



# Global results stakeholders survey

**Preliminary results from survey on needs for Research  
and from review of Best practices/on-going international initiatives**

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## *Context: Objective*

Aimed to produce a neutral, balanced and reliable assessment of the opinions collected from the stakeholders referred to research needs for decommissioning

- Prepare questionnaire
- Collect data with web supported tool
- Use of assessment criteria
- Quantitative and qualitative analysis

To rank identified innovation needs and compare with available solutions (cf. WP 3) for doing a Gap Analysis



STRATEGIC RESEARCH  
AGENDA



ROADMAP

Define and prioritize research and innovation activities in the field of decommissioning, with tentative schedule and potential actors

# THE QUESTIONNAIRE

## TOPICS

GENERAL OVERVIEW (9)

SAFETY AND RADIOLOGICAL PROTECTION ASPECTS (9)

PROJECT MANAGEMENT AND COSTING (11)

HUMAN RESOURCES MANAGEMENT (5)

CHARACTERIZATION DURING DECOMMISSIONING (12)

SITE PREPARATORY ACTIVITIES (4)

DISMANTLING (11)

ENVIRONMENTAL REMEDIATION AND SITE RELEASE (8)

MANAGEMENT OF MATERIALS AND RADIOACTIVE WASTES FROM DECOMMISSIONING (22)

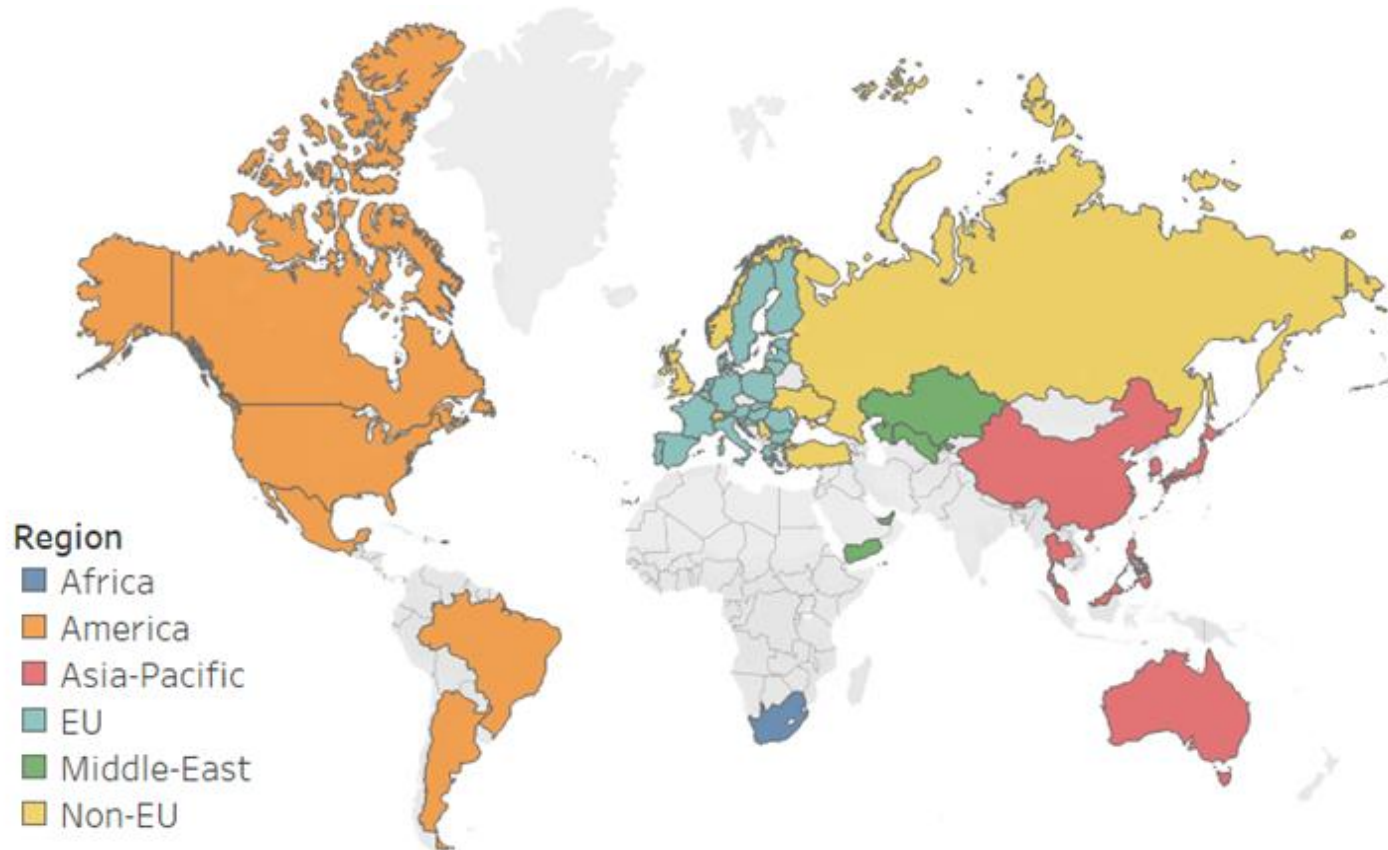
## PROFILE

- Country
- Type of organization
- Number of employees
- Status on decom. projects
- Type of Facility

