Konfernzraum, 11:30-12:45

National Research Policy

Sarah Foxen (Chair)

Sarah Howard

Barend van der Meulen

National Research Policy

Sarah Foxen (Chair)

Knowledge exchange manager,
Knowledge Exchange Unit, UK Parliament

UK Parliament

National Research Policy

Sarah Foxen, Knowledge Exchange Manager, UK Parliament

Sarah Howard, Branch Manager at the Australian Research Council

Barend van der Meulen, Head of Science at the Rathenau Instituut and endowed professor of Evidence for Science Policy at the Centre for Science and Technology Studies, Leiden University.

AESIS, Impact of Science, Berlin, June 2019

UK Parliament

Q: Are you aware of the national policy or policies in your country which drive/s or demand/s impactful research?

Yes
Possibly
No

UK Parliament

Q: Do you think this policy or policies is/are effective*?

*effective = leading to science research having a greater impact on society

Yes
To a certain extent
No

UK Parliament

A volunteer, please?

To take notes on insights around:

* **Necessary conditions** for developing successful national impact policies

* What **defines** a successful national impact policy

UK Parliament

REF2021

* An assessment for all higher education institutions, which assesses the quality of their research.

* Last one in 2014

* Next one in 2021

* In REF2021 ‘Impact’ will count for 25% of overall score

UK Parliament

REF2021 – two observations

* Impacts on structures and HR in higher education institutions

* Impacts on framing of research funding

UK Parliament

REF2021: good thing or bad thing?

* Depends on your perspective…

UK Parliament

Necessary condition?

* Developed in consultation with those the research impacts on

Definition of success?

* Rewarding and encouraging impact in *all* academics – might be one for the KEF (Knowledge Exchange Framework).

UK Parliament

Sarah Howard

Branch Manager at the
Australian Research Council

UK Parliament

Barend van de Meulen

Head of Science at the Rathenau Instituut and endowed professor of Evidence for Science Policy at the Centre for Science and Technology Studies, Leiden University.

