## Assessments by International Organizations

## UNSCEAR 2020/2021 Report (2/8): Outline of Assessment of Public Exposure Doses

- For ease of comparison with the UNSCEAR 2013 Report, dose estimates have been made for the same age groups (20-year-old adult, 10-year-old child and 1-year-old infant) and the same dosimetric endpoints (the absorbed dose to selected organs – the thyroid, red bone marrow, colon and female breast – and the effective dose).
- Estimates have also been made of doses in the first year after the accident, over the first 10 years and until an attained age of 80 years for exposed individuals.
- In addition, estimates have been made of the average absorbed doses to the fetal thyroid over the 30-week development period of the fetus and of the average absorbed dose in utero to the red bone marrow over the 40-week term of pregnancy.

## Exposure pathways

- (a) External exposure to radionuclides in the air
- (b) External exposure to radionuclides deposited onto the ground surface from the air by either wet or dry deposition
- (c) Internal exposure from inhalation of radionuclides in the air
- (d) Internal exposure from ingestion of radionuclides in food and drinking water

For ease of comparison with the UNSCEAR 2013 Report, dose estimates in the UNSCEAR 2020/2021 Report have been made for the same age groups and the same dosimetric endpoints. Concrete conditions are as shown above.

Dose assessment was conducted based on actual measurement data, while reflecting the latest scientific knowledge and progress that were published after the publication of the UNSCEAR 2013 Report up to the end of 2019 (p.194 of Vol. 1. "UNSCEAR 2020/2021 Report (3/8) Update from the UNSCEAR 2013 Report upon Assessing Public Exposure Doses").

## [Relevant parts in the Report]

 UNSCEAR 2020/2021 Report (prepared based on paragraphs A4 to A5 on page 110, ANNEX B)

Included in this reference material on March 31, 2023