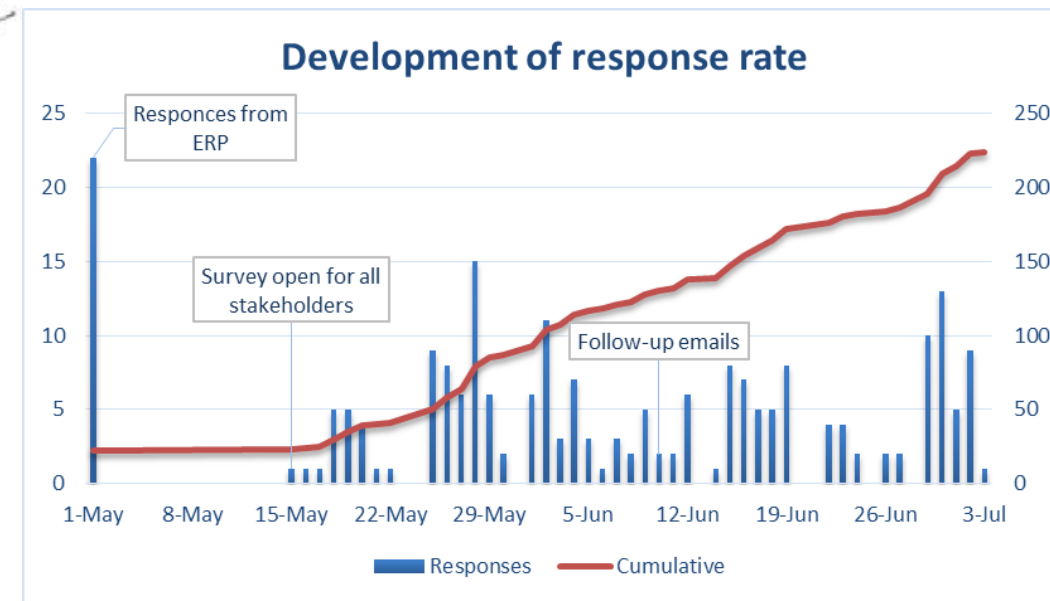
## QUESTIONNAIRE

- 82 sub-topics
- 9 open questions

# SURVEY RESPONDENTS



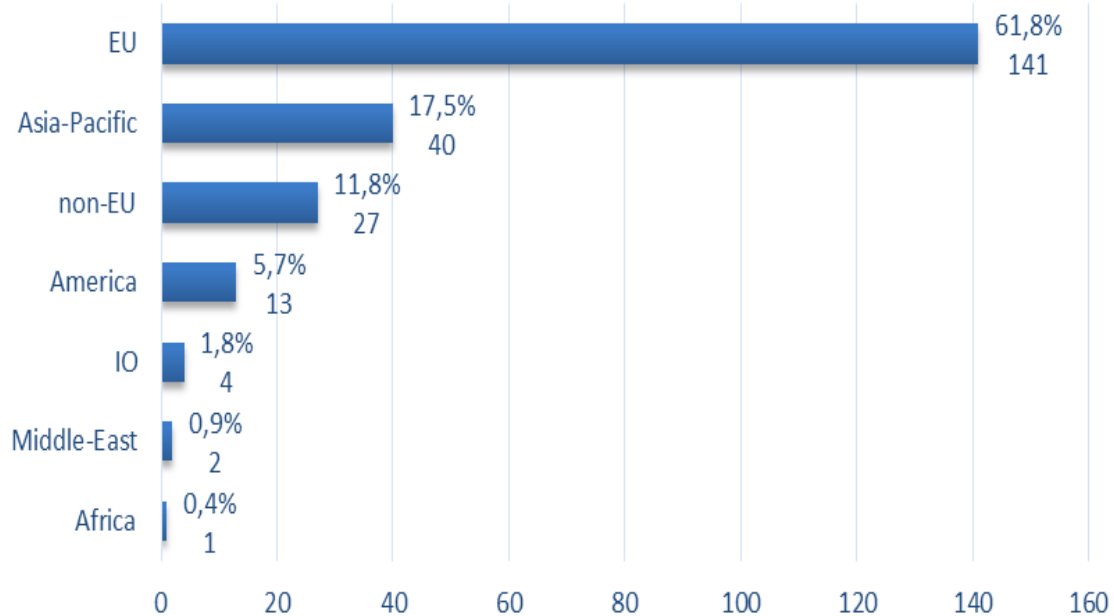
- 650 contacts
- 224 complete responses



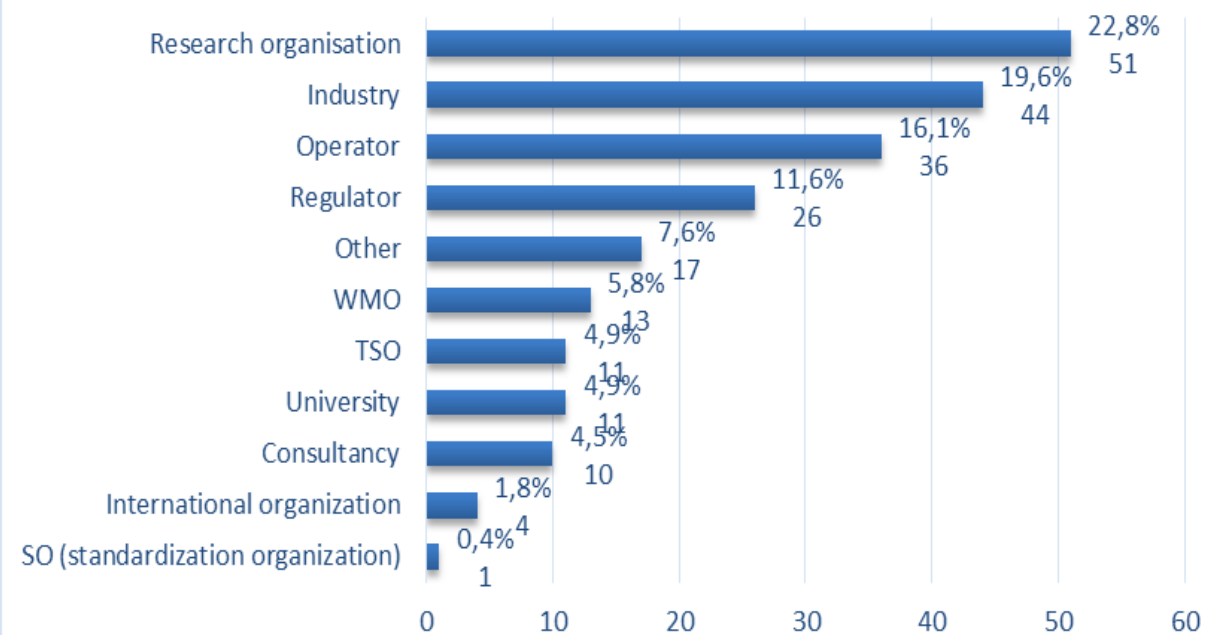
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# SURVEY RESPONDENTS