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National Research Policy

Sarah Howard
Head of the ERA programme,
Australian Research Council

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Australian Government

Australian Research Council

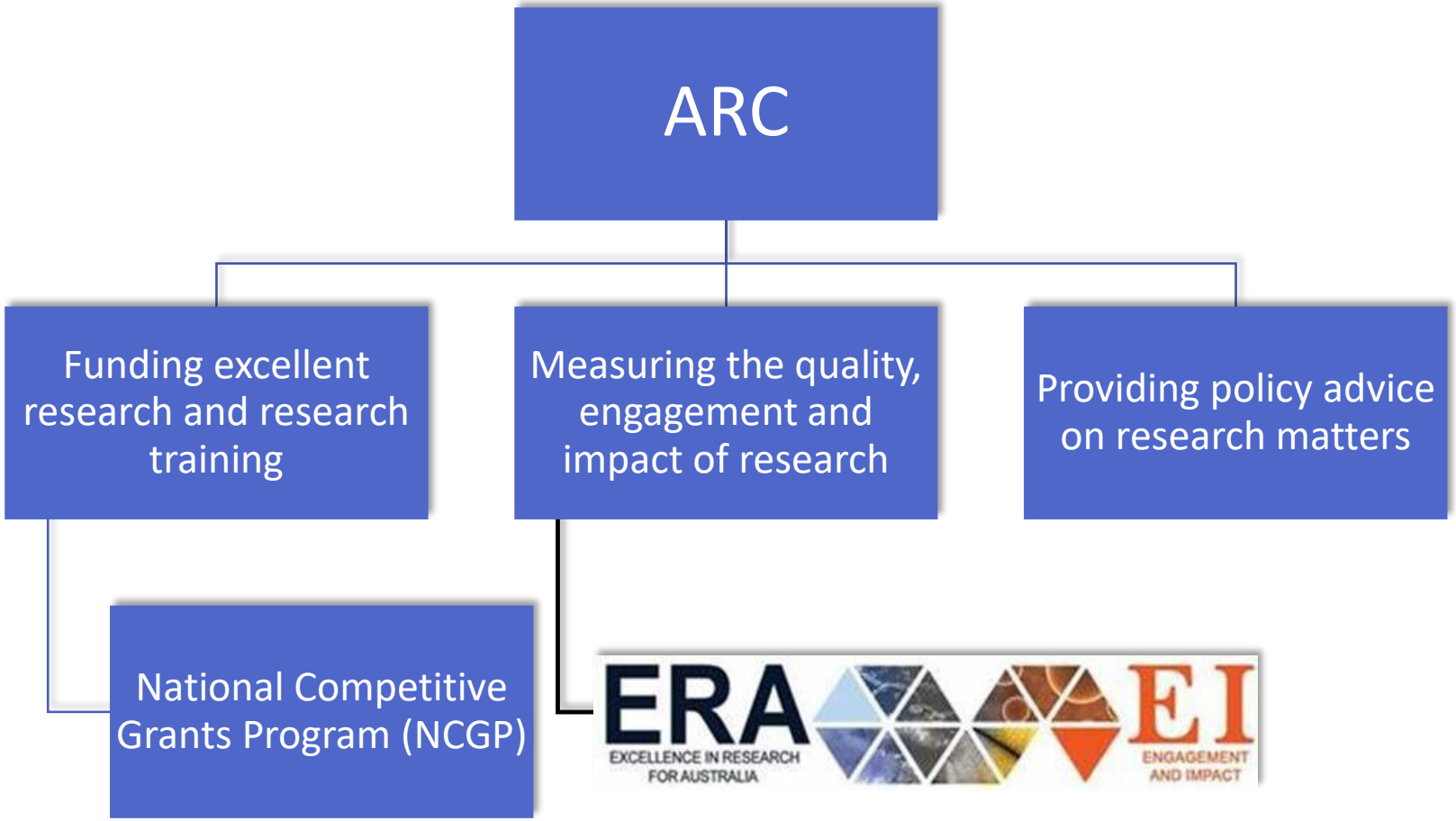
National Research Policy

Conditions for developing national Impact policies

7 June 2019

Sarah Howard
Branch Manager | Research Excellence Branch
Australian Research Council

ARC responsibilities



To understand the conditions for a successful national research impact policy… you need to understand the national research environment….

Key Facts and Figures

- Population – 25 million
- GERD/GDP – 1.88%
- GERD/GDP rank – 13th in OECD
- 42 universities – 38 public, 4 private

Australian higher education research sector Funding

- Majority of funding provided by Government
- Dual funding model:
  - block grants ($1.9b allocated in 2019)
  - competitive grants ($1.6b reported in 2017)
- Block grants support research and research training
- Block grant funding formula—

  $ excellence (47%) and $ end user engagement (53%)

The policy environment…

Science and Research policy in Australia

National Innovation and Science Agenda

24 measures

Innovation Science Australia (ISA)

Review of Research Policy and Funding Arrangements

(Watt Review)

ISA 2030 Strategy

Australia 2030: Prosperity through Innovation

National Innovation and Science Agenda

- Announced 7 December 2015
- $1.1 billion over 4 years
- A range of new initiatives to:
  - support research
  - encourage innovation and entrepreneurship
  - reward risk taking
  - promote science, maths and computing in schools.

Australia 2030: Prosperity through Innovation

Education	• skills in 2030
Industry	• ongoing prosperity through growth and productivity
Government	• innovation service delivery
Research and development	• Increasing translation and commercialisation
Culture and Ambition	• National missions

Image: Biotext, Canberra
source: https://www.industry.gov.au/sites/g/files/net3906/f/May%202018/document/pdf/australia-2030-prosperity-through-innovation-full-report.pdf

ERA 2018 National Report

EI 2018 National Report

ERA 2018


Contents
Australian Government
Australian Research Council
State of Australian University Research
2018-19
ERA National Report
HIGHLIGHTS
Scroll down

