NCIA/ACQ/2017/1816
19 August 2017

Market Survey - Request for Information

Project "Provide Multiband Deployable Satellite Ground Terminals Pool"
Project Serial Number 2016/0CM03114
Capability Package CP9A0130 "Satellite Communications (SATCOM) Transmission Services "

NCI Agency Reference: MS-CO-14634-DSGT

NCI Agency is seeking information from Nations and their Industry regarding the availability of Commercial-Off-The-Shelf (COTS) and Government-Off-The-Shelf (GOTS) Deployable Satellite Ground Terminals (DSGT) capable of operating in X-band and military Ka-band.

NCI Agency Point of Contact (POC): Ms. Viktorija NAVIKAITĖ

E-mail: viktorija.navikaite@ncia.nato.int

To: Distribution List (Annex A)

Subject: **NCI Agency Market Survey**
Request for Information MS-CO-14634-DSGT

1. NCI Agency requests the assistance of the Nations and their Industry to identify potential COTS/GOTS solutions available to meet the NATO requirement to provide a pool of multi-band (X/Ka) Deployable Satellite Ground Terminals (DSGT). This Market Survey is being issued to identify potential solutions and possible suppliers for augmenting and replacing the current NATO inventory of single-band DSGT radios to provide Satellite Communications (SATCOM) connectivity to deployed NATO and Allied Forces.

2. In addition to the firms noted at Annex D of this letter, NCI Agency requests the broadest possible dissemination by Nations of this Market Survey Request to their qualified and interested industrial base.

3. A summary of the NATO requirement for new multi-band DSGT and ancillary equipment is set forth in the Annex B attached hereto.

NATO Communications and Information Agency
Agence OTAN d'information et de communication
Avenue du Bourget 140
1140 Brussels, Belgium
www.ncia.nato.int

4. Respondents are requested to reply via the questionnaire at Annex C. Other supporting information and documentation (technical data sheets, marketing brochures, catalogue price lists, descriptions of existing installations, etc.) are also desired.

5. The NCI Agency reference for this Market Survey Request is **MS-CO-14634-DSGT**, and all correspondence and submissions concerning this matter should reference this number.

6. Responses may be issued to the NCI Agency directly from Nations or from their Industry (to the staff indicated at Paragraph 9 of this Market Survey Request). Respondents are invited to carefully review the requirements in Annex B.

7. Responses shall in all cases include the name of the firm, telephone number, e-mail address, designated Point of Contact, and a NATO UNCLASSIFIED description of the capability available and its functionalities. This shall include any restrictions (e.g. export controls) for direct procurement of the various capabilities by the NCI Agency. Non-binding product pricing information is also requested as called out in Annex C.

8. Responses are due back to the NCI Agency no later than **17:00 Brussels time 29 September 2017**.

9. Please send all responses either via post or email to the following NCI Agency Point of Contact:

To Attention of:	Ms Viktorija NAVIKAITĖ
Postal address:	NCI Agency Acquisition Directorate Avenue du Bourget 140 B-1110 Brussels Belgium
E-mail:	viktorija.navikaite@ncia.nato.int

10. Product demonstrations or face-to-face briefings/meetings with industry are not foreseen during this initial stage. Respondents are requested to await further instructions after their submissions regarding any potential future bidding process and are requested not to contact directly any NCI Agency staff other than the POC identified above in Paragraph 9.

11. Any response to this request shall be provided on a voluntary basis. Negative responses shall not prejudice or cause the exclusion of companies from any future procurement that may arise from this Market Survey. Responses to this request, and any information provided within the context of this survey, including but not limited to pricing, quantities, capabilities, functionalities and requirements will be considered as information only and will not be construed as binding on NATO for any future acquisition.

12. The NCI Agency is not liable for any expenses incurred by firms in conjunction with their responses to this Market Survey and this Survey shall not be regarded as a commitment of any kind concerning future procurement of the items described.

