Rathenau Instituut

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Societal impact of research infrastructures in context
Practical session

Leonie van Drooge & Isabelle van Elzakker – practical session – 17 December 2020
Workshop on Impact Assessment, Evaluation and Monitoring of Research Infrastructures

Welcome to the practical session

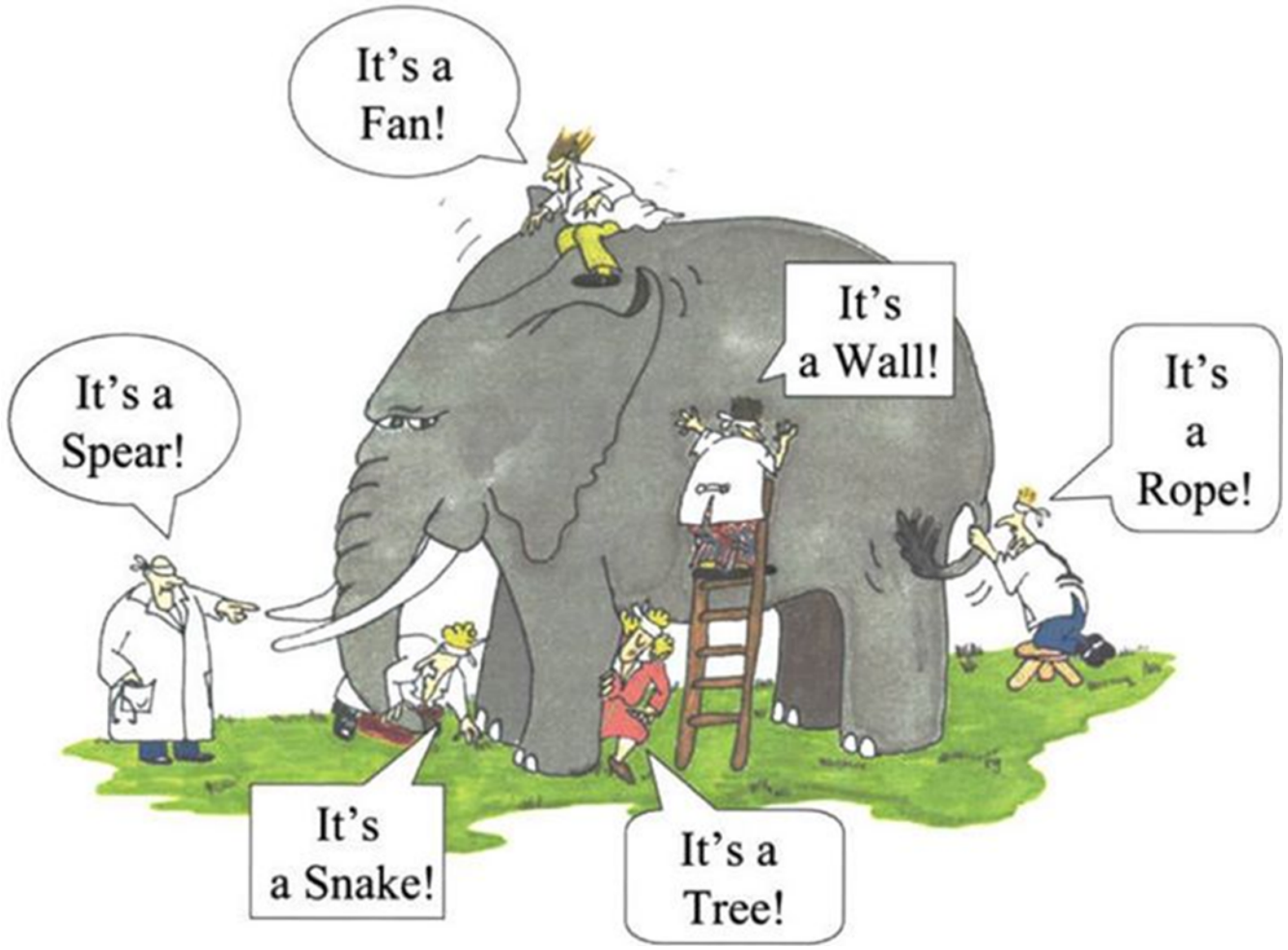
- Introduction
- Goal
- Programme
  - 9.00: Introduction
  - 9.15: Part 1 - The RI, its stakeholders and the expected societal impacts
  - 10:00: Break
  - 10:10: Part 2 - Pathways to societal impact
  - 11:15: Break
  - 11:25: Part 3 - Monitoring and evaluating societal impacts
  - 12:15: Wrap up
  - 12:30: End
- Format

