

Report on the Global Survey on the Information System on Occupational Exposure in Medicine, Industry and Research-Industrial Radiography (ISEMIR-IR)

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1 INTRODUCTION

The Information System on Occupational Exposure in Medicine, Industry and Research-Industrial Radiography (ISEMIR-IR), is a tool for non-destructive testing (NDT) service providers that perform industrial radiography and other industrial radiography (IR) facilities to optimize radiation protection.

ISEMIR-IR is a web-based system developed and operated by the International Atomic Energy Agency (IAEA) for regular data collection and analysis of occupational doses for individuals, working in industrial radiography. This information is then used to improve occupational radiation protection of workers. The tool helps IR facilities to benchmark their arrangements in radiation protection and safety against other IR facilities.

In response to the IAEA General Conference Resolution GC(64)/RES/9, requesting the Secretariat to promote ISEMIR with the aim to strengthen the safety of workers in industrial radiography and interventional cardiology, the IAEA launched a global survey on 30 October 2020 to improve the ISEMIR-IR system and to meet the needs of the users of the system, in particular NDT service providers and other IR facilities.

2 METHODS

In order to increase the number of active users in the ISEMIR-IR system, as well as to enhance users' experience, IAEA launched a global survey in the October of 2020 which is the second global survey of ISEMIR-IR. The results of the first survey, including its comprehensive analysis, have been included in the TECDOC: The Information System on Occupational Exposure in Medicine, Industry and Research (ISEMIR): Industrial Radiography (IAEA-TECDOC-1747). The survey of this year consists of two questionnaires:

- questionnaire for the regulatory body,
- questionnaire for the NDT service providers.

During the consultancy meeting held on 27-29 January 2020, the global survey was proposed and two draft questionnaires were prepared. The ISEMIR-IR Working Group (WG) organized two virtual meetings which were held on 24 April and 5 August 2020 to discuss and review the two questionnaires.

With the aim to investigate the situation of NDT companies and acceptance of ISEMIR-IR in Member States, the questionnaire for the regulatory body was designed to comprise of 8 main questions which was written in English (see Appendix I).

The aim of the questionnaire for NDT service providers was to investigate the occupational radiation protection situation and dose management information of NDT companies and promote the ISEMIR-IR system to meet the needs of users, such as NDT companies. This questionnaire was designed to compose of 18 main questions and was written in several languages: Chinese, Czech, English, French, German, Japanese, Korean, Portuguese, Slovak, Russian, Spanish and Turkish (see Appendix II).

These questionnaires were distributed widely over an approximate three-month period (October 2020 to January 2021), primarily using IAEA contacts with regulatory bodies, the National Contact Persons (NCPs) and the registered users of ISEMIRs and others. The IAEA Secretariat received 46 responses from regulatory bodies of 43 countries (out of 152 countries) and 284 responses from NDT service providers from 42 countries.

In this report, the classification of region of the Member States is based on the division of the World into 4 regions, respectively Africa, Asia-Pacific, America and Europe. This is according to the classification of the IAEA technical cooperation (TC) programme.

3 RESULTS AND ANALYSIS

The survey produced a large amount of information. This chapter will present the analysed results for the questionnaires. In many of the responses to the questionnaires for NDT service providers, not all questions were answered. In the results given in this report, “no reply” answers were excluded from the totals for that question.

The responses to the questionnaire for regulatory bodies were received from 46 regulatory bodies from 43 countries. Based on the total number of Member States of 152, this corresponds to a response rate is 28.9%. The detailed number of completed questionnaires received from each region is shown in Table 1.

Table 1. Number of completed questionnaires received from regulatory bodies

Region	Questionnaires received	Countries
Africa	7	7
Asia-Pacific	12	10
America	5	5
Europe	22	21
Global	46	43

The responses to the questionnaire for NDT service providers were received from 284 different companies from 42 different countries, representing 27.6 % of the Member States. 62 % (176 out of 284) of questionnaires were not fully completed. This means that some of the mandatory information for ISEMIR-IR system is missing. This comprises the information requested in questions 13 to 16. The detailed number for each region is shown in Table 2.

Table 2. Number of the questionnaires received from NDT companies

Region	Questionnaires received	Not completed questionnaires	Countries
Africa	30	20	9
Asia-Pacific	100	63	11
America	24	13	7
Europe	130	80	15
Global	284	176	42

The number of the Member States represented by both the responding regulatory bodies and the responding companies is 36.

3.1 Results of the questionnaire on occupational radiation protection in industrial radiography addressed to regulatory bodies

The distribution of responses from Member States across the regions is given in Table 1. The detailed results for each question of the questionnaire for regulatory body will be given one by one in the following sections.

3.1.1. Number of NDT companies per country

The distribution of the number of NDT companies per country is shown in Table 3 and Figure 1.

Table 3. Responses to question 1 - How many NDT companies are there in your country?

Up to 4	More than 5	Precise number		
		5-20	20-50	More than 50
8	9	16	7	6

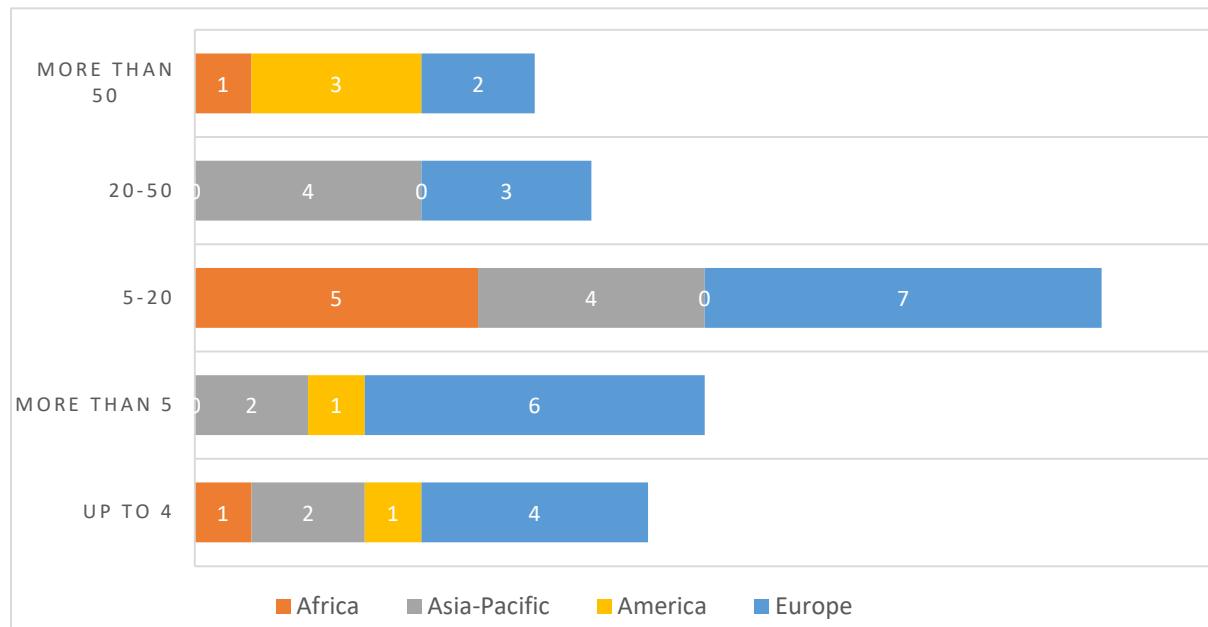


Fig.1 Responses to Question 1

3.1.2. Advantage of a free information system

41 regulatory bodies confirmed that they see advantage of a free information system for NDT companies that helps improve/optimise radiation safety for radiographers. The other 4 regulatory bodies did not see this advantage. It means that the majority of regulatory bodies agree that creating an information system is very useful to improve/optimise radiation safety for radiographers. The distribution of the responses to the second question over the different regions is shown in Table 4.

Table 4. Responses to question 2 - Do you see the advantage of a free information system for NDT companies that helps improve/optimise radiation safety for radiographers?

Do you see the advantage of a free information system for NDT companies that helps improve/optimise radiation safety for radiographers?			
	YES	No	No reply
Africa	6	1	0
Asia-Pacific	11	1	0
America	5	0	0
Europe	19	2	1
Global	41	4	1

3.1.3 Data collected by regulatory bodies

Almost all the regulatory bodies collect information from NDT companies on individual dose, sources details and accidents / incidents. Most of the regulatory bodies also collect information of the number of radiographers and training records from NDT companies. Only a few regulatory bodies collect information on the workload of radiographers. The distribution of the responses to the third question across the different regions is shown in Table 5 and Fig.2.

Table 5. Responses to question 3 - What data do you currently collect from NDT companies?

	Individual dose	Sources details	Accidents/ incidents	Number of radiographers	Training records	Workload	Other	Total
Africa	6	7	6	6	6	1	0	32
Asia-Pacific	9	11	11	7	5	0	4	47
America	5	5	5	5	3	2	0	25
Europe	20	21	22	15	13	1	6	98
Global	40	44	44	33	27	4	10	202

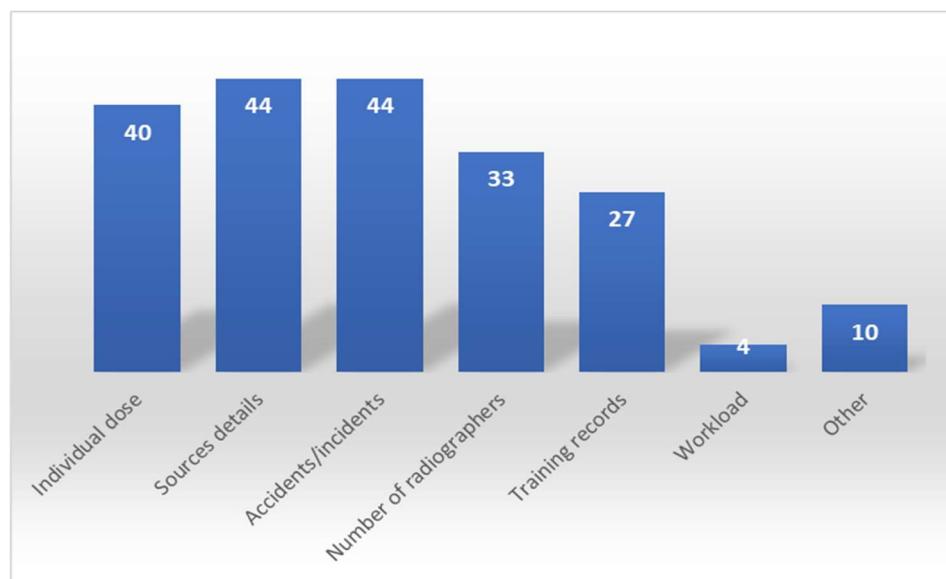


Fig.2 Responses to Question 3

3.1.4 Awareness of ISEMIR-IR

Only 67% of the regulatory bodies are aware of the ISEMIR-IR. The answer details about the question 4 were given in Table 6 and the distribution about the regulatory bodies who are aware of the ISEMIR-IR were given in Fig. 3.

Table 6. Responses to question 4 - Are you aware of the ISEMIR-IR?

	Are you aware of the ISEMIR-IR?	
	Yes	No
Africa	4	3
Asia-Pacific	5	7
America	3	2
Europe	19	3
Global	31	15

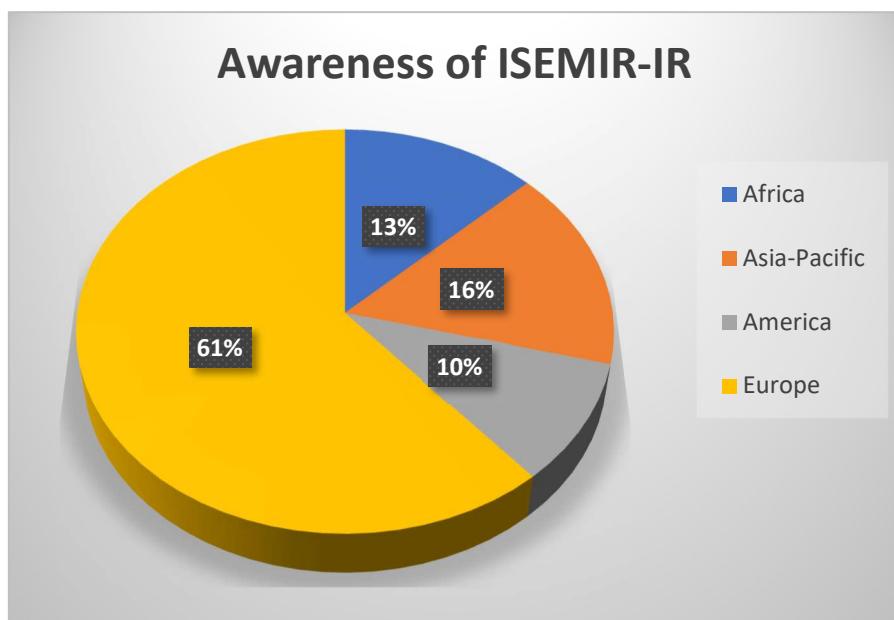


Fig. 3 Responses to Question 4

3.1.5 Value of information in periodic reports

Almost all the regulatory bodies agreed that the analysis function of ISEMIR is valuable. Most of the regulatory bodies thought that the benchmarking and demographics function are of value too. Other suggestions include sharing information on accidents or overexposures, quality control requirements of equipment and best practices/lessons learned. The details about the answers to question 5 are given in Table 7 and Fig.4.

Table 7. Responses to question 5 - What information from the ISEMIR system would be of value to you in periodic reports?

	Analysis	Benchmarking	Demographics	Other
Africa	7	5	3	2
Asia-Pacific	12	12	9	1
America	5	4	2	0
Europe	20	15	7	4
Global	44	36	21	7

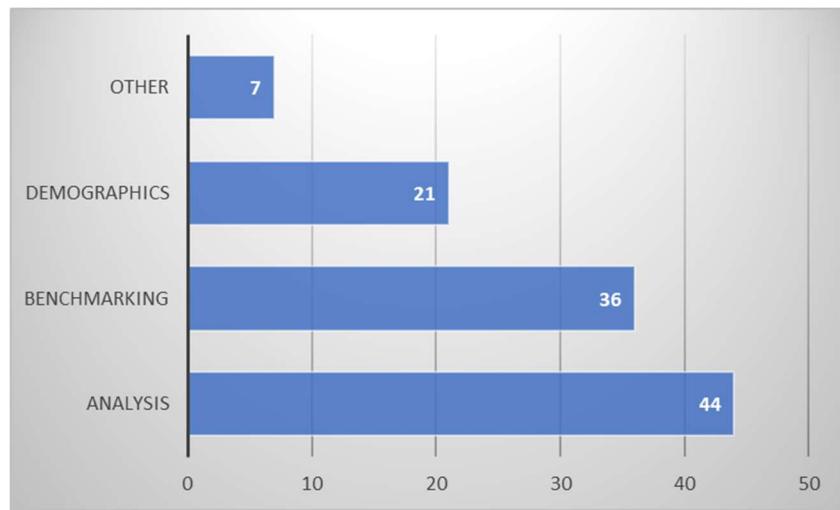


Fig.4 Responses to Question 5

3.1.6 Sharing of data

Almost all the regulatory bodies will share the information about accidents/incidents. Most of them will share the information about individual dose, sources details and number of radiographers. Some of them will share the training records and company name/code. Only 4 regulatory bodies will share the workload of the companies because only few of them collect the information about the workload. The details about the answers to question 6 are given in Table 8 and Fig.5.

Table 8. Responses to question 6 - What kind of data are you ready to share?

	Individual dose	Sources details	Accidents/ incidents	Number of radiographers	Training records	Workload	Company name/code	Total
Africa	4	4	4	5	5	2	1	25
Asia-Pacific	5	7	8	7	3	1	4	35
America	4	5	5	5	3	1	2	25
Europe	12	17	23	13	4	0	7	76
Global	25	33	40	30	15	4	14	161

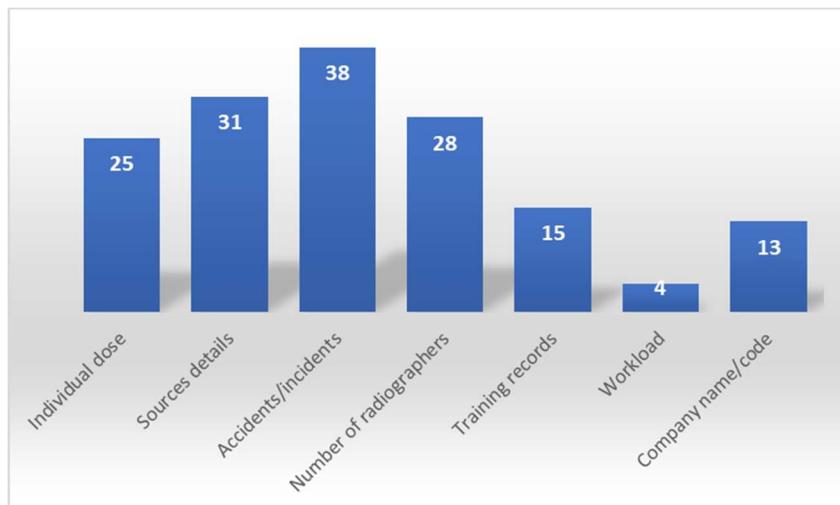


Fig.5 Responses to Question 6

3.2 Results of the questionnaire on occupational radiation protection in industrial radiography addressed to NDT service providers

The distribution of responses from Member States across the regions is given in Table 2. The responses of the questionnaires for NDT service providers and other IR facilities were received from 284 different companies from 42 different countries. The detailed results for each question of the questionnaire for NDT service providers will be given in the following sections.

3.2.1 Recording of individual doses

Most of the NDT companies still record the individual doses of radiographers on hard copies. Some companies use commercial software, software provided by their dosimetry service company or an Excel spreadsheet to record the individual doses of radiographers. 3 companies mentioned that they do not record the individual doses of radiographers. Some companies also record the individual doses of radiographers by other ways, including national dose register and MS Word. The details of the answers to question 1 are given in Table 9 and Fig.6. Apparently, some companies use different means to record the doses of their radiographers.

Table 9. Responses to question 1 - By what means do you record the individual doses for your radiographers?

	Commercial software	Software of dosimetry service company	Excel spreadsheet	Hard copy	I do not record	Other (please specify)	Total
Africa	2	11	11	15	0	4	43
Asia-Pacific	4	17	25	63	1	8	118
America	0	7	12	14	0	1	34
Europe	3	30	34	95	2	15	179
Global	9	65	82	187	3	28	374

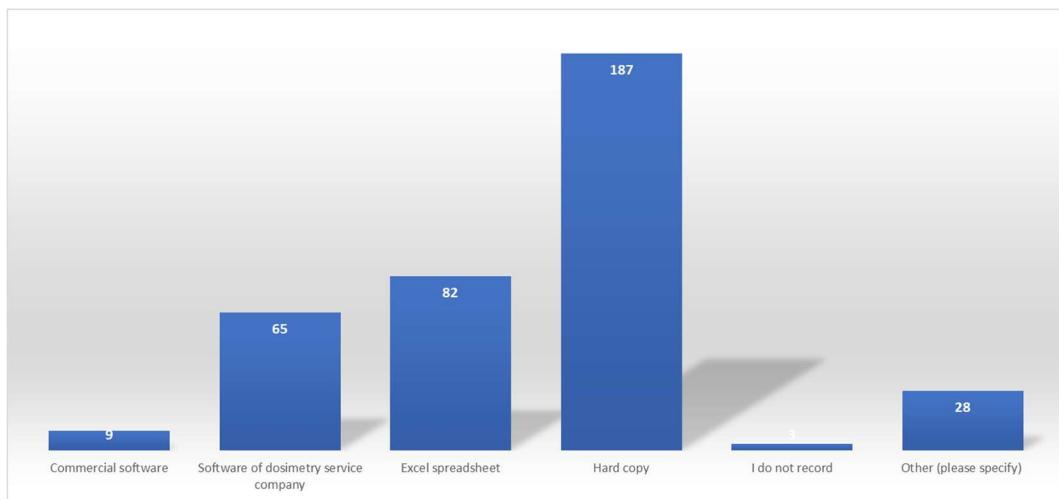


Fig. 6 Responses to Question 1

3.2.2 Type of data recorded

Almost all the NDT companies record the individual dose. Most of the companies also record the source details, accidents/incidents, number of radiographers and training records. Only 31.5%

companies record the workload of radiographers. The answer details about the question 2 are given in Table 10 and Fig.7.

Table 10. Responses to question 2 – What sort of data do you record?

