Handout „Transit Group“
Interlaboratory Comparison and Proficiency Testing of Passive Radon Detectors 2019

1. Besides the measurement, passive radon detectors are subject to transport and storage processes. In order to account for these processes the BfS interlaboratory comparison and proficiency test employs a so-called transit group.

2. The submitted measurement instruments are divided into the individual exposure groups as well as the transit group. The latter comprises the same number of detectors as the exposure groups.

3. During the exposure period, the passive radon detectors of the transit group are stored in a monitored room with low radon-222 activity concentration. The exposure of the transit group during this period is thus usually negligible in comparison to the exposure groups.

4. When the passive radon detectors are returned, the participant is informed on the individual codes of the transit group via e-mail.

5. The mean value of the radon-222 exposure of the transit group is a measure for transport and storage effects for all measurement instruments (transit background level).

6. It is recommended to subtract the transit background level from each individual determined exposition value of the passive radon detectors in the exposure groups.

7. It is for the participant to take the transit background level into account. Otherwise, a systematic error may be produced.

8. In filling the form “Measurement results” the participant has to indicate, whether the transit background level was taken into account or not. This is purely informative. The BfS will not perform any subsequent correction in this regard.