What is impact and why should you assess it?

Anika Duut van Goor

Getting to know each other…

- Why are you here and what do you wish to take away?
- Where do you sit in the ecosystem of research activity?

OVERVIEW OF AESIS

The AESIS network was founded in 2015 with the aim of creating an international, open community for various types of professionals working on stimulating and demonstrating the impact of science on economy, culture and well-being.

Demonstrating and Stimulating Impact of Science on Society

Sharing expertise and best-practices internationally

Finding common ground between stakeholders

AESIS Network

The international network for Advancing and Evaluating Societal Impact of Science

Founded in 2015 at the 3rd Impact of Science conference, Amsterdam

- Goals:
  - Knowledge exchange
  - Capacity Building
  - Development of parameters
- Open community of experts and stakeholders
  - cross-disciplinary (expertise from government, business and academia)
  - cross-cultural (geographically)

Tools

- Facilitating knowledge exchange, capacity building and harmonisation through:

Meetings	Sharing news	Advice
Conferences Seminars Courses	Webinars Newsletter Online Platform	Inhouse training Data-analysis Consultancy

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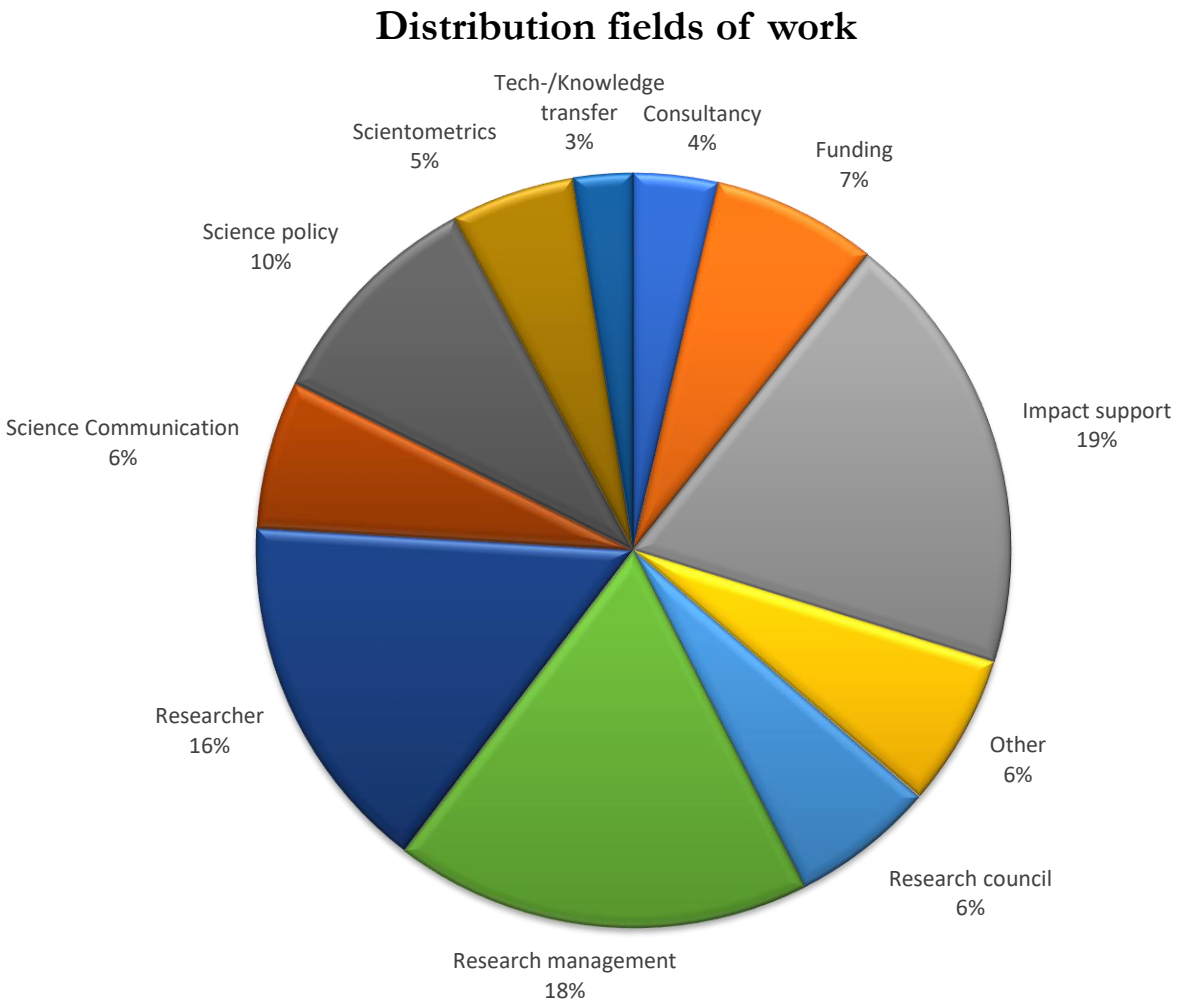

