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Tender

RFP-FY-22-17 Provision of an OpenRAN platform

Satellite Applications Catapult

F02: Contract notice

Notice identifier: 2021/S 000-025753

Procurement identifier (OCID): ocds-h6vhtk-02ec06

Published 14 October 2021, 4:54pm

The closing date and time has been changed to:

22 November 2021, 12:00pm

See the [change notice](#).

Section I: Contracting authority

I.1) Name and addresses

Satellite Applications Catapult

Electron Building, Fermi Avenue, Harwell

Didcot

OX11 0QR

Contact

James Morrison

Email

James.Morrison@sa.catapult.org.uk

Telephone

+44 1235567977

Country

United Kingdom

NUTS code

UK - United Kingdom

Internet address(es)

Main address

<https://sa.catapult.org.uk>

Buyer's address

https://www.mytenders.co.uk/search/Search_AuthProfile.aspx?ID=AA42845

I.2) Information about joint procurement

The contract is awarded by a central purchasing body

I.3) Communication

The procurement documents are available for unrestricted and full direct access, free of charge, at

www.mytenders.co.uk

Additional information can be obtained from the above-mentioned address

Tenders or requests to participate must be submitted electronically via

www.mytenders.co.uk

I.4) Type of the contracting authority

Other type

RDO

I.5) Main activity

Other activity

Space Technology

Section II: Object

II.1) Scope of the procurement

II.1.1) Title

RFP-FY-22-17 Provision of an OpenRAN platform

Reference number

RFP-FY-22-17

II.1.2) Main CPV code

- 32522000 - Telecommunications equipment

II.1.3) Type of contract

Supplies

II.1.4) Short description

Requirements For OpenRAN & Neutral Host Solution

1. Radio (RRUs)
2. Software (DU, CU)
3. Core Network and Integration
4. Services: Support the following use cases
5. Support

II.1.6) Information about lots

This contract is divided into lots: No

II.2) Description

II.2.2) Additional CPV code(s)

- 32522000 - Telecommunications equipment

II.2.3) Place of performance

NUTS codes

- UKJ14 - Oxfordshire

Main site or place of performance

Electron Building, Fermi Avenue, Harwell Campus Oxford, Didcot, Oxfordshire, OX11 0QR, UK

II.2.4) Description of the procurement

Requirements For OpenRAN & Neutral Host Solution

1. Radio (RRUs)

2x 5G RRU -ideally outdoor

bands n77/n78

eCPRI 7.2 interface or O-RAN split 7.2

1x 4G RRU -ideally outdoor

Any band

eCPRI 7.2 interface or O-RAN split 7.2

If not available, please state 4G units and when 5G RRUs will be compatible with your platform (same for 5G CU/DU)

2. Software (DU, CU)

DU: Associated DUs based on RRU provided: 5G vDU compatible with commercial --x86 servers (i.e. DellR440, Cisco UCS-B200M4/M5)

These servers have the following specs:

- OS: Linux

- memory: 256 GB
- vCPU:48
- Storage: 1T
- If not compatible, suggest x86 servers that can host DU/CU solution together with OS, memory, CPU, storage requirements

CU: Server requirements as above

- DU-CU split 2 (Optional) or DU-CU in the same hardware

Configuration

- GUI for configuring PLMN ids, as per core network PLMN for the case of Neutral host, radio Tx power, RIC parameters, DU,CU parameters e.t.c
- Installation guidelines for containerized DUs/CUs
- Access to the Kubernetes cluster where DU/CUs are running
- Possibility to scale up scale down applications/ delete deployments/install new deployments and services

Intelligence – Please describe the solution you provide:

- Real time RIC module (E2 interface O-RAN) - Please describe and also specify protocols used for E2 interface
- Non-RT RIC module (A1 interface O-RAN) - Please describe and also specify protocol used for A1 interface
- Exemplary applications that can be handled by RIC modules : hand-over/Radio resource management (RRM)
- RIC API for third party applications development – Please specify API (e.g. RESTful, netconf etc) and protocols used.

KPI monitoring, alarms monitoring, troubleshooting – Track KPIs (access, attach, CPU, memory etc) / alarms per MNO

3. Core Network and Integration

- Compatible with at least one of the following cores:

- Fraunhofer Focus Open 5g Core,

- open5Gs (4G/5G core)

- Amarisoft 5G/4GCore

4. Services: Support the following use cases

- 5G Neutral hosting MORAN -RRC configuration based on PLMN

- 5G and 4G Neutral hosting -MORAN -RRC configuration based on PLMN

- 5G Neutral Hosting MOCN -RRC configuration based on PLMN

- Hand over handled by RIC module.

- Radio Resource management through RIC module based on application (stage one O-RAN requirements)

- Third party apps deployed in RIC (xApps/rApps)

- Ability to integrate 4G and 5G networks under the platform (e.g neutral hosting of 4G and 5G bearers under the same platform)

5. Support

Knowledge transfer in terms of installation and configuration (No black boxes please)

Information on the IaaS platform used, (i.e. Kubernetes, Starlinx, e.t.c)

Instruction to configure the DU, CUs through GUI as well as through low level config files(i.e yaml files e.t.c)

On-site support for 6 months

Training and demos on the following:

- Platform RIC deployment and API

- Deployment of the 5G/5G or 4G/5G Neutral Host

- handling RIC modules for the RRM and handover use cases

- OSS solution available

II.2.5) Award criteria

Price is not the only award criterion and all criteria are stated only in the procurement documents

II.2.7) Duration of the contract, framework agreement or dynamic purchasing system

Duration in months

12

This contract is subject to renewal

Yes

Description of renewals

Warranty extension

II.2.10) Information about variants

Variants will be accepted: No

II.2.11) Information about options

Options: No

II.2.13) Information about European Union Funds

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

Section III. Legal, economic, financial and technical information

III.1) Conditions for participation

III.1.3) Technical and professional ability

Selection criteria as stated in the procurement documents

Section IV. Procedure

IV.1) Description

IV.1.1) Type of procedure

Open procedure

IV.1.8) Information about the Government Procurement Agreement (GPA)

The procurement is covered by the Government Procurement Agreement: No

IV.2) Administrative information

IV.2.2) Time limit for receipt of tenders or requests to participate

Originally published as:

Date

15 November 2021

Local time

12:00pm

Changed to:

Date

22 November 2021

Local time

12:00pm

See the [change notice](#).

IV.2.4) Languages in which tenders or requests to participate may be submitted

English

IV.2.7) Conditions for opening of tenders

Date

15 November 2021

Local time

1:00pm

Section VI. Complementary information

VI.1) Information about recurrence

This is a recurrent procurement: No

VI.3) Additional information

NOTE: To register your interest in this notice and obtain any additional information please visit the myTenders Web Site at

https://www.mytenders.co.uk/Search/Search_Switch.aspx?ID=224158.

The buyer has indicated that it will accept electronic responses to this notice via the Postbox facility. A user guide is available at

https://www.mytenders.co.uk/sitehelp/help_guides.aspx.

Suppliers are advised to allow adequate time for uploading documents and to dispatch the electronic response well in advance of the closing time to avoid any last minute problems.

(MT Ref:224158)

VI.4) Procedures for review

VI.4.1) Review body

Public Procurement Review Service

Cabinet Office

London

Email

publicprocurementreview@cabinetoffice.gov.uk

Telephone

+44 3450103503

Country

United Kingdom

Internet address

<https://www.gov.uk/government/publications/public-procurement-review-service-scope-and-remit>