	Individual dose	Sources details	Accidents/ incidents	Number of radiographers	Training records	Workload (for example: films/year)
Africa	28	23	20	12	14	10
Asia-Pacific	96	63	51	77	73	36
America	23	17	16	18	16	6
Europe	125	90	85	100	91	37
Global	272	193	172	207	194	89

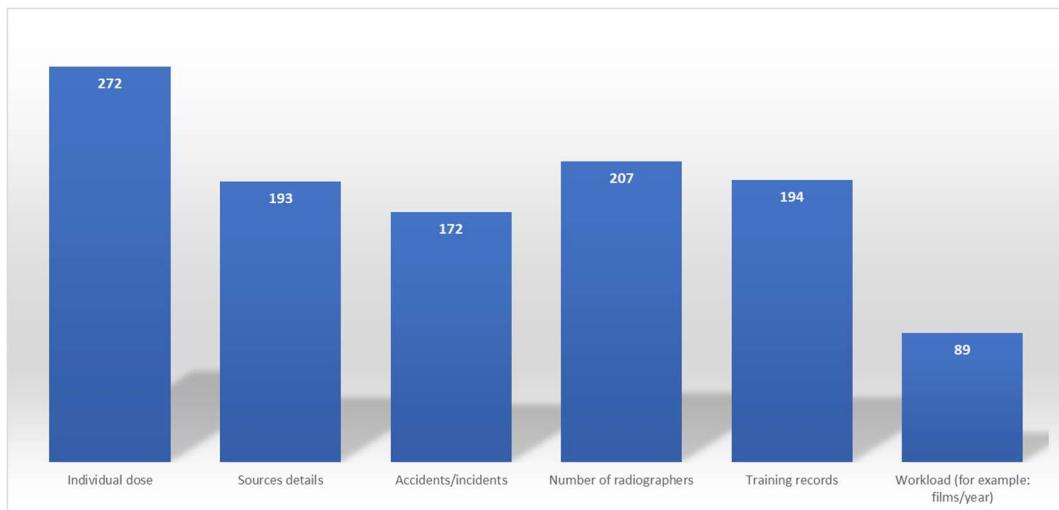


Fig. 7 Responses to Question 2

3.2.3 Frequency of dose recordings

About 36.5% companies update the dose records per month. 57.8% companies update the dose records quarterly. Other countries update the dose records daily, weekly, every two months or annually. The details of the answers given to the question 3 are given in Table 11 and Fig.8.

Table 11. Responses to question 3 – How frequently do you update the dose records?

	Monthly	Quarterly	Other (please specify)	Total
Africa	21	9	4	34
Asia-Pacific	26	69	7	102
America	10	4	12	26
Europe	46	81	13	140
Global	103	163	36	302

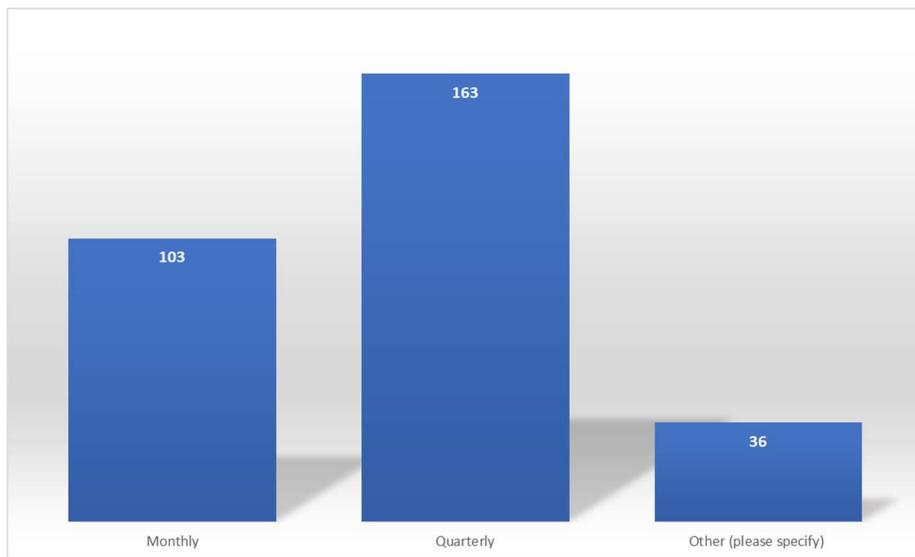


Fig.8 Responses to Question 3

3.2.4 Data to reported to regulatory bodies

Over 80% companies report the information about dose, sources/equipment and accidents/incidents to the regulators. Approximately 60% companies also report the training records to the regulators. Some companies also report the radiation measuring instruments, source movement actions and change of radiographers and equipment to the regulators. The details of the answers given to question 4 are given in Table 12 and Fig.9.

Table 12. Responses to question 4 - What kind of data you must report to regulator?

	Dose	Training records	Sources/equipment	Accidents/ incidents	Other please specify	Total
Africa	22	12	24	24	3	85
Asia-Pacific	88	70	91	75	6	330
America	23	21	23	22	7	96
Europe	109	67	113	101	19	409
Global	242	170	251	222	35	920

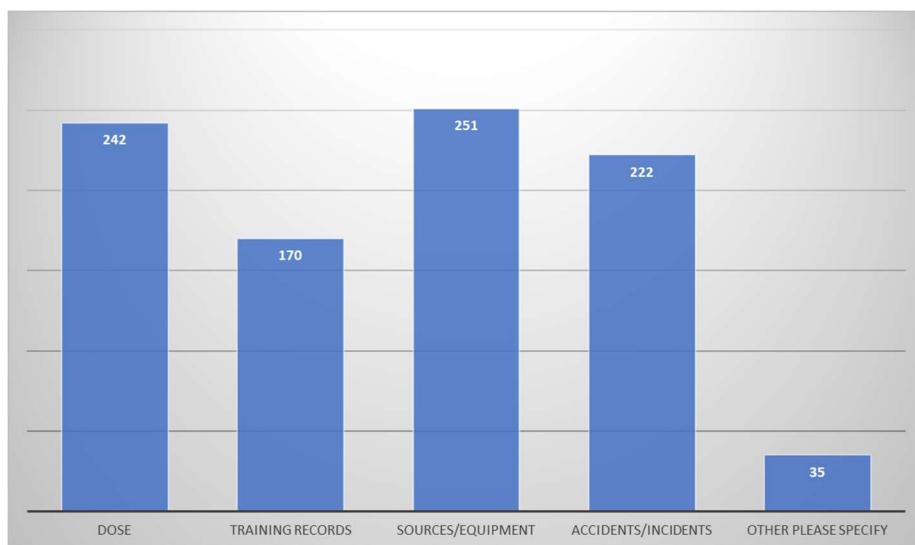


Fig. 9 Responses to Question 4

3.2.5 Interest in IAEA free software

Only 63% companies said “Yes” for the interest in IAEA free software. The details of the answers to question 5 are given in Table 13 and Fig.10.

Table 13. Responses to question 5 - Would you be interested in IAEA free software for dose recording, analysis and reporting?

	Yes	No
Africa	25	4
Asia-Pacific	62	31
America	21	1
Europe	62	64
Global	170	100

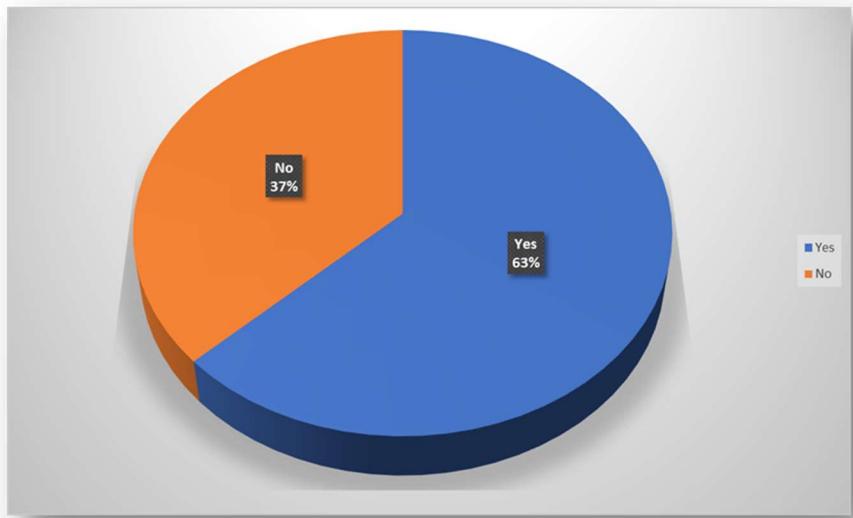


FIG. 10 Responses to Question 5

3.2.6 Need for particular features

All the companies want to see the periodic dose analysis function in the IAEA software. Over 50% companies also want to see the correlation functions: dose correlated with accidents, job characteristics, workload and training. Some companies mention about their interest in functions such as adjustable notifications, a documentation database, training and medical examination schedules. The details of the answers given to question 6 are given in Table 14 and Fig.11.

Table 14. Responses to question 6 - If so, are there any particular features you would like to see in the software?

	Periodic dose analysis	Correlation: dose/accidents	Correlation: dose/job characteristics	Correlation: workload/dose	Correlation: dose/training	Other particular features (please specify)
Africa	25	21	14	19	17	2
Asia-Pacific	70	47	50	57	47	2

America	19	13	12	17	7	3
Europe	63	27	36	29	22	5
Global	177	108	112	122	93	12

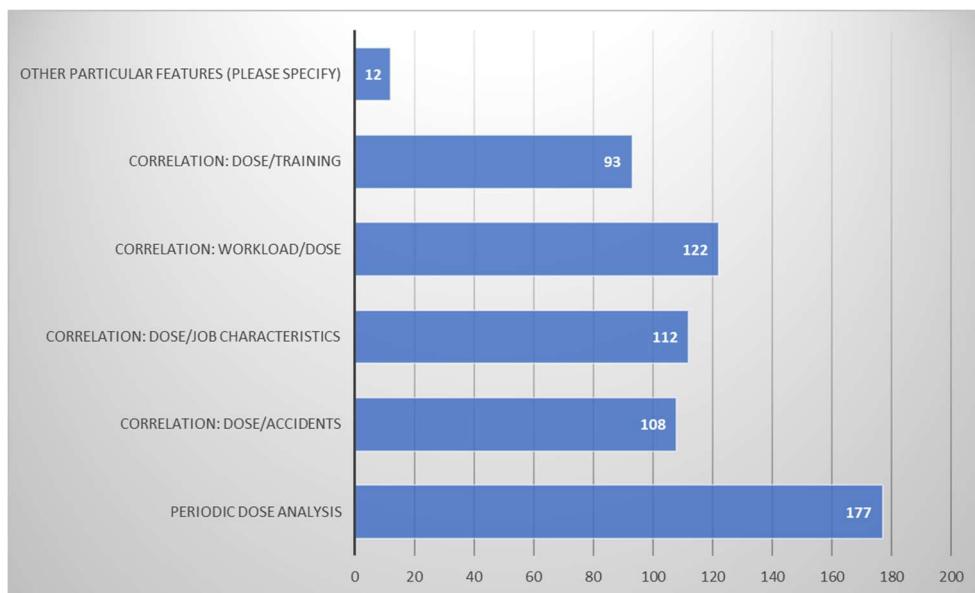


Fig. 11 Responses to Question 6

3.2.7 Sharing of information with the IAEA

Approximately 75% companies will share their information about individual doses with the IAEA. Over 50% companies will share information about source details, accidents/incidents, number of radiographers and training records with the IAEA. About 28% companies will also share information about their workload with the IAEA. The details of the answers given to question 7 are given in Table 15 and Fig.12.

Table 15. Responses to question 7 - What kind of data you are ready to share with IAEA?

	Individual dose	Sources details	Accidents/ incidents	Number of radiographers	Training records	Workload
Africa	21	24	22	16	19	10
Asia-Pacific	79	56	53	61	59	30
America	22	17	14	16	13	7
Europe	87	74	66	74	50	31
Global	209	171	155	167	141	78

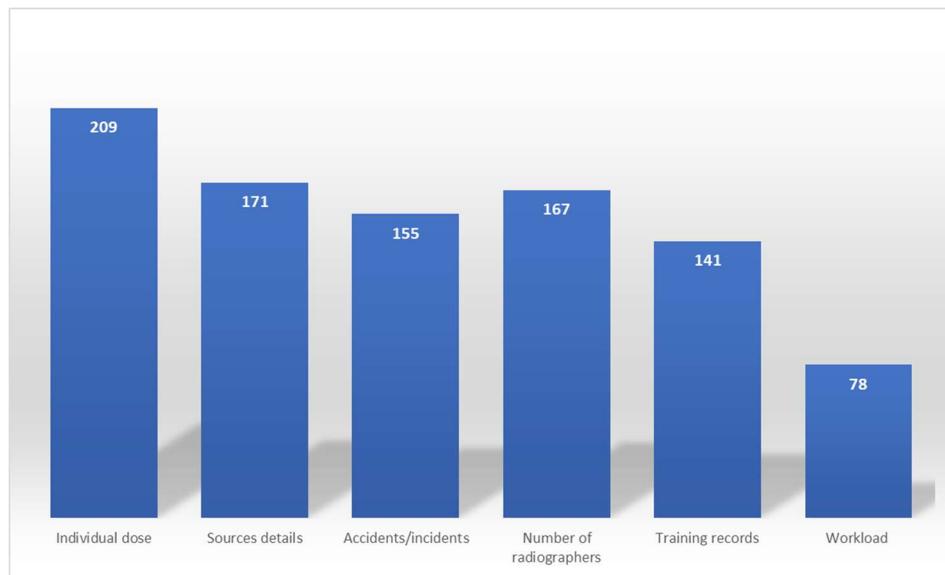


Fig. 12 Responses to Question 7

3.2.8. Frequency of uploading data

Approximately 57%, 22% and 11 % of the companies would be willing to update data to IAEA annually, monthly and quarterly, respectively. A few companies would like to update their data weekly and bimonthly. The details of the answer given to question 8 are given in Table 16 and Fig.13.

Table 16. Responses to question 8 - How often you would be willing to upload/update data?

	Annually	Monthly	Other (please specify)
Africa	10	16	5
Asia-Pacific	65	20	8
America	10	9	6
Europe	75	16	13
Global	160	61	32

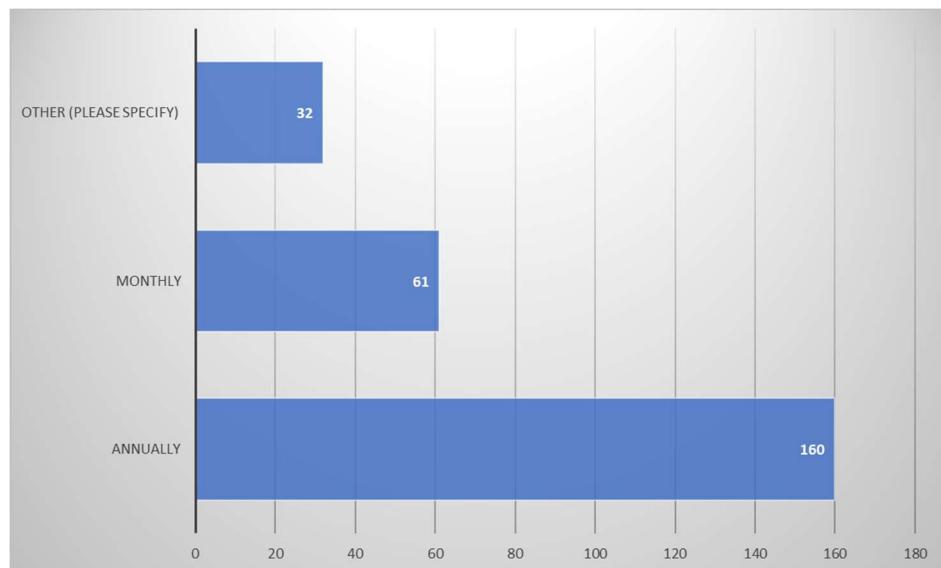


Fig. 13 Responses to Question 8

3.2.9 Means of uploading data

Approximately 50%, 36% and 26% of the companies prefer to upload data by online web-application, Excel spreadsheet and desktop application, respectively. Some companies mentioned MS Word and scanned copies for uploading data. Some companies gave more than one answer. The details of the answers given to question 9 are given in Table 17 and Fig.14.

Table 17. Responses to question 9 - What means of uploading your data do you prefer?

	Online web-application	Excel spreadsheet	Desktop application	Other (please specify)
Africa	21	10	14	0
Asia-Pacific	50	46	16	2
America	14	8	7	2
Europe	62	39	37	4
Global	147	103	74	8

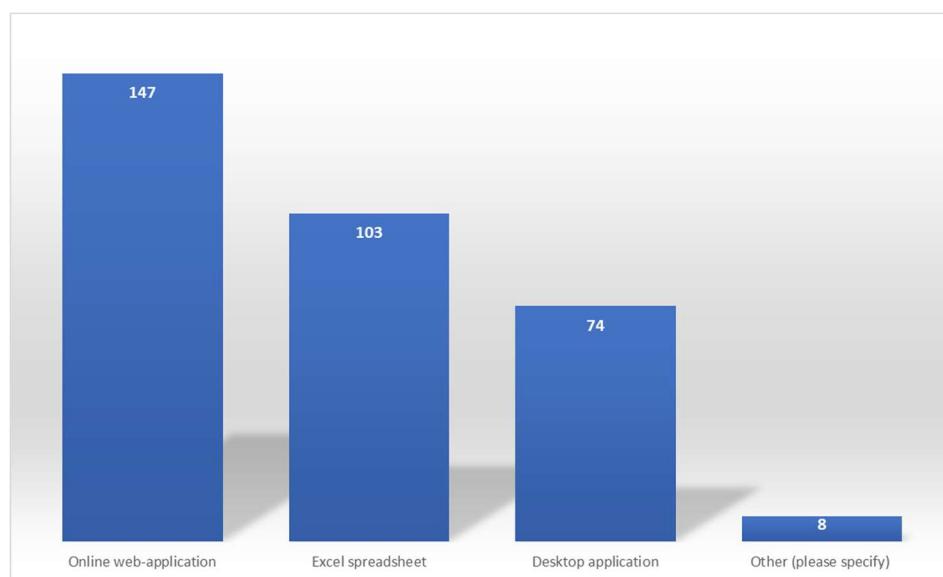


Fig. 14 Responses to Question 9

3.2.10 Awareness of ISEMIR-IR

16% of the companies were aware of the ISEMIR-IR. The other companies do not know what ISEMIR-IR is. The details of the answers given to question 10 are given in Table 18 and Fig.15.

Table 18. Responses to question 10 - Are you aware of the IAEA ISEMIR-IR project for NDT companies?

	Yes	No	Total
Africa	6	23	29
Asia-Pacific	13	80	93
America	3	17	20
Europe	20	100	120
Global	42	220	262

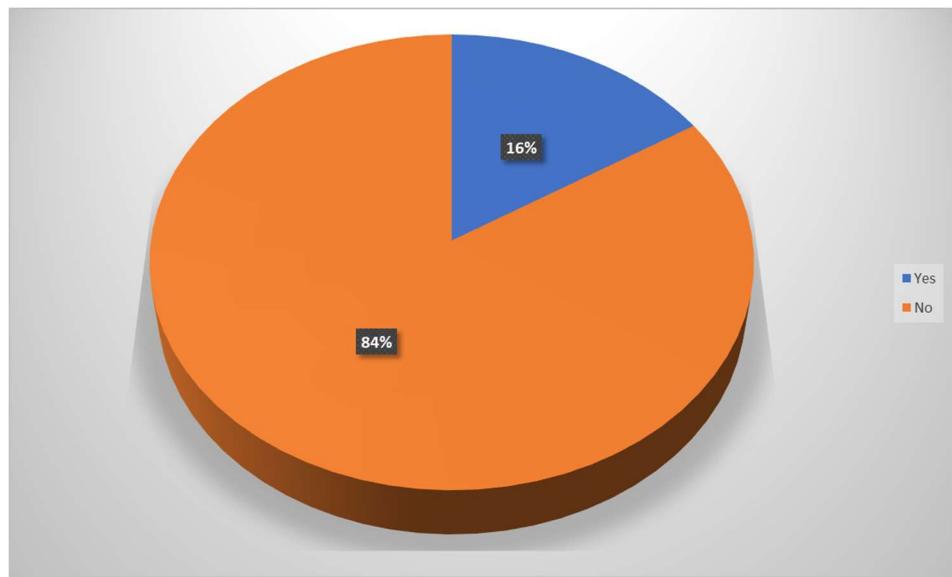


Fig. 15 Responses to Question 10

3.2.11 Creation of ISEMIR-IR accounts

50% of the companies would like the IAEA to create ISEMIR-IR account for them. Other companies said “No”. The details of the answers given to question 11 are given in Table 19 and Fig.16.

Table 19. Responses to question 11 - Would you like the IAEA to create ISEMIR-IR account for your company?

	Yes	No	Total
Africa	23	6	29
Asia-Pacific	49	41	90
America	13	2	15
Europe	54	61	115
Global	139	110	249

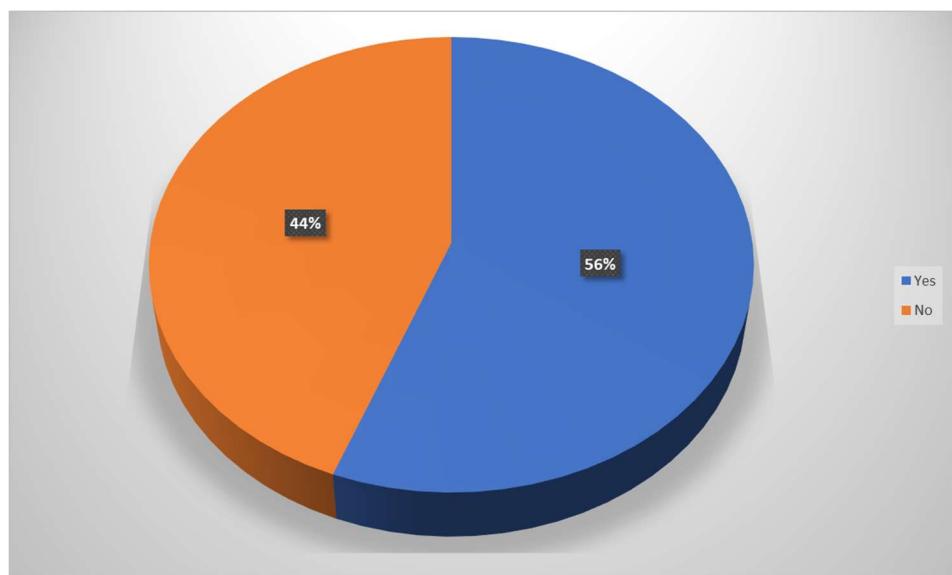


FIG. 16 Responses to Question 11

3.1.12 Preferred information channels

Over 51% of the companies prefer to receive information and training on ISEMIR-IR via an instruction manual. Approximately 42%, 29% and 38.6% of the companies prefer the way of webinars, on-site sessions and newsletters, respectively. The details of the answers given to question 12 are given in Table 20 and Fig.17.