What this session is about, and what not

- Practical session

- It is about governance of societal impact, and thus about evaluation in the end

Part 1: The RI, its stakeholders and the expected societal impacts



Part 1: Stakeholders' expectations

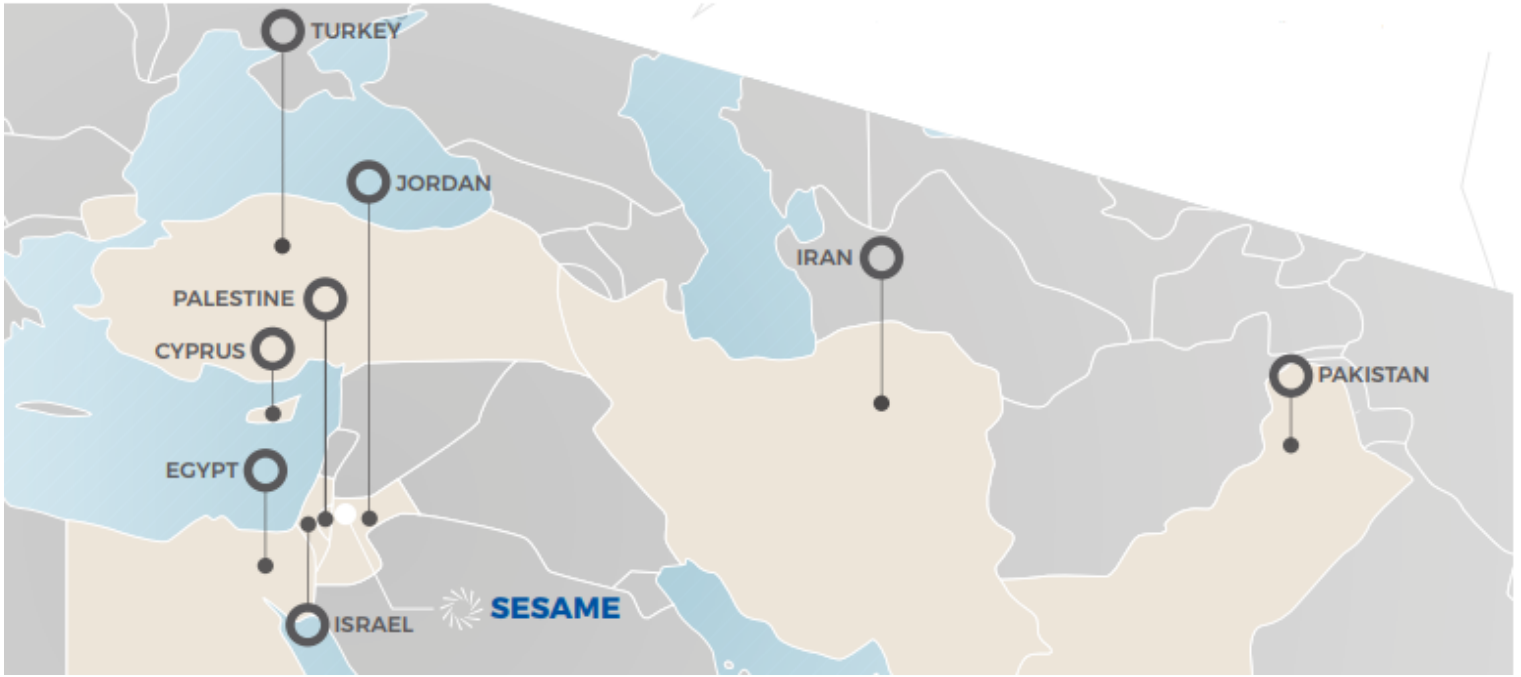
Part 1: The RI, its stakeholders and the expected societal impacts

