

NL-Zwolle: Astronomical and optical instruments

OJ S 64/2013 30/03/2013

Contract notice

Supplies

Directive 2004/18/EC

Section I: Contracting authority

I.1. Name and addresses

Official name: The Netherlands Research School for Astronomy, NOVA, represented by het NIC BV

Postal address: Dr. Stolteweg 60-66, PO Box 670

Town: Zwolle

Country: Netherlands

Contact person: BU Noord

For the attention of: Mr. H.J. Schutten, Mr. R. van Weeghel or Ms. M. Broekhof

E-mail: henk.schutten@hetnic.nl or raymond.vweeghel@hetnic.nl, or mandy.broekhof@hetnic.nl

Telephone: +31 384563210

Fax: +31 384563250

Internet address(es):

General address of the contracting authority: <http://www.astronomie.nl>

Additional information can be obtained from:

Official name: Het NIC BV

Postal address: Dr. Stolteweg 60-66

Town: Zwolle

Postal code: 8025 AZ

Country: Netherlands

Contact person: BU Noord

For the attention of: Mr. H.J. Schutten

E-mail: henk.schutten@hetnic.nl

Telephone: +31 384563347

Fax: +31 384563250

Internet address: www.hetnic.nl

Specifications and additional documents (including documents for competitive dialogue and a dynamic purchasing system) can be obtained from:

Official name: het NIC BV

Postal address: Dr. Stolteweg 60-66

Town: Zwolle

Postal code: 8025 AZ

Country: Netherlands

For the attention of: Dhr. R. van Weeghel

E-mail: raymond.vweeghel@hetnic.nl

Telephone: +31 384563398

Fax: +31 384563437

Internet address: www.hetnic.nl

Tenders or requests to participate must be submitted: Official name: het NIC BV

Postal address: Dr. Stolteweg 60-66

Town: Zwolle
Postal code: 8025 AZ
Country: Netherlands
For the attention of: Dhr. R. van Weeghel
E-mail: raymond.vweeghel@hetnic.nl
Telephone: +31 384563398
Fax: +31 384563437
Internet address: www.hetnic.nl

I.2. Type of the contracting authority

Body governed by public law

I.3. Main activity

Health
Education
Other: Frontline research

I.4. Contract award on behalf of other contracting authorities

The contracting authority is purchasing on behalf of other contracting authorities: no

Section II: Object of the contract

II.1. Description

II.1.1. Title attributed to the contract by the contracting authority

Tender for the supply of 163-211 GHz Cryogenic Corrugated Horn Antenna's for the band 5 receiver for the Atacama Large Millimeter Array (ALMA). Project for which no dedicated CPV code can be found.

II.1.2. Type of contract and place of performance or delivery

Supplies
Purchase
Main site or place of performance: Groningen, the Netherlands.
NUTS code NL11 Groningen

II.1.3. Information about a framework agreement or a dynamic purchasing system

The notice involves a public contract

II.1.4. Information about framework agreement

II.1.5. Short description of the contract or purchase(s)

The contracting authority is the Nederlandse Onderzoekschool voor de Astronomie, NOVA, legally represented by the University of Leiden.
The billing address is the address of NOVA which is located in Leiden.
The delivery address to NOVA for the purpose of this contract is:
University of Groningen,
C/o Kapteyn Institute, Kapteynborg
Landleven 12 Entrance J1, Zernike Campus
9747 AD Groningen.
1. Nederlandse Onderzoekschool voor de Astronomie, NOVA (English name: The Netherlands Research School for Astronomy)
NOVA, a top-research school, is a federation of the astronomical institutes at the universities of Amsterdam, Groningen, Leiden and Nijmegen, legally represented by the University of

Leiden. NOVA's mission is to carry out frontline astronomical research in the Netherlands, and to train young astronomers at the highest international level. As part of this mission, NOVA's instrumentation program aims to strengthen the technical expertise at the universities, and to develop and construct new instrumentation for world-class observatories. Development and production of the ALMA Band 5 Cartridge for the Atacama Large Millimeter Array project is an important part of this instrumentation program.