Table 20. Responses to question 12 - In what way would you like to receive information and training on ISEMIR-IR?

	Webinars	On-site sessions	Instruction manual	Newsletters	Total
Africa	19	17	18	16	70
Asia-Pacific	44	37	44	25	150
America	15	4	15	8	42
Europe	41	24	69	60	194
Global	119	82	146	109	456

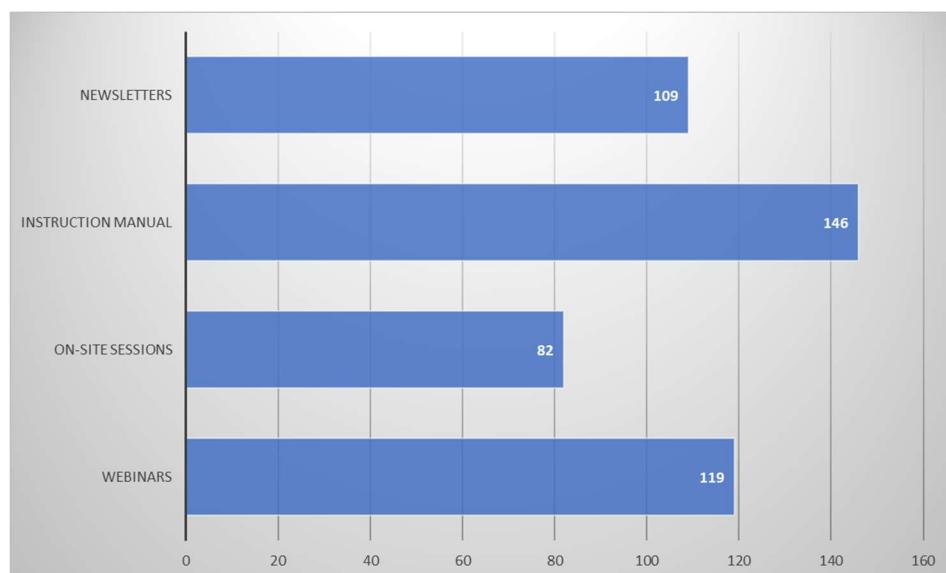


Fig. 17 Responses to Question 12

3.1.13 Number of radioactive sources and radiation generators

The total numbers of radiography sources of the companies for the year 2017, 2018 and 2019 were given in Table 21 and Fig.18. Over the years the number of radioactive sources and radiation sources is slightly increasing.

Table 21. Responses to question 13 - Radiography sources

Year	Number of Ir-192 radioactive sources	Number of Se-75 radioactive sources	Number of Co-60 radioactive sources	Number of units of radiation generators (X-ray units)	Total
2017	589	101	20	505	1215
2018	645	108	20	527	1300
2019	681	108	23	538	1350

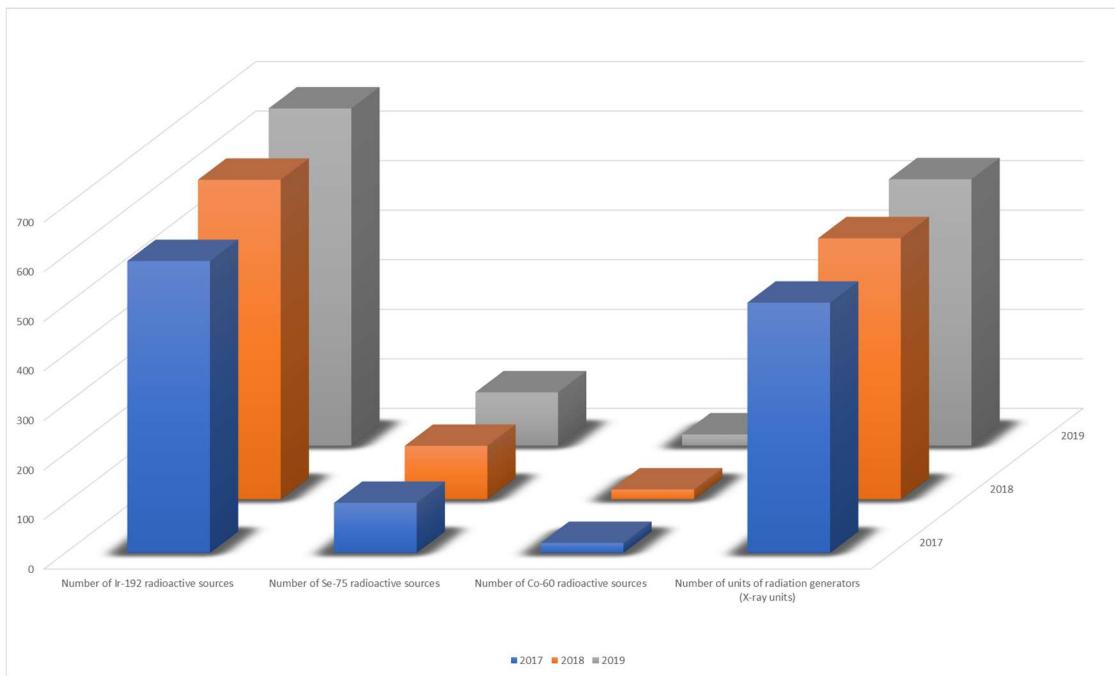


Fig. 18 Responses to Question 13

3.2.14 Company procedures

Approximately 70% of the companies have defined investigation levels for occupational exposure. 88% of the companies perform occupational radiation protection related assessments of their radiographers. 87% of the companies perform their own inspections for compliance to radiation safety standards and regulations. The responses to question 14 are given in Table 22 and Fig.19.

Table 22. Responses to question 14 – Company procedures

Year	Are there company investigation levels for occupational exposure?		Does your company perform occupational radiation protection related assessment of radiographers?		Does your company perform its own inspections for compliance to radiation safety standards and regulations? (optional)	
	YES	NO	YES	NO	YES	NO
2017	161	84	218	32	194	36
2018	162	84	218	32	193	37
2019	165	85	222	33	195	39



Fig. 19 Responses to Question 14

3.2.15 Dose information

The majority of the companies that responded employ less than 20 occupational exposed workers. Table 23 shows the ranges of occupational exposed workers per company.

Table 23. Responses to question 15.1 – Number of occupationally exposed workers

Year	Number of occupationally exposed workers				
	up to 4	5 to 19	20 to 50	over 50	no reply
2017	91	99	22	10	60
2018	90	101	21	10	60
2019	91	100	21	10	60

The number of films exposed in the year can be used to analysis the dose information per exposed film. This can be used as a proxy for the average dose per radiographic test, which in turn can be used as a benchmark between companies. The number of companies with the exposed films in different ranges is given in Table 24.

Table 24. Responses to question 15.2 – Number of films exposed in the year

Year	Number of films exposed in the year					
	up to 99	100 to 999	1000 to 9999	10000 to 50000	over 50000	no reply
2017	17	47	59	24	6	129
2018	15	48	59	25	6	129
2019	17	49	57	24	6	129

The number of companies with the annual collective dose in different ranges is given in Table 25. The companies with the annual collective dose over 50 man.mSv/year are the same ones for these three different years.

Table 25. Responses to question 15.3 – Annual collective dose

Year	Annual collective dose[man.mSv/year]						
	up to 0.1	0.1 < dose ≤ 1	1 < dose ≤ 5	5 < dose ≤ 20	20 < dose ≤ 50	over 50	no reply
2017	16	33	55	31	7	8	132
2018	15	34	52	32	6	9	132
2019	15	34	52	32	7	8	132

Table 26 shows the distribution of the number of companies with a minimum detectable level in a certain range.

Table 26. Responses to question 15.4 – Minimum detectable level

Year	Minimum detectable level [mSv]						
	≤ 0.01	0.01 to 0.1	0.1	0.1 to 1	1	over 1	no reply
2017	17	38	49	23	6	8	141
2018	17	38	49	23	6	8	141
2019	17	38	49	23	6	8	141

The numbers of workers in different dose ranges for three subsequent years are given in Table 27 to 29 which present the dose distribution for all workers in the companies that responded classified per region for the years 2017, 2018 and 2019. The same information is also presented in Figure 20. In 2019, the annual dose of one worker of a company from Africa was higher than 50 mSv. This was due to an accident.

Table 27. Responses to question 15.5 – Dose distribution information (2017)

Region	2017								
	15.5 Number of workers								
	Dose < min detectable level	1 mSv ≤ Dose < 5 mSv	5 mSv ≤ Dose < 10 mSv	10 mSv ≤ Dose < 15 mSv	15 mSv ≤ Dose < 20 mSv	20 mSv ≤ Dose < 30 mSv	30 mSv ≤ Dose < 50 mSv	50 mSv ≤ Dose	Total
Africa	104	76	11	6	6	0	6	0	1025
Asia-Pacific	262	358	13	9	0	0	0	0	660
America	127	177	42	8	1	1	3	0	532
Total	1025	1271	131	23	9	5	9	0	

Table 28. Responses to question 15.5 – Dose distribution information (2018)

2018								
15.5 Number of workers								
Region	Dose < min detectable level	1 mSv ≤ Dose < 5 mSv	5 mSv ≤ Dose < 10 mSv	10 mSv ≤ Dose < 15 mSv	15 mSv ≤ Dose < 20 mSv	20 mSv ≤ Dose < 30 mSv	30 mSv ≤ Dose < 50 mSv	50 mSv ≤ Dose
Africa	144	102	11	5	6	0	5	0
Asia-Pacific	367	339	19	10	1	1	0	0
America	117	174	41	11	4	3	2	0
Europe	526	659	69	4	2	4	0	0
Global	1154	1274	140	30	13	8	7	0

Table 29. Responses to question 15.5 – Dose distribution information (2019)

2019								
15.5 Number of workers								
Region	Dose < min detectable level	1 mSv ≤ Dose < 5 mSv	5 mSv ≤ Dose < 10 mSv	10 mSv ≤ Dose < 15 mSv	15 mSv ≤ Dose < 20 mSv	20 mSv ≤ Dose < 30 mSv	30 mSv ≤ Dose < 50 mSv	50 mSv ≤ Dose
Africa	132	96	9	4	6	2	6	1
Asia-Pacific	319	453	22	16	0	0	0	0
America	488	357	70	11	4	1	2	0
Europe	565	597	78	5	8	5	0	0
Global	1504	1503	179	36	18	8	8	1

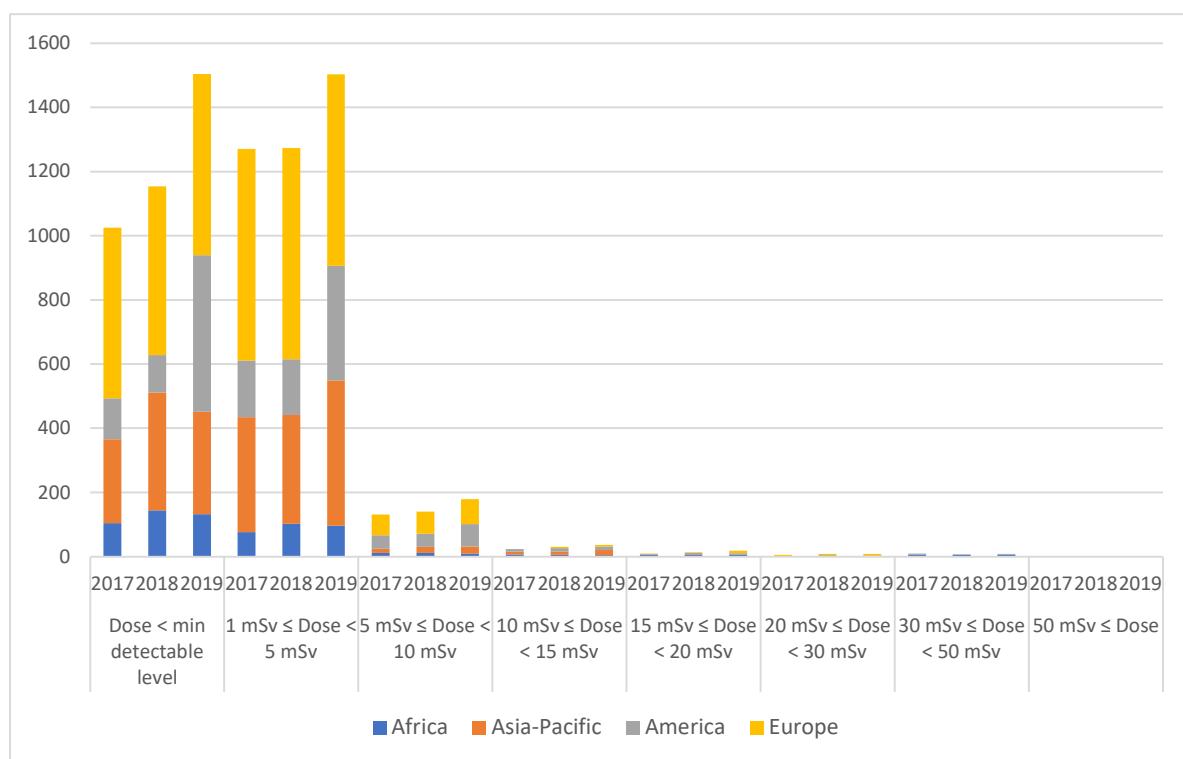


Fig. 20 Responses to Question 15.5

3.2.16 Accidents and incidents

The number of accidents and incidents reported by the companies in their responses to question 16 are given in Table 30 and Figure 21. Two companies reported that they have accidents and incidents in these all three years, one of them has accident with doses over 20mSv in 2017 and 2019. There are four companies which have accidents and incidents in two of these three years.

Table 30. Responses to question 16 – Accidents and incidents

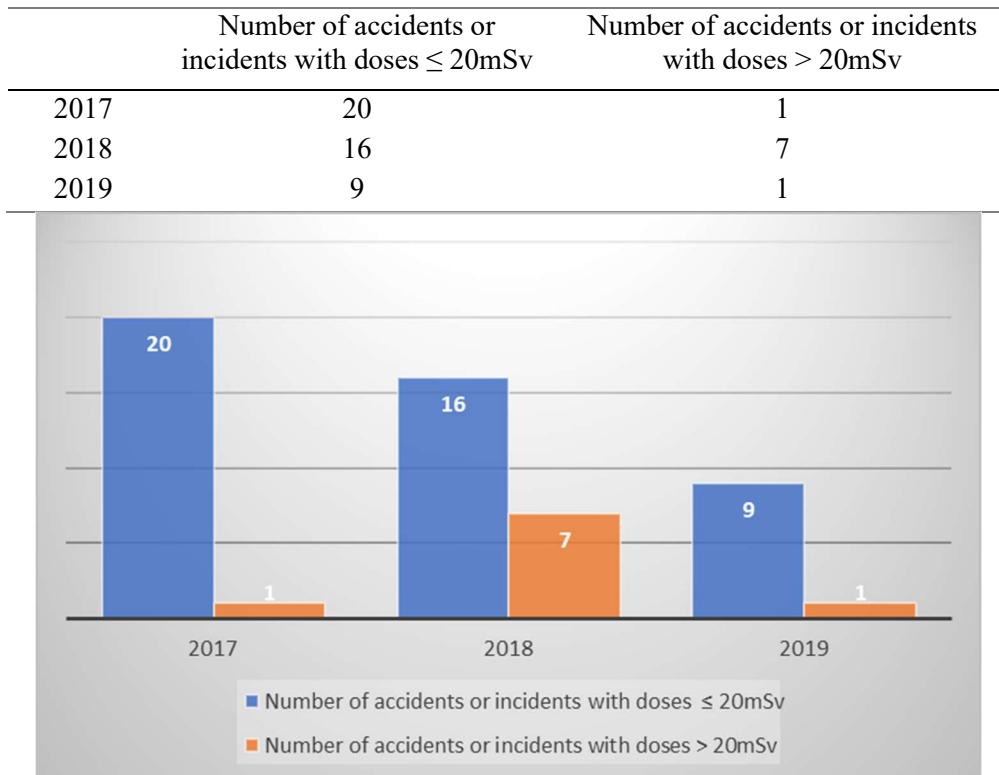


Fig. 21 Responses to Question 16

The number of companies reported accidents and incidents are given in Table 31. A company reported 12 and 9 accidents and incidents with doses less than 20mSv in 2017 and 2018 respectively, and 2 accidents and incidents with doses over than 20mSv in 2018. One company reported 5 accidents and incidents with doses over than 20mSv in 2018.

Table 31. Number of companies reported accidents and incidents

No accident/ incident	Number of companies			No reply
	Accidents or incidents with doses $\leq 20\text{mSv}$	Accidents or incidents with doses $> 20\text{mSv}$	No reply	
2017	176	9	1	98
2018	177	7	2	98
2019	178	7	1	98

3.2.17 Information on radiographers

In their responses to question 17, companies reported information on three of their radiographers. This concerned information about their Hp (10) dose, the number of films they

exposed in one year and their qualification. Table 32 shows the number of companies that answered questions 17 for the years 2017, 2018 and 2019. Some information of these radiographers is incomplete.

Table 32. Number of companies reported information on radiographers.

The number of companies reported information on radiographers		
	yes	No
2017	124	160
2018	122	162
2019	127	157

4 CONCLUSION

Up to the final deadline of 31 January 2021, 46 responses from regulatory bodies representing 43 countries were received, and 284 responses from NDT service providers or industrial radiography facilities from 42 countries. The number of Member States for which both a regulatory body and at least one company responded is 36. There were 13 Member States from which only a regulatory body or only a company responded. Thus, all respondents represent 49 Member States (out of 152) of the IAEA.

The majority of the responding regulatory bodies see the advantage of a free information system for NDT companies to help them improve/optimize radiation safety. About two third of them were already aware of ISEMIR-IR.

Almost two third of the responding NDT companies are interested in free software provided by the IAEA. The main purpose would be to perform periodic dose analysis and to a lesser extent to analyze the correlation of dose with other parameters. Only 16% of the responding NDT companies were aware of the existence of ISEMIR-IR.

The majority of the responding NDT companies still use hard copy for their registrations, followed by/combined with registrations in MS Excel and commercial software. For most companies these registrations include individual dose, source details, accidents/incidents, number of radiographers and training records. The registration of workload, e.g. in number of films exposed per year is less frequently done. This makes it more difficult to use the average individual dose per film as a benchmark between companies.

The majority of the responding NDT companies are willing to share information with the IAEA through ISEMIR-IR, and about 50% of the companies would like the IAEA to create an ISEMIR-IR account for them.

In conclusion there appears to be a (latent) need for a tool like ISEMIR-IR. Therefore, the IAEA should continue to further develop and promote it.

The result of the survey also gives an update of the current situation with regard to occupational exposure and radiation protection practices in industrial radiography. The data collected during the survey can be used to fill the ISEMIR-IR database, so that companies which use ISEMIR-IR can perform benchmarks against this data.

The experiences of the Member States and the companies are very useful to determine the best course of action to develop and promote ISEMIR-IR.

In order to improve the understanding of the current situation across all Member States of the IAEA with respect to occupational exposure and radiation protection in industrial radiography, it is still worthwhile to further distribute the questionnaires across regulatory bodies and NDT companies in members states that are not yet represented by the respondents.

5 APPENDIX

Appendix I

The IAEA ISEMIR-IR Survey (version for regulatory authority)

(to be sent to ISEMIR.Contact-Point@iaea.org)

1. How many NDT companies are there in your country?

- Precise number _____
- Up to 4
- more than 5

2. Do you see the advantage of a free information system for NDT companies that helps improve/optimise radiation safety for radiographers?

- Yes
- No

3. What data do you currently collect from NDT companies?

- Individual dose;
- Sources details;
- Accidents/incidents;
- Number of radiographers;
- Training records;
- Workload (for example: films/year)
- Other (please specify) _____

4. Are you aware of the ISEMIR-IR?

- Yes
- No

5. What information from the ISEMIR system would be of value to you in periodic reports?

- Analysis;
- Benchmarking;
- Demographics;
- Other (please specify) _____

6. What kind of data are you ready to share?*

- Individual dose;
- Sources details;
- Accidents/incidents;
- Number of radiographers;
- Training records;
- Workload (for example: films/year)
- Company name/code (not displayed in published statistics)

7. Would you be willing to share the contacts of persons who should complete this or companies' questionnaire?

Company name	Name of responsible person	E-mail address

8. Your personal information*

Name and Surname

Regulatory Authority

Job title or position

Town/city

E-mail:

Country

* All information will be treated as strictly confidential by the IAEA.

