

APPEL D'OFFRES-i - VIA « I-SOURCING »

No. 17-220289-A

Development of Collision Avoidance Validation and Evaluation Tool (CAVEAT)

The objective of this study is the development of high-level requirements for CAVEAT, an InCAS replacement, which take into account the needs of its variety of users and which will set a basis for the development of detailed technical specifications and implementation of CAVEAT. The objectives of CAVEAT Development include:

- Support simulation of the following TCAS II versions: 6.04a, 7.0, 7.1, 7.2 (the latter is experimental version for which MOPS do not exist but specification will be provided)
- Initially enable validation of ACAS Xa, and ultimately of the entire range of ACAS X versions (i.e. also Xo, Xu and Xp)
- Initially be able to simulate single and large numbers of encounters (various equipage combinations) and generate relevant outputs (statistics and static visualisations), and ultimately also generate interactive visualisations
- Be adaptable in order to anticipate ACAS X evolutions and required adaptation to new ATM / flight operations in Europe, via solutions necessary for Europe e.g. Remotely Piloted Aircraft Systems (RPAS) Detect And Avoid (DAA) may extend beyond the scope of collision avoidance and require encounters involving three or more aircraft.

Who should tender:

The Contractor Personnel shall:

- demonstrate detailed understanding of the attached High Level Requirements and indicate compliance.
- demonstrate how CAVEAT Development objectives will be met.
- provide Contractor's Personnel who have confirmed experience in project management and development team expertise demonstrating a deep understanding of the needs and providing a clear description of the technical solution.
- demonstrate in its offer its ability to provide the necessary level of experience and fluency to perform the tasks.
- have knowledge and expertise in statistical modelling applicable to rare event simulation sufficient to undertake the CAVEAT development.
- be highly experienced in software implementation of complex mathematical algorithms.
- be highly skilled in development in Matlab or equivalent.
- be highly skilled in the development of GUI.
- have knowledge of aviation, air traffic control, and airborne collision avoidance sufficient to undertake the CAVEAT development.
- demonstrate their track history of software development in challenging time scales.
- possess a high level of ability to write professional documents and speak in English.

European
Organisation for the
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Organisation
européenne pour la
sécurité de la
navigation aérienne

Rue de la Fusée, 96
B- 1130 Bruxelles
Tel: +32.2.729.90.11
Fax:+32.2.729.90.44
Telex: 21173 EUROCC B

Closing date: 09/08/2017, 15:00 Brussels time

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Point of Contact:

If you wish to receive the call for tender please see the "important notice" below and if you have any other related questions, please contact:

Mme Aleksandra Owoc Berson
DR/ABE

e-mail: eec.procurement@eurocontrol.int

Tél. : ++33 1 69 88 74 71

fax.: ++33 1 69 88 70 18

IMPORTANT NOTICE

The full i-call for tenders documentation is in electronic format (.pdf).

If you wish to obtain the i-call for tenders documentation please read and follow carefully the instructions below:

1. **If you are already registered in the EUROCONTROL Supplier Portal, please send an e-mail to the Point of Contact mentioned above to get access to the documentation.**
2. **If you are not yet a EUROCONTROL supplier, please follow the 4-step process described on the following link:**

<http://www.eurocontrol.int/articles/supplier-portal-registration-procedure>

3. EUROCONTROL accepts no responsibility whatsoever for the completeness, accuracy and/or timeliness of the transmission of the electronic documents (nor for the electronic documents themselves).
4. Submission of tenders shall **be made electronically** and shall be exclusively made in strict accordance with the instructions given in the "NOTICE CONCERNING THE PRESENTATION OF TENDERS".
5. You may:
 - a) print out the documents;
 - b) forward the documents further on a strictly need to know basis (always fully acknowledging the source, i.e. EUROCONTROL), and
 - c) use print-outs of the electronic i-call for tenders documents for the submission of tenders (especially Form i-AF32CFT).
6. You may not:
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- e) transmit the documents without indication of the source.
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An environmental notice:

With a view to reduce the exponential growth of paper consumption, we would invite you only to print out electronic documents received and/or request paper copies of the price enquiry documentation if you are actually considering to submit a tender.