



## SPECIFICATION

### Electronic Personal Radiation Dosimeters

#### 1. Scope

This specification describes the requirements for Electronic Personal Radiation Dosimeters (hereinafter referred as the “Equipment”) for the Jordanian Uranium Mining Company at its facilities in Jordan (hereinafter referred as the “End-User”).

#### 2. Requirements

The Equipment to be provided by the Contractor shall meet the following functional and performance requirements:

- Measurement and display: X and gamma energy range: 15 keV to 7 MeV Energy response better than  $\pm 20\%$  (typically  $\pm 10\%$ ) from 16 keV to 7 MeV;
- Measurement range: 1  $\mu\text{Sv}$  to 10 Sv, 0.1  $\mu\text{Sv/h}$  to 20 Sv/h;
- Saturation indication above 10 Sv or 10 Sv/h; and
- Dose Rate Linearity:  $< \pm 20\%$  up to 10 Sv/h ) (Co and X H30 20 keV).

#### 3. Marking

The Equipment shall have all safety markings in English language.

#### 4. Packing

The Equipment, for the shipment by air to the End-User, shall be packed in accordance with international standards that are applicable for the shipment by air of this kind of equipment.

#### 5. Quality Requirements

The Equipment shall be manufactured in accordance with the Contractor’s ISO quality assurance system or an equivalent quality assurance system.

The Contractor shall document the compliance with this quality assurance system.

#### 5. Testing and Acceptance

The Equipment, prior to shipment, shall be tested for conformance of the manufacturer’s performance specifications and the minimum requirements specified herein.

The Equipment, after delivery, shall be tested by the End-User to demonstrate that the performance meets the manufacturer’s performance specifications



and the minimum requirements specified herein as determined by the IAEA and the End-User.

The results of the testing of the Equipment shall be documented in an acceptance protocol that shall be signed by the End-User.

#### 6. Deliverable Data Items

The Contractor shall provide two complete sets of operation and servicing manuals and technical drawings in the English language.