Appendix II

English Version:

The IAEA ISEMIR-IR Survey (version for NDT service providers)

(to be sent to ISEMIR.Contact-Point@iaea.org)

1. By what means do you record the individual doses for your radiographers?

- Commercial software;
- Software of dosimetry service company;
- Excel spreadsheet;
- Hard copy;
- I do not record;
- Other (please specify) _____

2. What sort of data do you record?

- Individual dose;
- Sources details;
- Accidents/incidents;
- Number of radiographers;
- Training records;
- Workload (for example: films/year)

3. How frequently do you update the dose records?

- Monthly;
- Quarterly;
- Other (please specify) _____

4. What kind of data you must report to regulator?

- Dose;
- Training;
- Sources/equipment
- Accidents/incidents
- Other please specify _____

5. Would you be interested in IAEA free software for dose recording, analysis and reporting?

- Yes
- No

6. If so, are there any particular features you would like to see in the software?

- Periodic dose analysis;
- Correlation: dose/accidents;
- Correlation: dose/job characteristics;
- Correlation: workload/dose;
- Correlation: dose/training;
- Other particular features (please specify) _____

7. What kind of data you are ready to share with IAEA?

- Individual dose;
- Sources details;
- Accidents/incidents;
- Number of radiographers;
- Training records;
- Workload (for example: films/year)

8. How often you would be willing to upload/update data?

- Annually;
- Monthly;
- Other (please specify) _____

9. What means of uploading your data do you prefer?

- Online web-application;
- Excel spreadsheet;
- Desktop application;
- Other (please specify) _____

10. Are you aware of the IAEA ISEMIR-IR project for NDT companies?

- Yes
- No

11. Would you like the IAEA to create ISEMIR-IR account for your company?

- Yes
- No

12. In what way would you like to receive information and training on ISEMIR-IR?

- Webinars;
- On-site sessions;
- Instruction manual;
- Newsletters

Please give some details on your company in the questionnaire below (All information will be treated as strictly confidential by the IAEA)

Question	Year		
	2017	2018	2019
13. Radiography sources			
13.1 Number of Ir-192 radioactive sources	number of sources	number of sources	number of sources
13.1a Typical Initial activity of Ir-192 source (optional)	TBq	TBq	TBq
13.1b Typical end of use activity of Ir-192 source(optional)	TBq	TBq	TBq
13.2 Number of Se-75 radioactive sources	number of sources	number of sources	number of sources

Question	Year		
	2017	2018	2019
13.2a Typical Initial activity of Se-75 source (optional)	TBq	TBq	TBq
13.2b Typical end of use activity of Se-75 source(optional)	TBq	TBq	TBq
13.3 Number of Co-60 radioactive sources	number of sources	number of sources	number of sources
13.3a Typical Initial activity of Co-60 source(optional)	TBq	TBq	TBq
13.3b Typical end of use activity of Co-60 source(optional)	TBq	TBq	TBq
13.4 Number of units of radiation generators (X-ray units)	number of units	number of units	number of units
13.4a Typical MV of radiation generator (X-ray units) (optional)	MV	MV	MV
13.4b Typical mA of radiation generator (X-ray units) (optional)	mA	mA	mA
14. Company procedures			
14.1 Are there company investigation levels for occupational exposure?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
14.1a. If yes, what is the investigation level per month?	mSv	mSv	mSv
14.2 Does your company perform occupational radiation protection related assessment of radiographers?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
14.2a If yes, approximately how many times per year would a radiographer be assessed by your company?	number of times per year	number of times per year	number of times per year
14.3 Does your company perform its own inspections for compliance to radiation safety standards and regulations? (optional)	<input type="checkbox"/> Yes <input type="checkbox"/> No		
14.3 If yes, how many compliance inspections was held in a year? (optional)	number of inspections	number of inspections	number of inspections
15. Dose information			

Question	Year		
	2017	2018	2019
15.1 Number of Occupationally Exposed Workers	number of workers	number of workers	number of workers
15.2 Number of films exposed in the year	number of films	number of films	number of films
15.3 Annual collective dose	man.mSv/year	man.mSv/year	man.mSv/year
15.4 Minimum detectable level	mSv	mSv	mSv
15.5 Please, indicate number of workers in dose ranges:			
Annual Dose < min detectable level	number of workers	number of workers	number of workers
1 mSv ≤ Annual Dose < 5 mSv	number of workers	number of workers	number of workers
5 mSv ≤ Annual Dose < 10 mSv	number of workers	number of workers	number of workers
10 mSv ≤ Annual Dose < 15 mSv	number of workers	number of workers	number of workers
15 mSv ≤ Annual Dose < 20 mSv	number of workers	number of workers	number of workers
20 mSv ≤ Annual Dose < 30 mSv	number of workers	number of workers	number of workers
30 mSv ≤ Annual Dose < 50 mSv	number of workers	number of workers	number of workers
50 mSv ≤ Annual Dose	number of workers	number of workers	number of workers
16. Accidents and incidents			
16.1 Number of accidents or incidents with doses ≤ 20mSv	number of accidents/incidents	number of accidents/incidents	number of accidents/incidents
16.2 Number of accidents or incidents with doses > 20mSv	number of accidents/incidents	number of accidents/incidents	number of accidents/incidents
17. Information on radiographers (optional)			
Representative radiographer I			
17.1 Hp (10) dose	mSv	mSv	mSv
17.1a Number of films in a year	Number of films	Number of films	Number of films
17.1b Does he/she have valid radiation protection qualification (optional)?	Yes/No	Yes/No	Yes/No
Representative radiographer II			
17.2 Hp (10) dose	mSv	mSv	mSv
17.2a Number of films in a year	Number of films	Number of films	Number of films

Question	Year		
	2017	2018	2019
17.2b Does he/she have valid radiation protection qualification (optional)?	Yes/No	Yes/No	Yes/No
Representative radiographer III			
17.3 Hp (10) dose	mSv	mSv	mSv
17.3a Number of films in a year	Number of films	Number of films	Number of films
17.3b Does he/she have valid radiation protection qualification (optional)?	Yes/No	Yes/No	Yes/No

17. Your personal information

Name and Surname

Company/Institution

Job title or position

Town/city

E-mail:

Country

18. I agree to include the data from the questionnaire (questions 13-17) to the IAEA ISEMIR-IR database*

signature

* All information will be treated as strictly confidential by the IAEA. Only anonymised and aggregated data will be made available.

Chinese Version:

国际原子能机构 ISEMIR-IR 调查
(无损检测服务商版本)
(发送至 ISEMIR.Contact-Point@iaea.org)

1. 您通过什么方式记录探伤作业人员的个人剂量?

- 商业软件;
- 个人剂量监测服务公司的软件;
- Excel 电子表格;
- 纸质文档;
- 不记录;
- 其它方式(请注明) _____

2. 您都记录哪些数据?

- 个人剂量;
- 辐射源信息;
- 事故/事件;
- 探伤作业人员数量;
- 培训记录;
- 工作量(例如: 每年曝光多少胶片)

3. 您多久更新一次剂量记录?

- 一个月
- 一个季度
- 其它(请注明) _____

4. 哪些数据是必须向监管机构汇报的?

- 剂量;
- 培训;
- 辐射源/设备;
- 事故/事件;
- 其它(请注明) _____

5. 你是否有兴趣使用 IAEA 的免费软件来进行剂量记录、分析和汇报?

- 是
- 否

6. 如果是, 你是否希望在软件中看到以下任何特定的功能?

- 定期剂量分析;
- 相关性分析: 剂量/事故;
- 相关性分析: 剂量/工作特征;
- 相关性分析: 工作量/剂量;
- 相关性分析: 剂量/培训;
- 其它特定功能 (请注明) _____

7. 您准备与国际原子能机构分享什么样的数据?

- 个人剂量;
- 辐射源信息;
- 事故/事件;
- 探伤作业人员数量;
- 培训记录;
- 工作量(例如: 每年曝光多少胶片)

8. 您愿意多久上传/更新一次数据?

- 一年;
- 一个月
- 其它(请注明) _____

9. 您喜欢哪种方式上传数据?

- 在线网络应用程序;
- Excel 电子表格;
- 桌面应用程序;
- 其它(请注明) _____

10. 您是否知道针对无损检测公司的 IAEA ISEMIR-IR 项目?

- 是
- 否

11. 您是否希望国际原子能机构为贵公司创建 ISEMIR-IR 账号?

- 是
- 否

12. 您喜欢以下哪种方式来获得有关 ISEMIR-IR 的信息和培训?

- 网络研讨会;
- 现场会议;
- 使用说明书;
- 新闻通讯

请在下面的调查表中提供贵公司的一些详细信息(国际原子能机构将对所有信息严格保密)

问题	年份		
	2017	2018	2019
13. 射线探伤辐射源			
13.1 Ir-192 放射源的数量			
13.1a Ir-192 出厂时的典型活度值(选填)	TBq	TBq	TBq
13.1b Ir-192 废弃时的典型活度值(选填)	TBq	TBq	TBq
13.2 Se-75 放射源的数量			

问题	年份		
	2017	2018	2019
13.2a Se-75 出厂时的典型活度值(选填)	TBq	TBq	TBq
13.2b Se-75 废弃时的典型活度值(选填)	TBq	TBq	TBq
13.3 Co-60 放射源			
13.3a Co-60 出厂时的典型活度值(选填)	TBq	TBq	TBq
13.3b Co-60 废弃时的典型活度值(选填)	TBq	TBq	TBq
13.4 射线发生器的数量(X 射线装置)			
13.4a 射线发生器的典型值 MV (X 射线装置) (选填)	MV	MV	MV
13.4b 射线发生器的典型值 mA (X 射线装置) (选填)	mA	mA	mA
14. 公司程序			
14.1 贵公司是否有针对职业照射的调查水平？	<input type="checkbox"/> 是 <input type="checkbox"/> 否		
14.1a. 如果是，每月的调查水平是多少？	mSv	mSv	mSv
14.2 贵公司是否对探伤从业人员进行职业辐射防护相关的评估？	<input type="checkbox"/> 是 <input type="checkbox"/> 否		
14.2a 如果是，贵公司每年会对探伤从业人员进行大约多少次评估？			
14.3 贵公司是否对自己进行检查以确认是否符合辐射安全标准和规定？(选填)	<input type="checkbox"/> 是 <input type="checkbox"/> 否		
14.3 如果是，每年进行几次相关的检查？(选填)			
15. 剂量信息			

问题	年份		
	2017	2018	2019
15.1 职业照射工作人员的数量			
15.2 每年曝光的胶片数量			
15.3 年集体剂量	man.mSv/year	man.mSv/year	man.mSv/year
15.4 最小可探测水平	mSv	mSv	mSv
15.5 请指出剂量范围内的工作人员数量:			
年剂量 < 最小可探测水平			
1 mSv ≤ 年剂量 < 5 mSv			
5 mSv ≤ 年剂量 < 10 mSv			
10 mSv ≤ 年剂量 < 15 mSv			
15 mSv ≤ 年剂量 < 20 mSv			
20 mSv ≤ 年剂量 < 30 mSv			
30 mSv ≤ 年剂量 < 50 mSv			
50 mSv ≤ 年剂量			
16. 事故和事件			
16.1 事故或事件的数量 剂量 ≤ 20mSv			
16.2 事故或事件的数量 剂量 > 20mSv			
17. 探伤从业人员信息(选填)			
有代表性的探伤从业人员 I			
17.1 个人剂量当量 Hp (10)	mSv	mSv	mSv
17.1a 每年曝光的胶片数量			
17.1b 他/她是否有有效的辐射防护资质(选填)?			
有代表性的探伤从业人员 II			
17.2 个人剂量当量 Hp (10)	mSv	mSv	mSv
17.2a 每年曝光的胶片数量			
17.2b 他/她是否有有效的辐射防护资质(选填)?			
有代表性的探伤从业人员 III			
17.3 个人剂量当量 Hp (10)	mSv	mSv	mSv
17.3a 每年曝光的胶片数量			
17.3b 他/她是否有有效的辐射防护资质(选填)?			

17. 您的个人信息

姓名

公司/机构

职称或职位

城镇/城市

电子邮件:

国家

18. 我同意把调查表中的数据(问题 13-17)用于
IAEA ISEMIR-IR 数据库*

签字:

* 国际原子能机构将对所有的信息进行严格地保密。只提供匿名和汇总后的数据。

Portuguese Version:

**Pesquisa IAEA ISEMIR-IR
(versão para Empresas de END)**

(enviar para ISEMIR.Contact-Point@iaea.org)

1. Por quais meios você registra as doses individuais de seus operadores?

- Programa computacional comercial;
- Programa computacional do laboratório de dosimetria;
- Planilha Excel;
- Documento impresso;
- Não registro;
- Outros (favor especificar) _____

2. Que tipo de dados você registra?

- Dose individual;
- Detalhes de fontes;
- Acidentes/incidentes;
- Números de operadores;
- Registros de treinamento;
- Carga de trabalho (por exemplo: número de filmes radiográficos/ano)

3. Com que frequência você atualiza os registros de dose?

- Mensal;
- Trimestral;
- Outros (favor especificar) _____

4. Que tipo de dados você deve informar a Autoridade Reguladora?

- Dose;
- Treinamento;
- Fontes/equipamentos;
- Acidentes/incidentes;
- Outros (favor especificar) _____

5. Você estaria interessado no software gratuito da IAEA para registro, análise e relatório de doses?

- Sim
- Não

6. Em caso afirmativo, há algum recurso específico que você gostaria de ver no software?

- Análise periódica de dose;
- Correlação: dose/acidente;
- Correlação: dose/características de trabalho;
- Correlação: carga de trabalho/dose;
- Correlação: dose/treinamento;

Outro recurso particular (favor especificar) _____

7. Que tipo de dados você pode compartilhar com a IAEA?

- Dose individual;
- Detalhes de fontes;
- Acidentes/incidentes;
- Números de operadores;
- Registros de treinamento;
- Carga de trabalho (por exemplo: número de filmes radiográficos/ano)

8. Com que frequência você estaria disposto a fazer envio/atualização dos dados?

- Anual;
- Mensal;
- Outros (favor especificar) _____

9. Que meios de envio de seus dados você prefere?

- Aplicativo online na web;
- Planilha Excel;
- Aplicativo em Desktop;
- Outros (favor especificar) _____

10. Você está ciente do projeto IAEA ISEMIR-IR para Empresas de END?

- Sim
- Não

11. Você gostaria de criar uma conta de cadastro para sua Empresa no ISEMIR-IR da IAEA?

- Sim
- Não

12. De que forma gostaria de receber informações e treinamentos do ISEMIR-IR?

- Seminários na web (Webinars);
- Sessões no próprio site (On-site sessions);
- Manual de Instrução;
- Boetins informativos (Newsletters)

Favor forneça alguns detalhes sobre sua Empresa no questionário abaixo (Todas as informações serão tratadas como estritamente confidenciais pela IAEA)

Questão	Ano		
	2017	2018	2019
13. Fontes de Radiografia			
13.1 Número de fontes radioativas de Ir-192	número de fontes	número de fontes	número de fontes
13.1a Atividade inicial típica de fonte de Ir-192 (opcional)	TBq	TBq	TBq
13.1b Atividade final típica de fonte de Ir-192 (opcional)	TBq	TBq	TBq

Questão	Ano		
	2017	2018	2019
13.2 Número de fontes radioativas de Se-75	número de fontes	número de fontes	número de fontes
13.2a Atividade inicial típica de fonte de Se-75 (opcional)	TBq	TBq	TBq
13.2b Atividade final típica de fonte de Se-75 (opcional)	TBq	TBq	TBq
13.3 Número de fontes radioativas de Co-60	número de fontes	número de fontes	número de fontes
13.3a Atividade inicial típica de fonte de Co-60 (opcional)	TBq	TBq	TBq
13.3b Atividade final típica de fonte de Co-60 (opcional)	TBq	TBq	TBq
13.4 Número de equipamentos geradores de radiação (unidades de raios X)	número de unidades	número de unidades	número de unidades
13.4a Energia típica MV do gerador de radiação (unidade de raios X) (opcional)	MV	MV	MV
13.4b Corrente típica mA do gerador de radiação (unidade de raios X) (opcional)	mA	mA	mA
14. Procedimentos da Empresa			
14.1 Existem níveis de investigação da empresa para exposição ocupacional?	<input type="checkbox"/> Sim <input type="checkbox"/> Não		
14.1a. Se sim, qual é o nível de investigação por mês?	mSv	mSv	mSv
14.2 Sua Empresa realiza avaliações relacionadas a proteção radiológica dos operadores?	<input type="checkbox"/> Sim <input type="checkbox"/> Não		
14.2a Se sim, aproximadamente quantas vezes por ano um operador seria avaliado por sua Empresa?	número de vezes por ano	número de vezes por ano	número de vezes por ano
14.3 Sua Empresa realiza suas próprias inspeções de conformidade com as recomendações e regulamentos de proteção radiológica? (opcional)	<input type="checkbox"/> Sim <input type="checkbox"/> Não		

Questão	Ano		
	2017	2018	2019
14.3 Se sim, quantas inspeções de conformidades foram realizadas no ano? (opcional)	número de inspeções	número de inspeções	número de inspeções
15. Informação de dose			
15.1 Número de trabalhadores ocupacionalmente expostos (IOE)	número de trabalhadores	número de trabalhadores	número de trabalhadores
15.2 Número de filmes radiográficos expostos no ano	número de filmes	número de filmes	número de filmes
15.3 Dose coletiva anual	homem.mSv/ano	homem.mSv/ano	homem.mSv/ano
15.4 Valor mínimo detetável da dosimetria	mSv	mSv	mSv
15.5 Favor, indique o Número de Trabalhadores nos intervalos de doses:			
Dose Anual < valor mínimo detetável	número de trabalhadores	número de trabalhadores	número de trabalhadores
1 mSv ≤ Dose Anual < 5 mSv	número de trabalhadores	número de trabalhadores	número de trabalhadores
5 mSv ≤ Dose Anual < 10 mSv	número de trabalhadores	número de trabalhadores	número de trabalhadores
10 mSv ≤ Dose Anual < 15 mSv	número de trabalhadores	número de trabalhadores	número de trabalhadores
15 mSv ≤ Dose Anual < 20 mSv	número de trabalhadores	número de trabalhadores	número de trabalhadores
20 mSv ≤ Annual Dose < 30 mSv	número de trabalhadores	número de trabalhadores	número de trabalhadores
30 mSv ≤ Dose Anual < 50 mSv	número de trabalhadores	número de trabalhadores	número de trabalhadores
50 mSv ≤ Dose Anual	número de trabalhadores	número de trabalhadores	número de trabalhadores
16. Acidentes e incidentes			
16.1 Número de acidentes ou incidentes com doses ≤ 20mSv	número de acidentes/incidentes	número de acidentes/incidentes	número de acidentes/incidentes
16.2 Número de acidentes ou incidentes com doses > 20mSv	número de acidentes/incidentes	número de acidentes/incidentes	número de acidentes/incidentes
17. Informação dos operadores (opcional)			
Operador representativo I			
17.1 Dose anual Hp (10)	mSv	mSv	mSv
17.1a Número de filmes radiográficos no ano	número de filmes	número de filmes	número de filmes

Questão	Ano		
	2017	2018	2019
17.1b Possui qualificação válida em proteção radiológica? (opcional)	Sim/Não	Sim/Não	Sim/Não
Representative radiographer II			
17.2 Dose anual Hp (10)	mSv	mSv	mSv
17.2a Número de filmes radiográficos no ano	número de filmes	número de filmes	número de filmes
17.2b Possui qualificação válida em proteção radiológica? (opcional)	Sim/Não	Sim/Não	Sim/Não
Representative radiographer III			
17.3 Dose anual Hp (10)	mSv	mSv	mSv
17.3a Número de filmes radiográficos no ano	número de filmes	número de filmes	número de filmes
17.3b Possui qualificação válida em proteção radiológica? (opcional)	Sim/Não	Sim/Não	Sim/Não

17. Suas informações pessoais

Nome e Sobrenome

Empresa/Instituição

Cargo ou posição

Cidade/Estado

E-mail:

País

18. Eu concordo em incluir os dados do questionário (questões 13-17) no banco de dados ISEMIR-IR da IAEA*

assinatura

* Todas as informações serão tratadas como estritamente confidenciais pela IAEA. Apenas dados anônimos e agregados serão disponibilizados.

Spanish Version

**Encuesta OIEA ISEMIR-IR
(versión para las Empresas END)**

(enviar a ISEMIR.Contact-Point@iaea.org)

1. ¿Qué medios utiliza para registrar las dosis individuales de sus operadores?

- Software comercial;
- Software del laboratorio de dosimetría;
- Hoja de cálculo de Excel;
- Documento impreso;
- No las registro;
- Otro (por favor especifique) _____

2. ¿Qué tipo de datos registra?

- Dosis individual;
- Detalles de la fuente;
- Accidentes/incidentes;
- Número de operadores;
- Registro de entrenamientos;
- Carga de trabajo (por ejemplo: número de películas/año)

3. ¿Con qué frecuencia actualiza los registros de dosis?

- Mensual;
- Trimestral;
- Otro (por favor especifique) _____

4. ¿Qué tipo de datos debe informar a la Autoridad Reguladora?

