



The BACW's Bidding Commission hereby presents question made by companies with their respective answers.

**REMARK:** The questions presented in this "Questions and Answers" are numbered as they are answered by the Bidding Commission and may not match the numbering provided by the companies.

1. **Question:** Question - A bidder could present a technical qualification documents issued in the name of another company pertaining to the same economic group of bidder? Is this understanding correct?

**Answer:** *For this solicitation it will be accepted the composition of parent companies, subsidiaries and the companies with society participation*

2. **Question:** Are Companies allowed to participate in the form of a Consortium?

**Answer:** *Please refer to the item 4 of the IFB.*

3. **Question:** Considerando que esse é o terceiro certame referente aos T-27 realizado pela FAB e que os preços de referência apresentados pelas empresas dentro deste certame era para execução na base da contratada, questiona-se se a execução do trabalho poderá ser realizada na base da contratada ? Caso negativo, pelo menos as primeiras aeronaves protótipos poderão ser executadas na base da contratada, dentro do território brasileiro?

**Answer:** *As per item 9.3.5. of the Basic Project, 9.3.5 - All avionics system installation services for T-27 aircraft, including modifications, installations and integration of new equipment, shall be performed at PAMALS, at the following address: PARQUE DE MATERIAL AERONÁUTICO DE LAGOA SANTA (PAMALS) AVENIDA BRIGADEIRO EDUARDO GOMES, S/N, VILA ASAS LAGOA SANTA – MG – BRAZIL CEP. 33400-000*

4. **Question:** There seems to be a discrepancy between the PN of GTX-345 requested in Attachment D (010-01216-01) and the system architecture described in Attachment E. In the Attachment E there's clear indication that the required equipment is the remote version of the GTX-345 transponder, however, the correct PN for the remote unit is 010-01217-01. We ask the commission to clarify if the companies are required to offer and deliver the panel mounted GTX-345 (PN: 010-01216-01) as precluded in Attachment D or the remote version of the GTX-345R (PN: 010-01217-01) as precluded in Attachment E;

**Answer:** *The remote version of the GTX-345R (PN: 010-01217-01) as precluded in Attachment E.*

5. **Question:** We would like to request a clarification regarding the activation datacards for the G600 TXi. In the quantity column, is the number referred to the amount of physical SD cards required to be delivered or the number of licenses for the requested software

**Answer:** *The priority is the number of licenses for the requested software.*



6. **Question:** In Attachment D three GPS antennas are being requested (two GA36 and one Commant GPS/VHF combo antenna) yet, on the diagram of Attachment E only one GA36 antenna is used to feed both GTN 650 units using a ACTIVE GPS SPLITTER 1x4 (ALDCBS1X4-B). The GPS function of the Commant antenna is shown as delivered to both GTN units using another ACTIVE GPS SPLITTER 1x4 (ALDCBS1X4-B). There're three issues we see with this architecture which we would like clarifications:

- There is an unused GA36 antenna being requested. We would like to confirm if the acquisition of a spare GA36 antenna with each aircraft is what the administration is seeking;
- Each GTN unit is able to be connected to only one GPS antenna at a time (connector P1006). Hence, the both GPS splitters are not really required for this solution since they would serve no purposes;
- There's no VHF antenna for the #2 GTN unit. We would like to confirm if we are to consider that one of the existing VHF antennas is to be used for integration of the second GTN unit COMM function; We would like to suggest the administrator to amend the table of Attachment D to read-out as follows in relation to this component as it would reduce costs and ultimately provide the same level of redundancy

PN ALDCBS1X4-B - ACTIVE GPS SPLITTER 1x4 - QTD per Aircraft: 0

PN 013-00244-00 - GA36 GPS/WAAS ANTENNA (WHITE) - QTD per Aircraft: 1

PN 115-00873-00 - Antenna Doubler for GA 36 Antenna - QTD per Aircraft: 1

*Answer: The initial project presented can have a small correction during Preliminary Desing Review (PDR)*

7. **Question:** In Attachment D two GMA-342 audio panels are being requested. In the integration diagrams of Attachment E, it's indicated that each GMA-342 audio panel is to be installed in a different cockpit and with an interconnection to the existing audio panel. The GMA-342 is not designed to act as dual independent audio panels in tandem aircrafts. This architecture would generate a potentially confusing cockpit set-up as each pilot would have two audio panels with very different functions and would affect the communication system operational philosophy. We would like to clarify if the GMA-342 is to be used as Marker Beacon receivers only or as the main audio panel;

*Answer: The initial project presented can have a small correction during Preliminary Desing Review (PDR)*

8. **Question:** According to item 7.2. from basic project, approval of the project, review of the executive Project, so that the CONTRACTED PARTY can maintain the guarantee of the integrated equipment; Is correct our understanding that s CONTRACTED party must review and make changes on executive project during and after installations has been performed? According to basic project, item 9.3.6. the COTRACTING party will be responsible for aircraft certification at IFI. The BIDDER would like to know who will be responsible to develop certification reports / projects to be used at the certification at IFI? If BIDDER will be responsible for the certification report, what information/report should be supplied by CONTARCTED party? Installation report, manual installation, such as drawings etc? Could you please describe items?