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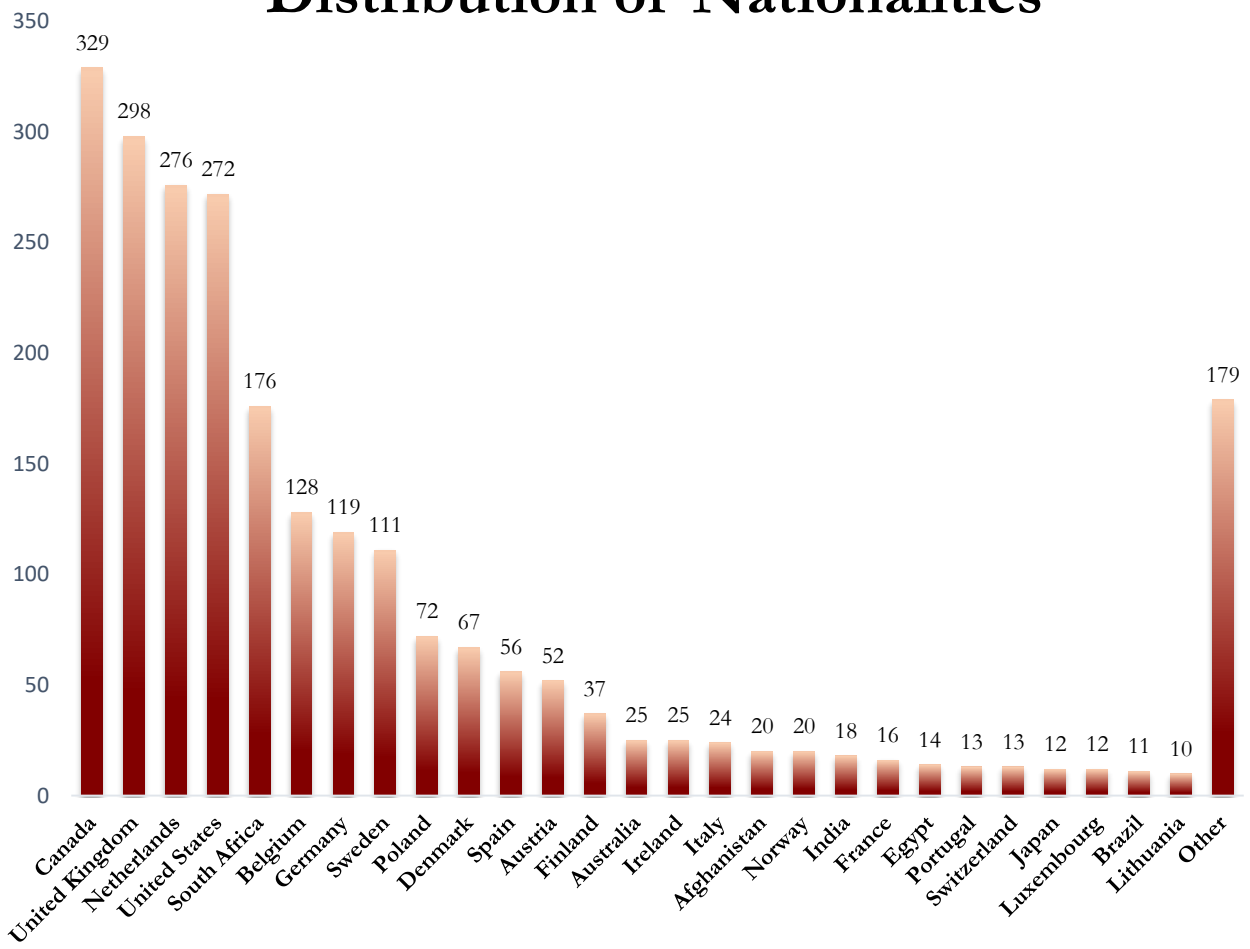


Societal Impact – The current/upcoming debates

- Incentivising for Impact & Fundamental (curiosity-driven) research vs societal impact
- Understanding societal (and political!) needs from science in different parts of the world
- Connecting Stakeholders in one impact strategy
- Where to harmonise (all inclusive), where to diversify per discipline
- Qualitative and Quantitative indicators & Output, outcome, impact discussion
- Ex-ante, post ante, co-creation
- Also: Credibility of Science, evidence-informed policy, public engagement, big data and AI, SDG's…


Impact of Science
5-7 June 2019, Berlin
Plenary opening: Policies for impact
Dietmar Harhoff
Director, Max Planck Institute
for Innovation and Competition , Germany
AESIS


WELCOME TO AESIS


Allianz
Allianz Deutschland AG
Repräsentanz
STIFTERVERBAND
2. Obergeschoss
Participants registration
L - Z

