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) products.
- 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. **Can your company provide a SATCOM L-band FDMA modem in a 19-inch 1RU tall form factor with the following features:**
   a) **Reprogrammable platform that supports multiple waveforms including but not limited to the DVB-S2X that conforms to ETSI EN 302 307–2;**
   b) **Standard Generic Stream Encapsulation (GSE) on forward and return links that complies with ETSI TS 102 606-1;**
   c) **Ability to transparently transport Ethernet frames (L2 bridging)? If so, what is the Ethernet MTU supported;**
   d) **Ability to support Ethernet VLANs (IEEE 802.1q). If so, is this supported in a VCM/ACM multi-stream configuration? If so, indicate how many streams are supported?**
   e) **TRANSEC that provides encryption and obfuscation of all user data, traffic activity patterns, management and control information and link-establishment data transmitted via the RF interface. If yes, please describe how TRANSEC is implemented and certified;**
   f) **The ability to demodulate multiple DVB-S2X carriers simultaneously (at least four), and the expansion capabilities if any;**
   g) **If your modem is not available in a single 1 RU tall form factor, would this modem be available in a 2RU tall form factor?**
   h) **Can you provide a compatible (1a to 1e) modem in a small embeddable card form factor and featuring a single demodulator? If yes, please provide the dimensions?**
   i) **Can you provide a compatible (1a to 1e) modem with a single demodulator in a small rugged weatherproof housing for outdoor use?**

2. **Does your M&C architecture support the configuration and monitoring of modems operating in the same network, and the means to transport and protect M&C information over the air?**

3. **How is the allocation of bandwidth to different traffic flows and their mapping to MODCODs using VCM and GSE performed?**

4. **Can you provide a 1:1 and N:1 redundancy solutions? Please describe how redundancy is implemented. If any, please describe (incl. physical dimensions) the additional components required.**

5. Please confirm whether the proposed modem is currently: available as a COTS/GOTS, a prototype or under development. If it is under development when will it be available?

6. Does your company intend to develop a family of products that conform to the NATO STANAG 5646 (currently under development)?

7. **If the answer to the above is yes, but full compliance is not achievable in the initial offering would your company be able to deliver a modem that is only partially compliant, would your company be able to achieve compliance based on the initial offering, through hardware and software field upgrades that do not require specialized equipment, soldering or direct factory support?**

8. **Please provide the Modem Model and Spec Sheet for each question answered positively.**

9. Please provide a Rough Order of Magnitude (ROM) pricing for the Modem product(s), including any modem controller capability and network planning software.

10. Do you provide a Service Level Support to perform level 3 maintenance for at least 10 years after delivery? If so, please provide a ROM cost estimate.

11. Can your company describe the following System Engineering design approach including reference to standards that have been used for the proposed solution:

a) Predicted and actual/record for MTBF/MTBCF and MTTR/MTTRS figures in different operating conditions (e.g.: severe environment, duration) and the maintenance levels apportionment;

b) Effect of failure modes in terms of testability fault detection and isolation;

c) Logistics Support Database (e.g.: ASD S3000L or MIS-STD-1388-2B);

d) Technical Manuals (e.g.: ASD S1000D and relevant issue);

e) Training (e.g.: SCORM based training);

f) Resiliency in terms of obsolescence management including monitoring and resolution (e.g.: detailing the process to minimize the product's Life Cycle Costs).

12. Can your company provide ROM cost estimate for third level of maintenance (both HW and SW) for at least 10 years after delivery AND describe the Contractor Logistics Support approach for the proposed solution (warranty and post-warranty phase) covering the following:

a) Engineering Support (e.g.:, failure reporting analysis, corrective actions, engineering change, obsolescence);

b) Material Management (e.g.: spare parts procurement lead time, repair time, optimization of stocks);

c) Field Engineering (e.g.: preventative and corrective maintenance, on the job training).

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 __