- What societal impacts are expected of an RI?
  - Those that are formally described in legal documents
  - Those that are implictly expected by funders, stakeholders etc.
  - Those that RI management aim for
  - Those that happen anyway

- What stakeholders matter?
  - Funders, members
  - Those that are affected by the RI, regardless of the work

Part 1: The RI, its stakeholders and the expected societal impacts

"SESAME shall provide for **collaboration in the Middle East and the Mediterranean Region** with free access to all scientists of SESAME members in relevant areas of research, being also open to scientists from the whole world, in basic and applied research using synchrotron radiation or closely related topics."



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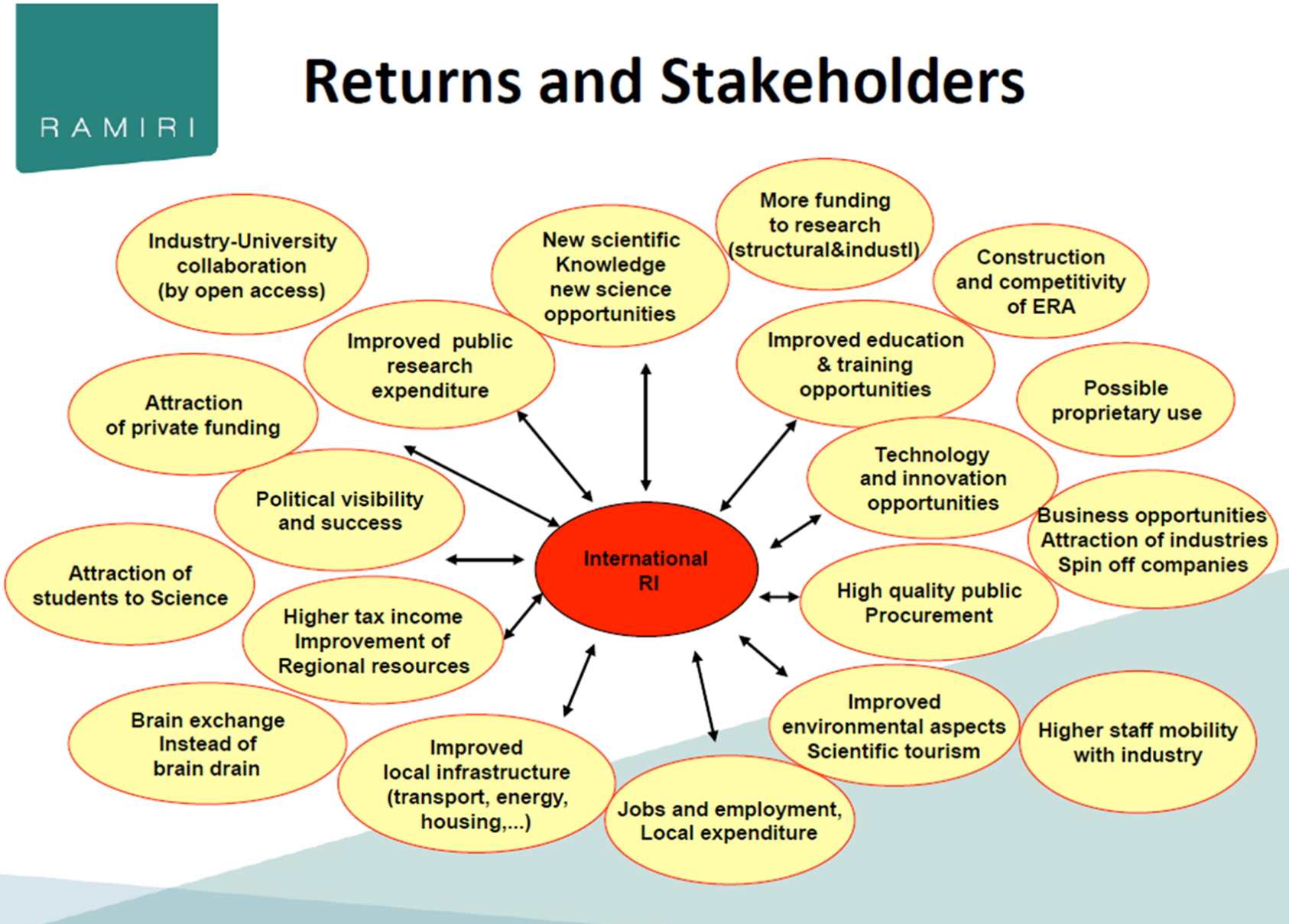
Part 1: The RI, its stakeholders and the expected societal impacts