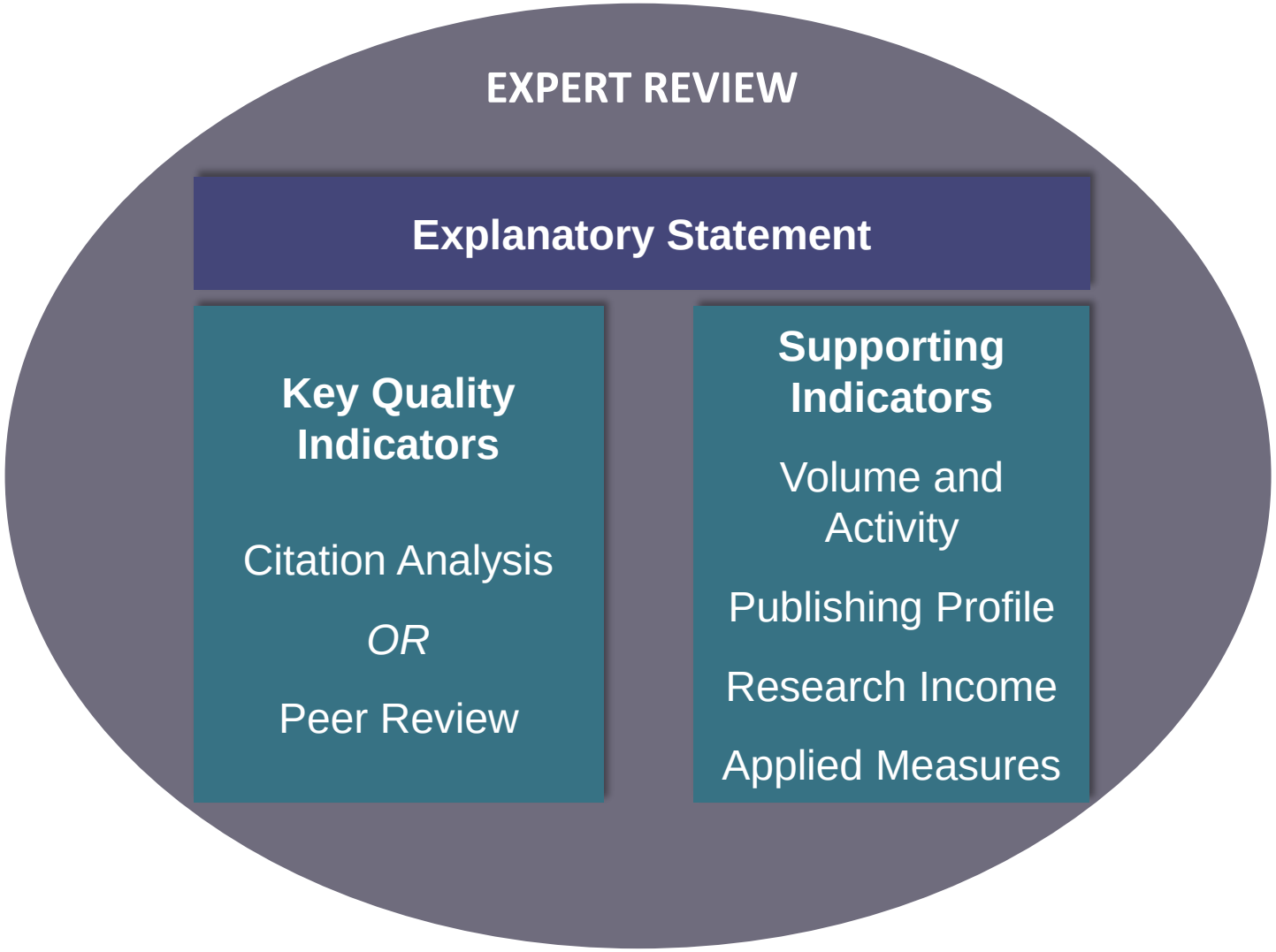
What is ERA?

First implemented in 2010, ERA evaluates the quality of the research undertaken in Australian universities against **national and international benchmarks**

ERA is a **comprehensive** collection. The data submitted by universities covers all eligible researchers and their research outputs