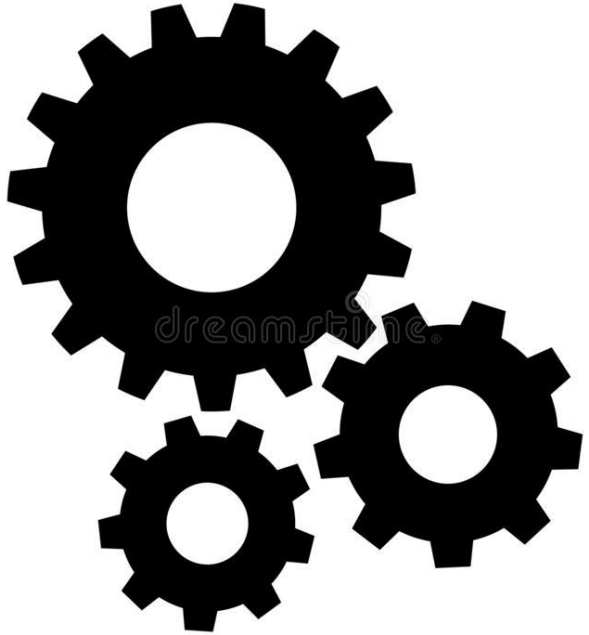

Zbigniew Marcisak
David Sweeney
Beverley Damonse
Toby Smith
Anika Duut van Goor

How did we get here?

Science ↔ Society

In the 20th century

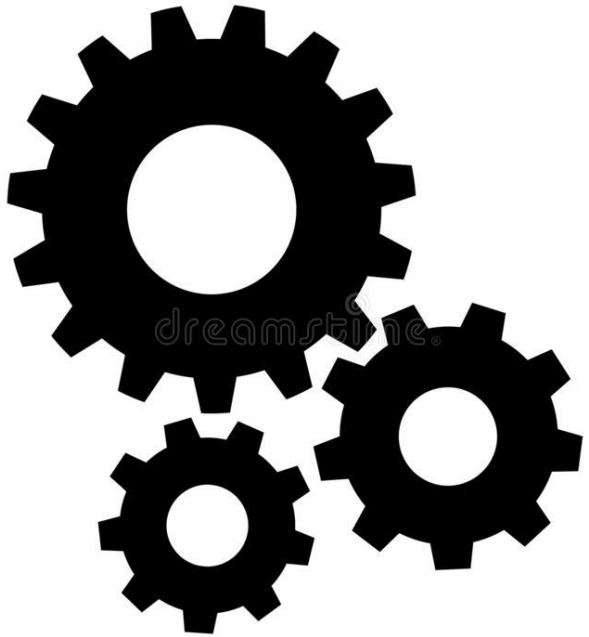
- Industries involving academics when necessary
- Contract research & technology transfer (TTO's)
- Entrepreneurship, Scienceparks



Science ↔ Society

Which meant

- Transfer of new technologies to the market: Contract research, Patents & Licenses, Start-ups
- Market demand is often clear
- Input from research is often tangible
- Outcomes often quantifiable
- TTO's well organised



Science ↔ Society

The shift…

- dissatisfaction with publication models
- demand for openness of science & innovation
- policy interest in mission- and challenge-driven research
- importance of research for broader impact