- Dosis;
- Entrenamiento;
- Fuentes/equipos
- Accidentes/incidentes;
- Otro (por favor especifique) _____

5. ¿Le interesaría el software gratuito del OIEA para el registro, análisis y notificación de las dosis?

- Sí
- No

6. Si la respuesta anterior es afirmativa, ¿hay alguna característica particular que le gustaría ver en el software?

- Análisis periódico de dosis;
- Correlación: dosis/accidentes;
- Correlación: dosis/características del trabajo;
- Correlación: carga de trabajo/dosis;

- Correlación: dosis/entrenamiento;
- Otras características particulares (por favor especifique)_____

7. ¿Qué tipos de datos está dispuesto a compartir con el OIEA?

- Dosis individual;
- Detalles de la fuente;
- Accidentes/incidentes;
- Número de operadores;
- Registro de entrenamiento;
- Carga de trabajo (por ejemplo: número de películas/año)

8. ¿Con qué frecuencia estaría dispuesto a cargar/actualizar los datos?

- Anualmente;
- Mensual;
- Otro (por favor especifique)_____

9. ¿Qué medios prefiere para cargar sus datos?

- Aplicación web online;
- Hoja de cálculo de Excel;
- Aplicación para el escritorio;
- Otro (por favor especifique)_____

10. ¿Conoce el proyecto ISEMIR-IR del OIEA para Empresas de END?

- Sí
- No

11. ¿Le gustaría que el OIEA creara una cuenta ISEMIR-IR para su Empresa?

- Sí
- No

12. ¿De qué forma le gustaría recibir información y entrenamiento sobre ISEMIR-IR?

- Seminarios en la web (Webinars);
- Sesiones in-situ (On-site sessions);
- Manual de instrucciones;
- Boletines (Newsletters)

Por favor, proporcione algunos detalles sobre su Empresa en el cuestionario a continuación (El OIEA tratará toda la información como estrictamente confidencial).

Preguntas	Año		
	2017	2018	2019
13. Fuentes de Radiografía			
13.1 Número de fuentes radiactivas de Ir-192	Número de fuentes	Número de fuentes	Número de fuentes
13.1a Actividad típica inicial de la fuente de Ir-192 (opcional)	TBq	TBq	TBq

Preguntas	Año		
	2017	2018	2019
13.1b Actividad típica final de la fuente de Ir-192 (opcional)	TBq	TBq	TBq
13.2 Número de fuentes radiactivas de Se-75	Número de fuentes	Número de fuentes	Número de fuentes
13.2a Actividad típica inicial de la fuente de Se-75 (opcional)	TBq	TBq	TBq
13.2b Actividad típica final de la fuente de Se-75 (opcional)	TBq	TBq	TBq
13.3 Número de fuentes radioactivas de Co-60	Número de fuentes	Número de fuentes	Número de fuentes
13.3a Actividad típica inicial de la fuente de Co-60 (opcional)	TBq	TBq	TBq
13.3b Actividad típica final de la fuente de Co-60 (opcional)	TBq	TBq	TBq
13.4 Número de equipos generadores de radiación (rayos X)	Número de equipos	Número de equipos	Número de equipos
13.4a Energía típica MV de equipos generadores de radiación (rayos X) (opcional)	MV	MV	MV
13.4b Corriente típica (mA) de equipos generadores de radiación (rayos X) (opcional)	mA	mA	mA
14. Procedimientos de la Empresa			
14.1 ¿Existen niveles de investigación para exposición ocupacional en la empresa?	<input type="checkbox"/> Sí <input type="checkbox"/> No		
14.1a. Si es la respuesta anterior es afirmativa, ¿cuál es el nivel mensual de investigación?	mSv	mSv	mSv
14.2 ¿Su Empresa realiza evaluaciones relacionadas con la protección radiológica ocupacional de los operadores?	<input type="checkbox"/> Sí <input type="checkbox"/> No		
14.2a Si la respuesta anterior es afirmativa, ¿cuántas veces al año, aproximadamente, su	Número de veces por año	Número de veces por año	Número de veces por año

Preguntas	Año		
	2017	2018	2019
Empresa evalúa a un operador?			
14.3 ¿Su empresa realiza sus propias inspecciones para verificar el cumplimiento de las normas y regulaciones de seguridad radiológica? (opcional)		<input type="checkbox"/> Sí <input type="checkbox"/> No	
14.3 Si la respuesta anterior es afirmativa, ¿cuántas inspecciones para verificar el cumplimiento se realizaron en un año? (opcional)	Número de inspecciones	Número de inspecciones	Número de inspecciones
15. Información de dosis			
15.1 Número de trabajadores ocupacionalmente expuestos.	Número de trabajadores	Número de trabajadores	Número de trabajadores
15.2 Número de películas expuestas en un año	Número de películas	Número de películas	Número de películas
15.3 Dosis colectiva anual	mSv hombre/año	mSv hombre/año	mSv hombre/año
15.4 Valor mínimo detectable de la dosimetría	mSv	mSv	mSv
15.5 Por favor, indique el número de trabajadores por rangos de dosis:			
Dosis Anual < valor mínimo detectable	Número de trabajadores	Número de trabajadores	Número de trabajadores
1 mSv ≤ Dosis Anual < 5 mSv	Número de trabajadores	Número de trabajadores	Número de trabajadores
5 mSv ≤ Dosis Anual < 10 mSv	Número de trabajadores	Número de trabajadores	Número de trabajadores
10 mSv ≤ Dosis Anual < 15 mSv	Número de trabajadores	Número de trabajadores	Número de trabajadores
15 mSv ≤ Dosis Anual < 20 mSv	Número de trabajadores	Número de trabajadores	Número de trabajadores
20 mSv ≤ Dosis Anual < 30 mSv	Número de trabajadores	Número de trabajadores	Número de trabajadores
30 mSv ≤ Dosis Anual < 50 mSv	Número de trabajadores	Número de trabajadores	Número de trabajadores

Preguntas	Año		
	2017	2018	2019
50 mSv ≤ Dosis Anual	Número de trabajadores	Número de trabajadores	Número de trabajadores
16. Accidentes e incidentes			
16.1 Número de accidentes o incidentes con dosis ≤ 20mSv	Número de accidentes/incidentes	Número de accidentes/incidentes	Número de accidentes/incidentes
16.2 Número de accidentes o incidentes con dosis > 20mSv	Número de accidentes/incidentes	Número de accidentes/incidentes	Número de accidentes/incidentes
17. Información de los operadores (opcional)			
Operador representativo I			
17.1 Dosis anual Hp (10)	mSv	mSv	mSv
17.1a Número de películas en un año	Número de películas	Número de películas	Número de películas
17.1b ¿El (la) operador(a) tiene una certificación válida en protección radiológica? (opcional)	Sí/No	Sí/No	Sí/No
Operador representativo II			
17.2 Dosis anual Hp (10)	mSv	mSv	mSv
17.2a Número de películas en un año	Número de películas	Número de películas	Número de películas
17.2b ¿El (la) operador(a) tiene una certificación válida en protección radiológica? (opcional)	Sí/No	Sí/No	Sí/No
Operador representativo III			
17.3 Dosis anual Hp (10)	mSv	mSv	mSv
17.3a Número de películas en un año	Número de películas	Número de películas	Número de películas
17.3b ¿El (la) operador(a) tiene una certificación válida en protección radiológica? (opcional)	Sí/No	Sí/No	Sí/No

17. Su información personal

Nombre y Apellido

Empresa/Institución

Puesto de trabajo o cargo

Ciudad/Estado

E-mail:

País

18. Acepto incluir los datos del cuestionario
(preguntas 13 a 17) en la base de datos ISEMIR-
IR del OIEA*

firma

* Toda la información será tratada como estrictamente confidencial por el OIEA. Solo estarán disponibles datos anonimizados y agregados.

Czech Version:

IAEA ISEMIR-IR průzkum
(verze pro společnosti provádějící defektoskopické činnosti)
(zaslat na adresu ISEMIR.Contact-Point@iaea.org)

1. Jakými prostředky zaznamenáváte individuální dávky Vašich defektoskopických pracovníků?

- Komerční software;
- Software dozimetrické služby;
- tabulka v MS Excel;
- Vytisknuta verze;
- Nezaznamenáváme;
- Jiné (prosím uveďte) _____

2. Jaký typ dat zaznamenáváte?

- Osobní dávky;
- Údaje o zdroji ionizujícího záření;
- Havárie/nehody;
- Počet defektoskopických pracovníků;
- Záznamy o školení;
- Pracovní zatížení (například: počet použitých filmů za rok)

3. Jak často aktualizujete tyto záznamy?

- Měsíčně;
- Čtvrtletně;
- Jiné (prosím uveďte) _____

4. Jaké údaje musíte zasílat dozornému orgánu (SÚJB)?

- Osobní dávky;
- Záznamy o školení;
- Zdroje ionizujícího záření/pomocné zařízení;
- Havárie/nehody;
- Jiné (prosím uveďte) _____

5. Měli byste zájem o neplacený IAEA software pro zaznamenávání dávek, jejich analýzu a hlášení?

- Ano
- Ne

6. Pokud ano, jaké funkce tohoto softwaru byste uvítali?

- Periodická analýza obdržených dávek;
- Korelace: dávka/havárie;
- Korelace: dávka/pracovní činnost;
- Korelace: pracovní zatížení/dávka;
- Korelace: dávka/školení;

Jiné (prosím uveďte) _____

7. Jaké údaje jste ochotni sdílet s IAEA?

- Individuální dávky;
- Údaje o zdroji ionizujícího záření;
- Havárie/nehody;
- Počet defektoskopických pracovníků;
- Záznamy o školení;
- Pracovní zatížení (například: počet použitých filmů za rok)

8. Jak často byste byli ochotni nahrávat data?

- Ročně;
- Měsíčně;
- Jiné (prosím uveďte) _____

9. Jaký způsob nahrávání dat byste preferovali?

- Online formulář;
- tabulka v MS Excel;
- Aplikace ke stažení;
- Jiné (prosím uveďte) _____

10. Znáte projekt IAEA ISEMIR-IR (the Information System on Occupational Exposure in Medicine, Industry and Research focusing on industrial radiography) pro společnosti provádějící defektoskopické činnosti?

- Ano
- Ne

11. Chtěli byste, aby IAEA vytvořila ISEMIR-IR uživatelský účet pro Vaši zem?

- Ano
- Ne

12. Jakým způsobem byste chtěli získávat informace a školení týkající se ISEMIR-IR?

- Webináře;
- Přímo na Vašem pracovišti;
- Manuál instrukcí;
- Newsletters

Prosím uveďte detaily o Vaší společnosti v dotazníku níže (všechny informace budou považované za důvěrné a pouze pro účely IAEA)

Otázka	Rok		
	2017	2018	2019
13. Radiografické zdroje			
13.1 Počet radioaktivních zdrojů Ir-192	počet zdrojů	počet zdrojů	počet zdrojů

Otázka	Rok		
	2017	2018	2019
13.1a Typická počáteční aktivita zdroje Ir-192 (volitelná odpověď)	TBq	TBq	TBq
13.1b Typická konečná aktivita zdroje Ir-192 (volitelná odpověď)	TBq	TBq	TBq
13.2 Počet radioaktivních zdrojů Se-75	počet zdrojů	počet zdrojů	počet zdrojů
13.2a Typická počáteční aktivita zdroje Se-75 (volitelná odpověď)	TBq	TBq	TBq
13.2b Typická konečná aktivita zdroje Se-75 (volitelná odpověď)	TBq	TBq	TBq
13.3 Počet radioaktivních zdrojů Co-60	počet zdrojů	počet zdrojů	počet zdrojů
13.3a Typická počáteční aktivita zdroje Co-60 (volitelná odpověď)	TBq	TBq	TBq
13.3b Typická konečná aktivita zdroje Co-60 (volitelná odpověď)	TBq	TBq	TBq
13.4 Počet generátorů RTG záření	počet generátorů	počet generátorů	počet generátorů
13.4a Typické MV generátoru RTG záření (volitelná odpověď)	MV	MV	MV
13.4b Typické mA generátoru RTG záření (volitelná odpověď)	mA	mA	mA
14. Postupy společnosti			
14.1 Existují ve Vaší společnosti vyšetřovací úrovňě pro profesní ozáření?	<input type="checkbox"/> Ano <input type="checkbox"/> Ne		
14.1a. Pokud ano, jaká je vyšetřovací úroveň za měsíc?	mSv	mSv	mSv
14.2 Provádí Vaše společnost hodnocení zabezpečení radiační ochrany Vašich defektoskopických pracovníků?	<input type="checkbox"/> Ano <input type="checkbox"/> Ne		
14.2a Pokud ano, kolikrát za rok se toto hodnocení přibližně provádí?	Počet hodnocení za rok	Počet hodnocení za rok	Počet hodnocení za rok
14.3 Provádí Vaše společnost vlastní kontroly zaměřené na zajištění souladu radiační ochrany s právními předpisy?	<input type="checkbox"/> Ano <input type="checkbox"/> Ne		

Otázka	Rok		
	2017	2018	2019
(volitelná odpověď)			
14.3 Pokud ano, kolik těchto kontrol bylo provedeno za rok? (volitelná odpověď)	Počet kontrol	Počet kontrol	Počet kontrol
15. Informace o dávkách			
15.1 Počet defektoskopických pracovníků	Počet pracovníků	Počet pracovníků	Počet pracovníků
15.2 Počet použitých filmů za rok	Počet filmů	Počet filmů	Počet filmů
15.3 Roční kolektivní dávka	man.mSv/rok	man.mSv/rok	man.mSv/rok
15.4 Minimální detekovatelná úroveň	mSv	mSv	mSv
15.5 Prosím, uveďte počty pracovníků do intervalů dávek:			
roční dávka < minimální detekovatelná úroveň	Počet pracovníků	Počet pracovníků	Počet pracovníků
1 mSv ≤ roční dávka < 5 mSv	Počet pracovníků	Počet pracovníků	Počet pracovníků
5 mSv ≤ roční dávka < 10 mSv	Počet pracovníků	Počet pracovníků	Počet pracovníků
10 mSv ≤ roční dávka < 15 mSv	Počet pracovníků	Počet pracovníků	Počet pracovníků
15 mSv ≤ roční dávka < 20 mSv	Počet pracovníků	Počet pracovníků	Počet pracovníků
20 mSv ≤ roční dávka < 30 mSv	Počet pracovníků	Počet pracovníků	Počet pracovníků
30 mSv ≤ roční dávka < 50 mSv	Počet pracovníků	Počet pracovníků	Počet pracovníků
50 mSv ≤ roční dávka	Počet pracovníků	Počet pracovníků	Počet pracovníků
16. Havárie a nehody			
16.1 Počet havárií nebo nehod s dávkou ≤ 20mSv	Počet havárií nebo nehod	Počet havárií nebo nehod	Počet havárií nebo nehod
16.2 Počet havárií nebo nehod s dávkou > 20mSv	Počet havárií nebo nehod	Počet havárií nebo nehod	Počet havárií nebo nehod
17. Informace o defektoskopických pracovnících (volitelné)			
Reprezentativní (vzorový) defektoskopický pracovník I			
17.1 Hp (10) dávka	mSv	mSv	mSv
17.1a Počet filmů za rok	Množství filmů	Množství filmů	Množství filmů
17.1b Má potřebnou (platnou) kvalifikaci z radiační ochrany? (volitelná odpověď)	Ano/Ne	Ano/Ne	Ano/Ne
Reprezentativní (vzorový) defektoskopický pracovník II			

Otázka	Rok		
	2017	2018	2019
17.2 Hp (10) dávka	mSv	mSv	mSv
17.2a Počet filmů za rok	Množství filmů	Množství filmů	Množství filmů
17.2b Má potřebnou (platnou) kvalifikaci z radiační ochrany? (volitelná odpověď)	Ano/Ne	Ano/Ne	Ano/Ne
Reprezentativní (vzorový) defektoskopický pracovník III			
17.3 Hp (10) dávka	mSv	mSv	mSv
17.3a Počet filmů za rok	Množství filmů	Množství filmů	Množství filmů
17.3b Má potřebnou (platnou) kvalifikaci z radiační ochrany? (volitelná odpověď)	Ano/Ne	Ano/Ne	Ano/Ne

17. Vaše osobní údaje

Jméno a příjmení

Společnost/Instituce

Název pracovní pozice

Obec/město

E-mail:

Země

18. Poskytuji souhlas se zpracováním informací (odpovědi č. 13-17) pro účely IAEA ISEMIR-IR databáze*

podpis

* Se všemi informacemi bude nakládáno jako s důvěrnými a pouze pro účely IAEA. Veřejně dostupné budou jen údaje, které jsou anonymní.

German Version:

IAEA ISEMIR-IR Umfrage
(Version für ZfP-Unternehmen)

(bitte senden an: ISEMIR.Contact-Point@iaea.org)

1. Wie erfassen Sie die Personendosis für Ihre Radiographen?

- Kommerzielle Software;
- Software vom Messgerätehersteller;
- Excel Tabellen;
- Papierform;
- die Personendosis wird nicht erfasst;
- andere (bitte angeben) _____

2. Welche Art von Daten im Strahlenschutz speichern Sie?

- Personendosis;
- Details zu Strahlenquellen;
- Störfälle/Vorkommnisse/;
- Anzahl Radiographen;
- Aufzeichnungen über Schulungen;
- Arbeitspensum (z. B. Filme/Jahr)

3. Wie häufig werden die Aufzeichnungen über Strahlendosen aktualisiert?

- monatlich;
- einmal im Quartal;
- anders (bitte angeben) _____

4. Welche Daten müssen der Aufsichtsbehörde/zuständigen Behörde übermittelt werden?

- Strahlendosen;
- Schulungen;
- Strahlenquellen/Zubehör
- Störfälle/Vorkommnisse
- andere (bitte angeben) _____

5. Haben Sie Interesse an einer kostenlosen IAEA Software für die Dokumentation, Analyse und Meldung von Strahlendosen?

- Ja
- Nein

6. Wenn ja, gibt es spezielle Features die die Software beinhalten sollte?

- Periodische Analyse der Strahlendosen;
- Zusammenhang: Dosis/Vorkommnis;
- Zusammenhang: Strahlendosis/Tätigkeit;
- Zusammenhang: Arbeitspensum/Dosis;
- Zusammenhang: Dosis/Schulungen;
- Andere spezielle Features (bitte angeben) _____

7. Welche Art von Daten würden Sie mit der IAEA teilen?

- Personendosis;
- Details zu Strahlenquellen;
- Störfälle/Vorkommnisse;
- Anzahl Radiographen;
- Aufzeichnungen über Schulungen;
- Arbeitspensum (z. B. Filme/Jahr)

8. Wie oft wären Sie bereit einen Datenupload/ein Update durchzuführen?

- jährlich;
- monatlich;
- anderer Zeitraum (bitte angeben) _____

9. Auf welche Art würden Sie gerne einen Datenupload durchführen?

- Online Web-App;
- Excel-Tabelle;
- Desktop Applikation;
- andere (bitte angeben) _____

10. Kennen Sie das IAEA ISEMIR-IR Projekt für ZfP-Unternehmen?

- Ja
- Nein

11. Hätten Sie gerne, dass die IAEA einen ISEMIR-IR Account für Ihr Unternehmen anlegt??

- Ja
- Nein

12. Auf welchem Weg würden Sie gerne Informationen und Schulungen zu ISEMIR-IR erhalten?

- Webinare;
- Präsenzveranstaltungen;
- Handbuch;
- Newsletter

Bitte teilen Sie uns ein paar Details Ihres ZfP-Unternehmens über nachfolgenden Fragebogen mit
(Alle Informationen werden von der IAEA als streng vertraulich behandelt)

Frage	Jahr		
	2017	2018	2019
13. Strahlenquellen für die technische Radiographie			
13.1 Anzahl Ir192-Strahler	Anzahl Strahle	Anzahl Strahle	Anzahl Strahle
13.1a Typische Ausgangsaktivität der Ir192-Strahler (optional)	TBq	TBq	TBq
13.1b Typische Aktivität bei Abgabe der Ir192-Strahler (optional)	TBq	TBq	TBq

Frage	Jahr		
	2017	2018	2019
13.2 Anzahl Se75-Strahler	Anzahl Strahle	Anzahl Strahle	Anzahl Strahle
13.2a Typische Ausgangsaktivität der Se75-Strahler (optional)	TBq	TBq	TBq
13.2b Typische Aktivität bei Abgabe der Se75-Strahler (optional)	TBq	TBq	TBq
13.3 Anzahl Co60-Strahler	Anzahl Strahler	Anzahl Strahle	Anzahl Strahle
13.3a Typische Ausgangsaktivität der Co60-Strahler (optional)	TBq	TBq	TBq
13.3b Typische Ausgangsaktivität der Co60-Strahler (optional)	TBq	TBq	TBq
13.4 Anzahl Röntgeneinrichtungen	Anzahl Röntgeneinrichtungen	Anzahl Röntgeneinrichtungen	Anzahl Röntgeneinrichtungen
13.4a Typische Spannung (in MV) (optional)	MV	MV	MV
13.4b Typischer Strom (in mA) (optional)	mA	mA	mA
14. Firmeninterne Handlungsanweisungen			
14.1 Gibt es bei der beruflichen Exposition für firmeninterne Untersuchungen interne „Dosisrichtwerte“?	<input type="checkbox"/> Ja <input type="checkbox"/> Nein		
14.1a. Wenn ja, wo liegen die Richtwerte?	mSv	mSv	mSv
14.2 Führt Ihre Firma eine interne Beurteilung der Radiographen in Bezug auf die berufliche Exposition durch?	<input type="checkbox"/> Ja <input type="checkbox"/> Nein		
14.2a Wenn ja, schätzen Sie, wie oft ein Radiograph pro Jahr von Ihrem Unternehmen beurteilt wird?	Beurteilungen pro Jahr	Beurteilungen pro Jahr	Beurteilungen pro Jahr