2. The Atacama Large Millimeter Array (ALMA)

ALMA is an instrument, which, when completed in 2013, will consist of an array of sixty-six antennas, with baselines up to 16 km located on the Chajnantor plateau in the Atacama Desert in the North of Chile, at 5.000m altitude. It will observe at wavelengths in the range 7.5-0.3 mm (40 to 950 GHz). The antennas can be moved around, in order to form arrays with different distributions of baseline lengths.

ALMA is an international astronomy facility. It is a partnership of Europe, Japan, and North America in cooperation with the Republic of Chile.

ALMA is funded in Europe by:

— The European Organisation for Astronomical Research in the Southern Hemisphere (ESO) and Spain.

— In Japan by the National Institutes of Natural Sciences (NINS) in cooperation with the Academia Sinica in Taiwan.

— In North America by the U.S. National Science Foundation (NSF) in cooperation with the National Research Council of Canada (NRC).

ALMA construction and operations are led on behalf of Europe by ESO, on behalf of Japan by the National Astronomical Observatory of Japan (NAOJ) and on behalf of North America by the National Radio Astronomy Observatory (NRAO), which is managed by Associated Universities, Inc. (AUI).

3. In the past years, NOVA has developed and produced the ALMA Band 9 receivers.

NOVA is presently producing the ALMA Band 5 receivers. This is a cryogenic heterodyne receiver offering state-of-the-art sensitivities at signal frequencies from 163-211 GHz.

A consortium of two institutes executes the work:

— The ALMA/NOVA group within the Kapteyn Institute, the Astronomy department of the University of Groningen in the Netherlands, and

— GARD group within the University of Göteborg, Sweden.

NOVA leads in the project and performs this work under contract to ESO.

The aggressive science goals, large scope, and remote location of the ALMA project, combined with the cartridges' cryogenic operating temperatures (as low as 3 K or 270°C), place high demands on the performance and reliability of the Band 5 Cartridges and their component parts.

4. GARD group at the Chalmers University of Technology, Gothenburg, Sweden.

The Group for Advanced Receiver Development (GARD) is a research and engineering group working on Terahertz scientific instrumentation. GARD research focuses on superconducting electronics, material science and thin-film processing. The results and experience from these fields facilitate development and building of state-of-the-art instruments used in radio astronomy and environmental science.

During 2006- 2011, under EC FP6 ALMA Enhancement Project, GARD completed development, production and tests of six Band 5 Cartridge Pre-Production Assemblies. All produced Band 5 receiver cartridges demonstrate state-of-the-art performance (the noise temperature of about 5 times quantum noise hf/k). The first produced Band 5 receiver has been integrated with ALMA antenna s/n 01 and is on AOS since October 2011. The ALMA Band 5 covers the frequency range 163 GHz - 211 GHz. The para-H₂O(313-220) line at 183 GHz lies in the middle of Band 5. It is one of a few H₂O lines that can be observed from Earth

(at the excellent ALMA site the transmission can approach 50% at the line peak). The GARD group employs about twelve people

5. The European Organization for Astronomical Research in the Southern Hemisphere (ESO)
ESO is the European Organisation for Astronomical Research in the Southern Hemisphere. Created in 1962, ESO provides state-of-the-art research facilities to European astronomers and astrophysicists and is supported by Belgium, the Czech Republic, Denmark, Finland, France, Germany, Italy, the Netherlands, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Preparing the future, ESO is currently engaged in design studies for an Extremely Large optical /near-infrared Telescope for Europe's astronomers (E-ELT). ESO is a member of the EIROforum, the partnership of the seven European intergovernmental research organisations that operate major research infrastructures.

See also the selection guidelines. These selection guidelines can be applied for by e-mail at Het NIC BV, BU Noord in Zwolle, the Netherlands.

II.1.6. CPV code(s)

38630000 Astronomical and optical instruments, 32500000 Telecommunications equipment and supplies, 32530000 Satellite-related communications equipment

II.1.7. Information about the Government Procurement Agreement (GPA)

The procurement is covered by the Government Procurement Agreement: yes

II.1.8. Lots

This contract is divided into lots: no

II.1.9. Information about variants

Variants will be accepted: no

II.2. Scope of the procurement

II.2.1. Total quantity or scope

The aim of the Contracting Authority of this tender procedure is to conclude in a transparent way a contract with 1 contracting party on the terms and conditions of the Contracting Authority, for the supply to NOVA of Corrugated Horn Antenna's that shall:

- cover the operating frequency range of 163-211 GHz;
- be used for at least 15 years in high vacuum, at cryogenic temperatures;
- be produced according to a customer supplied User Requirement Specification, URS and according to a customer supplied set of mechanical drawings.