*Answer: 1) The executive project developed by CONTRACTING party can present SMALL correction to be done during intallation and it is part of any development.*

*2) The documentation is been developed by CONTRACTING party, but shall be reviesed and presented by contracted party as final installer.*



9. **Question:** According to item 8.1. from basic project, Flights by instruments, as well as navigations and approximations in accordance with the existing air traffic rules. The BIDDER would like to ask what capacities are expected for RNP e RNAV for aircraft operation.

*Answer: The RNAV capability expected is the most accurate applicable for the equipments set which are listed on the PB.*

10. **Question:** According to item 9. from basic project, The CONTRACTED PARTY shall approve the installation/integration plan contemplating new equipment as well as the equipment which shall remain on the aircraft. Is correct that CONTRATED party will have to supply and approve executive and installation project so the certification can be requested to IFI by the CONTRACTING party?

*Answer: The executive and installation project is been developed by CONTRACTING party, but shall be revised and presented by contracted party as final installer.*

11. **Question:** According to item 9.2.1. from basic project, Changes in the electrical power distribution system SHALL be completed to meet the demand associated with the new avionics architecture, however in such a way that does not require new certification of the electrical system. Is correct that items chosen as products to be installed at the aircraft, according to appendix 1, even with necessary changes on power distribution, these items will fit at the electrical load available at the aircraft model? Is correct that the new items can fit at the existent electrical load available at the aircraft? If after changes on the electrical distribution and if an electrical load is necessary, the BIDDER would like to know who would be responsible for the certification process.

*Answer: 1) YES: The products to be installed at the aircraft will fit at the electrical load available at the aircraft model. 2) CORRECT: the new items will fit at the existent electrical load available at the aircraft. 3) the certification process is CONTRACTING's party responsibility.*

12. **Question:** According to item 9.2.2. from basic project, Changes to the electrical protection system SHALL be completed to meet the demand associated with the new avionics architecture, however in such a way that does not require new certification of the electrical system. Is correct that items chosen as products to be installed at the aircraft, according to appendix 1, even with necessary changes on protection system, these items can fit at the existent protection system available at the aircraft?

*Answer: According to executive and installation project, the new items will fit at the existing electrical load available at the aircraft.*

13. **Question:** According to item 9.2.10. from basic project, all drawings SHALL be supplied in the right scale, thus allowing easy verification of all technical details; they shall also comply with the formats established the Brazilian Association of Technical Norms (ABNT) or- in the absence of ABNT standards- according to other similar international technical standard. Is correct that CONTRACTED party will be responsible for all drawings?



*Answer: The CONTRACTED party will be responsible for final drawings. But, the draft of the drawings will be provided by CONTRACTING party, as part of the executive project.*

14. **Question:** According to item 9.3.7. from basic project, the CONTRACTED PARTY shall provide technical documentation for the equipment acquired, as well as for the integration and installation developed, to allow the CONTRACTING PARTY to undergo a modification and certification process with DCTA/IFI, Could you please inform what is included in the certification support. For instance: Should the supplier be responsible to update the continued airworthiness of T-27 modernized. If yes, confirm if the all documents listed below shall be updated:

- a. Airworthiness Directives (ADs) and Service Bulletins (SBs)
- b. Aircraft Flight Manual (AFM)
- c. Airworthiness Limitation Section (ALS), which may be a separate document (or part of another)
- d. Cabin Crew Operating Manual
- e. Flight Crew Operating Manual
- f. Configuration Maintenance and Procedures Document (linked to ETOPS operation)
- g. Certification Maintenance Requirements (CMR)
- h. Aircraft Maintenance Manual (AMM)
- i. Schedule Maintenance Program
- j. Component Maintenance Manuals (CMM) or Component Overhaul Manuals (COM)
- k. Illustrated Parts Catalogue (IPC)
- l. Wiring Diagram Manuals
- m. Weight and Balance Manuals
- n. Electrical Load Analysis
- o. Supplemental Structural Inspection Document (SSID)
- p. Nondestructive Testing Manual
- q. Key Safety Information (KSI).

*Answer: Once the installation is finished and the certification process is concluded, the contracted party will be no responsible to continue the updates.*

15. **Question:** According to item 9.4.4. from basic project, All technical documentation pertaining to operation, maintenance, testing and acceptance of systems shall be written in Portuguese, printed on paper compatible in quality with the paper used in the aircraft's current technical publications, include media in PDF format, and it shall be delivered in its final version upon delivering the first aircraft. Data pertaining to the inclusion of the items in SILOMS shall be supplied in digital form, in accordance with the format provided by the CONTRACTING PARTY. Should the supplier provide the test procedure and test results for the certification tests ?

