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## Evaluation of an Autonomous Navigation and Positioning System for IAEA-SG Inspectors

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Documenting visual observations and other data taken during field missions such as inspections, complementary accesses and design information verification is a time-consuming process which requires considerable effort from the inspectors in the field. To streamline their work in the field, IAEA inspectors would benefit from being able to position themselves and navigate inside vast and complex sites. Automated positioning of the inspector will result in more accurate and complete documentation of the measurements and data that they collect. While outdoor positioning using GPS is a mature technology, an autonomous system providing ubiquitous positioning without relying on any infrastructure is still an emerging technology.

This paper will present the results of the Technology Evaluation Workshop that was conducted in 2014 by the Department of Safeguards to assess the readiness level of existing technologies, identify gaps, and validate the identified operational needs. Potential implementation of the technology will be envisioned, and the presentation will highlight how they could benefit the efficiency of IAEA safeguards activities in the field and at Headquarters. Finally, it will be shown how the process of organizing technology evaluation workshops can be systematized to accelerate technological development and lower the risks associated with their deployment.

### Country or International Organization

IAEA

### EPR Number (required for all IAEA-SG staff)

687

**Primary author:** FINKER, Dimitri (IAEA)

**Co-authors:** KOCJAN, John (IAEA); RUTKOWSKI, Joshua (IAEA); CAI, Rui (IAEA)

**Presenter:** FINKER, Dimitri (IAEA)

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