Part of the project is not only delivery but also qualification of the horn manufacturing process for horns used in a cryogenic and vacuum environment and verification and qualification of the reproducibility of the as-built dimensions of the fabricated horns.

For further information, see selection guidelines. The selection guidelines can be applied for by e-mail, fax or written letter, at het NIC BV, BU Noord, for the attention of Mr.

Raymond van Weeghel tel +31 38 4563398, email address raymond.weeghel@hetnic.nl or Mandy Broekhof, tel +31 38 4563371, email address mandy.broekhof@hetnic.nl, in Zwolle, the Netherlands.

II.2.2. Information about options

Options: no

II.2.3. Information about renewals

This contract is subject to renewal: no

II.3. Duration of the contract or time limit for completion

Section III: Legal, economic, financial and technical information

III.1. Conditions related to the contract

III.1.1. Deposits and guarantees required

Not applicable.

III.1.2. Main financing conditions and payment arrangements and/or reference to the relevant provisions governing them

Not applicable.

III.1.3. Legal form to be taken by the group of economic operators to whom the contract is to be awarded

See the selection guidelines.

III.1.4. Contract performance conditions

The performance of the contract is subject to particular conditions: no

III.2. Conditions for participation

III.2.1. Suitability to pursue the professional activity, including requirements relating to enrolment on professional or trade registers

List and brief description of conditions: The information shall be submitted by the Applicants in 3-fold. In case of a combined expression of interest by a group of Applicants, every single Applicant shall submit the information requested under III.2.2) to III.2.3). The minimum requirements, information and statements together with the procedure for the Qualitative Selection are described in the Selection Guidelines (see also IV.3.2.) Also the assessment procedure for the different members of a combination is described in the Selection Guidelines.

III.2.2. Economic and financial ability

III.2.3. Technical and professional ability

III.2.4. Information about reserved contracts

III.3. Conditions specific to services contracts

III.3.1. Information about a particular profession

III.3.2. Information about staff responsible for the performance of the contract

Section IV: Procedure

IV.1. Type of procedure

IV.1.1. Type of procedure

Restricted

IV.1.2. Information about the limits on the number of candidates to be invited

Envisaged number of candidates: 5

Objective criteria for choosing the limited number of candidates: See the selection guidelines.

IV.1.3.

Information about reduction of the number of solutions or tenders during negotiation or dialogue

IV.2. Award criteria

IV.2.1. Award criteria

The most economically advantageous tender in terms of Price is not the only award criterion and all criteria are stated only in the procurement documents

IV.2.2. Information about electronic auction

An electronic auction will be used: no

IV.3. Administrative information

IV.3.1. File reference number attributed by the contracting authority

Publication Number.

IV.3.2. Previous publication concerning this procedure

no

IV.3.3. Conditions for obtaining specifications and additional documents or descriptive document

Payable documents: no

IV.3.4. Time limit for receipt of tenders or requests to participate

14.5.2013 - 14:00

IV.3.5. Estimated date of dispatch of invitations to tender or to participate to selected candidates

22.7.2013

IV.3.6. Languages in which tenders or requests to participate may be submitted

English. Dutch.

IV.3.7. Minimum time frame during which the tenderer must maintain the tender

IV.3.8. Conditions for opening of tenders

Section VI: Complementary information

VI.1. Information about recurrence

This is a recurrent procurement: no

VI.2. Information about European Union funds

The procurement is related to a project and/or programme financed by European Union funds: no

VI.3. Additional information

Information will only be send to potential applicants.

VI.4. Procedures for review

VI.4.1. Review body

Official name: Rechtbank Groningen

Postal address: P.O. Box 781

Town: Groningen

Postal code: 9700 AT

Country: Netherlands

Internet address: <http://www.rechtspraak.nl/Gerechten/Rechtbanken/Groningen>

VI.4.2. Review procedure

Precise information on deadline(s) for review procedures: Within 20 calendar days following the dispatch of the notification letters concerning the award decision.

VI.4.3. Service from which information about the review procedure may be obtained

VI.5. Date of dispatch of this notice

28.3.2013