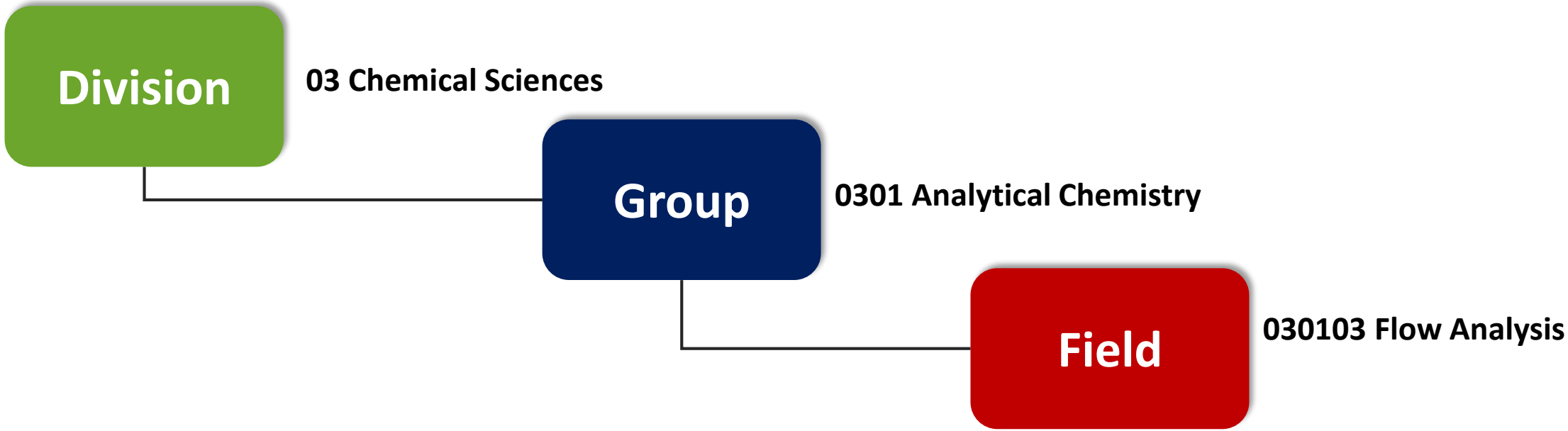
ERA assesses the quality of research disciplines at each university—it does not assess or rate individual researchers

ERA Indicators and Assessment

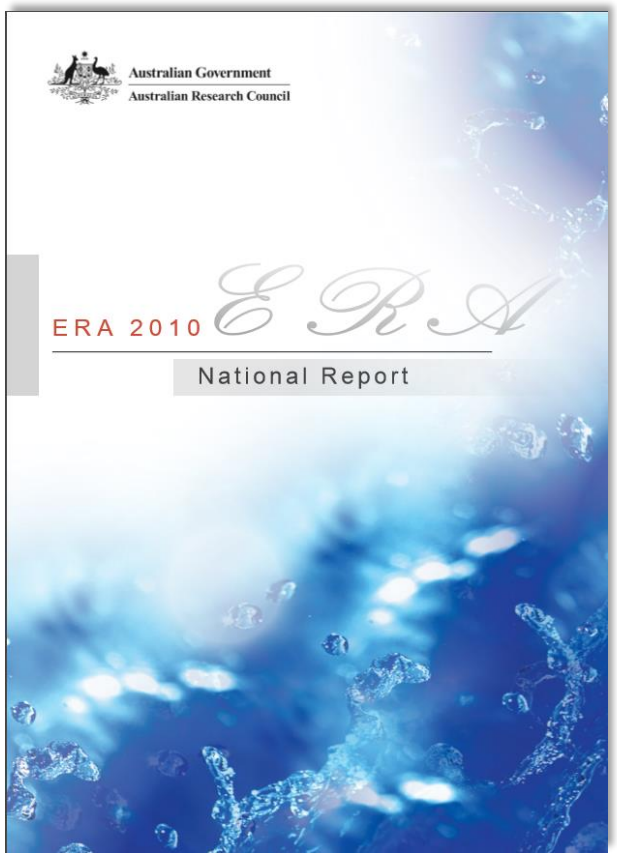


Useful Background and Terminology

- **FoR** stands for Fields of Research from the Australian and New Zealand Standard Research Classification (ANZSRC) 2008
- Structure of ANZSRC is:



ERA Rounds



2010

2012

2015

2018 ERA Highlights

42 Australian Institutions

2,603
Units of Evaluation (UoEs) assessed

506,294
Unique research outputs submitted

$10.9b
Income reported

76,261
Researchers

How ERA drives behavior change

Reputational lever for policy change

Originally moderated the calculation of a small proportion of Research Block Grants (SRE only) – ERA 2012 and ERA 2015

Universities incorporate ERA outcomes into their strategic planning

Some questions –

Do reputational drivers work?

