



BSI Standards Publication

Radiation protection instrumentation — Vehicle-mounted mobile systems for the detection of illicit trafficking of radioactive materials

National foreword

This British Standard is the UK implementation of EN IEC 63121:2021. It is identical to IEC 63121:2020.

The UK participation in its preparation was entrusted to Technical Committee NCE/2, Radiation protection and measurement.

A list of organizations represented on this committee can be obtained on request to its committee manager.

BSI, as a member of CENELEC, is obliged to publish EN IEC 63121:2021 as a British Standard. However, attention is drawn to the fact that during the development of this European Standard, the UK committee voted against its approval.

It is the belief of the UK committee that the tests required in the standard are not solely appropriate for European users, and in situations in which sources may be hard to find, alternatives could have been recommended.

The UK committee would like to clarify that to get complete readings for the dynamic tests in subclauses 6.2, 6.3 and 6.5, the vehicle would need to be in motion. The committee's opinion is that relative velocity is not the only factor which may affect detection. Modern mobile systems may be able to indicate the direction and location of the source especially if multiple detectors are used within the same vehicle (e.g. one on each side as shown in Figure 1). The committee believes the standard should test for this capability as it is important to be able to estimate direction and distance whilst in motion, or stationary. The committee believes that robustness and stability of the detector is also not tested if not tested in a dynamic environment. The committee believes that multiple vehicle speeds should be tested (i.e. including the manufacturer recommended speed, if provided).

The committee's opinion is that if the vehicle is static during measurements, the following data storage requirements in subclause 5.3.1 are not tested:

- Latitude and longitude
- Monitor location via geolocation system
- Speed
- Mapping functionality (geolocation history)
- Mapped changes in background due to changes in physical location.

Contractual and legal considerations

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