

Experience in Europe – First Results from the Questionnaire on the Optimisation of RP in NORM Industries

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Introduction

Background

- Optimisation needs information
- Publications give a special view to the problems. →
 Questions:
 - can a questionnaire deliver valuable additional information?
 - Is a questionnaire suitable for networking in the future EAN_{NORM}-network?
- Present status: "Test" (pilot phase)

Methodical remarks

- Few and simple questions.
- Intended for collecting personal views (not institutional views!).
- No knowledge general assessments and opinions.
- Multiple choice. Several answers allowed.
- Evaluated by referring the marked answers to the total number of responses ("All")
- and: by referring the marked answers to the number of responses for the three groups "authorities", "industries", "consultants/researchers"

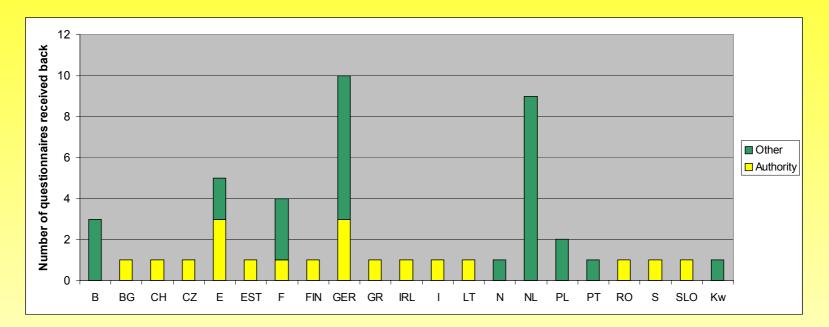


Structure of the questionnaire

Questionnaire	Part II: Radiation protection in NORM industry
	5. How are NORM generally identified in your working
On the optimisation of radiation protection in NORM-industries	area?
	6. At the workplaces, who knows about the occurrence
Respondent Details	of radioactivity in the materials?
	7. Who is or may be exposed?
Part I: General Questions	8. What level of exposure occurs at your working area?
1. Please classify the area of your work:	9. How is the exposure of workers controlled?
	10. How radiation protection is organised at your working
2. Characterise your responsibility regarding workplaces	area?
with NORM:	11. Which measures are applied to lower the exposure of
	workers in your working field?
3. Your work is related to:	12. How are the results of exposure control documented?
	13. How do you distinguish between NORM and non-
4. Fields of NORM industry within which you are	radioactive materials?
engaged or you are dealing with:	14. Additional comments



Respondent Statistic



Responses: 48 Authorities: 24 (15 countries) Industry, Consultants, Researchers, Others: 24 (9 countries, 1 non-EU)

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All Autority Industry Consulting; Research Frequency 0% 20% 60% 80% 100% 40% Part I-a Manager / chief officer Responsibility regarding workplaces with NORM: Engineer / technical staffer Responsibility Attitude of Technical staff / workers respondents Consulting, Research Others Regulation Authorisation Your work is related to: Supervision Management Work related to what kind of actions? Handling of NORM Expertises Others

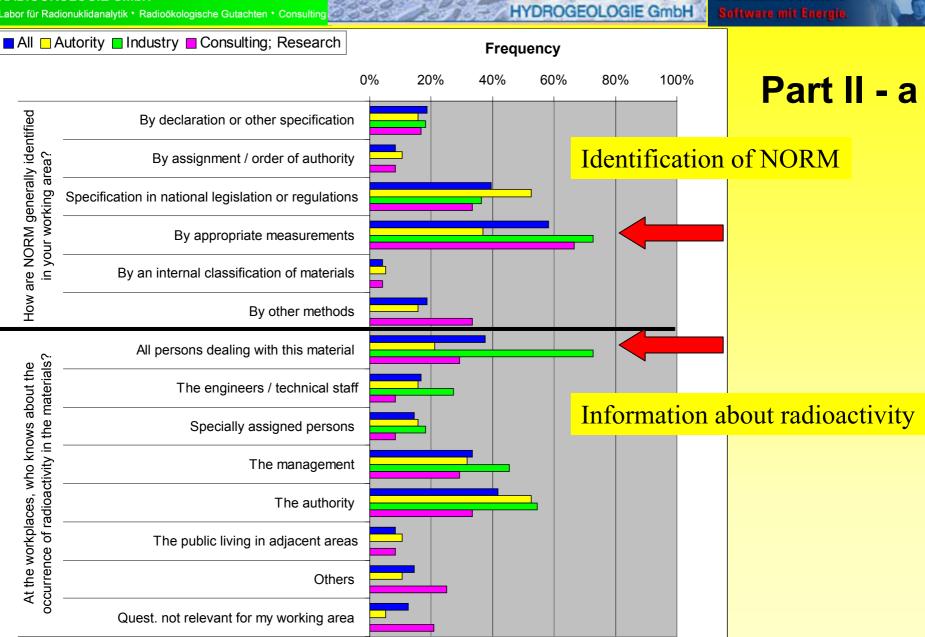
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Part I-b All Autority Industry Consulting; Research Frequency 0% 20% 60% 80% 100% 40% NORM issues in general Fields of NORM industry within which you are engaged or you are dealing with: Sources of Extraction of rare earth elements experience Production and use of Th / Th-compounds Use of U for non-nuclear (chemical) purposes Production of Nb, Fe-Nb, Ta Mining of uranium ore Mining of ores other than uranium ore Fields of NORM industry in which Production of oil and gas respondents are engaged Manufacture of TiO2 pigments Phosphate industry Zircon and zirconia industries Production of Sn, Cu, Al, Fe, Zn, Pb Combustion of coal Water treatment Waste management or waste disposal Others

