the operator will still have to carry out quality sample checks in accordance with existing operational rules.
Cmt. ***35 / Bruce DeCleene/Brad Miller/Jeff Meyers***	
The FAA does not agree that a third party accreditation will adequately assure database integrity.	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.
Cmt. ***41 / Garmin International, USA***	
"It may be sufficient to rely on a statement of compliance with ED-76/DO-200A from the navigation database supplier itself, or an accredited third party." – We suggest adding the following sentence: "A Letter of Acceptance (LOA) granted under AC-20DB is recognized as compliant by the EASA without further showing by the supplier."	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.
Cmt. ***63 / Lufthansa Systems FlightNav***	
We believe that (as suggested in paragraphs 15 and 16) that a certification mechanism that is based on the conformity to ED-76/DO-200A is the best situation and such should be adopted.	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. Conformity to ED-76/DO-200A will form part of the accreditation process.

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	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. NOTE: second paragraph should be addressed during the detailed review of the guidance Agreed. Text will be amended consistent with FAA AC-20DB para 11.b(3).

Comment	Response
VI.17	
Paragraph	
Cmt. *15 / ERA*	
Paragraph 19 sums up why this NPA should proceed. What should be highlighted here is the impact on costs and safety to operators if this proposal is not agreed, approved nor accepted!	It is noted that the comment provider supports the use of an approval process.

Comment	Response
VI.18	
Paragraph	
Cmt. ***15 / ERA***	
Paragraph 19 sums up why this NPA should proceed. What should be highlighted here is the impact on costs and safety to operators if this proposal is not agreed, approved nor accepted!	It is noted that the comment provider supports the use of an approval process.
Cmt. ***64 / Lufthansa Systems FlightNav***	
Paragraph 18 indicates an uncertainty on the costs. We believe the costs to conform to ED-76/DO-200A is relatively minor. On the contrary, the cost to conform to Part 21 Subpart G will be considerable due to the connection between such approval and the holder of the navigation system design approval. A database supplier provides data to numerous manufactures, each of whom have numerous versions of their equipment. It is very unreasonable to expect the database suppliers to consider the design approval of such a large number of systems when each has its own proprietary characteristics (especially when some of the characteristics may be in conflict.)	Whilst not being expected to have specific design knowledge of the airborne navigation system a Type 1 database supplier has to satisfy the DQRs specified by the relevant Type 2 integrator. It is therefore considered that the costs will be less than those assumed by the comment provider.

Comment	Response
VI.19	
Paragraph	
Cmt. ***15 / ERA***	
Paragraph 19 sums up why this NPA should proceed. What should be highlighted here is the impact on costs and safety to operators if this proposal is not agreed, approved nor accepted!	It is noted that the comment provider supports the use of an approval process.
Cmt. ***24 / AEA***	
Point 19 of the explanatory note seems to suggest that the airlines should accept additional costs for increasing the integrity of the navigation database. This is a dangerous assumption, as the benefits are not justified (demonstrated).	It is the intent of the proposal to alleviate the overall burden on the operator by providing an approved source of data per JAA TGL 10. For this reason the comment is not shared.