Is a link between assessment outcomes and funding required?

Do assessment outcomes and formula based funding mechanisms need to interact? If so, how?

EI 2018

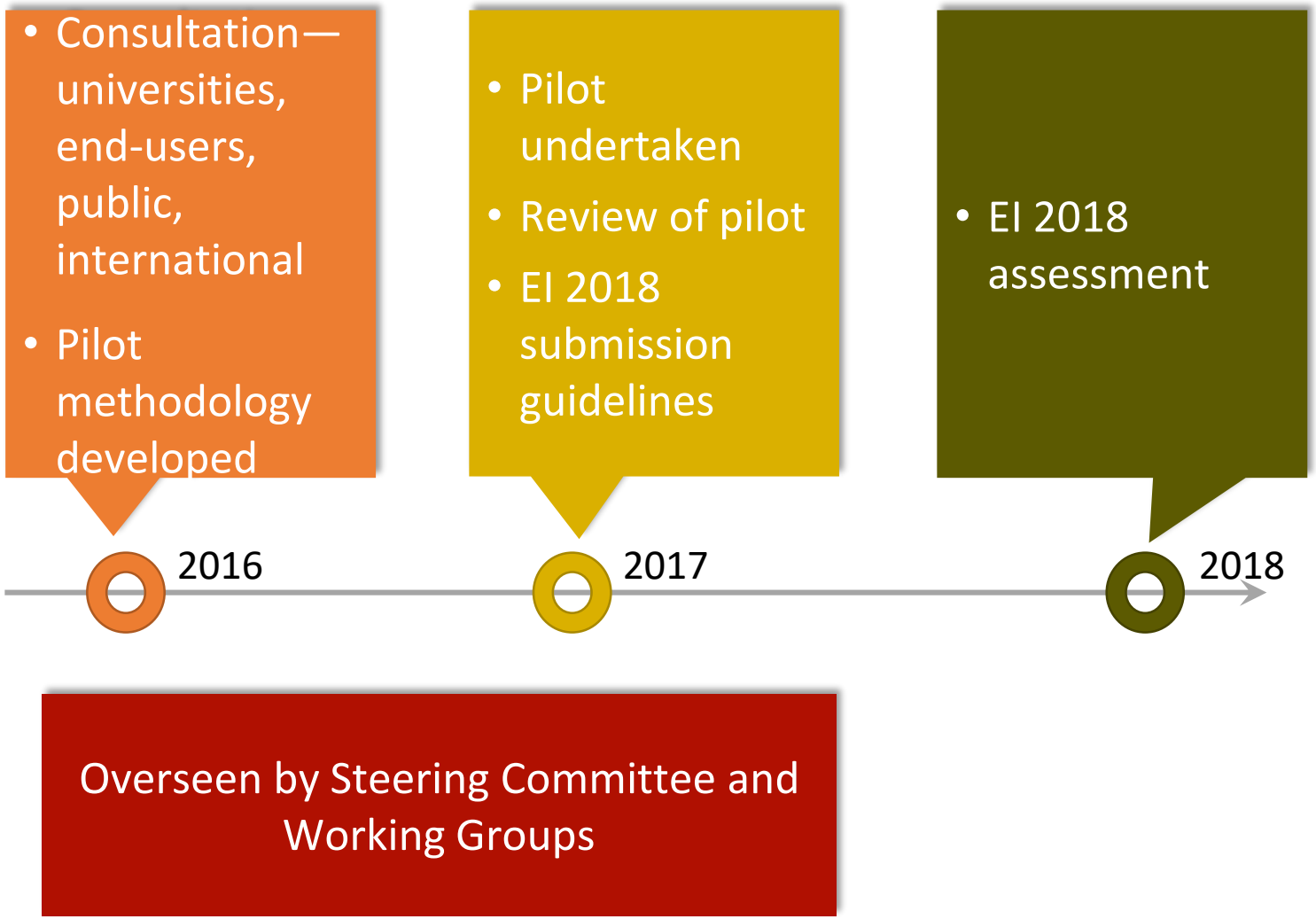

Contents
Australian Government
Australian Research Council
Engagement and
Impact Assessment
2018-19
National Report