Frage	Jahr		
	2017	2018	2019
14.3 Kontrolliert Ihre Firma nach eigenen Vorgaben die Einhaltung der Sicherheitsstandards und Rechtsvorschriften im Strahlenschutz? (optional)	<input type="checkbox"/> Ja <input type="checkbox"/> Nein		
14.3 Wenn ja, wie viele Kontrollen werden pro Jahr durchgeführt? (optional)	Anzahl Inspektionen	Anzahl Inspektionen	Anzahl Inspektionen
15. Information zu Strahlendosis			
15.1 Anzahl beruflich exponierter Personen	Anzahl Mitarbeiter	Anzahl Mitarbeiter	Anzahl Mitarbeiter
15.2 Anzahl belichteter Filme pro Jahr	Anzahl Filme	Anzahl Filme	Anzahl Filme
15.3 Jährliche Kollektivdosis	mSv pro Person und Jahr	mSv pro Person und Jahr	mSv pro Person und Jahr
15.4 untere Messschwelle	mSv	mSv	mSv
15.5 Bitte geben Sie die Anzahl der exponierten Mitarbeiter für die unten angegebenen Dosisbereichen an:			
Jahresdosis < untere Messschwelle	Anzahl Mitarbeiter	Anzahl Mitarbeiter	Anzahl Mitarbeiter
1 mSv ≤ Jahresdosis < 5 mSv	Anzahl Mitarbeiter	Anzahl Mitarbeiter	Anzahl Mitarbeiter
5 mSv ≤ Jahresdosis < 10 mSv	Anzahl Mitarbeiter	Anzahl Mitarbeiter	Anzahl Mitarbeiter
10 mSv ≤ Jahresdosis < 15 mSv	Anzahl Mitarbeiter	Anzahl Mitarbeiter	Anzahl Mitarbeiter
15 mSv ≤ Jahresdosis < 20 mSv	Anzahl Mitarbeiter	Anzahl Mitarbeiter	Anzahl Mitarbeiter
20 mSv ≤ Jahresdosis < 30 mSv	Anzahl Mitarbeiter	Anzahl Mitarbeiter	Anzahl Mitarbeiter
30 mSv ≤ Jahresdosis < 50 mSv	Anzahl Mitarbeiter	Anzahl Mitarbeiter	Anzahl Mitarbeiter
50 mSv ≤ Jahresdosis	Anzahl Mitarbeiter	Anzahl Mitarbeiter	Anzahl Mitarbeiter
16. Störfälle und Vorkommnisse			
16.1 Anzahl von Störfällen oder Vorkommnissen mit	Anzahl Störfälle/Vorkommnisse	Anzahl Störfälle/Vorkommnisse	Anzahl Störfälle/Vorkommnisse

Frage	Jahr		
	2017	2018	2019
Strahlendosen ≤ 20mSv			
16.2 Anzahl von Störfällen oder Vorkommnissen mit Strahlendosen > 20mSv	Anzahl Störfälle/Vorkommnisse	Anzahl Störfälle/Vorkommnisse	Anzahl Störfälle/Vorkommnisse
17. Informationen über Radiographen (optional)			
Representativer Radiograph I			
17.1 Tiefen-Personendosis Hp (10)	mSv	mSv	mSv
17.1a Anzahl Filme pro Jahr	Anzahl Filme	Anzahl Filme	Anzahl Filme
17.1b Besitzt er/sie gültige Qualifikationen im Strahlenschutz (optional)?	Ja/Nein	Ja/Nein	Ja/Nein
Representativer Radiograph II			
17.2 Tiefen-Personendosis Hp (10)	mSv	mSv	mSv
17.1a Anzahl Filme pro Jahr	Anzahl Filme	Anzahl Filme	Anzahl Filme
17.1b Besitzt er/sie gültige Qualifikationen im Strahlenschutz (optional)?	Ja/Nein	Ja/Nein	Ja/Nein
Representativer Radiograph III			
17.3 Tiefen-Personendosis Hp (10)	mSv	mSv	mSv
17.1a Anzahl Filme pro Jahr	Anzahl Filme	Anzahl Filme	Anzahl Filme
17.1b Besitzt er/sie gültige Qualifikationen im Strahlenschutz (optional)?	Ja/Nein	Ja/Nein	Ja/Nein

17. Ihre persönlichen Daten

Vor- und Nachname

Firma/Institution

Berufsbezeichnung oder Position

Ort

E-Mail:

Land

18. Ich bin damit einverstanden, dass die Daten
dieses Fragebogens (Fragen 13 bis 17) von der
IAEA in die ISEMIR-IR Datenbank übernommen
werden*

signature

* Alle Informationen werden von der IAEA als streng vertraulich behandelt. Nur anonymisierte und
zusammengefasste Daten werden zugänglich gemacht.

French Version:

AIEA ISEMIR-IR Enquête
(la version pour les fournisseurs de service du contrôle non destructif)
(veuillez renvoyer à ISEMIR.Contact-Point@iaea.org)

1. De quelle manière tenez-vous un registre des doses individuelles des radiographies?

- Logiciel commercial;
- Logiciel d'un prestataire de service de dosimétrie;
- Excel spreadsheet;
- Copie-papier;
- On ne les enregistre pas;
- Autres (veuillez préciser) _____

2. Quelle sorte de données enregistrez-vous?

- Doses individuelles;
- Détails sur les sources;
- Accidents/incidents;
- Nombre de radiographies;
- Information sur la formation professionnelle;
- Charge du travail (par exemple: pellicule / an)

3. A quelle fréquence mettez vous à jour des enregistrement des doses?

- Mensuel;
- Trimestriel;
- Autres (veuillez préciser) _____

4. Quelle sorte de données êtes-vous obligé de transmettre au régulateur?

- Dose;
- Information sur la formation professionnelle;
- Sources/ équipement
- Accidents/incidents
- Autres (veuillez préciser) _____

5. Est-ce que vous seriez intéressé sur un logiciel gratuit de l'AIEA pour enregistrer, analyser et faire rapport?

- Oui
- Non

6. Si tel est le cas, est-ce qu'il y a des fonctions particulières que vous voudriez voir dans le logiciel de tel type?

- Analyse périodique des doses;
- Corrélation: dose/accidents;
- Corrélation: dose/caractéristique d'emploi;
- Corrélation: Charge du travail/dose;
- Corrélation: dose/formation;

Autres (veuillez préciser) _____

7. Quelle sorte de données êtes-vous prêt à partager avec l'AIEA?

- Doses individuelles;
- Détails sur les sources;
- Accidents/incidents;
- Nombre de radiographs;
- Information sur la formation professionnelle;
- Charge du travail (par exemple: pellicule/an)

8. A quelle fréquence voudriez-vous mettre à jour des données?

- Annuellement;
- Mensuel;
- Autres (veuillez préciser) _____

9. Quels moyens à télécharger des données préférez-vous?

- En ligne par application Web ;
- Excel spreadsheet;
- Application pour votre ordinateur;
- Autres (veuillez préciser) _____

10. Etes-vous au courant du projet de l'AIEA pour les fournisseurs du service de contrôle non destructif ?

- Oui
- Non

11. Est-ce que vous voulez que l'AIEA créer un compte gratuit sur ISEMIR-IR pour votre entreprise?

- Oui
- Non

12. Par quels moyens préférez-vous recevoir l'information et matériels de formation sur ISEMIR-IR?

- Webinaires;
- Sessions sur place;
- Manuel d'instructions;
- Newsletter

Veuillez partager les détails sur votre entreprise en remplissant le questionnaire dessous (Toute information sera traitée de manière confidentielle de la part de l'AIEA)

Question	An		
	2017	2018	2019
13. Sources de radiographie			
13.1 Nombre de sources radioactives de Ir-192	Nombre de sources	Nombre de sources	Nombre de sources
13.1a Activité initiale typique de source Ir-192 (facultatif)	TBq	TBq	TBq

Question	An		
	2017	2018	2019
13.1b Activité finale typique de source de Ir-192 (facultatif)	TBq	TBq	TBq
13.2 Nombre de sources radioactives de Se-75	Nombre de sources	Nombre de sources	Nombre de sources
13.2a Activité initiale typique de source de Se-75 (facultatif)	TBq	TBq	TBq
13.2b Activité finale typique de source de Se-75 (facultatif)	TBq	TBq	TBq
13.3 Nombre de sources radioactives de Co-60	Nombre de sources	Nombre de sources	Nombre de sources
13.3a Activité initiale typique de source de Co-60 (facultatif)	TBq	TBq	TBq
13.3b Activité finale typique de source de (facultatif)	TBq	TBq	TBq
13.4 Nombre de générateurs de rayonnement (à rayons X)	Nombre de générateurs	Nombre de générateurs	Nombre de générateurs
13.4a MV typique de générateur de rayonnement (à rayons X) (facultatif)	MV	MV	MV
13.4b mA typique de générateur de rayonnement (à rayons X) (facultatif)	mA	mA	mA
14. Procédures d'entreprise			
14.1 Est-ce qu'il y a des seuils d'investigations de l'exposition professionnelle dans votre entreprise?	<input type="checkbox"/> Oui <input type="checkbox"/> Non		
14.1a. Si tel est le cas, quel est le seuil d'investigation par mois?	mSv	mSv	mSv
14.2 Est-ce que votre entreprise effectue l'évaluation des	<input type="checkbox"/> Oui <input type="checkbox"/> Non		

Question	An		
	2017	2018	2019
radiographies concernant radioprotection professionnelle?			
14.2a Si tel est le cas, combien de fois environ par année les radiographies sont évaluées par votre entreprise?	Nombre de fois	Nombre de fois	Nombre de fois
14.3 Est-ce que votre entreprise effectue ses propres inspections pour vérifier la conformité aux normes de sûreté radiologique et aux règlements? (facultatif)	<input type="checkbox"/> Oui <input type="checkbox"/> Non		
14.3a Si tel est le cas, combien d'inspections de conformité ont été effectuées au cours d'une année? (facultatif)	Nombre d'inspections	Nombre d'inspections	Nombre d'inspections
15. L'information sur les doses			
15.1 Nombre de travailleurs exposés professionnellement	Nombre de travailleurs	Nombre de travailleurs	Nombre de travailleurs
15.2 Nombre de pellicules exposées au cours d'une année	Nombre de pellicules	Nombre de pellicules	Nombre de pellicules
15.3 Dose collective annuelle	pers.mSv/an	pers.mSv/an	pers.mSv/an
15.4 Niveau minimum détectable	mSv	mSv	mSv
15.5 Veuillez présenter le nombre de travailleurs dans l'intervalle des doses:			
Dose annuelle < Niveau minimum détectable	Nombre de travailleurs	Nombre de travailleurs	Nombre de travailleurs
1 mSv ≤ Dose annuelle < 5 mSv	Nombre de travailleurs	Nombre de travailleurs	Nombre de travailleurs
5 mSv ≤ Dose annuelle < 10 mSv	Nombre de travailleurs	Nombre de travailleurs	Nombre de travailleurs
10 mSv ≤ Dose annuelle < 15 mSv	Nombre de travailleurs	Nombre de travailleurs	Nombre de travailleurs

Question	An		
	2017	2018	2019
15 mSv ≤ Dose annuelle < 20 mSv	Nombre de travailleurs	Nombre de travailleurs	Nombre de travailleurs
20 mSv ≤ Dose annuelle < 30 mSv	Nombre de travailleurs	Nombre de travailleurs	Nombre de travailleurs
30 mSv ≤ Dose annuelle < 50 mSv	Nombre de travailleurs	Nombre de travailleurs	Nombre de travailleurs
50 mSv ≤ Dose annuelle	Nombre de travailleurs	Nombre de travailleurs	Nombre de travailleurs
16. Accidents et incidents			
16.1 Nombre d'accidents et d'incidents avec les doses ≤ 20mSv	Nombre d'accidents/d'incidents	Nombre d'accidents/d'incidents	Nombre d'accidents/d'incidents
16.2 Nombre d'accidents et d'incidents avec les doses > 20mSv	Nombre d'accidents/d'incidents	Nombre d'accidents/d'incidents	Nombre d'accidents/d'incidents
17. L'information sur les radiographies (facultatif)			
Radiographer representative I			
17.1 Hp (10) dose	mSv	mSv	mSv
17.1a Nombre de pellicules au cours d'une année	Nombre de pellicules	Nombre de pellicules	Nombre de pellicules
17.1b Est-ce il/elle a la qualification valide de sûreté radiologique (facultatif)?	Oui/Non	Oui/Non	Oui/Non
Radiographer representative II			
17.2 Hp (10) dose	mSv	mSv	mSv
17.2a Nombre de pellicules au cours d'une année	Nombre de pellicules	Nombre de pellicules	Nombre de pellicules
17.2b Est-ce il/elle a la qualification valide au sujet de sûreté radiologique (facultatif)?	Oui/Non	Oui/Non	Oui/Non
Radiographer representative III			
17.3 Hp (10) dose	mSv	mSv	mSv
17.3a Nombre de pellicules au cours d'une année	Nombre de pellicules	Nombre de pellicules	Nombre de pellicules
17.3b Est-ce il/elle a la qualification valide au sujet de	Oui/Non	Oui/Non	Oui/Non

Question	An		
	2017	2018	2019
sûreté radiologique (facultatif)?			

17. Vos renseignements personnels

Prénom et Nom

Entreprise/Institution

Titre d'un poste ou d'une position

Ville

E-mail:

Pays

18. J'accepte de partager les données du questionnaire (questions 13-17) à la base des données de l'AIEA ISEMIR-IR *

signature

* Toute information sera traitée de manière confidentielle de la part de l'AIEA. Seulement des données anonymes et agrégées pourraient être disponibles.

Russian Version:

Исследование МАГАТЭ по ISEMIR-IR

(версия для компаний по неразрушающему контролю)

(просьба отправить заполненную форму на ISEMIR.Contact-Point@iaea.org)

1. Какие средства используются для учета индивидуальных доз дефектоскопистов?

- Коммерческое ПО;
- ПО компании, предоставляющей услуги ДК
- Excel таблицы
- Учет на бумаге
- Учет не ведется
- Другое (пожалуйста укажите) _____

2. Учет каких данных ведется?

- Индивидуальные дозы
- Параметры источников
- Инциденты/аварии
- Численность дефектоскопистов
- Образование работников
- Рабочая загрузка (например: снимки/год)

3. С какой частотой обновляются записи по дозовым нагрузкам?

- Раз в месяц;
- Раз в квартал;
- Другое (пожалуйста уточните) _____

4. Какие данные передаются Регулятору?

- Индивидуальные дозы;
- Образование работников;
- Источники/оборудование
- Инциденты/аварии
- Другое (пожалуйста уточните) _____

5. Заинтересованы ли Вы в бесплатном ПО от МАГАТЭ для учета доз, анализа и отчетности?*

- Да
- Нет

6. Если да, какой функционал Вы хотели бы видеть в таком ПО?

- Анализ доз за период
- Корреляция: доза/аварийность;
- Корреляция: доза/Условия труда;
- Корреляция: рабочая нагрузка/доза;
- Корреляция: доза/квалификация сотрудника;
- Другие функции (Пожалуйста уточните) _____

7. Какие данные Вы готовы предоставлять МАГАТЭ?

- Индивидуальные дозы
- Параметры источников
- Инциденты/аварии
- Численность дефектоскопистов
- Образование работников
- Рабочая загрузка (например: снимки/год)

8. Как часто Вы могли бы загружать/обновлять данные?

- Раз в год;
- Раз в месяц;
- Другое (пожалуйста уточните) _____

9. Какой способ загрузки данных Вы бы предпочли?

- Web-приложение (онлайн);
- Excel таблица;
- Приложение на ПК;
- Другое (пожалуйста уточните) _____

10. Знаете ли Вы о проекте МАГАТЭ ISEMIR-IR для компаний по неразрушающему контролю?

- Да
- Нет

11. Хотели ли бы Вы, чтобы МАГАТЭ создали для Вас аккаунт в ISEMIR-IR?

- Да
- Нет

12. Как вы хотели бы получать общую информацию и учебные материалы по ISEMIR-IR ?

- Вебинары;
- Очные встречи;
- Инструкции и руководства;
- Новостная рассылка

Пожалуйста заполните формуляр ниже данными по Вашей компании (Вся информация, указанная ниже рассматривается в МАГАТЭ как строго конфиденциальная)

Вопрос	Год		
	2017	2018	2019
13. Источник			
13.1 Количество источников Ir-192	number of sources	number of sources	number of sources
13.1а Начальная активность источника Ir-192 (официально)	TBq	TBq	TBq
13.1б Конечная активность источника Ir-192 (официально)	TBq	TBq	TBq

Вопрос	Год		
	2017	2018	2019
13.2 Количество источников Se-75	number of sources	number of sources	number of sources
13.2а Начальная активность источника Se-75 (опционально)	ТБк	ТБк	ТБк
13.2б Конечная активность источника Se-75 (опционально)	ТБк	ТБк	ТБк
13.3 Количество источников Co-60	Количество источников	Количество источников	Количество источников
13.3а Начальная активность источника Co-60 (опционально)	ТБк	ТБк	ТБк
13.3б Конечная активность источника Co-60 (optional)	ТБк	ТБк	ТБк
13.4 Количество X-ray установок	Количество установок	Количество установок	Количество установок
13.4а МВаж X-ray установок (опционально)	МВ	МВ	МВ
13.4б мАаж of X-ray установок (опционально)	мА	мА	мА
14. Рабочие практики			
14.1 Установлена ли в Вашей организации уровни расследования?	<input type="checkbox"/> Да <input type="checkbox"/> Нет		
14.1а. Если да, укажите значение в месяц?	мЗв	мЗв	мЗв
14.2 Проводит ли Ваша компания проверку дефектоскопистов на знание правил радиационной безопасности и защиты на рабочем месте?	<input type="checkbox"/> Да <input type="checkbox"/> Нет		
14.2а Если да, как приблизительно сколько раз в год дефектоскопист проходит такую проверку?	Число раз за год	Число раз за год	Число раз за год
14.3 Проводит ли Ваша компания внутренние проверки соответствия стандартам и требованиям обеспечения радиационной безопасности? (опционально)	<input type="checkbox"/> Да <input type="checkbox"/> Нет		
14.3 Если да, сколько таких проверок было проведено за год? (опционально)	Количество проверок	Количество проверок	Количество проверок

Вопрос	Год		
	2017	2018	2019
15. Dose information			
15.1 Число работников, подверженных облучению	Число работников	Число работников	Число работников
15.2 Число снимков за год	Число снимков	Число снимков	Число снимков
15.3 Коллективная годовая доза	чел.мЗв/год	чел.мЗв/год	чел.мЗв/год
15.4 Минимально детектируемый уровень	мЗв	мЗв	мЗв
15.5 Пожалуйста укажите количество работников по диапазонам доз:			
Годовая доза < минимально детектируемый уровень	Количество работников	Количество работников	Количество работников
1 мЗв ≤ Annual Dose < 5 мЗв	Количество работников	Количество работников	Количество работников
5 мЗв ≤ годовая доза < 10 мЗв	Количество работников	Количество работников	Количество работников
10 мЗв ≤ годовая доза < 15 мЗв	Количество работников	Количество работников	Количество работников
15 мЗв ≤ годовая доза < 20 мЗв	Количество работников	Количество работников	Количество работников
20 мЗв ≤ годовая доза < 30 мЗв	Количество работников	Количество работников	Количество работников
30 мЗв ≤ годовая доза < 50 мЗв	Количество работников	Количество работников	Количество работников
50 мЗв ≤ годовая доза	Количество работников	Количество работников	Количество работников
16. Инциденты и аварии			
16.1 Число инцидентов или аварий с дозами ≤ 20 мЗв	Число инцидентов /аварий	Число инцидентов /аварий	Число инцидентов /аварий
16.2 Число инцидентов или аварий с дозами > 20 мЗв	Число инцидентов /аварий	Число инцидентов /аварий	Число инцидентов /аварий
17. Информация о дефектоскопистах (опционально)			
Репрезентативный дефектоскопист I			
17.1 Нр (10) доза	мЗв	мЗв	мЗв
17.1а Число снимков в год	Число снимков	Число снимков	Число снимков
17.1б Имеет ли квалификацию в области радиационной защиты (опционально)?	Да/Нет	Да/Нет	Да/Нет
Репрезентативный дефектоскопист II			
17.2 Нр (10) доза	мЗв	мЗв	мЗв
17.2а Число снимков в год	Число снимков	Число снимков	Число снимков
17.2б Имеет ли квалификацию в области	Да/Нет	Да/Нет	Да/Нет

Вопрос	Год		
	2017	2018	2019
радиационной защиты (опционально)?			
Репрезентативный дефектоскопист III			
17.3 Нр (10) доза	мЗв	мЗв	мЗв
17.3а Число снимков в год	Число снимков	Число снимков	Число снимков
17.3б Имеет ли квалификацию в области радиационной защиты (опционально)?	Да/Нет	Да/Нет	Да/Нет

17. Ваши контактные данные

Имя и фамилия

Организация

Должность

Город/населенный пункт

E-mail:

Страна

**18. Я согласен с внесением данных данного
исследования (вопросы 13-17) в базу данных
МАГАТЭ ISEMIR-IR***

Подпись

* Вся представленная информация считается МАГАТЭ строго конфиденциальной. Только
анонимизированные и общие статистические данные могут быть опубликованы.