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13. Your assistance in this Market Survey request is greatly appreciated.

FOR THE GENERAL MANAGER:

Jean-Luc Guellec
Principal Contracting Officer

Enclosures:
Annex A (Distribution List)
Annex B (Market Survey Request - Summary of Requirements, Project 2016/0CM03114)
Annex C (Market Survey Request - Questionnaire)
Annex D (Market Survey Industrial Recipients)

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ANNEX A
Distribution List for Market Survey Request for Information
MS-CO-14634-DSGT

Potential Industrial Suppliers	1

NATO Delegations (Attn: Investment Adviser):

Albania	1
Belgium	1
Bulgaria	1
Canada	1
Croatia	1
Czech Republic	1
Denmark	1
Estonia	1
France	1
Germany	1
Greece	1
Hungary	1
Iceland	1
Italy	1
Latvia	1
Lithuania	1
Luxembourg	1
Montenegro	1
Netherlands	1
Norway	1
Poland	1
Portugal	1
Romania	1
Slovakia	1
Slovenia	1
Spain	1
Turkey	1
The United Kingdom	1
The United States of America	1

Belgian Ministry of Economic Affairs	1

Embassies in Brussels (Attn: Commercial Attaché):

Albania	1
Belgium	1
Bulgaria	1
Canada	1
Croatia	1
Czech Republic	1
Denmark	1

Estonia	1
France	1
Germany	1
Greece	1
Hungary	1
Iceland	1
Italy	1
Latvia	1
Lithuania	1
Luxembourg	1
Montenegro	1
Netherlands	1
Norway	1
Poland	1
Portugal	1
Romania	1
Slovakia	1
Slovenia	1
Spain	1
Turkey	1
The United Kingdom	1
The United States of America	1

ANNEX B
Summary of Requirements
Project ID 2016/0CM03114, CP9A0130

NATO requires a pool of sufficient multi-band (X/Ka) Deployable Satellite Ground Terminals (DSGT) to support Deployable Communications Information System (DCIS) requirements across different communities of interest and missions, at locations with less demanding operational and environmental conditions than the larger Transportable Satellite Ground Terminals (TSGT) of NATO's current Satellite Communications (SATCOM) ground segment. In particular, the multi-band DSGT shall provide SATCOM transmission in support of small DCIS Points of Presence (POP) or augment the transmission capabilities provided by TSGT in large DCIS POP. In those roles, these DSGT will replace the current 1st and 2nd generation X-band DSGT (2.4 metres, 200 Watts). As the 3rd generation DSGT in NATO, these terminals will also become the first ever Ka-band capable SATCOM assets available to NATO.

The 3rd generation multi-band DSGT shall:

- Support multi-carrier operation in X-band or military Ka-band;
- Be able to fine-point to and autonomously track a geostationary satellite in both X- and Ka-bands;
- Deliver G/T > 21 dB/K and EIRP > 62 dBW (linear at IP3o >25 dBC) at X-band and at 10º elevation;
- Deliver G/T > 28 dB/K and EIRP > 69 dBW (linear at IP3o >25 dBC) at military Ka-band and at 10º elevation;
- Fulfil the interoperability and performance requirements in MIL-STD-188-164B relevant to X-band and military Ka-band;
- Be transportable in rugged transit cases (2-men lift), which can be palletized for transport in fixed or rotary wing aircrafts or land vehicles;
- Be able to operate in extreme environmental conditions (from -25ºC to +55ºC);
- Operate with winds loads up to 30 mph without performance degradation;
- Be deployable in less than 30 minutes by two trained operators;
- Allow a configuration change between X- and Ka-band to occur within 30 minutes;
- Interface to the user equipment (Purchaser Furnished Equipment) at IF level (L-band). The external PFE equipment may include the NATO Deployable Baseband Augmentation Capability (DBAC) or the IF (L-band) section of a NATO TSGT. The DBAC essentially consists of a set of modems connected to an external RF head via an IF splitter/combiner.
- Be remotely manageable through a built-in monitoring and control (M&C) capability. The onboard M&C shall be SNMPv3-compatible allowing for the use of any 3rd party software applications to remotely manage the terminal
- Be delivered as Commercial or Government off-the-shelf (COTS/GOTS) to the maximum possible extent, i.e. be able to fulfil the high level specification above with minimal or no Non-Recurring Engineering (NRE) efforts required.