FRM II
Forschungs-Neutronenquelle
Heinz Maier-Leibnitz

Part 1: The RI, its stakeholders and the expected societal impacts

RAMIRI



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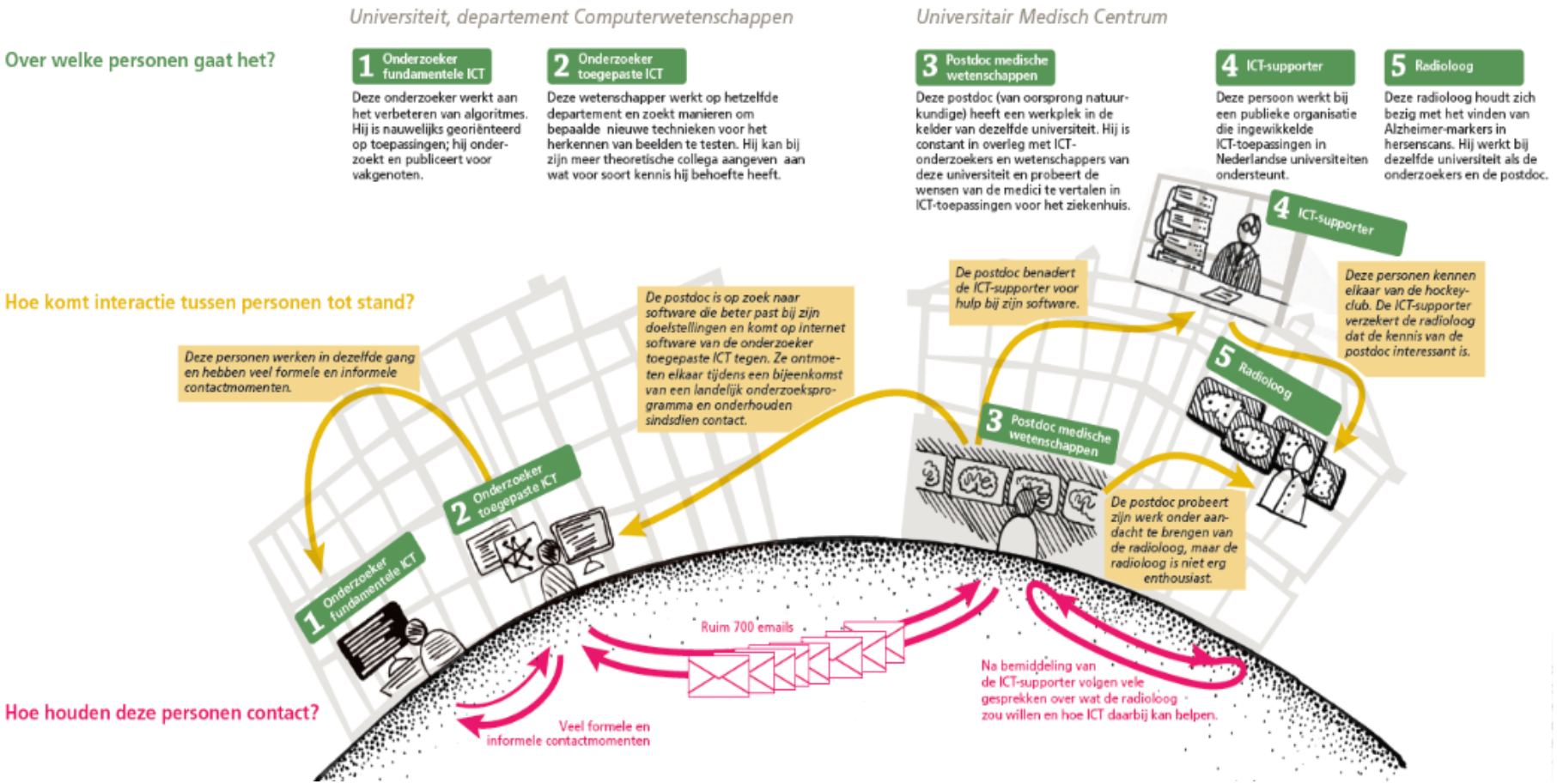
Part 1: The RI, its stakeholders and the expected societal impacts

