## List of fees and charges

Number	Product number	Subject	Net payment in EUR
1	11 15 51	Radon Exposure <sup>1</sup>	
1.1		Calibration exposure of active measurement devices of radon- und radon decay products	
1.1.1		Calibration of measurement devices for the measurand activity concentration of radon-222 in air under standard ambient conditions, 3 calibration points including determination of the background level of the measurement device, per operating mode <sup>2</sup>	1.090,-
1.1.2		Calibration of measurement devices not covering the full range for the measurand activity concentration of radon-222 in air <sup>3</sup> per operating mode	810,-
1.1.3		Calibration of low-sensitivity measurement devices for the measurand activity concentration of radon-222 in air under standard ambient conditions, 2 calibration points including determination of the background level of the measurement device, per operating mode	910,-
1.1.4		Calibration of measurement devices for the measurand potential activity concentration of the short-lived radon-222 progenies in air, 2 calibration points, no determination of the background level of the measurement device, per operating mode	1.110,-
1.2		Exposures for passive radon measurement devices using solid- state track detectors or electrets	
		Basic charge	250,-
		plus per unit exposure point (up to a maximum of 8)	280,-
		plus extra charge for excess quantity from 51 to 250 detectors	183,-
		plus extra charge for excess quantity exceeding 250 detectors	730,-

<sup>&</sup>lt;sup>1</sup> Additional services or services differing from the scope offered are to be charged per hour according to expenditure: hD 98 EURO, gD 90EURO, mD 73 EURO.

<sup>&</sup>lt;sup>2</sup> The operating mode of a device is a user-selected mode of operation which, in combination with an evaluation algorithm to be selected, provides a measurement result. Examples are "fast" or "slow" mode, diffusion mode vs. pump operation or various pump rates that can be freely selected. The selected operating mode is to be specified during registration.

<sup>&</sup>lt;sup>3</sup> Procedure is performed simultaneously with calibration under 1.1.1. Can be provided on request, or BfS will inform you if the limited measuring range of the instrument is known.

1.3		Calibration exposure for passive radon measurement devices using solid-state track detectors or electrets	
		Exposure to a reference atmosphere of Rn-222 at an exposure level approximating 1,000 kBq·h/m³ (1 exposure point); including determination of the mean calibration factor of the client's measurement devices after obtaining the client's evaluation results; including a calibration certificate issued in accordance with accreditation of the BfS-calibration laboratory	
		Basic charge	250,-
		Exposure to reference atmosphere	280,-
		Issuing a calibration certificate	135,-
		plus extra charge for excess quantity from 51 to 250 detectors	183,-
		plus extra charge for excess quantity exceeding 250 detectors (up to a maximum of 1,000 detectors)	730,-
1.4		Participation in intercomparison and proficiency testing of passive detectors for radon und radon progenies	720,-
2	11 14 69	Licencee's monitoring of radioactive effluents in exhaust air from nuclear power plants <sup>4</sup>	
2.1		Gammaspectrometry exhaust air	314,-
2.2		Total measurement of alpha and beta emitters	293,-
2.3		Alphaspectrometry without radiochemistry	644,-
2.4		Radiochemical analysis determining alpha emitters	
2.4.1		one nuclide	1.664,-
2.4.2		any further nuclide	444,-
2.5		Radiochemical analysis determining strontium isotopes <sup>5</sup>	887,-
2.6		Measurement of tritium and carbon-14	
2.6.1		Tritium / carbon-14 measurement (molecular sieve, 1 Patr.)	670,-
2.6.2		Tritium / carbon-14 measurement (Molekularsieb, 1 Patr.)	1.027,-
2.6.3		Tritium-determination (condensate)	257,-
2.6.4		Carbon-14 determination (sodium hydroxide)	386,-
2.7		Interlaboratory comparison	According to number of calibration sources <sup>6</sup>

 $<sup>^{\</sup>rm 4}\,$  Travel expenses are included in the charges under item 2.

<sup>&</sup>lt;sup>5</sup> Additional beta emitters are to be charged per hour according to expenditure: hD 112 EURO, gD 104 EURO, mD 87 EURO.

<sup>&</sup>lt;sup>6</sup> Calculation of flat rate per calibration source:  $\frac{20.601,00 \, EURO}{number \, of \, calibration \, sources} + 197,00 \, EURO$ .

2.8		Comparative measurements of radioactive noble gases	26.253,-
2.9		Calibration of noble gas measurement equipment	
		Total	17.902,-
		Nuclide specific	20.149,-
2.10		Inspection of sampling equipment/ Determination of the total loss factor	25.167,-
2.11		Assessment of sampling inspection/ Assessment of Calibration of noble gas measurement equipment	4.536,-
3	11 14 79	Licencee's monitoring of radioactive effluents in waste water from nuclear power plants	
3.1		Proficiency test waste water from nuclear installations (for 20 to 60 participants)	According to number of participants 7
3.2		Tritium analysis	309,-
3.3		Total alpha measurement	313,-
3.4		Measurement of strontium isotopes	1.366,-
3.5		Measurement of Fe-55 and Ni-63	
3.5.1		Fe-55	1.204,-
3.5.2		Ni-63	1.461,-
3.6		Gammaspectrometry waste water	349,-
3.7		Determination of individual radionuclides	
3.7.1		Uranium	1.115,-
3.7.2		Thorium	1.293,-
3.7.3		Plutonium	1.197,-
3.7.4		Pu – 241	1.279,-
3.7.5		Th – 234	253,-
3.8		Waste water sampling (per unit)	493,-
3.9		Total beta measurement	319,-
4		Incorporation monitoring	
4.1	11 16 51	Whole body-/organ measurement (simple)	165,-
4.2	11 16 52	Whole body-/organ measurement (intensive)	303,-
4.3	11 16 53	Excretion analysis urine - Americium	465,-

<sup>&</sup>lt;sup>7</sup> Calculation of flat rate per participant:  $\frac{30.726,00 \, EURO}{number \, of \, participants} + 323,00 \, EURO$ .

5	11 11 50	Chromosomal analysis <sup>8</sup>	2.903,-
4.7.6	11 16 33	Dosimetric case studies	358,-
4.7.5	11 16 32	Interlaboratory Comparisons in vitro beta	367,-
4.7.4		Interlaboratory Comparisons in vitro alpha	267,-
4.7.3		Interlaboratory Comparison in vivo whole body and thyroid	883,-
4.7.2	11 16 31	Interlaboratory Comparison in vivo thyroid	752,-
4.7.1		Interlaboratory Comparison in vivo whole body	721,-
4.7		Interlaboratory Comparisons carried out by the Coordinating Office on Incorporation Monitoring	
4.6	11 16 56	Excretion analysis Urine - Polonium	264,-
4.5	11 16 55	Excretion analysis Urine - Tritium	126,-
4.4	11 16 54	Excretion analysis urine - Carbon	126,-

 $<sup>^{8}</sup>$  According to a BMI circular dated 9 March 1983 (GMBl. 1983/176) free of charge for the countries.