The key deliverables to be provided through this project are:

- 16 multi-band DSGT in transit cases;
- 2 additional units in support of training as well as reference configuration and testing activities.

ANNEX C
Questionnaire

Organisation name: _____

Contact name & details within organisation: _____

Notes

- Please **DO NOT** alter the formatting. If you need additional space to complete your text then please use the 'Continuation Sheet' at the end of this Annex and reference the question to which the text relates to.
- Please feel free to make assumptions, *HOWEVER* you must list your assumptions in the spaces provided.
- Please **DO NOT** enter any company marketing or sales material as part of your answers within this market survey. But please submit such material as enclosures with the appropriate references within your replies. If you need additional space, please use the sheet at the end of this Annex.
- Please **DO** try and answer the relevant questions as comprehensively as possible.
- All questions within this document should be answered in conjunction with the summary of requirements in Annex B.
- All questions apply to Commercial or Government respondees as appropriate to their Commercial off the Shelf (COTS) or Government off the Shelf (GOTS) product.
- Cost details required in the questions refer to Rough Order of Magnitude (ROM) Procurement & Life Cycle cost, including all assumptions the estimate is based upon:
    - Advantages & disadvantages of your product/solution/organisation,
    - Any other supporting information you may deem necessary including any assumptions relied upon.

1. **Do you produce a product compliant with the specifications of Annex B? If so, please specify the name and type of the product. If not, please list any products that are deemed to be close to the specification and state the functional or performance deviations where relevant.**

2. **Provide the detailed functional and technical specifications of the product, including total weight and transport footprint (in number of transit cases).**

3. **Is your product part of one or more NATO Nations' military inventories or is it currently under military or government contract with a NATO Nation? If so, state the number of units in the inventory(ies) and describe the support framework and processes that are currently in place to support those units.**

4. **Has your product been fielded and operated in austere environments? If so, describe where and for how long. Are there any records of actual Mean Time Between Failures (MTBF) and Mean Time To Repair (MTTR) figures for different operating conditions?**

5. **Has your product been evaluated and certified against MIL-STD-188-164A, MIL-STD-188-164B? Provide a list of any relevant deviations from these standards.**

6. **Has your product received any NATO nation-specific certification for operating over X-band or Ka-band payloads? If so, state the applicable certifications.**

7. **Briefly describe the technical approach adopted to minimize antenna tracking gain losses under different wind loads when operating at Ka-band.**

8. **Is your product capable of, or upgradeable to, simultaneous X/Ka-band operation? If so, describe the characteristics of the multi-band feed assembly and the performances attainable when receiving and transmitting simultaneously in both frequency bands.**

9. **Is your terminal capable, or upgradeable, to provide access to the IF TX and RX interfaces over fibre? If so please specify how this is achieved and which remote fibre transceiver will be used.**

10. **Based upon the quantities defined in Annex B, please state the Rough Orders of Magnitude (ROMs) costs for the in-plant tested DSGT. Include all assumptions that the estimate is based upon as well as what is included and excluded from the estimate.**

11. **Please state the annual ROM cost in terms of fixed costs and variable costs for the Supplier's support services to the pool of DSGTs, describing the different support options on offer. Include the primary assumptions in these values and the applicable costs that are included or excluded.**

Continuation Sheet Please feel free to add any information you may think that may be of value to NCI Agency in the space provided below. Should you need additional space, please copy this page and continue with the appropriate page numbers.	Page __ Of __