*Answer: The tests mentioned on this item are not related to the certification process.*

16. **Question:** According to item 3.4.6. from attachment F – SOW, from basic project, the client shall be responsible for all activities pertaining to the preparation of prototypes, as necessary, to perform ground and flight test campaigns, including -but not limited to- fueling and defueling aircraft, inspections and re-work, as the case may be, to eliminate non-conformities associated with non-modernized



systems identified during the tests, the performance of periodic inspections and aircraft preservation tasks. Is correct that the cost for fueling and defueling will be paid by the CONTRACTING party?

**Answer:** Yes.

17. **Question:** According to attachment E page 07 from basic project, the BIDDER would like to clarify if PN shown as GTX 435R should be used for the transponder.

**Answer:** *The remote version of the GTX-345R (PN: 010-01217-01) as precluded in Attachment E.*

18. **Question:** Considering that new VHF COMM installed has a lower capacity comparing to the one now installed, can this down grade be considered as a reduction of operational capacity?

**Answer:** No.

19. **Question:** Since the list of avionic equipment includes the Engine Indication is that necessary the Engine tests outside the aircraft? If yes, who will be responsible to provide the test bench and the required infrastructure for the test?

**Answer:** Yes. *The CONTRACTING party will be responsible.*

20. **Question:** Diante do exposto solicita a ora Consulente o ajuste dos termos do edital às disposições Legais que determinam a equalização de propostas comerciais apresentadas por empresas nacionais e estrangeiras, aplicando-se, para julgamento isonômico das propostas, ao preço apresentado pelas licitantes estrangeiras, gravames consequentes dos mesmos tributos que oneram exclusivamente os licitantes brasileiros

**Answer:** *Sobre o assunto, informo a V. Sa. que a Administração seguirá todos os princípios contidos na Lei 8.666, com base no art. 123 da referida Lei: "Em suas licitações e contratações administrativas, as repartições sediadas no exterior observarão as peculiaridades locais e os princípios básicos desta Lei, na forma de regulamentação específica." Ademais, informo a V. Sa., que na atual fase do procedimento licitatório, todos os princípios elencados no art 3º da Lei 8.666 estão sendo observados pela Administração.*

21. **Question:** Considering that the invitation for bid states:

- i. Object as solo: installation and integration service, with the supply of equipment;
- ii. SOW tasks as: modification (avionics, environmental control and electrical management systems), installation, support for certification, tests, flight tests and manufacture and aircraft delivery; Based on points "i" and "ii" above it can be identified that there is a contradiction between object and sow tasks in terms of scope to be performed by supplier. In this sense, the SOW states activities of a development program and not only installation and integration of equipment once that at the end it will be delivered a final and certified project for the Aircraft. Therefore, we would like to understand: a) who will be responsible for this activities? b) shall all the SOW tasks be considered as supplier obligations? c) Were such tasks are considered on the estimated proposal calculation? and d) is there already a certified project for this scope in the aircraft?



*Answer: a) The Contracting Party will be responsible for certification process. But, the SUPPLIER will provide engineering support to accompany the certification, including reports consulting when applicable. b) The SOW defines the Roles and Responsibilities between SUPPLIER, and CUSTOMER. c) Yes. d) No.*

22. **Question:** In case that the equipment listed in the Annex D does not comply with performance and certification requirements, what is the responsibility of the Contracting Party on equipment replacement?

*Answer: If a replacement need is identified, and there is a cost associated to this replacement, it will be subjected to analysis and a possible amendment to the contract. It is expected to mitigate this risk during PDR.*

23. **Question:** What are the CDRLs documents that need to be approved by Contracting Party and what are the documents that only need to be delivered (with no approval)?

*Answer: Review, comment and approve CDRLs, shall be defined on PDR, as item 3.2 from SOW. All installation design, product configuration, drawings, associated parts lists, processes descriptions and other documents related to the EMB-312 aircraft modification / equipment installation shall be delivered by Supplier to CUSTOMER through a set of CDRL to be mutually agreed between CUSTOMER and Supplier and updated at CDR and PDR.*

24. **Question:** We request the Contracting Party to list CDRLs to be delivered including detailing the development phase and schedule.

*Answer: The list of CDRL will be informed in the executive project, and updated at PDR and CDR.*

25. **Question:** Considering the purchasing of 20 equipment sets is expected for T0+2 and prototype is expected for T0+4, what is the Contracting Party expectation and responsibility in case of a modification in the equipment configuration after prototype certification?