Science ↔ Society

In the 21th century

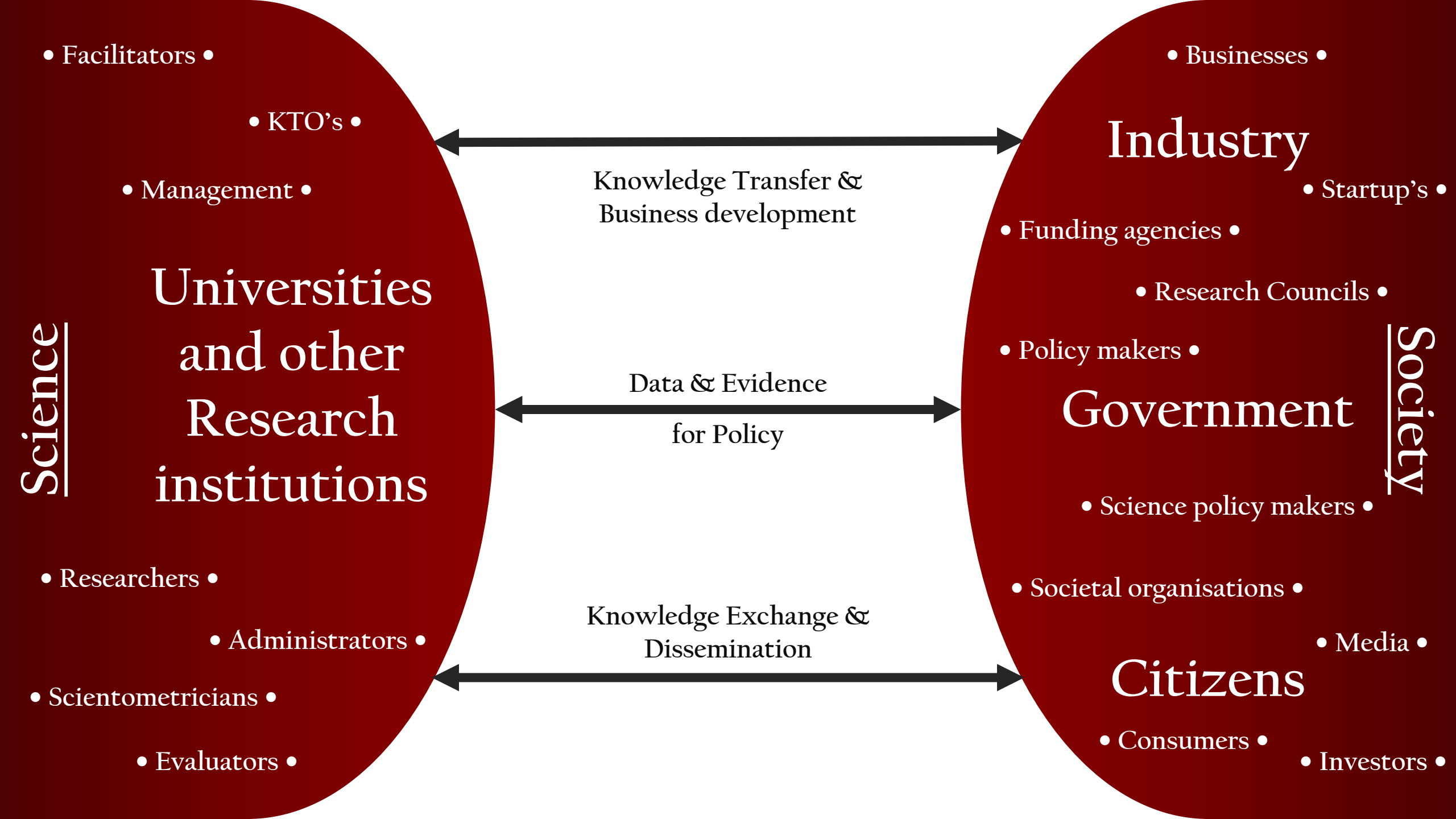
- Accountability for funding all science
- From Economic to Societal Impact
- Integration, not add on. Transformation.

Labels: TT, KT, KE, KEC, 3rd Thing (arm, leg, mission)

Science ↔ Society

Shift to societal impact focus meant

- Society at large, even directly
- It's about people & quality of life
- By all scientific disciplines
- Multiple stakeholders
- …