- Question:
  - For RIs: What is the context in which you operate and what is expected?
  - For others: What do you expect of RIs? What other stakeholders are involved?

- Sub-questions:
  - What stakeholders (funders, members, otherwise) are key?
  - What do these stakeholders expect?
  - What is laid down in formal documents?
  - What does the RI aim for, otherwise?

Break

Part 2: Pathways to societal impact



Part 2: Pathways to societal impact

- From perceptions and expectations…
  - Perception an RI is or does something (that will lead to an impact)
  - Expecation an RI contributes to something (that will lead to an impact)

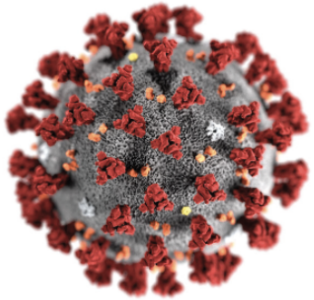
- …..towards impact……
  - What impact?

- …pathways.
  - That relate the RI to the impact

Part 2: Pathways to societal impact

- Impact pathways describe the bigger story/narrative of the process towards impact
- It includes requirements that are thought necessary for an impact to occur
- It also includes assumptions regarding cause and effect
- The contribution of the RI is key element
- The contribution of the RI includes the input the RI makes available, its activities, the results of these activities and the further use of the results towards the impact

Part 2: Pathways to societal impact



Research Infrastructures and COVID-19 Research

Part 2: Pathways to societal impact

- Example: **coordination**

- Professionalization of a (scientific) community
- Increased capacity in a certain (geographical) region

- What does the RI contribute?
  - Shared practices and procedures
  - Facilitating capacity development and knowledge exchange
    - For example by organizing training events
  - Dedicated staff and resources

Part 2: Pathways to societal impact

Question (subgroups): Develop an impact pathway narrative

Sub questions:

- What impact (relating to what perception or expectation)
- What does the RI contribute?
  - what does the RI make available (money, people, facilities)?
  - what does the RI do?
  - what is the result?
  - what happens with the result?

- What is necessary for the impact to occur? Other than the contribution of the RI?
- What do you assume?