## Region

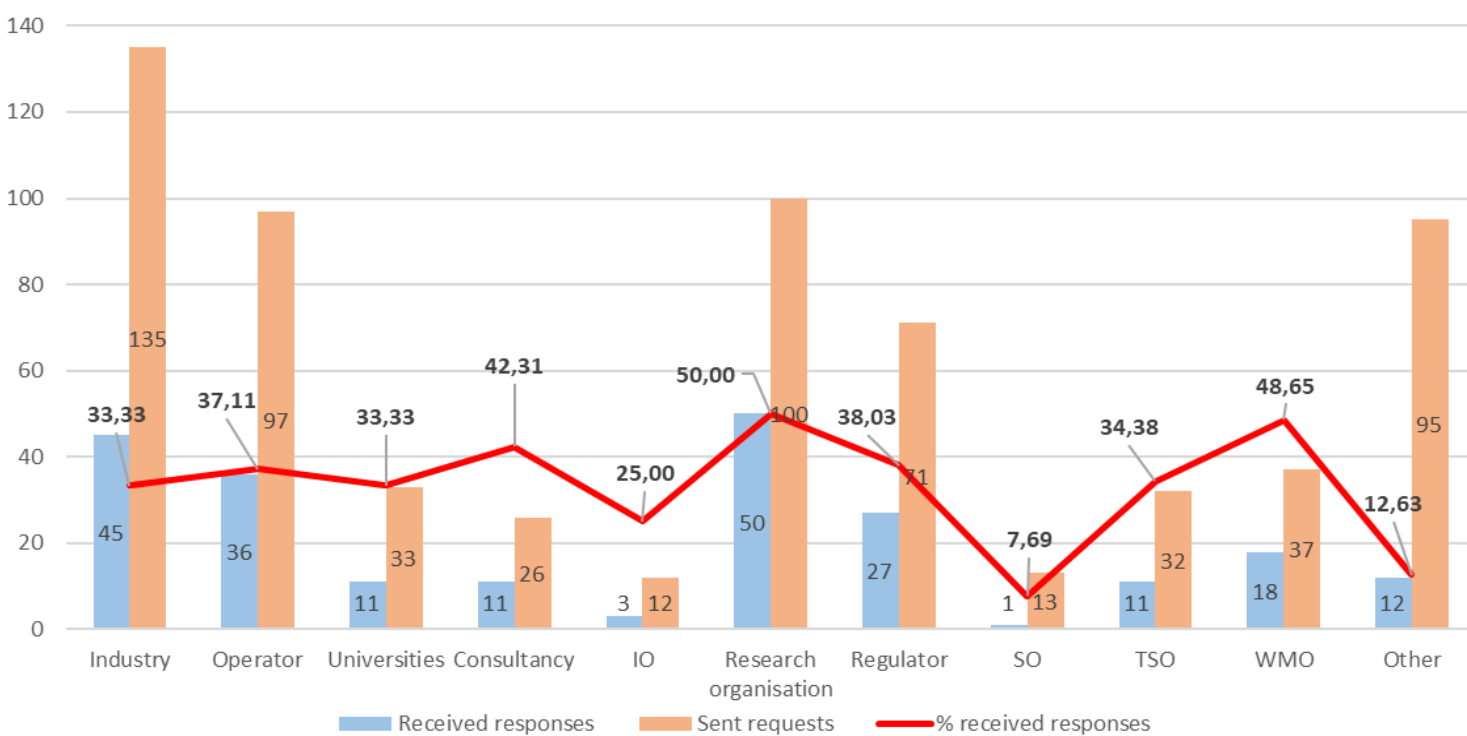


## Type of organization

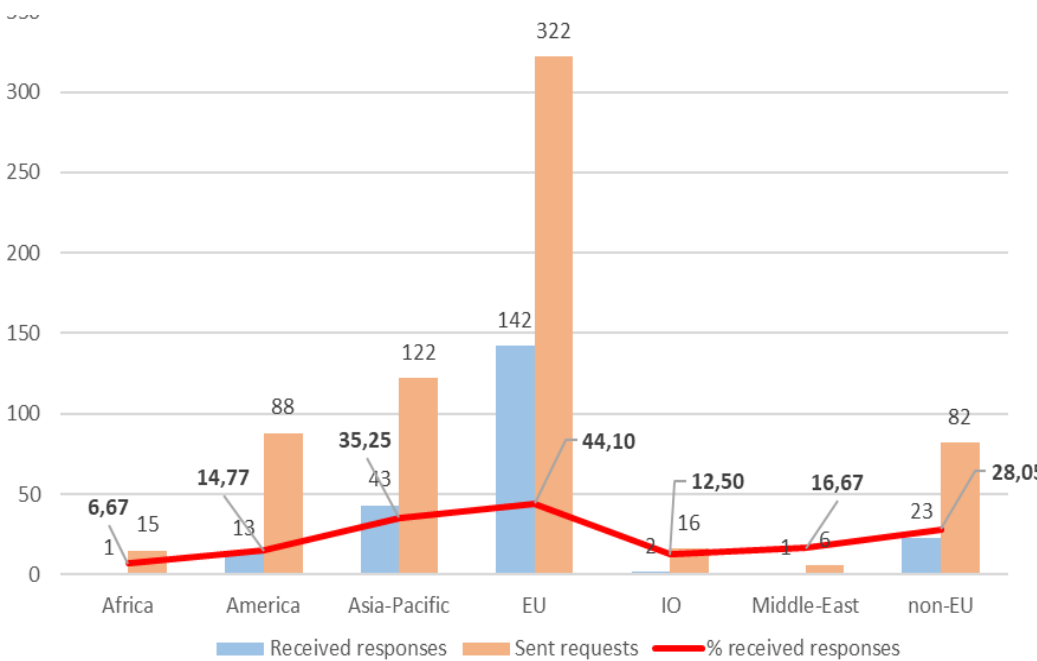


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# RESPONSES DESCRIPTION



Type of stakeholders



Regions

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# IMPORTANCE

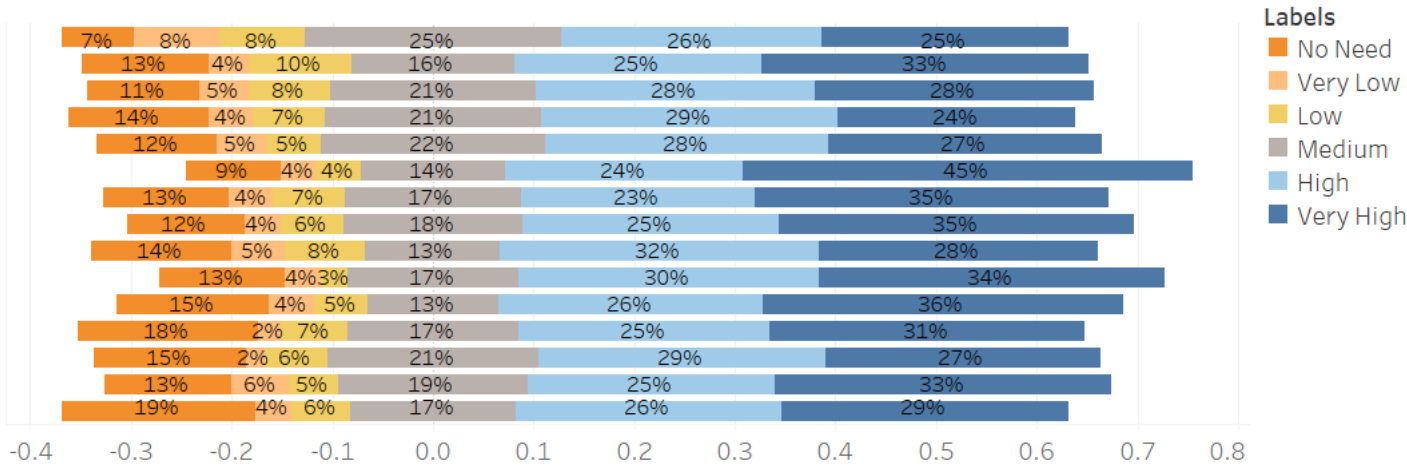
| TOP SCORED SUBTOPICS  | SCORING |
|---|---------|
| 36 - INVENTORY ASSESMENT (RADIOLOGICAL AND NON RADIOLOGICAL)  | 836     |
| 53 - IN SITU RADIOACTIVE WASTE CHARACTERIZATION   | 787     |
| 38 - CHARACTERIZATION OF ACTIVATED COMPONENTS AND AREAS (CONCRETE)  | 779     |
| 37 - CHARACTERIZATION OF ACTIVATED COMPONENTS AND AREAS (METAL)   | 762     |
| 60 - ROBOTS AND REMOTE CONTROL TOOLS FOR DISMANTLING  | 757     |
| 70 - MANAGEMENT ROUTES FOR MATERIALS INCLUDING RADIOACTIVE WASTE STREAMS                                      | 756     |
| 13 - DEVELOPMENT FOR NATIONAL REGULATORY GUIDANCE FOR DECOMMISSIONING (CLEARANCE OF STRUCTURES AND MATERIALS) | 748     |
| 14 - DEVELOPMENT FOR NATIONAL REGULATORY GUIDANCE FOR DECOMMISSIONING (FINAL SITE RELEASE)                    | 743     |
| 32 - GENERAL EDUCATION FOR DECOMMISSIONING  | 742     |
| 63 – CHARACTERIZATION METHODS AND TECHNOLOGIES TO IDENTIFY SUBSURFACE CONTAMINATION                           | 734     |
| 40 - TECHNOLOGIES FOR HARD TO ACCESS AREAS  | 732     |
| 62 – CLEARANCE OF SURFACES AND STRUCTURES (INTERIOR AND EXTERIOR)   | 723     |