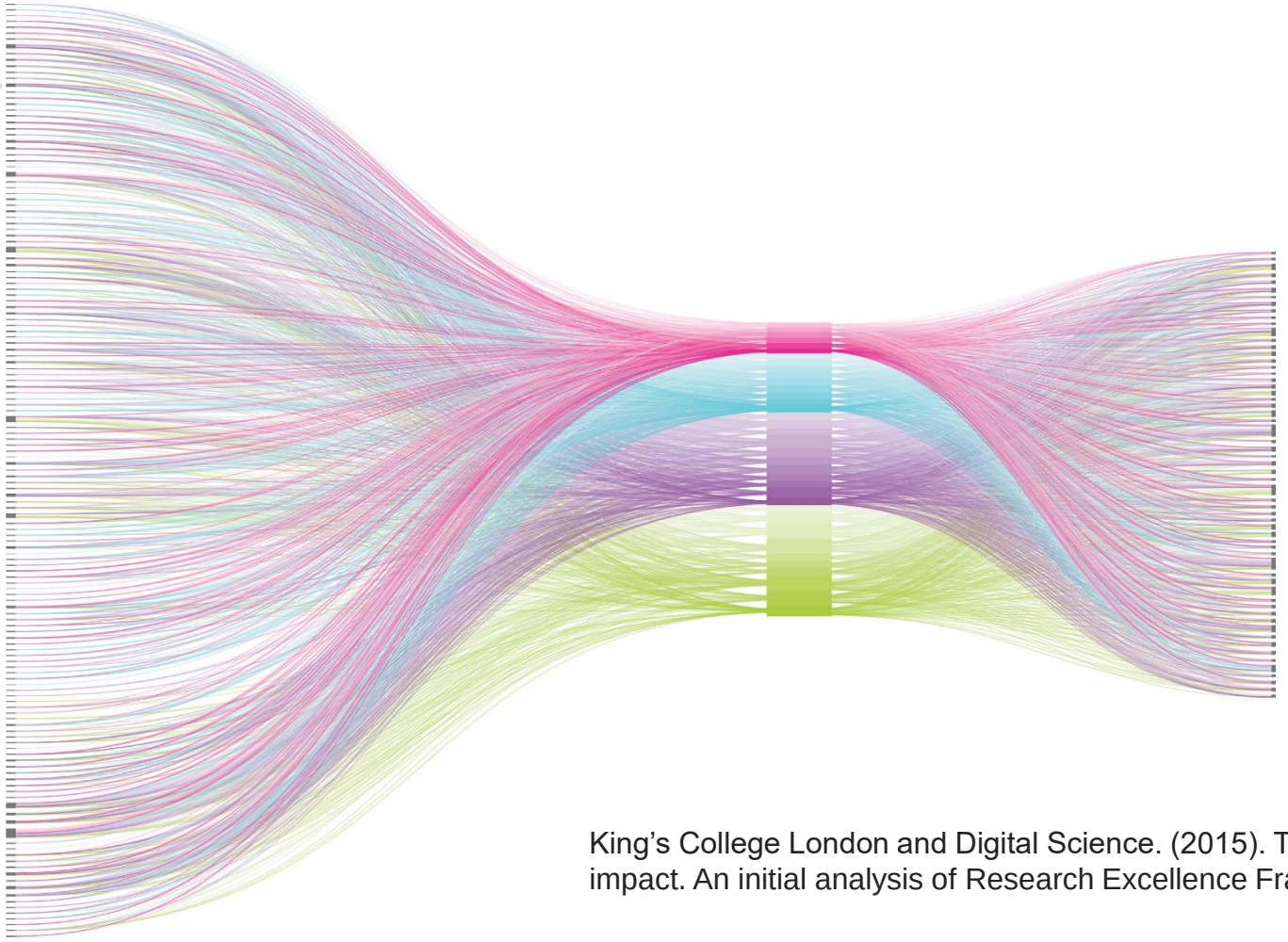

• Facilitators •
• KTO's •
• Management •
Universities and other Research institutions
Science
• Researchers •
• Administrators •
• Scientometricians •
• Evaluators •
Knowledge Transfer & Business development
Data & Evidence for Policy
Knowledge Exchange & Dissemination
• Businesses •
Industry
• Startup's •
• Funding agencies •
• Research Councils •
• Policy makers •
Government
Society
• Science policy makers •
• Societal organisations •
• Media •
Citizens
• Consumers •
• Investors •

Science ↔ Society

Shift to societal impact focus meant

- Society at large, even directly
- It's about people & quality of life
- By all scientific disciplines
- Multiple stakeholders
- Vast number of impact-pathways

Why assessing is difficult



149 research fields

36 Units of Assessment

60 impacted areas

……

3709 pathways

King's College London and Digital Science. (2015). The nature, scale and beneficiaries of research impact. An initial analysis of Research Excellence Framework (REF) 2014 impact case studies. *HEFCE*.

Science ↔ Society

Shift to societal impact focus meant

- Society at large, even directly
- It's about people & quality of life
- By all scientific disciplines
- Multiple stakeholders
- Vast number of impact-pathways
- Mismatch between impact-ambitions and evaluation systems

Science ↔ Society

So more emphasis on…

- reviewing merit & promotion criteria
- developments of digital tools and metrics monitor uptake of research beyond academia
- supporting (infra)structures for scientific impact
- Training and skills for researchers

Defining Societal Impact

https://www.ucd.ie/impacttoolkit/whatisimpact/

AESIS

Defining Societal Impact

An effect on, change or benefit to the economy, society, culture, public policy or services, ~~health,~~ the environment or quality of life, beyond academia

REF

Research impact is the contribution that research makes to the economy, society, ~~environment or~~ culture, beyond the contribution to academic research

Defining Societal Impact

What about your organisation?