Part 2: Pathways to societal impact

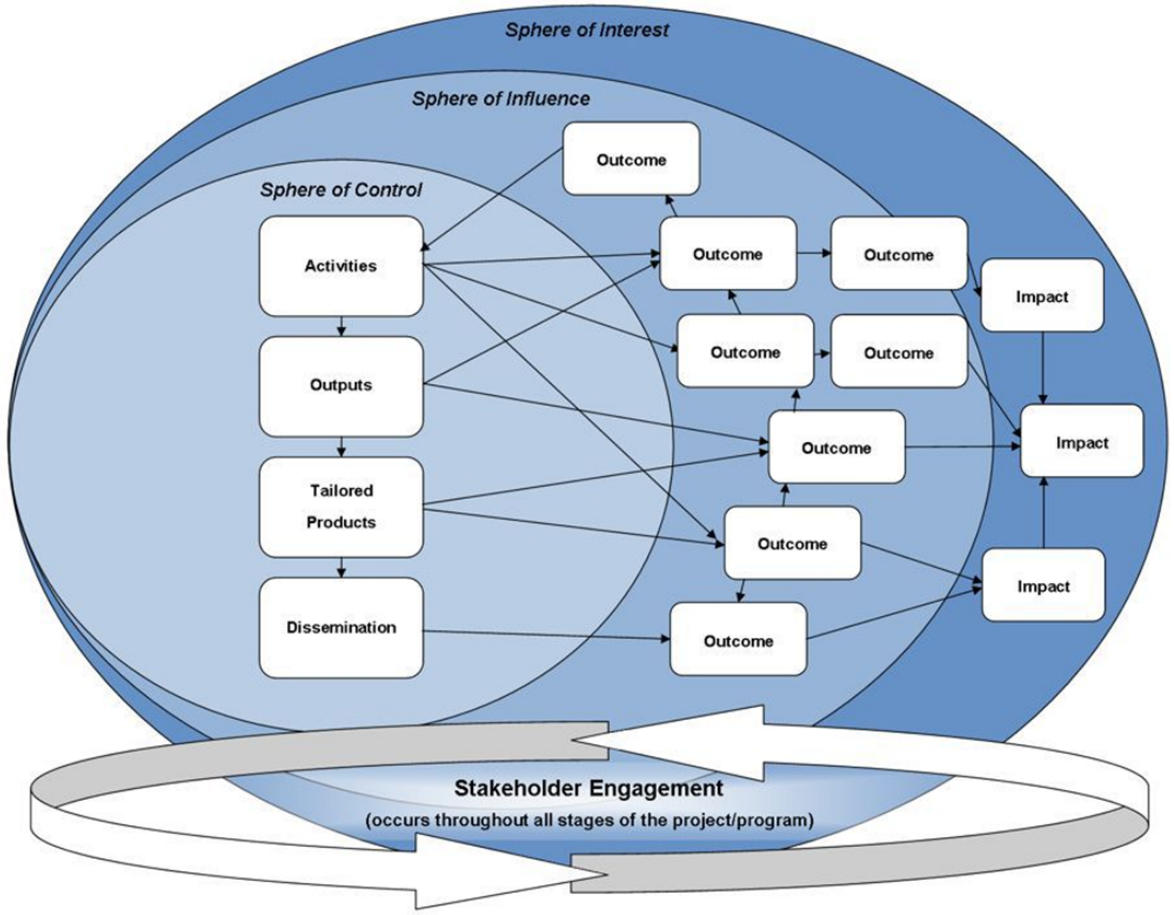
Question (subgroups): Develop an impact pathway narrative

Sub questions:

- What is necessary for the impact to occur? Other than the contribution of the RI?
- What do you assume?

Break

Part 3: Monitoring and evaluating societal impacts



Part 3: Monitoring and evaluating societal impacts

- Hosting of (high-level) scientific events
- Visits to (high-level) scientific events
- Number of scientific users
- Satisfaction of scientific users
- Public awareness: engagement of RI in social media/press/online media
- Contribution to public sector challenges: Administration & governance
- Public awareness about taxes going to RI
- Contribution to social sustainability: CSR, Social Inclusion, Culture
- Contribution to Gender balance
- Use of open data (access and download)
- Contribution to environmental sustainability: Energy & Waste issues
- Number of school classes/university courses visiting
- Improvement of wellbeing: Health & Ageing
- Inclusion of topics in schools and academic curricula
- Number of promotional events, exhibitions, fairs
- People reached and engaged in outreach activities
- Public awareness: visitors on website and followers on social media
- Number of visitors at RI, by type

- Scientific attractiveness
- Improvement of HRST (C) in region/country (Scientific)
- Improvement of HRST (C) in region/country (Technical/Managerial)
- Improved job opportunities in the region/nation
- Increased Prestige as Training Facility
- Added value of RI-owned patents and other IP
- Corporate efficiency gains through use/application of RI data
- Technological impact: Number of new technologies and designs
- Market creation impact: triggered sales volume
- Market expansion impact: increased sales volume
- Market expansion impact: increased revenues
- Increased economic activity in the region/nation
- Contribution to public sector challenges: Administration & governance
- Contribution to social sustainability: CSR, Social Inclusion, Culture
- Contribution to Gender balance
- Contribution to environmental sustainability: Energy & Waste issues
- Improvement of wellbeing: Health & Ageing
- Inclusion of topics in schools and academic curricula
- Notable changes in relevant regulations
- Notable changes in funding decisions
- Increased trust in science
- Notable changes in policy decisions