# IMPORTANCE

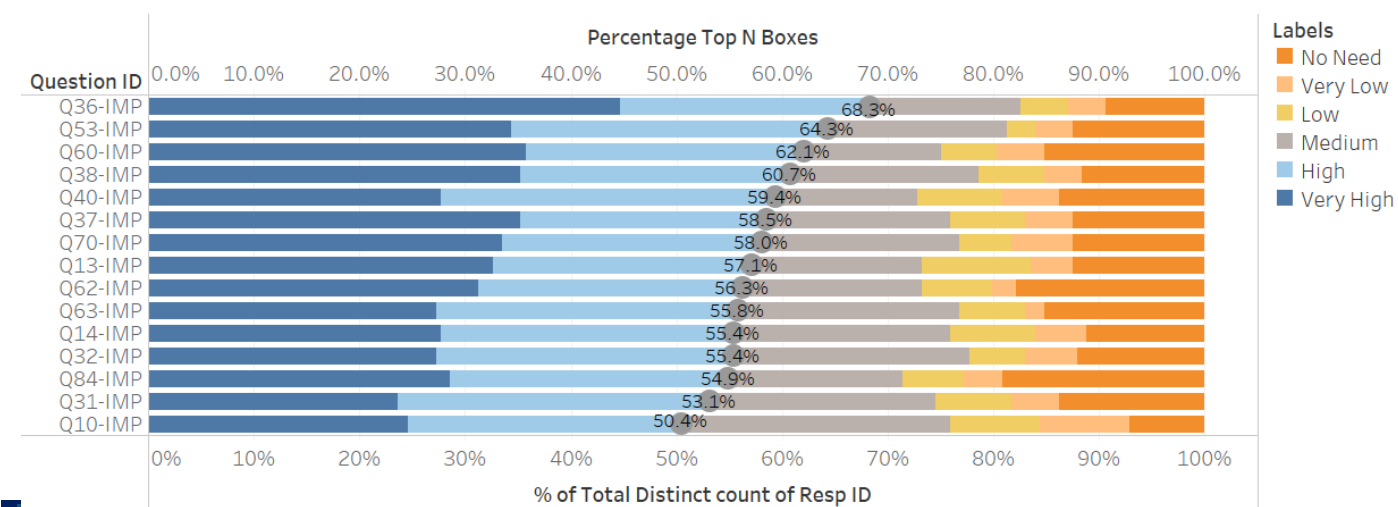
## Likert Scale Questions using Divergent Stacked Bar Chart Importance

### Question Wording

- 10. International..
- 13. Development..
- 14. Development..
- 31. Methods and..
- 32. General educ..
- 36. Inventory as..
- 37. Characterisa..
- 38. Characterisa..
- 40. Technologies..
- 53. In situ Radio..
- 60. Robots and r..
- 62. Clearance of ..
- 63. Characterisa..
- 70. Management..
- 84. Material clea..



## Likert Scale with Percent Top N Boxes Importance Most Highly Scored



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36 - INVENTORY ASSESMENT (RAD. AND NON RADIOLOGICAL)

53 - IN SITU RADIOACTIVE WASTE CHARACTERIZATION

38 - CHARACTERIZATION OF ACTIVATED COMPONENTS (CONCRETE)

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13 - DEVELOPMENT FOR NATIONAL REGULATORY GUIDANCE FOR DECOMMISSIONING (CLEARANCE OF STRUCTURES AND MATERIALS)

14 - DEVELOPMENT FOR NATIONAL REGULATORY GUIDANCE FOR DECOMMISSIONING (FINAL SITE RELEASE)

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63 - CHARACTERIZATION METHODS AND TECHNOLOGIES TO IDENTIFY SUBSURFACE CONTAMINATION