Considerations for defining impact

Reach/Scope → Beyond academia

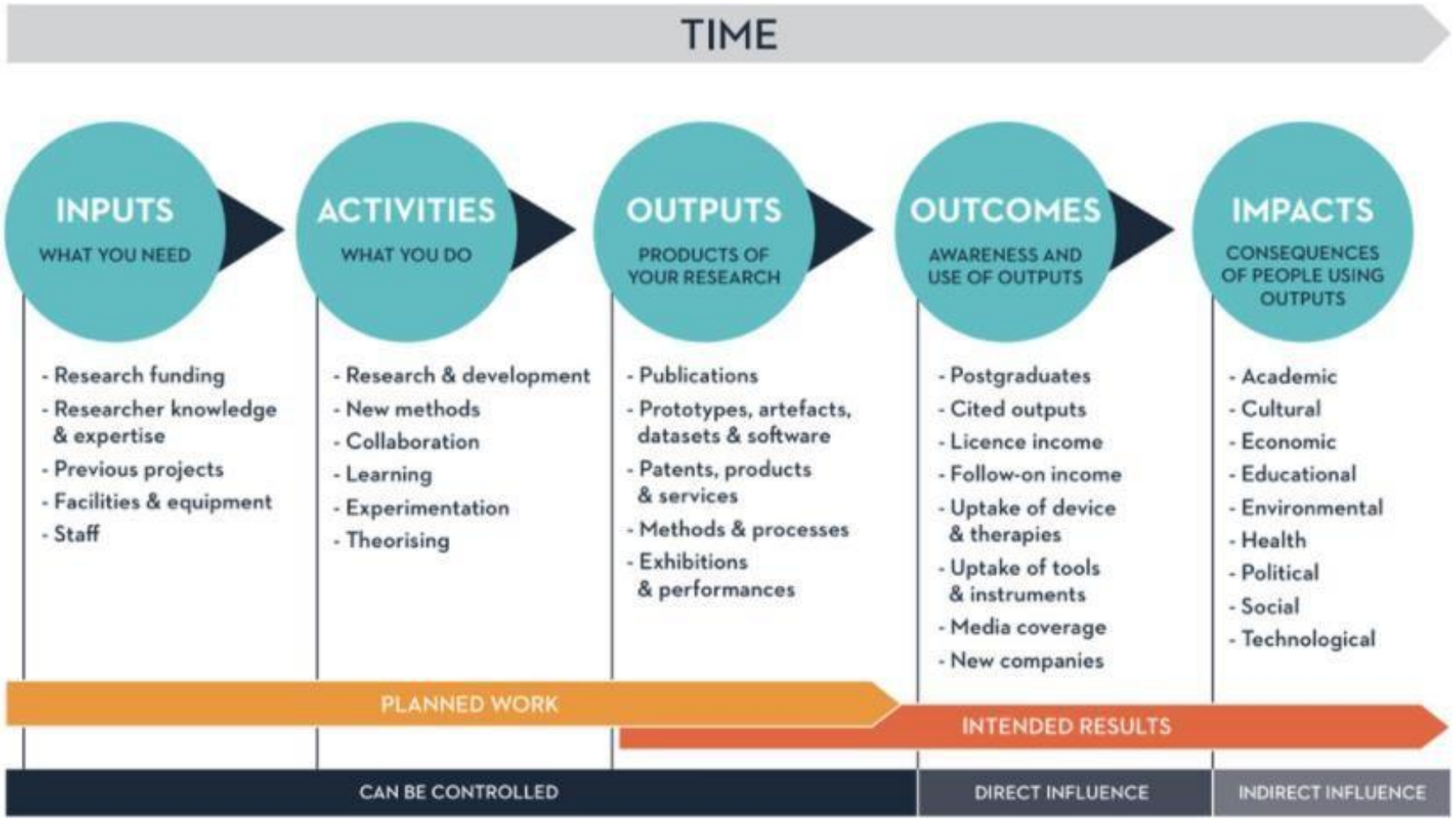
→ Regional, National, International

Demonstrable → Indirect impact (intentional or not)