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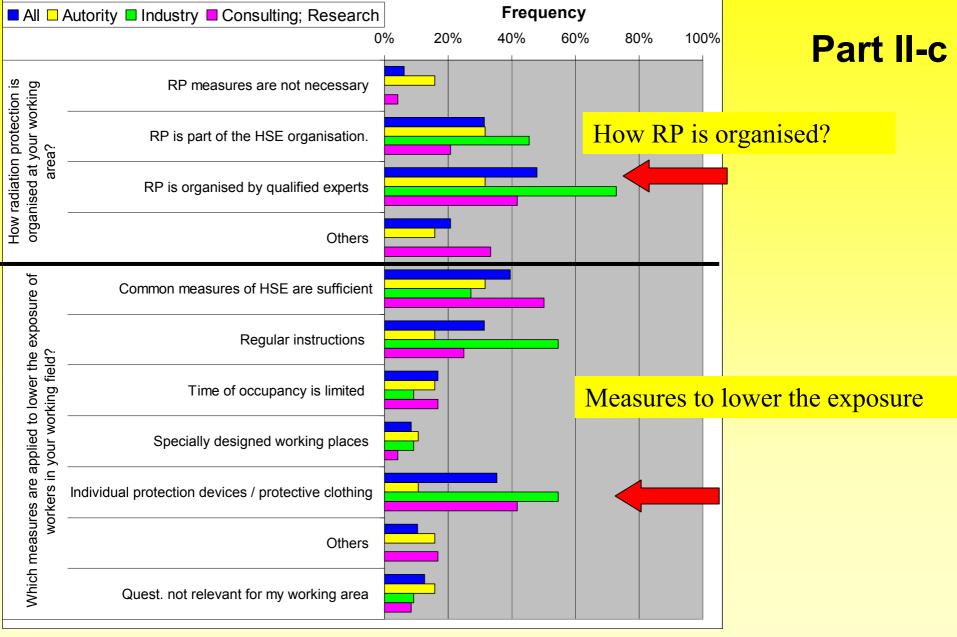


All Autority Industry Consulting; Research Frequency Part II - b 0% 20% 80% 100% 40% 60% Only a few, special workers Who is or may be Many /all workers at a site where NORM is occurring exposed? members of the public Others Who is/may be exposed? I do not know exposure occurs at Above 6 mSv per year your working area? What level of Level of exposure Between 1 mSv and 6 mSv per year Below 1 mSv per year I do not know By individual dosimeters How is the exposure of workers By measurements of local gamma dose rates By dust control controlled? By radon monitoring How exposure is controlled? Assessment of internal exposure Control of exposure is not required Others

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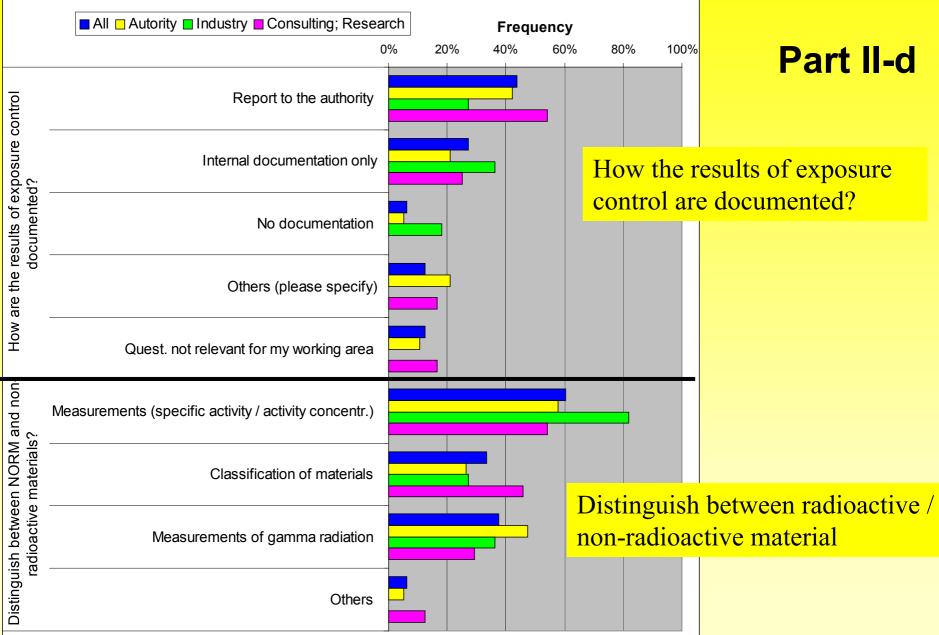


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- The present survey only provides a limited insight to the practice of RP in the NORM industry. Therefore the contacts to the contact points have to be intensified.
- Open questions should be solved by additional questionnaires and in dialog with the contact points.
- By communicating with the contact points, information sheets will be developed, describing good radiation protection practices for the relevant industries.

- The survey gives an impression, but is not specifically enough for more detailed information.
- It is not suitable for the networking.

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