Aims of the EI Assessment

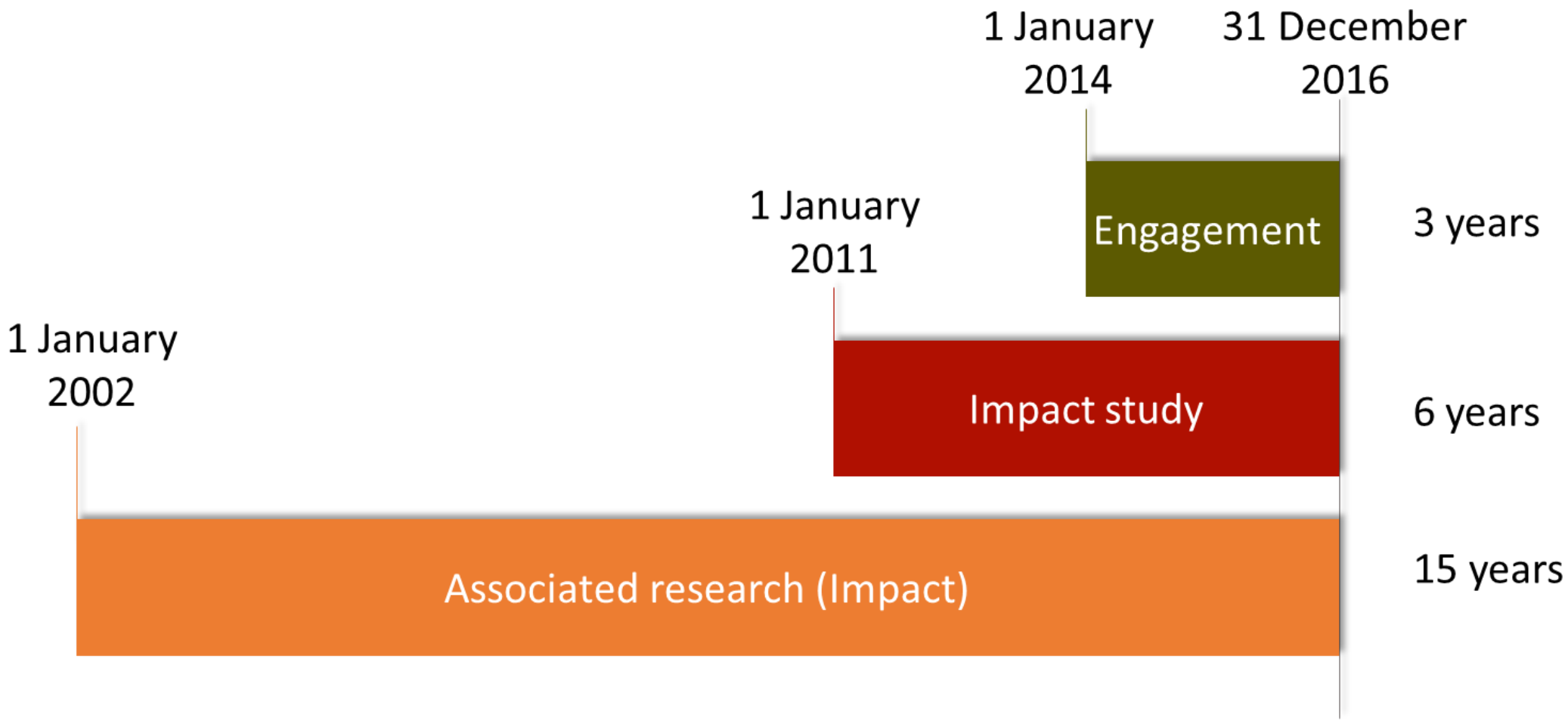
- how well researchers in Australian universities engage with end users **beyond academia**
- What kinds of impacts are occurring **outside of academia** as result of research undertaken by Australian universities
- how well Australian universities support their researchers to deliver research which has an impact **beyond academia**