Type → Positive/negative/no change

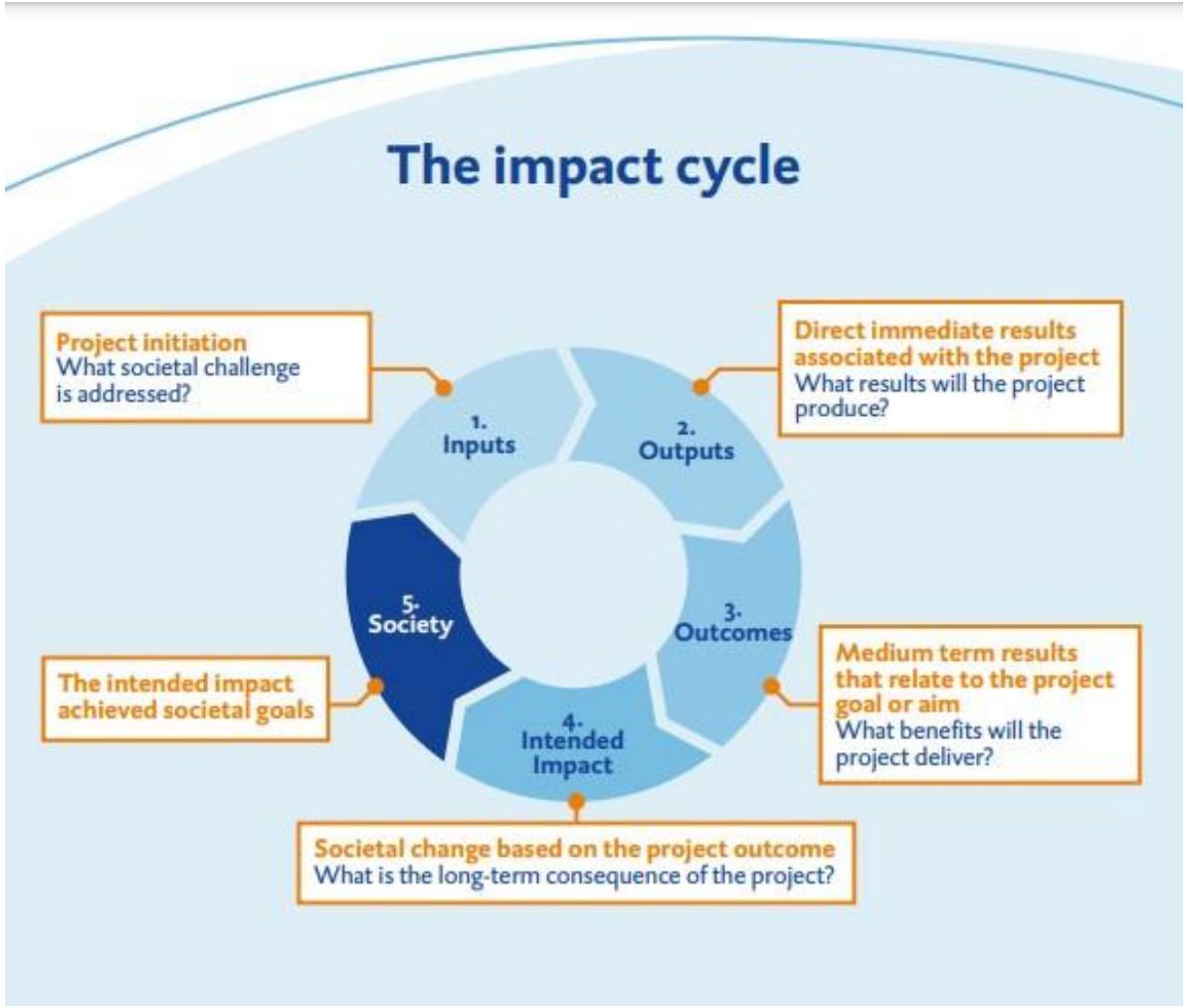
Phase → Output – Outcome – Impact

Impact process



University College Dublin - https://www.ucd.ie/impacttoolkit/whatisimpact/

Impact process



University of Groningen Medical Center
https://www.umcg.nl/SiteCollectionDocuments/English/Research/Impact/impact-cycle.pdf/

Integral part: mapping, demonstrating and assessing impact

➢ Analysis	To understand why, how and whether research is effective, and how it can be better supported.
➢ Advocacy	'makes the case' for research funding among policymakers and the public
➢ Accountability	Evidence efficient use of resources to taxpayer, donors, partners, etc…
➢ Allocation	How to distribute funding (institution, field, people …)
➢ Acclaim	Compare and recognise value of HE institutions
➢ Adaptation	Steer change in structures, cultures, activities and priorities

Source: Parks, Sarah, Daniela Rodriguez-Rincon, Sarah Parkinson, and Catriona Manville, The changing research landscape and reflections on national research assessment in the future. Santa Monica, CA: RAND Corporation, 2019. https://www.rand.org/pubs/research_reports/RR3200.html.

Possible impacts

- Stronger economy
- New companies
- Exports
- Jobs
- Stronger society
- Better Health
- Better Education
- Inequalities
- Poverty
- Unemployment
- Social care burden
- Crime/violence/terrorism
- Pollution
- Climate change

Demonstrating impact

Quantifiable indicators (REF/SEP/etc)

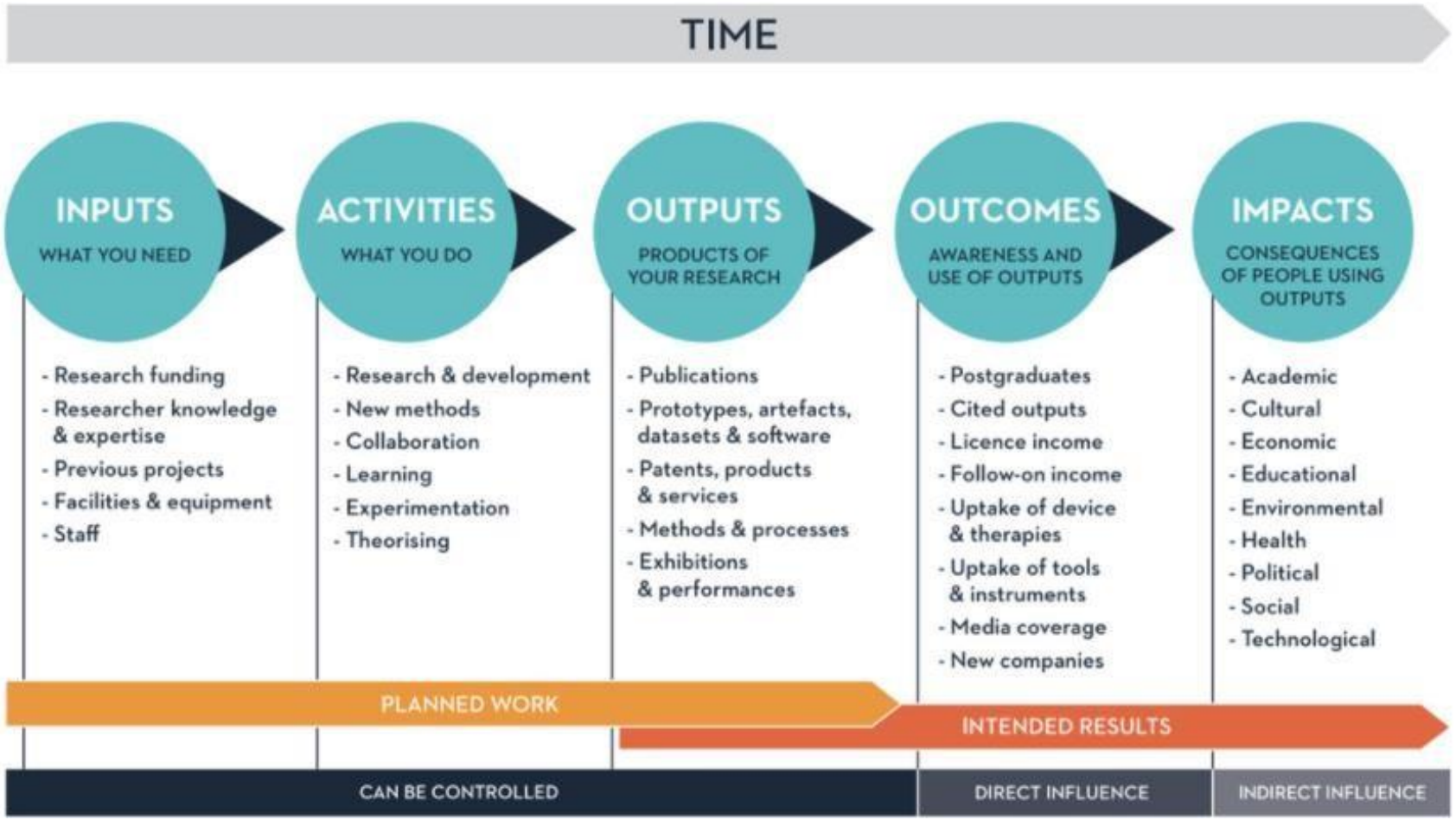
- The citations of science in the parliament
- The scientific advisory functions in government
- The citations of science in main newspapers/daily news
- Contract research
- Policy reports
- Articles in professional journals for non-academic readers
- Public prizes
- Other outputs (instruments, infrastructure, datasets, software tools or designs that the unit has developed) for societal target groups