Slovak Version:

**IAEA ISEMIR-IR dotazník
(verzia pre defektoskopárov)**

(zaslat' na adresu ISEMIR.Contact-Point@iaea.org)

1. Akými prostriedkami zaznamenávate individuálne dávky Vašich defektoskopárov?

- Komerčné softvéry;
- Softvér dozimetrickej služby;
- Excel tabuľky;
- Tlačená verzia;
- Nezaznamenávam;
- Iné (prosím uveďte) _____

2. Aký typ dát zaznamenávate?

- Osobné dávky;
- Údaje o zdroji ionizujúceho žiarenia;
- Havárie/nehody;
- Počet defektoskopárov;
- Záznamy o školení;
- Pracovné zataženie (napríklad: počet použitých filmov za rok)

3. Ako často aktualizujete tieto záznamy?

- Mesačne;
- Štvrtročne;
- Iné (prosím uveďte) _____

4. Aké údaje musíte nahlasovať dozornému orgánu (ÚVZ SR)?

- Osobné dávky;
- Záznamy o školení;
- Zdroje ionizujúceho žiarenia/pomocné zariadenia;
- Havárie/nehody;
- Iné (prosím uveďte) _____

5. Mali by ste záujem o neplatený IAEA softvér pre zaznamenávanie dávok, ich analýzu a nahlasovanie?

- Áno
- Nie

6. Ak áno, aké funkcie by ste uvítali v tomto softvéri?

- Periodická analýza prijatých dávok;
- Korelácia: dávka/havária;
- Korelácia: dávka/pracovná činnosť;
- Korelácia: pracovné zataženie/prijatá dávka;
- Korelácia: prijatá dávka/účasť na školení;
- Iné (prosím uveďte) _____

7. Aké údaje ste pripravený zdieľať s IAEA?

- Individuálne dávky;
- Údaje o zdroji ionizujúceho žiarenia;
- Havárie/nehody;
- Počet defektoskopárov;
- Záznamy o školení;
- Pracovné zaťaženie (napríklad: počet použitých filmov za rok)

8. Ako často ste ochotný nahrávať data?

- Ročne;
- Mesačne;
- Iné (prosim uvedzte) _____

9. Aký spôsob nahrávania dát preferujete?

- Online formulár;
- Excel tabuľky;
- Aplikácia na počítač;
- Iné (prosim uvedzte) _____

10. Poznáte projekt IAEA ISEMIR-IR pre defektoskopárov?

- Áno
- Nie

11. Chceli by ste aby IAEA vytvorila ISEMIR-IR používateľský účet pre vašu krajinu?

- Áno
- Nie

12. Akým spôsobom by ste chceli dostávať informácie a školenia na ISEMIR-IR?

- Webináre;
- Stretnutia na pracovisku;
- Manuál inštrukcií;
- Newsletters

Prosim uveďte detaľy o Vašej spoločnosti v dotazníku nižšie (všetky informácie budú považované za citlivé a využité iba pre účely IAEA)

Otázka	Rok		
	2017	2018	2019
13. Rádiografické zdroje			
13.1 Počet rádioaktívnych zdrojov Ir-192	počet zdrojov	počet zdrojov	počet zdrojov
13.1a Zvyčajná počiatočná aktivita zdroja Ir-192 (voliteľná odpoved)	TBq	TBq	TBq
13.1b Zvyčajná konečná aktivita zdroja Ir-192 (voliteľná odpoved)	TBq	TBq	TBq

Otázka	Rok		
	2017	2018	2019
13.2 Počet rádioaktívnych zdrojov Se-75	počet zdrojov	počet zdrojov	počet zdrojov
13.2a Zvyčajná počiatočná aktivita zdroja Se-75 (voliteľná odpoved')	TBq	TBq	TBq
13.2b Zvyčajná konečná aktivita zdroja Se-75 (voliteľná odpoved')	TBq	TBq	TBq
13.3 Počet rádioaktívnych zdrojov Co-60	počet zdrojov	počet zdrojov	počet zdrojov
13.3a Zvyčajná počiatočná aktivita zdroja Co-60 (voliteľná odpoved')	TBq	TBq	TBq
13.3b Zvyčajná konečná aktivita zdroja Co-60 (voliteľná odpoved')	TBq	TBq	TBq
13.4 Počet generátorov RTG žiarenia	počet zdrojov	počet zdrojov	počet zdrojov
13.4a Zvyčajné MV generátora RTG žiarenia (voliteľná odpoved')	MV	MV	MV
13.4b Zvyčajné mA generátora RTG žiarenia (voliteľná odpoved')	mA	mA	mA
14. Postupy spoločnosti			
14.1 Existujú vo vašej spoločnosti vyšetrovacie úrovne pre ožiarenie pracovníka?	<input type="checkbox"/> Áno <input type="checkbox"/> Nie		
14.1a. Ak áno, aká je vyšetrovacie úroveň za mesiac ?	mSv	mSv	mSv
14.2 Vykonáva vaša spoločnosť hodnotenie zabezpečenia radiačnej ochrany Vašich defektoskopárov?	<input type="checkbox"/> Áno <input type="checkbox"/> Nie		
14.2a Ak áno, približne kol'kokrát za rok je hodnotenie vykonávané?	Počet hodnotení za rok	Počet hodnotení za rok	Počet hodnotení za rok
14.3 Vykonáva vaša spoločnosť vlastnú kontrolu súladu radiačnej ochrany s právnymi predpismi? (voliteľná odpoved')	<input type="checkbox"/> Áno <input type="checkbox"/> Nie		
14.3 Ak áno, kol'ko kontrol bolo vykonaných? (voliteľná odpoved')	Počet kontrol	Počet kontrol	Počet kontrol
15. Informácie o dávkach			
15.1 Počet pracovníkov = defektoskopárov?	Počet pracovníkov	Počet pracovníkov	Počet pracovníkov

Otázka	Rok		
	2017	2018	2019
15.2 Počet použitých filmov za rok?	Počet filmov	Počet filmov	Počet filmov
15.3 Ročná kolektívna dávka?	man.mSv/year	man.mSv/year	man.mSv/year
15.4 Minimálna detegovateľná úroveň?	mSv	mSv	mSv
15.5 Prosím, uveďte počty pracovníkov do intervalu dávok:			
ročná dávka < minimálna detegovateľná úroveň	Počet pracovníkov	Počet pracovníkov	Počet pracovníkov
1 mSv ≤ ročná dávka < 5 mSv	Počet pracovníkov	Počet pracovníkov	Počet pracovníkov
5 mSv ≤ ročná dávka < 10 mSv	Počet pracovníkov	Počet pracovníkov	Počet pracovníkov
10 mSv ≤ ročná dávka < 15 mSv	Počet pracovníkov	Počet pracovníkov	Počet pracovníkov
15 mSv ≤ ročná dávka < 20 mSv	Počet pracovníkov	Počet pracovníkov	Počet pracovníkov
20 mSv ≤ ročná dávka < 30 mSv	Počet pracovníkov	Počet pracovníkov	Počet pracovníkov
30 mSv ≤ ročná dávka < 50 mSv	Počet pracovníkov	Počet pracovníkov	Počet pracovníkov
50 mSv ≤ ročná dávka	Počet pracovníkov	Počet pracovníkov	Počet pracovníkov
16. Havárie a nehody			
16.1 Počet havárií alebo nehôd s dávkou ≤ 20mSv	Počet havárií alebo nehôd	Počet havárií alebo nehôd	Počet havárií alebo nehôd
16.2 Počet havárií alebo nehôd s dávkou > 20mSv	Počet havárií alebo nehôd	Počet havárií alebo nehôd	Počet havárií alebo nehôd
17. Informácie o defektoskopároch (voliteľné)			
Vzorkový defektoskopár 1			
17.1 Hp (10) dávka	mSv	mSv	mSv
17.1a Počet filmov za rok	Množstvo filmov	Množstvo filmov	Množstvo filmov
17.1b Má potrebnú kvalifikáciu z radiačnej ochrany? (voliteľná odpoved')	Áno/Nie	Áno/Nie	Áno/Nie
Vzorkový defektoskopár 2			
17.2 Hp (10) dávka	mSv	mSv	mSv
17.2a Počet filmov za rok	Množstvo filmov	Množstvo filmov	Množstvo filmov
17.2b Má potrebnú kvalifikáciu z radiačnej ochrany? (voliteľná odpoved')	Áno/Nie	Áno/Nie	Áno/Nie
Vzorkový defektoskopár 3			
17.3 Hp (10) dávka	mSv	mSv	mSv

Otázka	Rok		
	2017	2018	2019
17.3a Počet filmov za rok	Množstvo filmov	Množstvo filmov	Množstvo filmov
17.3b Má potrebnú kvalifikáciu z radiačnej ochrany? (voliteľná odpoved)	Áno/Nie	Áno/Nie	Áno/Nie

17. Vaše osobné údaje

Meno a priezvisko

Spoločnosť/Inštitúcia

Názov pracovnej pozície

Obec/mesto

E-mail:

Krajina

18. Súhlasím, aby boli moje odpovede spracované na účely IAEA ISEMIR-IR databázy

podpis

* Všetky informácie budú považované za citlivé a využité iba pre účely IAEA. Verejne budú dostupné iba spracované údaje, ktoré sú anonymizované.

Turkish Version:

UAEA ISEMIR-IR Anketi
(Tahribatsız Muayene Servisleri için düzenlenmiştir)

(Yanıtın gönderilmesi gereken e-posta adresi: ISEMIR.Contact-Point@iaea.org)

1. Radyografçlarınızın bireysel dozlarını nasıl kaydediyorsunuz?

- Ticari yazılım;
- Dozimetri servise saglayıcının temin ettiği özel yazılım ;
- Excel dokümanında;
- Yazılı;
- Kaydetmiyorum;
- Diğer (lütfen belirtin) _____

2. Ne tip verileri kaydediyorsunuz?

- Bireysel doz;
- Kaynak detayları;
- Kaza/olay;
- Radyografi sayıları;
- Eğitim kayıtları;
- İş yükü (örneğin: yılda cekilen film sayısı, film/yıl)

3. Doz kayıtlarınızı hangi sıklıkta güncelliyorsunuz?

- Aylık;
- Üç ayda bir;
- Diğer (lütfen belirtin) _____

4. Düzenleyici kuruluşa ne tür veri bildirme zorunluluğu bulunmaktadır?

- Doz;
- Eğitim kayıtları;
- Kaynaklar/ekipman
- Kazalar/olaylar
- Diğer (lütfen belirtin) _____

5. Uluslararası Atom Enerjisi Ajansı'nın (UAEA) ücretsiz doz kaydetme, analiz ve raporlama programıyla ilgilenir misiniz?

- Evet
- Hayır

6. Eğer ilgileniyorsanız, programda görmek istediğiniz belirli özellikler nelerdir?

- Periyodik doz analizi;
- Karşılıklı ilişki - korelasyon: doz/kaza;
- Karşılıklı ilişki - korelasyon: doz/şirket karakteristikleri ;
- Karşılıklı ilişki - korelasyon: iş yükü/doz;
- Karşılıklı ilişki - korelasyon: doz/öğretim;
- Diğer özellikler (lütfen belirtin) _____

7. UAEA ile ne tip veri paylaşmayı uygun görünsünüz?

- Bireysel doz;
- Kaynak detayları;
- Kaza/olaylar;
- Radyograf sayıları;
- Eğitim kayıtları;
- İş yükü (örneğin: yılda çekilen film sayısı -film/yıl)

8. Ne sıklıkta bilgi yüklemeyi/güncellemeyi uygun görünsünüz?

- Yıllık;
- Aylık;
- Diğer (lütfen belirtin) _____

9. Verilerinizi nasıl yüklemeyi tercih edersiniz?

- Online web-uygulaması;
- Excel dokümanı ile;
- Bilgisayar programı aracılığı ile;
- Diğer (lütfen belirtin) _____

10. UAEA'nın Tahribatsız Muayene Servisleri için ISEMIR-IR projesinden haberdar misiniz?

- Evet
- Hayır

11. UAEA'nın şirketiniz için bir ISEMIR-IR hesabı yaratmasını ister misiniz?

- Evet
- Hayır

12. ISEMIR-IR ile ilgili bilgi ve eğitim konusunda nasıl bilgilendirilmek istersiniz?

- Webinar;
- İş yerinde toplantı;
- Kullanım kılavuzu;
- E-posta bülteni (newsletter)

Lütfen şirketiniz hakkında aşağıdaki formu kullanarak bilgi veriniz (Verilen bilgiler UAEA tarafından kesinlikle gizli tutulacaktır).

Soru	Yıl		
	2017	2018	2019
13. Radyografi kaynakları			
13.1 Ir-192 radyoaktif kaynak sayısı	Kaynak sayısı	Kaynak sayısı	Kaynak sayısı
13.1a Ir-192 kaynağının tipik ilk aktivitesi (isteğe bağlı)	TBq	TBq	TBq
13.1b Ir-192 kaynağının tipik son kullanım aktivitesi (isteğe bağlı)	TBq	TBq	TBq
13.2 Se-75 radyoaktif kaynak sayısı	Kaynak sayısı	Kaynak sayısı	Kaynak sayısı

Soru	Yıl		
	2017	2018	2019
13.2a Se-75 kaynağının tipik ilk aktivitesi (isteğe bağlı)	TBq	TBq	TBq
13.2b Se-75 kaynağının tipik son kullanım aktivitesi (isteğe bağlı)	TBq	TBq	TBq
13.3 Co-60 radyoaktif kaynak sayısı	Kaynak sayısı	Kaynak sayısı	Kaynak sayısı
13.3a Co-60 kaynağının tipik ilk aktivitesi (isteğe bağlı)	TBq	TBq	TBq
13.3b Co-60 kaynağının tipik son kullanım aktivitesi (isteğe bağlı)	TBq	TBq	TBq
13.4 Radyasyon üretici ünite sayısı (X-ray ünitesi)	Ünite sayısı	Ünite sayısı	Ünite sayısı
13.4a Radyasyon üreticisinin tipik MV'u (X-ray ünitesi) (isteğe bağlı)	MV	MV	MV
13.4b Radyasyon üreticisinin tipik mA'sı (X-ray ünitesi) (isteğe bağlı)	mA	mA	mA
14. Şirket prosedürleri			
14.1 Sirketiniz tarafından belirlenmiş mesleki rasyasyon ile ısınlanma için inceleme seviyesi var mı?	<input type="checkbox"/> Evet <input type="checkbox"/> Hayır		
14.1a. Cevabınız evet ise, aylık inceleme düzeyi nedir?	mSv	mSv	mSv
14.2 Şirketinizin radyografların mesleki radyasyondan korunması ile ilgili bir değerlendirme prosedürü var mı?	<input type="checkbox"/> Evet <input type="checkbox"/> Hayır		
14.2a Cevabınız evet ise, bir radyografi uzmanı şirketiniz tarafından yılda yaklaşık kaç kez değerlendiriliyor?	Yıllık değerlendirme sayısı	Yıllık değerlendirme sayısı	Yıllık değerlendirme sayısı
14.3 Şirketiniz radyasyon güvenliği standartlarına ve yönetmeliklerine uygunluk için kendi öz denetimlerini yapıyor mu? (isteğe bağlı)	<input type="checkbox"/> Evet <input type="checkbox"/> Hayır		
14.3 Cevabınız evet ise, yılda kaç tane uygunluk denetimi yapılıyor? (isteğe bağlı)	Denetim sayısı	Denetim sayısı	Denetim sayısı
15. Doz bilgisi			

Soru	Yıl		
	2017	2018	2019
15.1 Mesleki radyasyona maruz kalan çalışan sayısı	Çalışan sayısı	Çalışan sayısı	Çalışan sayısı
15.2 Yıllık maruz kalan film sayısı	Film sayısı	Film sayısı	Film sayısı
15.3 Yıllık kolektif Doz	man.mSv/yıl	man.mSv/yıl	man.mSv/yıl
15.4 Minimum tespit edilebilir seviye	mSv	mSv	mSv
15.5 Lütfen doz aralıklarında çalışan sayısını belirtin:			
Yıllık Doz < tespit edilebilir minimum seviye	Çalışan sayısı	Çalışan sayısı	Çalışan sayısı
1 mSv ≤ Yıllık Doz < 5 mSv	Çalışan sayısı	Çalışan sayısı	Çalışan sayısı
5 mSv ≤ Yıllık Doz < 10 mSv	Çalışan sayısı	Çalışan sayısı	Çalışan sayısı
10 mSv ≤ Yıllık Doz < 15 mSv	Çalışan sayısı	Çalışan sayısı	Çalışan sayısı
15 mSv ≤ Yıllık Doz < 20 mSv	Çalışan sayısı	Çalışan sayısı	Çalışan sayısı
20 mSv ≤ Yıllık Doz < 30 mSv	Çalışan sayısı	Çalışan sayısı	Çalışan sayısı
30 mSv ≤ Yıllık Doz < 50 mSv	Çalışan sayısı	Çalışan sayısı	Çalışan sayısı
50 mSv ≤ Yıllık Doz	Çalışan sayısı	Çalışan sayısı	Çalışan sayısı
16. Kazalar ve olaylar			
16.1 Dozu 20 mSv'ye eşit veya altında olan kaza ve olay sayısı	Kaza/olay sayısı	Kaza/olay sayısı	Kaza/olay sayısı
16.2 Dozu 20 mSv'den yüksek olan kaza ve olay sayısı	Kaza/olay sayısı	Kaza/olay sayısı	Kaza/olay sayısı
17. Radyograflar hakkında bilgi (isteğe bağlı)			
Temsilci Radyografçı I			
17.1 Hp (10) doz	mSv	mSv	mSv
17.1a Yıllık film sayısı	Film sayısı	Film sayısı	Film sayısı
17.1b Geçerli radyasyondan korunma yeterliliğine sahip mi (isteğe bağlı)?	Evet/Hayır	Evet/Hayır	Evet/Hayır
Temsilci Radyografçı II			
17.2 Hp (10) doz	mSv	mSv	mSv
17.2a Yıllık film sayısı	Film sayısı	Film sayısı	Film sayısı
17.2b Geçerli radyasyondan korunma	Evet/Hayır	Evet/Hayır	Evet/Hayır

Soru	Yıl		
	2017	2018	2019
yeterliliğine sahip mi (isteğe bağlı)?			
Temsilci Radyografçısı III			
17.3 Hp (10) doz	mSv	mSv	mSv
17.3a Yıllık film sayısı	Film sayısı	Film sayısı	Film sayısı
17.3b Geçerli radyasyondan korunma yeterliliğine sahip mi (isteğe bağlı)?	Evet/Hayır	Evet/Hayır	Evet/Hayır

17. Kişisel bilgileriniz

İsim ve soy isim

Şirket/Enstitü

İş unvanı veya pozisyonu

Şehir

E-posta:

Ülke

18. Anketteki (sorular 13-17) cevaplarimin UAEA ISEMIR-IR veri tabanina eklenmesini kabul ediyorum *

İmza

* Tüm bilgiler UAEA tarafından gizli tutulacaktır. Yalnızca anonimleştirilmiş ve toplu veriler kullanılabılır hale getirilecektir.

