

EUROPEAN COMMISSION DIRECTORATE-GENERAL FOR ENERGY Directorate D - Nuclear Safety and Fuel Cycle D.3 - Radiation Protection

Invitation to tender ENER/D3/2014-231-2 for a service contract regarding

Contract notice in OJEU 2014/S 043-070543

"Whole Body Counter measurements to assess internal exposure of radiation workers"

QUESTIONS & ANSWERS

Latest update 18/03/2014

Question 1:

What isotopes would routinely be required in the whole-body measurements? We can give detection limits for a long range of isotopes and varying measurement times, but it would be best if the required isotopes were known beforehand (also with regards to the reporting of results).

Answer:

With the whole body measurement the laboratory shall be able to identify all gamma emitters, which potentially could cause significant radiation exposures of workers performing their tasks in various facilities of the nuclear fuel cycle. Measurement time of the whole-body measurement cannot exceed 1 hour as required in the technical specifications paragraph 3.2.

Question 2:

You require a detection limit of 8 Bq Am-241/ organ for the partial body measurement of the lungs. The detection limit of a measurement depends, among other factors, on the required confidence level. Generally speaking, which confidence level do you expect for a given detection limit? We usually give results based on a 95% confidence level as required by the German authorities, but we could accommodate different requirements if desired.

Answer:

The laboratory shall provide for the minimum detection limits and the respective coverage factors (k) or confidence levels according to calculation methods given by national or international standards.