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62 - CLEARANCE OF SURFACES AND STRUCTURES (INTERIOR AND EXTERIOR)

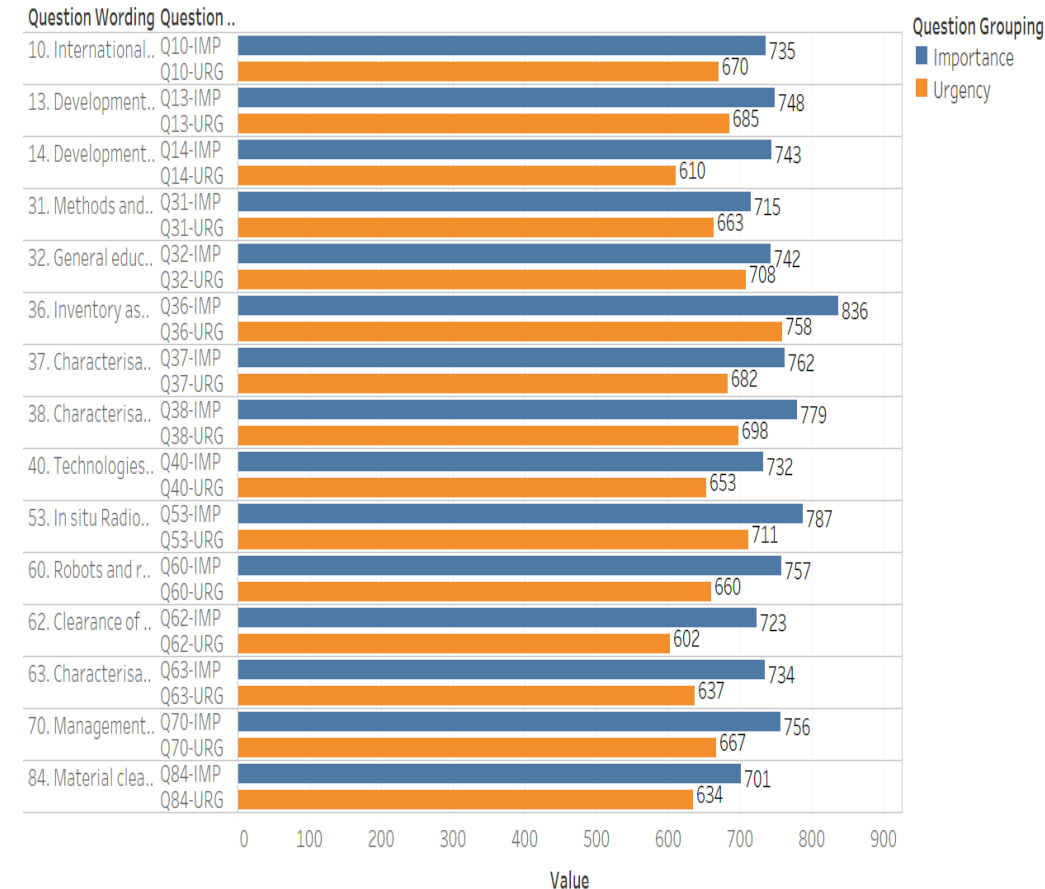


| TOP SCORED SUBTOPICS  | SCORING |
|---|---------|
| 36 - INVENTORY ASSESMENT (RADIOLOGICAL AND NON RADIOLOGICAL)  | 758     |
| 53 - IN SITU RADIOACTIVE WASTE CHARACTERIZATION   | 711     |
| 32 - GENERAL EDUCATION FOR DECOMMISSIONING  | 708     |
| 38 - CHARACTERIZATION OF ACTIVATED COMPONENTS AND AREAS (CONCRETE)  | 698     |
| 13 - DEVELOPMENT FOR NATIONAL REGULATORY GUIDANCE FOR DECOMMISSIONING (CLEARANCE OF STRUCTURES AND MATERIALS) | 685     |
| 37 - CHARACTERIZATION OF ACTIVATED COMPONENTS AND AREAS (METAL)   | 682     |
| 10 - INTERNATIONAL HARMONIZATION OF SAFETY STANDARDS AND SAFETY APPROACHES FOR DECOMMISSIONING                | 670     |
| 70 - MANAGEMENT ROUTES FOR MATERIALS INCLUDING RADIOACTIVE WASTE STREAMS                                      | 667     |
| 31 –METHODS AND SOFTWARE TOOLS FOR KNOWLEDGE MANAGEMENT (E.G. COMPETENCE PRESERVATION)                        | 663     |
| 60 - ROBOTS AND REMOTE CONTROL TOOLS FOR DISMANTLING  | 660     |
| 40 - TECHNOLOGIES FOR HARD TO ACCESS AREAS  | 653     |
| 84 - MATERIAL CLEARANCE (METHODOLOGY AND PROCEDURES)  | 634     |