Demonstrating impact

Qualitative/Narratives

- Public awareness, attitude or understanding of risks improved
- Quality or productivity of professional or public service improved
- Public health or quality of life improved
- Project lowered risks to security
- User experience has improved
- Changes in environmental or architectural design standards or general practice
- Development of ethical standards
- Professional research capabilities improved
- Project challenged conventional wisdom, stimulating debate among stakeholders
- Improved access to justice and other opportunities
- Impact on democratic participation
- Creating, inspiring or supporting new forms of expression (like artistic, literary etc.)
- Understanding, developing and adopting alternative economic models
- Etc…

Impact process



University College Dublin - https://www.ucd.ie/impacttoolkit/whatisimpact/

Output – Outcome – Impact

Research uptake
People are interested in research, read it, talk about it, go to a presentation or event, etc

Research use
People do something with the research, maybe change a bit of their view, pass it on, apply it to practice or policy

Research impact
A contribution to change as a result of the research usage

Source: Matter of Focus (Sarah Morton)

Why focus on impact

Why focus on impact

Expectations

Making a difference

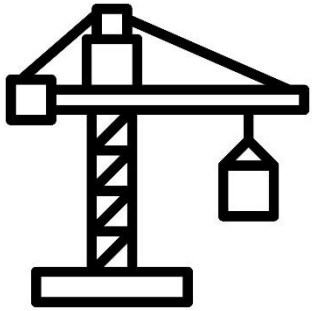
Performance assessment

Responsibility

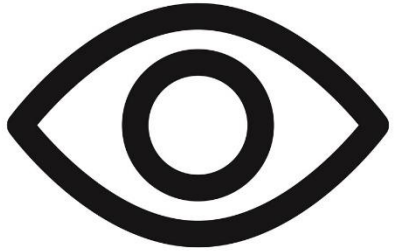
Overcoming challenges

When changing:

Skills



Resources



Perspectives

On the project level - impact pathways

Contexts	What are the wider environmental, political, social, technological, legal and/or economic contexts to which your research may be relevant
Communities	Who are the communities and beneficiaries of your research?
Constituencies	Who has a (positive) interest in your project and can influence change?
Challenge	What is the situation, and challenge, you will solve through your research questions?
Channels	What approaches will you use to reach those constituencies?
Communication	What is the appropriate style, tone and structuring needed to get your main message across?
Capture	How will you demonstrate your impact?

Sreenan, N., Hinrichs-Krapels, S., Pollitt, A., Rawlings, S., Grant, J., Wilkinson, B., ... & Kinloch, E. (2019). Impact by design: Planning your research impact in 7Cs. *Emerald Open Research*, *1*(18), 18.

What do we need?

And of course:

Workshop group assignment

Research project in need of an impact-planning, mapping and assessment plan

Roles: researcher, grant advisor, societal stakeholder, science communicator, dean/manager, KT officer, etc

Considerations:

What is the purpose of mapping, demonstrating and/or assessing societal impact of the project? Who needs to be involved to determine a set of impact assessment indicators to the project? Are they qualitative and/or quantitative metrics? On which level and in which phase will impact be monitored? What will the usage be of the outcomes of this exercise?