Part 3: Monitoring and evaluating societal impacts

- Indicators (evidence)…
  - Traditional quantitative indicators
  - Descriptions
  - Examples (case study) of something

- …. of pathways…..
  - Process
  - Proxy

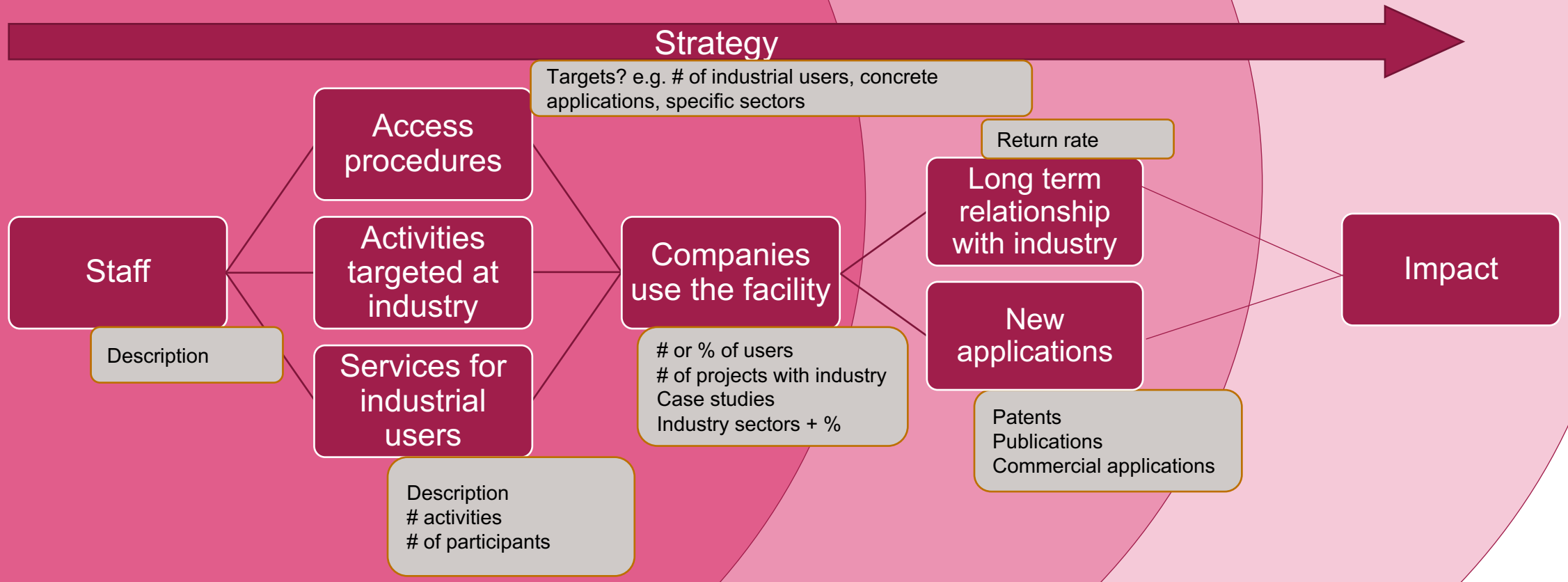
- … to societal impact.
  - and what is the sphere of control / influence / interest of the RI?

Enabling industrial use

Sphere of control

Sphere of influence

Sphere of interest



Part 3: Monitoring and evaluating societal impacts

Question (subgroups): Substantiate the impact pathway narrative with indicators (evidence)

- Choose indicators along a specific pathway
  - the input the RI makes available,
  - its activities,
  - the results of these activities
  - the further use of the results towards the impact

  - Within the sphere of control
  - (For the sphere of influence)

Wrap up: using the approach

Thank you!

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