# IMPORTANCE + URGENCY

## TOP SCORED SUBTOPICS

- 36 - INVENTORY ASSESMENT (RADIOLOGICAL AND NON RADIOLOGICAL)
- 53 - IN SITU RADIOACTIVE WASTE CHARACTERIZATION
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- 32 - GENERAL EDUCATION FOR DECOMMISSIONING
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- 70 - MANAGEMENT ROUTES FOR MATERIALS INCLUDING RADIOACTIVE WASTE STREAMS
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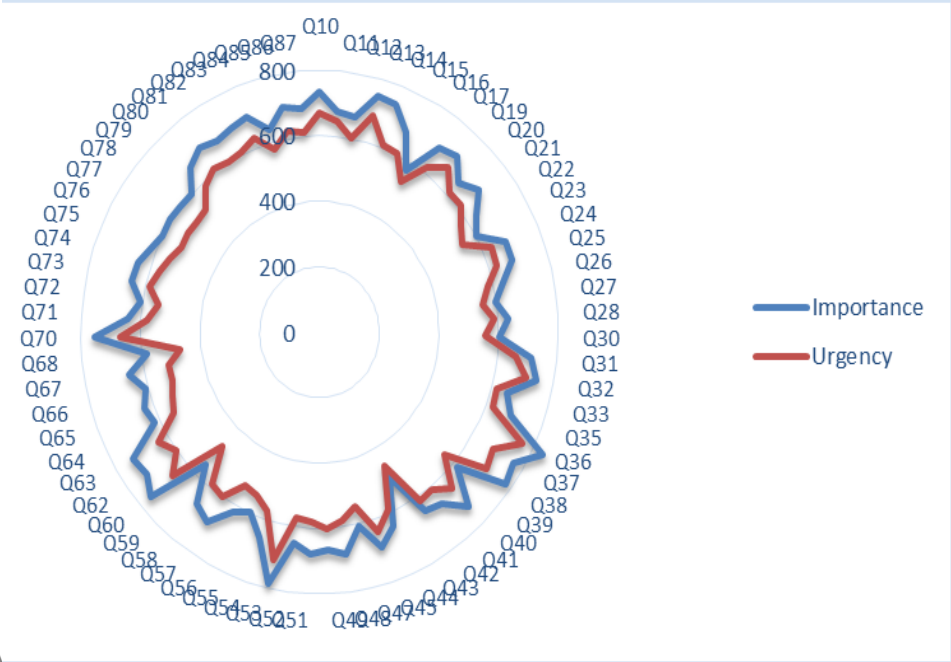
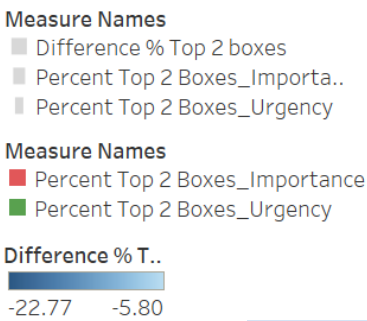
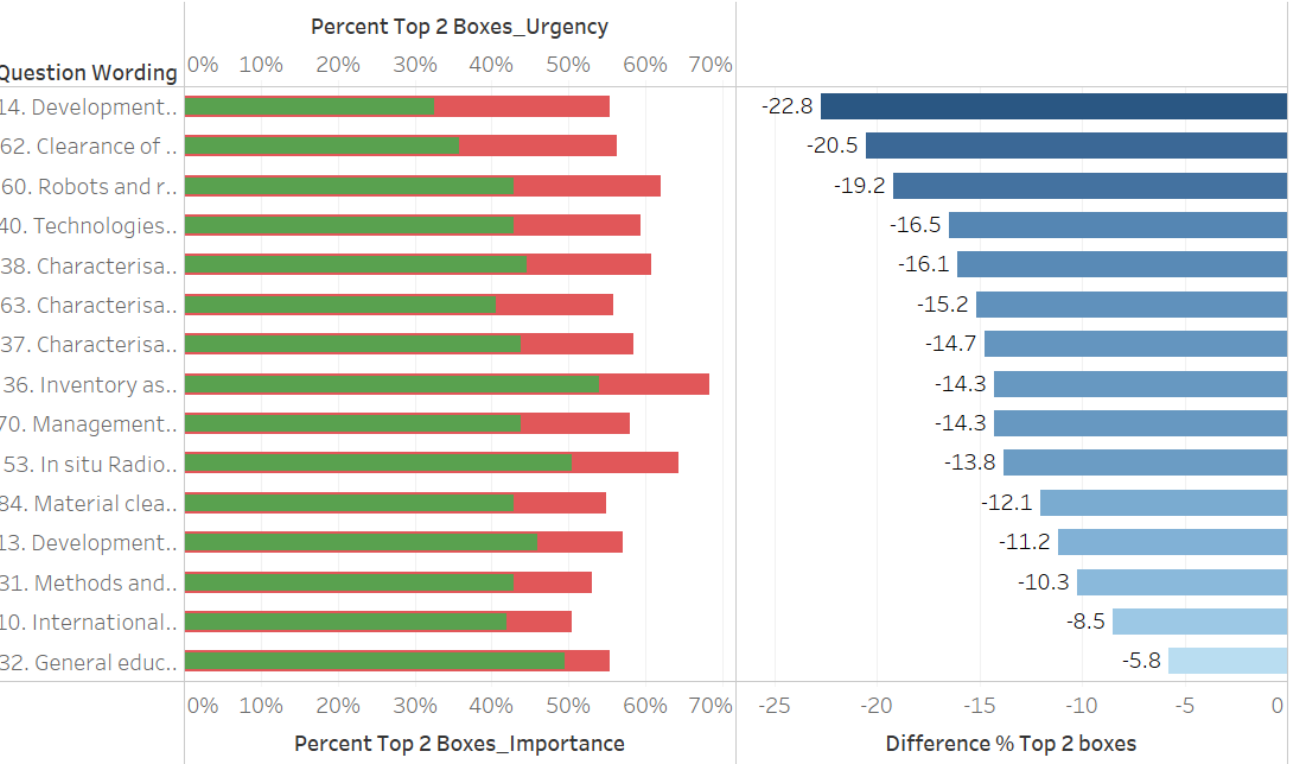