*Answer: If a replacement need is identified, and there is a cost associated to this replacement, it will be subjected to analysis and a possible amendment to the contract. It is expected to mitigate this risk during PDR.*

26. **Question:** Considering the SOW requires PDR and CDR, and the deliver and payment schedule requires CDR in T0+2, when is expected the PDR?

*Answer: Up to 20 days from contract effectiveness.*

27. **Question:** What are the operator requirements that can justify the proposed architecture and specific equipment part numbers listed?



*Answer: The operator's requirements are classified and will be discussed with the contracted party during the certification phase.*

28. **Question:** What is the RNAV requirement for airway navigation phase, final approach and landing procedure?

*Answer: The RNAV capability expected is the most accurate applicable for the equipments set which are listed on the PB.*

29. **Question:** Considering that SOW states that following two system shall be modified or modernized: Environmental Control System (ECS) and Electrical Bus Management System.

i. We request clarification about how goods and services for such systems were considered in the BID estimated prices?

ii. Does the Supplier need to list those two systems in the price proposal detailing part numbers and manufactures as it is in price proposal template attachment?

iii. According to SOW, Ref4 should present the preliminary architecture for Electrical System. Please, point where is it detailed in the attachment.

*Answer: i. The estimated prices did nt considered the ECS and the Electrical Bus Generating System.*

*ii. No. Iii. The preliminary information is at ANNEX E. At contract signature the executive project will be presented with more details.*

30. **Question:** Considering that FAB uses IFR charts produced by ICA (Instituto de Cartografia da Aeronáutica), is it possible to upload in the avionics displays charts different than the ones provided by Jeppesen?

*Answer: It is not part of this development phase.*

31. **Question:** Considering original aircraft solution with one source for attitude and heading reference system and the new preliminary system description with two equipment GRS 7800 per aircraft, please inform the rational for increasing the quantity of aircraft sensors in the scope of this bid.

*Answer: This solution was considered more reliable.*

32. **Question:** According to the item 8.10 on page 12 of the bid, "AS per item 12 of the BASIC PROJECT, ATTACHMENT I, before preparing its proposal, the Bidder shall have the option of inspecting at least one aircraft undergoing modification, in the presence of a COMAER representative, ..." we understand that is not mandatory to perform the survey in the aircrafts. Is that understand correctly?

*Answer: Correct*

33. **Question:** On the ATTACHMENT C – PRICE PROPOSAL TEMPLATE, 3) ITEM 2, it requests: "As referenced in ATTACHMENT A and B of this PB, service consumption shall be considered as Installation technical [service], with engineering activities, Training and Support, for a total amount of:"



As ITEM 2 is referred only to consumable goods, our understanding is that this item is not to be on this section, but on the ITEM 3 that is referred to prices of services and installation. Please clarify if our understanding is correct and if not, what shall be included on this

*Answer: The estimated price presented on Table 2 of the Appendix 1 (Annex B of the Basic Project) does not contemplate the amount of US\$ 120.727.829,69 referred to the item “Events, Guides and Training”. This cost may be verified at the line “Eventos, Manuais e Treinamentos”, with the cost of 120.984,27. Finally, how it will be presented may be suggested by the company.*

34. **Question:** A bidder could present a technical qualification documents issued in the name of another company pertaining to the same economic group of bidder? Is this understanding correct?

*Answer: For this solicitation it will be accepted the composition of parent companies, subsidiaries and the companies with society participation*

35. **Question:** In the BID, it shows the standard System Description on ANNEX E and Standard SOW in ANNEX F. This is supposed to be presented on the Envelope 2. Shall the Bidder present a new complete SOW and System Description on the Envelope 2, or no need to present and consider the standard described on the BID? Please clarify

*Answer: In accordance with item 9 of the Basic Project, the Executive Project with the complete level of detail shall be supplied by the CONTRACTING PARTY after the contract execution.*

Notwithstanding, In accordance with the Invitation For Bid 188733/CABW/2018 item 31.1, *Any doubts arising from the provisions of this Invitation for Bid may be the subject of consultation, in writing, to the **Bidding Commission** in charge of this bidding process, up to 48 hours before the delivery of the proposals.*

Based on that, the BACW’s Bidding Commission reinforces that questions shall be submitted to [con@cabw.org](mailto:con@cabw.org) and no agents outside BACW should be copied in the e-mail. Thus, only answers published in BACW’s website are considered official and part of the solicitation file.

Furthermore, the Brazilian Aeronautical Commission appreciates the question, and stands available to clarify and explain any doubts or concerns in order to increase the BID quality. Any questions or concerns must be submitted to [con@cabw.org](mailto:con@cabw.org)

*Note: This information has been made available at BACW website in the publishing for the related Bidding Process. <http://www.cabwnews.com/index.php/solicitations.html>*