



Responsible Contracts Officer: A. Galtieri (IMT-CTE)  
Telephone (31) 71-5656834  
Fax (31) 71-5655773

**SUBJECT: Invitation to Tender ITT/1-4404/03/NL/AG  
Verification of Quantum Mechanics and New Applications of Quantum  
Technologies and Methods in Space**

REF: ESA/IPC(2003)11, item no 03.1EM.06  
Budget output 060 – General Studies

Dear Sirs,

The European Space Agency (ESA) hereby invites you to submit a tender for the above subject.

Please note that the above-mentioned Invitation to Tender has been published on EMITS on 20<sup>th</sup> November 2003.

Please find attached hereto the following documents:

Appendix 1 – Statement of Work and Technical Requirements  
Appendix 2 - Draft contract  
Appendix 3 - Special Conditions of Tender

The General Conditions of Tender, to which the Special Conditions refer, are available on <http://emits.esa.int/emits/owa/emits.main> under "Reference Documents" -----> "Administrative Documents".

Please note the provisions of the Dispatch and Receipt Conditions contained in the General Conditions of Tender, in particular those relating to the non-admissibility of offers arriving after expiry of the closing date and to the return of the Acknowledgement of Receipt.

Your attention is furthermore drawn to the following:

1. The Agency has earmarked for this activity a budget of 150.000 EURO. For the purpose of converting national currencies into EURO and of calculating geographical distribution, you are requested to refer to the costing requirements of the General Conditions of Tender as updated since August 1999 in EMITS.

Consequently, please note that only proposals quoting a firm fixed price in EURO within this limit will be considered for evaluation.

2. Your special attention is drawn to Article 7 (Special Conditions) of the Draft Contract and paragraphs 2, 2.5, 2.6, 3.4, 3.6 (c), 3.11 and 3.13 of the Special Conditions of Tender.
3. It should be noted that this ITT does not address the use of entangled particles (e.g. photons) or superposition of quantum states for quantum communications (e.g. quantum key distribution, quantum teleportation, quantum dense coding, etc.) and quantum computing, which belong conceptually to a separate domain. Two other ITTs (“Theoretical Evaluation of Quantum Information Processing”, which closed on July the 31 last and whose responses are being evaluated, and “Experimental Evaluation of Quantum Communications in the Framework of the Current Needs of Space Systems”, still not issued) cover those areas.

Any questions relating to this invitation to tender should be addressed in writing to the responsible Contracts Officer mentioned here-above (fax number 31-71-565 57 73), **no later than 3 weeks before the closing date mentioned below.**

Your offer and all supporting documents must reach:

Central Registry Office  
THE EUROPEAN SPACE RESEARCH AND TECHNOLOGY CENTRE  
P.O. Box 299  
2200 AG NOORDWIJK  
The Netherlands  
**Attn. Mr. A. Galtieri**  
**AO/1-4404/03/NL/AG – Verification of Quantum Mechanics and New Applications of Quantum Technologies and Methods in Space**

not later than 14<sup>th</sup> January 2004, 2003 at 13.00 hours, and shall be submitted in 10 paper copies and a CD-ROM.

Yours faithfully,

F. Mazzaglia  
Head of Electrical Engineering Contracts Section  
ESTEC Contracts Division for Technology and Support