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**Total scoring most highly scored**

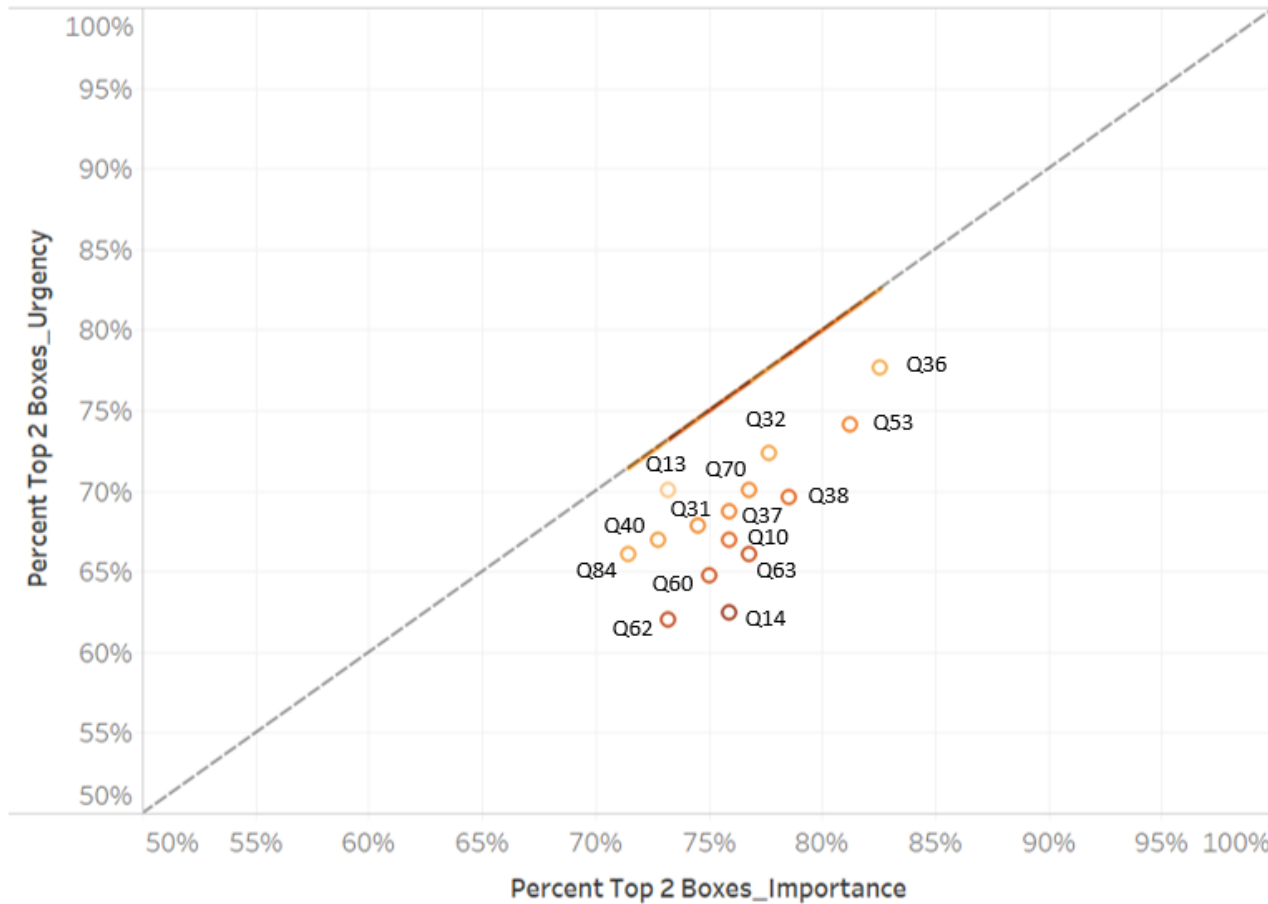
# IMPORTANCE & URGENCY

Bar chart with difference (% top 2 boxes) Most Highly Scored



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# IMPORTANCE + URGENCY



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- SHARE survey **preliminary results**.
- Additional data assessment on going.
  - Effects of the number of responses from specific regions /countries.
    - Distortion of the overall results?
  - Analysis of answers received to open questions.
    - Potential needs not considered?
  - Influence of demographic parameters.
    - Different results depending on:
      - Region
      - Type of stakeholder,
      - Status of decommissioning projects
- Comparison of research needs on decommissioning (WP2) and available solutions (WP3) - gap analysis.