Japanese Version:

**The IAEA ISEMIR-IR Survey
(version for NDT service providers)**

IAEA ISEMIR-IR (Information System on Occupational Exposure in Medicine, Industry and Research- Industrial Radiography: 医療、産業、研究における職業被ばくに関するデータベース: 産業におけるラジオグラフィー)に関する調査
(非破壊検査サービス提供者用)

(to be sent to ISEMIR.Contact-Point@iaea.org)

提出先: ISEMIR.Contact-Point@iaea.org

1. By what means do you record the individual doses for your radiographers?

1 . 放射線技師の個人被ばく線量をどのような方法で記録していますか。

- Commercial software 市販のソフトウェア;
- Software of dosimetry service company 線量測定サービスを提供する会社のソフトウェア;
- Excel spreadsheet Excel のシート;
- Hard copy 紙媒体;
- I do not record 記録してない;
- Other (please specify) その他 (具体的に記載してください)

2. What sort of data do you record?

2 . どのような種類のデータを記録していますか。

- Individual dose 個人被ばく線量;
- Sources details 線源;
- Accidents/incidents 事故 / 異常事象;
- Number of radiographers 放射線技師の数;
- Training records 訓練や研修の記録;
- Workload (for example: films/year) 作業量 (例: 年間のフィルム使用数);

3. How frequently do you update the dose records?

3 . 線量に関するデータをどのくらいの頻度で更新していますか。

- Monthly 毎月;
- Quarterly 四半期ごと;
- Other (please specify) その他 (具体的に記載してください)

4. What kind of data do you must report to regulator?

4 . どのようなデータを規制機関に報告する必要がありますか。

- Individual dose 個人被ばく線量;
- Training records 訓練や研修の記録;
- Sources/equipment 線源 / 機器
- Accidents/incidents 事故 / 異常事象
- Other (please specify) その他 (具体的に記載してください) _____

5. Would you be interested in IAEA free software for dose recording, analysis and reporting?

5 . IAEA が提供する、線量の記録、分析、報告に関する無料のソフトウェアにご関心がありますか。

Yes No

はい いいえ

6. If so, are there any particular features you would like to see in the software?

6 . 5 . で「はい」と回答された場合、当該ソフトウェアに特に搭載して欲しい機能はありますか。

- Periodic dose analysis 定期的な線量の分析;
- Correlation: dose/accidents 線量と事故との相関;
- Correlation: dose/job characteristics 線量と職業との相関;
- Correlation: workload/dose 線量と作業量との相関;
- Correlation: dose/training 線量と訓練や研修との相関;
- Other particular features (please specify) その他 (具体的に記載してください) _____

7. What kind of data you are ready to share with IAEA?

7 . どのようなデータを IAEA と共有いただくことが可能ですか。

- Individual dose 個人被ばく線量;
- Sources details 線源;
- Accidents/incidents 事故 / 異常事象;
- Number of radiographers 放射線技師の数;
- Training records 訓練や研修の記録;
- Workload (for example: films/year) 作業量 (例: 年間のフィルム使用数) ;

8. How often you would be willing to upload/update data?

8 . どのくらいの頻度でアップロード / 更新することが可能ですか。

- Annually 毎年;
- Monthly 毎月;
- Other (please specify) その他 (具体的に記載してください) _____

9. What means of uploading your data do you prefer?

9 . どのような方法でデータをアップロードすることを希望されますか。

- Online web-application オンライン上のアプリケーションを通じて;
 - Excel spreadsheet Excelのシート;
 - Desktop application デスクトップ上のアプリケーションを通じて;
 - Other (please specify) その他 (具体的に記載してください)
-

10. Are you aware of the IAEA ISEMIR-IR project for NDT companies?

10 . 非破壊検査会社用の IAEA ISEMIR-IR Project をご存じでしたか。

Yes No

はい いいえ

11. Would you like the IAEA to create ISEMIR-IR account for your company?

11 . 貴社用の ISEMIR-IR アカウントを IAEA が作成することを希望されますか。

Yes No

はい いいえ

12. In what way would you like to receive information and training on ISEMIR-IR?

12 . どのような方法で ISEMIR-IR やその研修に関する情報を入手することを希望されますか。

- Webinars; ウェブによるセミナー
- On-site sessions; 現地における打ち合わせ
- Instruction manual; 操作マニュアルの提供
- Newsletters ニュースレター

Please give some details on your company in the questionnaire below (All information will be treated as strictly confidential by the IAEA)

貴社に関する以下の質問にお答えください (提供いただいた情報に関しては、IAEAにおいて機密情報として厳重に管理いたします。)

Question / 質問	Year／年		
	2017	2018	2019
<u>13. Radiography sources 13 . 放射線源</u>			
13.1 Number of Ir-192 radioactive sources <u>13.1 Ir-192 の線源数</u>	number of sources <u>線源数</u>	number of sources <u>線源数</u>	number of sources <u>線源数</u>
13.1a Typical Initial activity of Ir-192 source (optional) <u>13.1a Ir-192 の代表的な初期放射能 (任意)</u>	TBq	TBq	TBq
13.1b Typical end of use activity of Ir-192 source (optional)	TBq	TBq	TBq

Question / 質問	Year／年		
	2017	2018	2019
13.1b Ir-192 の代表的な使用後の放射能 (任意)			
13.2 Number of Se-75 radioactive sources 13.2 Se-75 の線源数	number of sources 線源数	number of sources 線源数	number of sources 線源数
13.2a Typical Initial activity of Se-75 source (optional) 13.2a Se-75 の代表的な初期放射能 (任意)	TBq	TBq	TBq
13.2b Typical end of use activity of Se-75 source (optional) 13.2b Se-75 の代表的な使用後の放射能 (任意)	TBq	TBq	TBq
13.3 Number of Co-60 radioactive sources 13.3 Co-60 の線源数	number of sources 線源数	number of sources 線源数	number of sources 線源数
13.3a Typical Initial activity of Co-60 source(optional) 13.3a Co-60 の代表的な初期放射能 (任意)	TBq	TBq	TBq
13.3b Typical end of use activity of Co-60 source (optional) 13.3b Co-75 の代表的な使用後の放射能 (任意)	TBq	TBq	TBq
13.4 Number of units of radiation generators (X-ray units) 13.4 放射線発生装置のユニット数 (X 線)	number of units ユニット数	number of units ユニット数	number of units ユニット数
13.4a Typical MV of radiation generator (X-ray units) (optional) 13.4a 代表的な放射線発生装置の電圧 (X 線) (任意)	MV	MV	MV
13.4b Typical mA of radiation generator (X-ray units) (optional) 13.4b 代表的な放射線発生装置の電流 (X 線) (任意)	mA	mA	mA

Question / 質問	Year／年		
	2017	2018	2019
14. Company procedures 14. 貴社内の手続			
14.1 Are there company investigation levels for occupational exposure? <u>14.1 職業被ばくに関して、社内での調査レベルはありますか。</u>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> はい <input type="checkbox"/> いいえ		
14.1a If yes, what is the investigation level per month? <u>14.1a 14.1で「はい」と回答した場合、その調査レベル（1月あたりの個人被ばく線量）を教えてください。</u>	mSv	mSv	mSv
14.2 Does your company perform occupational radiation protection related assessment of radiographers? <u>14.2 貴社は放射線技への職業被ばくに関してアセスメントを実施していますか。</u>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> はい <input type="checkbox"/> いいえ		
14.2a If yes, approximately how many times per year would a radiographer be assessed by your company? <u>14.2a 14.2で「はい」と回答した場合、放射線技師に対して年に何回程度アセスメントを実施していますか。</u>	number of times per year <u>1年あたりの回数</u>	number of times per year <u>1年あたりの回数</u>	number of times per year <u>1年あたりの回数</u>
14.3 Does your company perform its own inspections for compliance to radiation safety standards and regulations? (optional) <u>14.3 貴社は放射線防護に関する独自のコンプライアンス調査を実施していますか（任意）。</u>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> はい <input type="checkbox"/> いいえ		

Question / 質問	Year／年		
	2017	2018	2019
14.3a If yes, how many compliance inspections was held in a year? (optional) <u>14.3a 14.3で「はい」と回答した場合、年に何回程度コンプライアンス調査を実施していますか（任意）。</u>	number of inspections per year <u>1年あたりの調査の実施回数</u>	number of inspections per year <u>1年あたりの調査の実施回数</u>	number of inspections per year <u>1年あたりの調査の実施回数</u>
15. Dose information 15. 個人被ばく線量に関する情報			
15.1 Number of Occupationally Exposed Workers <u>15.1 職業被ばくを受けている作業者数</u>	number of workers <u>作業者数</u>	number of workers <u>作業者数</u>	number of workers <u>作業者数</u>
15.2 Number of films exposed in the year <u>15.2 年間のフィルム使用数</u>	number of films <u>フィルム使用数</u>	number of films <u>フィルム使用数</u>	number of films <u>フィルム使用数</u>
15.3 Annual collective Dose <u>15.3 年間の集団線量</u>	man.mSv/year	man.mSv/year	man.mSv/year
15.4 Minimum detectable level <u>15.4 検出限界値</u>	mSv	mSv	mSv
15.5 Please, indicate number of workers in dose ranges: 15.5 以下の個人被ばく線量の範囲ごとの作業者数をご記入ください			
Annual Dose < min detectable level <u>年間の個人被ばく線量が検出限界値未満</u>	number of workers <u>作業者数</u>	number of workers <u>作業者数</u>	number of workers <u>作業者数</u>
1 mSv ≤ Annual Dose < 5 mSv <u>1 mSv ≤ 年間の個人被ばく線量 < 5 mSv</u>	number of workers <u>作業者数</u>	number of workers <u>作業者数</u>	number of workers <u>作業者数</u>
5 mSv ≤ Annual Dose < 10 mSv <u>5 mSv ≤ 年間の個人被ばく線量 < 10 mSv</u>	number of workers <u>作業者数</u>	number of workers <u>作業者数</u>	number of workers <u>作業者数</u>
10 mSv ≤ Annual Dose < 15 mSv <u>10 mSv ≤ 年間の個人被ばく線量 < 15 mSv</u>	number of workers <u>作業者数</u>	number of workers <u>作業者数</u>	number of workers <u>作業者数</u>

Question / 質問	Year／年		
	2017	2018	2019
<u>< 15 mSv</u>			
<u>15 mSv ≤ Annual Dose < 20 mSv</u> <u>15 mSv ≤ 年間の個人被ばく線量 < 20 mSv</u>	number of workers 作業者数	number of workers 作業者数	number of workers 作業者数
<u>20 mSv ≤ Annual Dose < 30 mSv</u> <u>20 mSv ≤ 年間の個人被ばく線量 < 30 mSv</u>	number of workers 作業者数	number of workers 作業者数	number of workers 作業者数
<u>30 mSv ≤ Annual Dose < 50 mSv</u> <u>30 mSv ≤ 年間の個人被ばく線量 < 50 mSv</u>	number of workers 作業者数	number of workers 作業者数	number of workers 作業者数
<u>50 mSv ≤ Annual Dose</u> <u>50 mSv ≤ 年間の個人被ばく線量</u>	number of workers 作業者数	number of workers 作業者数	number of workers 作業者数
16. Accidents and incidents 16. 事故及び異常事象			
<u>16.1 Number of accidents or incidents with doses ≤ 20mSv</u> <u>16.1 個人被ばく線量が 20mSv 以下の事故または異常事象数</u>	number of accidents/incidents 事故または異常事象の数	number of accidents/incidents 事故または異常事象の数	number of accidents/incidents 事故または異常事象の数
<u>16.2 Number of accidents or incidents with doses > 20mSv</u> <u>16.2 個人被ばく線量が 20mSv を超える事故または異常事象数</u>	number of accidents/incidents 事故または異常事象の数	number of accidents/incidents 事故または異常事象の数	number of accidents/incidents 事故または異常事象の数
17. Information on radiographers (optional) 17. 放射線技師に関する情報（任意）			
Representative radiographer I 代表的な放射線技師 1			
<u>17.1 Hp (10) dose</u> <u>17.1 個人線量当量 (Hp(10))</u>	mSv	mSv	mSv
<u>17.1a Number of films in a year</u> <u>17.1a 年間のフィルム使用数</u>	Number of films フィルム使用数	Number of films フィルム使用数	Number of films フィルム使用数

Question / 質問	Year／年		
	2017	2018	2019
17.1b Does he/she have valid radiation protection qualification (optional)? <u>17.1b この方は放射線防護に関する有効な資格を有していますか（任意）。</u>	<input type="checkbox"/> Yes <input type="checkbox"/> No <u>□ はい □ いいえ</u>	<input type="checkbox"/> Yes <input type="checkbox"/> No <u>□ はい □ いいえ</u>	<input type="checkbox"/> Yes <input type="checkbox"/> No <u>□ はい □ いいえ</u>
Representative radiographer II <u>代表的な放射線技師2</u>			
17.2 Hp (10) dose <u>17.2 個人線量当量 (Hp(10))</u>	mSv	mSv	mSv
17.2a Number of films in a year <u>17.2a 年間のフィルム使用数</u>	Number of films <u>フィルム使用数</u>	Number of films <u>フィルム使用数</u>	Number of films <u>フィルム使用数</u>
17.2b Does he/she have valid radiation protection qualification (optional)? <u>17.2b この方は放射線防護に関する有効な資格を有していますか（任意）。</u>	<input type="checkbox"/> Yes <input type="checkbox"/> No <u>□ はい □ いいえ</u>	<input type="checkbox"/> Yes <input type="checkbox"/> No <u>□ はい □ いいえ</u>	<input type="checkbox"/> Yes <input type="checkbox"/> No <u>□ はい □ いいえ</u>
Representative radiographer III <u>代表的な放射線技師3</u>			
17.3 Hp (10) dose <u>17.2 個人線量当量 (Hp(10))</u>	mSv	mSv	mSv
17.3a Number of films in a year <u>17.3a 年間のフィルム使用数</u>	Number of films <u>フィルム使用数</u>	Number of films <u>フィルム使用数</u>	Number of films <u>フィルム使用数</u>
17.3b Does he/she have valid radiation protection qualification (optional)? <u>17.3b この方は放射線防護に関する有効な資格を有していますか（任意）。</u>	<input type="checkbox"/> Yes <input type="checkbox"/> No <u>□ はい □ いいえ</u>	<input type="checkbox"/> Yes <input type="checkbox"/> No <u>□ はい □ いいえ</u>	<input type="checkbox"/> Yes <input type="checkbox"/> No <u>□ はい □ いいえ</u>

17. Your personal information
17. 回答者に関する情報

Name and Surname 氏名

Company/Institution 会社等の名称

Job title or position 役職等

Town/city 都道府県及び市町村等

E-mail: メールアドレス

Country 国

18. I agree to include the data from the questionnaire (questions 13-17) to the IAEA ISEMIR-IR database*

18. 本質問（質問 13～17）に対する回答を IAEA ISEMIR-IR のデータベースにおいて使用することに同意いたします。

Signature

署名

* All information will be treated as strictly confidential by the IAEA. Only anonymised and aggregated data will be made available.

* 提供いただいた全ての情報に関しては、IAEAにおいて機密情報として厳重に管理いたします。匿名化または統計的に処理した情報のみ使用いたします。

Korean Version:

**The IAEA ISEMIR-IR Survey
(version for NDT service providers)**

(to be sent to ISEMIR.Contact-Point@iaea.org)

1. 방사선 촬영시 어떤 방법을 통해서 개인선량을 기록하십니까?

- 상용 소프트웨어;
- 선량서비스기업 소프트웨어;
- 엑셀;
- 인쇄물;
- 기록하지 않습니다;
- 기타(구체적으로 기재) _____

2. 어떤 종류의 데이터를 기록하십니까?

- 개인선량;
- 선원 세부정보;
- 사건/사고;
- 방사선 촬영기사의 수;
- 교육 기록;
- 업무량(예: 필름 수/년)

3. 얼마나 자주 선량 기록을 갱신하십니까?

- 매달;
- 분기별;
- 기타(구체적으로 기재) _____

4. 규제자에게 어떤 종류의 데이터를 필수로 보고해야 합니까?

- 선량;
- 교육;
- 선원/장비
- 사건/사고
- 기타(구체적으로 기재) _____

5. 선량 기록, 분석, 보고에 관한 IAEA 무료 소프트웨어에 관심이 있으십니까?

- 그렇다
- 아니다

6. 만약 그렇다면, 소프트웨어에 원하는 특색이 있으십니까?

- 주기적인 선량 분석;
- 선량/사고와 연관된 것
- 선량/직업특성과 연관된 것
- 업무량/선량과 연관된 것
- 선량/교육과 연관된 것

그 외 다른 특색들 (구체적으로 기재) _____

7. 어떤 정보를 IAEA 와 공유하실 수 있습니까?

- 개인선량;
- 선원 세부정보;
- 사건/사고;
- 방사선 촬영 기사의 수;
- 교육 기록;
- 업무량(예: 필름 수/년)

8. 얼마나 자주 데이터를 업로드/업데이트 하시고 싶습니까?

- 연간;
- 월간;
- 기타(구체적으로 기재) _____

9. 어떤 방법으로 데이터를 업로드 하시고 싶습니까?

- 온라인 웹 어플리케이션;
- 엑셀;
- 테스크탑 어플리케이션;
- 기타(구체적으로 기재) _____

10. NDT(비파괴 검사)기업을 위한 IAEA 의 ISEMIR-IR(Information System on Occupational Exposure in Medicine, Industry and Research) 프로젝트에 대해 알고 계십니까?

- 그렇다
- 아니다

11. 귀사를 위해 IAEA 가 ISEIR-IR 계정을 개설하기를 바라십니까?

- 그렇다
- 아니다

12. 어떤 방법을 통해 ISEMIR-IR 의 정보를 받기를 바라십니까?

- Webinars;
- 현장교육;
- 사용 안내서;
- 소식지;

아래의 설문지를 통해 귀사에 대한 자세한 정보를 기재해주십시오.(모든 정보는 IAEA 에서 극비로 다루어질 것입니다)

Question	년도		
	2017	2018	2019
13. 방사선 촬영 선원			
13.1 Ir-192 방사능원의 개수	number of sources	number of sources	number of sources
13.1a	TBq	TBq	TBq

Question	년도		
	2017	2018	2019
Ir-192 의 평균적인 초기 활동도(선택)			
13.1b Ir-192 선원의 평균적인 후기 활동도(선택)	TBq	TBq	TBq
13.2 Se-75 방사능원의 개수	number of sources	number of sources	number of sources
13.2a Se-75 선원의 평균적인 초기 활동도(선택)	TBq	TBq	TBq
13.2b Se-75 선원의 평균적인 후기 활동도(선택)	TBq	TBq	TBq
13.3 Co-60 방사능원의 개수	number of sources	number of sources	number of sources
13.3a Co-60 선원의 평균적인 초기 활동도(선택)	TBq	TBq	TBq
13.3b Co-60 선원의 평균적인 후기 활동도(선택)	TBq	TBq	TBq
13.4 방사선 발생장치의 단원 수(X 선 단원)	number of units	number of units	number of units
13.4a 방사선 발생장치의 평균 MV(X 선 단원)(선택)	MV	MV	MV
13.4b 방사선 발생장치의 평균 mA(X 선 단원)(선택)	mA	mA	mA
14. 회사 절차			
14.1 직업적 방사선 피폭에 관한 회사의 조사수준이 있습니까?	<input type="checkbox"/> 그렇다 <input type="checkbox"/> 아니다		
14.1a. 만약 그렇다면, 한달을 기준으로 조사수준이 어떠합니까?	mSv	mSv	mSv
14.2	<input type="checkbox"/> 그렇다 <input type="checkbox"/> 아니다		

Question	년도		
	2017	2018	2019
귀사에서는 방사선촬영 평가와 관련된 직업적 방사선 방호를 하고 있습니까?			
14.2a 만약 그렇다면, 대략적으로 연간 몇번정도의 방사선촬영이 평가되고 있습니까?(선택)	number of times per year	number of times per year	number of times per year
14.3 귀사에서는 방사선 안전기준과 규제를 준수하기위한 검사를 수행하고 있습니까?(선택)	<input type="checkbox"/> 그렇다 <input type="checkbox"/> 아니다		
14.3 만약 그렇다면, 연간 몇번의 준수조사가 이루어지고 있습니까?(선택)	number of inspections	number of inspections	number of inspections
15. 선량정보			
15.1 직업적으로 노출되는 종사자의 수	number of workers	number of workers	number of workers
15.2 연간 노출되는 필름의 수	number of films	number of films	number of films
15.3 연간 촉적선량	man.mSv/year	man.mSv/year	man.mSv/year
15.4 최소 측정가능값	mSv	mSv	mSv
15.5 선량 범위에 따라 해당하는 종사자의 수를 기재해주세요:			
연간선량 < 최소 측정수준	number of workers	number of workers	number of workers
1 mSv ≤ 연간선량 < 5 mSv	number of workers	number of workers	number of workers
5 mSv ≤ 연간선량 < 10 mSv	number of workers	number of workers	number of workers
10 mSv ≤ 연간선량	number of workers	number of workers	number of workers

Question	년도		
	2017	2018	2019
< 15 mSv			
15 mSv ≤ 연간선량 < 20 mSv	number of workers	number of workers	number of workers
20 mSv ≤ 연간선량 < 30 mSv	number of workers	number of workers	number of workers
30 mSv ≤ 연간선량 < 50 mSv	number of workers	number of workers	number of workers
50 mSv ≤ 연간선량	number of workers	number of workers	number of workers
16. 사건 및 사고			
16.1 선량≤ 20mSv 인 사건 혹은 사고의 수	number of accidents/incidents	number of accidents/incidents	number of accidents/incidents
16.2 선량> 20mSv 인 사건 혹은 사고의 수	number of accidents/incidents	number of accidents/incidents	number of accidents/incidents
17. 방사선 촬영 기사에 관한 정보(선택)			
대표 방사선 촬영 기사 I			
17.1 Hp (10) dose	mSv	mSv	mSv
17.1a 연간 촬영한 필름의 수	Number of films	Number of films	Number of films
17.1b 그/그녀는 유효한 방사선 방호 자격을 가지고 있습니까?(선택)	Yes/No	Yes/No	Yes/No
대표 방사선 촬영 기사 II			
17.2 Hp (10) dose	mSv	mSv	mSv
17.2a 연간 촬영한 필름의 수	Number of films	Number of films	Number of films
17.2b 그/그녀는 유효한 방사선 방호 자격을 가지고 있습니까?(선택)	Yes/No	Yes/No	Yes/No
대표 방사선 촬영 기사 III			
17.3 Hp (10) dose	mSv	mSv	mSv
17.3a 연간 촬영한 필름의 수	Number of films	Number of films	Number of films

Question	년도		
	2017	2018	2019
17.3b 그/그녀는 유효한 방사선 방호 자격을 가지고 있습니까?(선택)	Yes/No	Yes/No	Yes/No

17. 개인정보

이름 회사/조직

직책 지역/도시

이메일: 국가

18. 나는 the IAEA ISEMIR-IR database*에
설문지의 정보(질문 13-17)가 포함되는것에
동의한다.

서명

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