

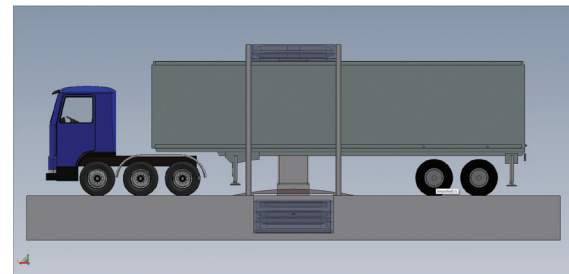
IMPRINT – Integrated Muon protection internal Theft Defeat of Insider Theft in Nuclear and Radioactive Sites

The product in this project is a low-cost passive vehicle scanning system to prevent theft by an insider from nuclear or radioactive sites.

Insider threats are perhaps the most serious challenges that nuclear security systems face. All theft cases of nuclear or radioactive materials were characterized by known circumstances as perpetrated either by insiders or, with the help of insiders. Given other cases that involve bulk material stolen covertly without anyone being aware the material was missing, there is every reason to believe that they were perpetrated by insiders as well.

Therefore, there is a need for inspection systems that can penetrate high attenuating vehicles, be specific to nuclear and shielding materials that can be stolen from nuclear and radioactive sites.

Lingacom technology is based on high energy natural atmospheric cosmic ray muons, which have the highest known penetration levels on earth. Combining these cosmic particles with in-house expertise in high spatial resolution detectors, Lingacom's 3D imaging algorithms far exceed what is currently available in the market.

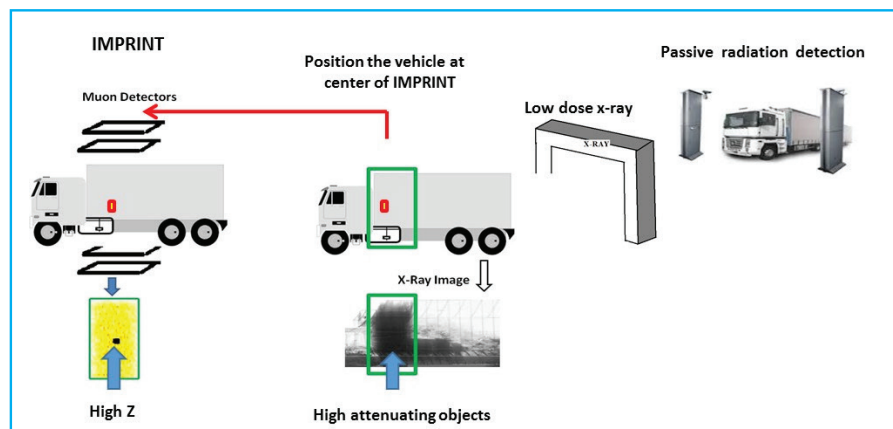


IMPRINT Vehicle muon scanner



High-energy natural atmospheric cosmic-ray muons

The uniqueness's of Lingacom solution versus existing solutions are: (1) detection of high-Z materials such as heavily shielded nuclear or radioactive materials (2) powerful detection in mid-to-high attenuating dense cargos (3) complementary concept of operation with existing inspection systems that deploys x-rays and radiation portal monitors (4) green, passive and safe detection that can easily deployed (5) patented 3D imaging algorithms, in-house low cost muon detectors.



IMPRINT Concept of operation – Defeat of Insider Theft in Nuclear and Radioactive Sites

The project development of IMPRINT advanced vehicle scanning solution is funded by the European Commission's prestigious Horizon 2020 SME Instrument.



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About Lingacom

Lingacom Ltd develops and fabricates muon based detection solutions for security, mining exploration, industrial and civil applications. Our green, radiation-free solutions target imaging for the security market and underground mapping for uses such as in mining exploration. Lingacom's muon tomography uses natural cosmic particles, proprietary algorithms and detectors with high spatial resolution developed in-house. Lingacom's key management is built upon a variety of management disciplines enabling product development and the key personnel are highly experienced in all relevant fields: technology, product and business.