

1. **Title of Proposed Study:** IED Detection Technologies
2. **Brief Description of Proposed Study:** It is needed to develop Technologies that enables the detection of Improvised Explosive Devices (IEDs) from a secure distance by using airborne or ground vehicle-bourne systems which are prepared by terrorists and refugees in operational theatre, city center and border areas. To this end, some well known technologies can be employed such as ground penetrating radars, electromagnetic induction (EMI) sensors, chemical detection systems, hyperspectral cameras, SAR radars.
3. **Background:** Ground penetrating radars and electromagnetic induction (EMI) sensors (metal detectors) has been studied by researchers for the last decade. A Restricted Class NIAG SG study titled "Countering Improvised Explosives Devices (SG-84)" was conducted in 2004.
4. **Objectives of the Study:** Determination of pre-feasibility/feasibility of technologies that enables the detection of Improvised Explosive Devices (IEDs) from a secure distance by using airborne or ground vehicle-bourne systems.
5. **Please indicate whether you would like to be presented with alternative solution options, taking into consideration that exploring various options may reduce the depth of the study scope:** Yes
6. **NATO Priority:** -
7. **Intended Follow on to the Study:** Pre-feasibility/Feasibility of IED detection technologies on different platforms like armoured vehicles can be examined.
8. **Other NATO Bodies Involved in the Related Area of Work:** -
9. **Current Industrial Involvement with the Sponsor Group:** -
10. **Proposed Start Date:** 2021
11. **Desired Completion Date:** 2022
12. **Study Classification:** NATO Restricted
13. **Study Open to Partner Industries:** NATO member country industries only.
14. **Final report releasable to:** NATO members only.
15. **Sponsoring Group Point and IS Point of Contact:**

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