Thereby **encouraging collaboration** by university researchers with end-users, driving **innovation** and **entrepreneurship……**

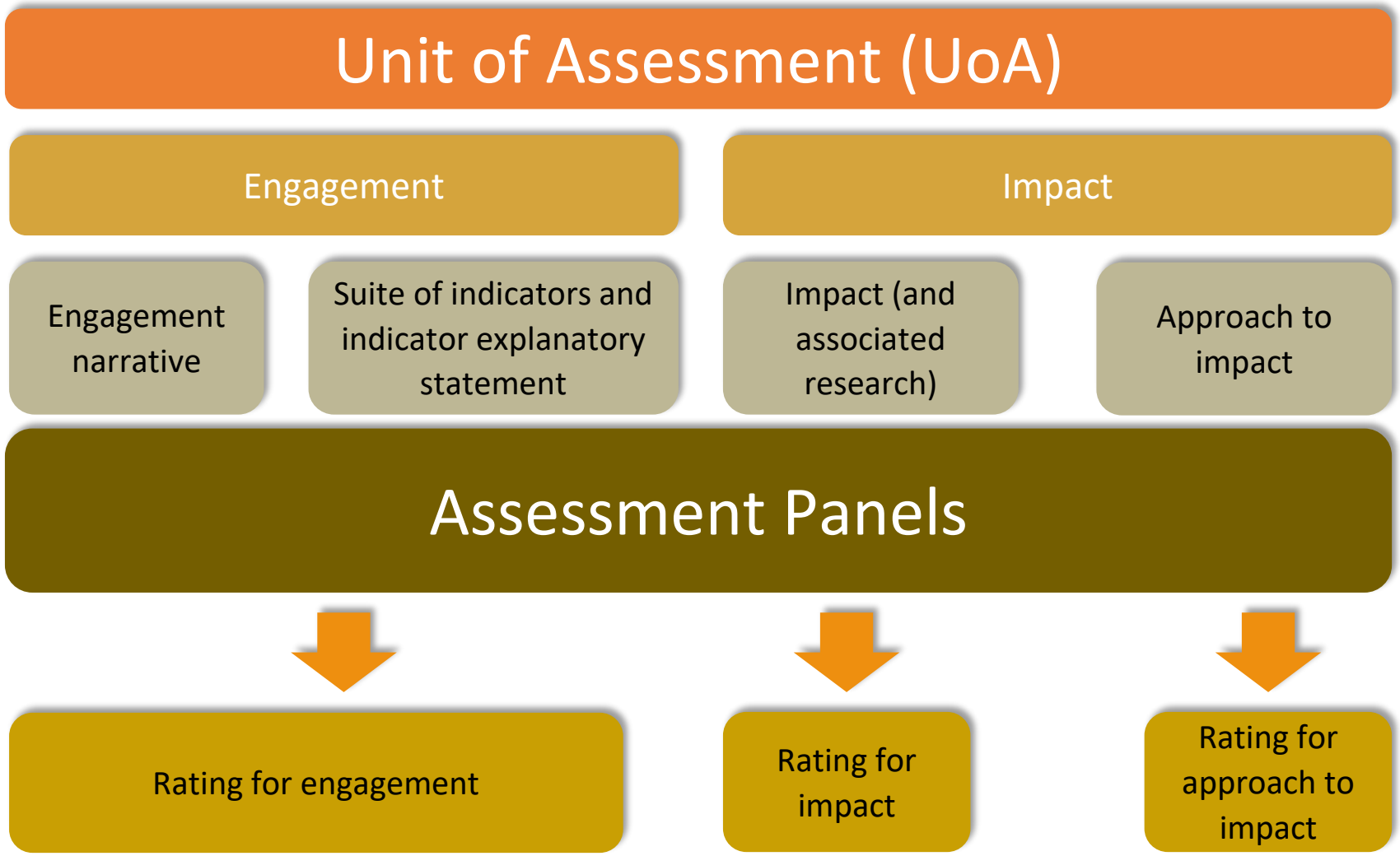
EI development timeframe

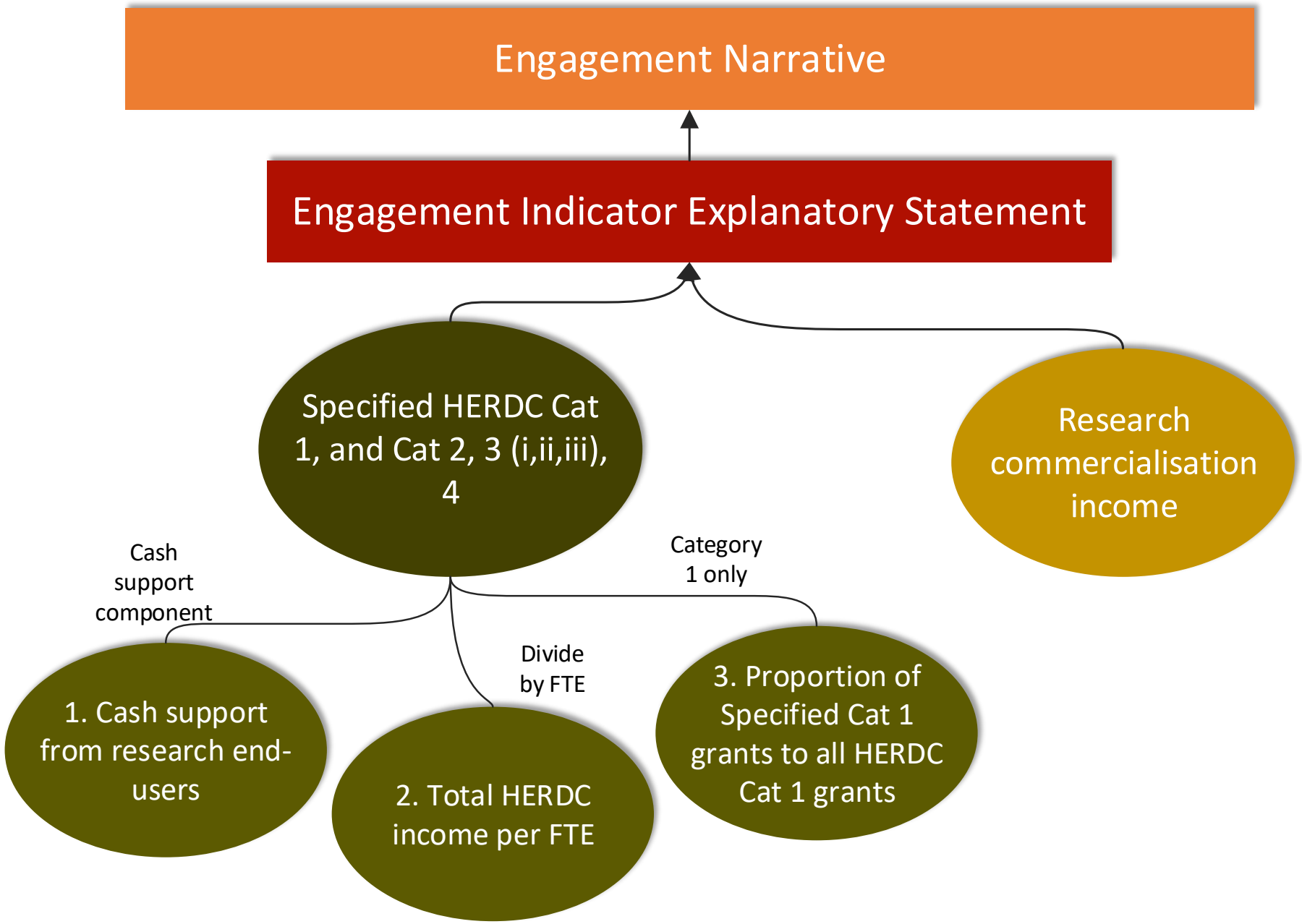


EI 2018 reference periods



EI 2018 assessment framework




Engagement Narrative
Engagement Indicator Explanatory Statement
Specified HERDC Cat 1, and Cat 2, 3 (i,ii,iii), 4
Research commercialisation income
Cash support component
Category 1 only
Divide by FTE
1. Cash support from research end-users
2. Total HERDC income per FTE
3. Proportion of Specified Cat 1 grants to all HERDC Cat 1 grants

Impact studies

Three types of impact studies—

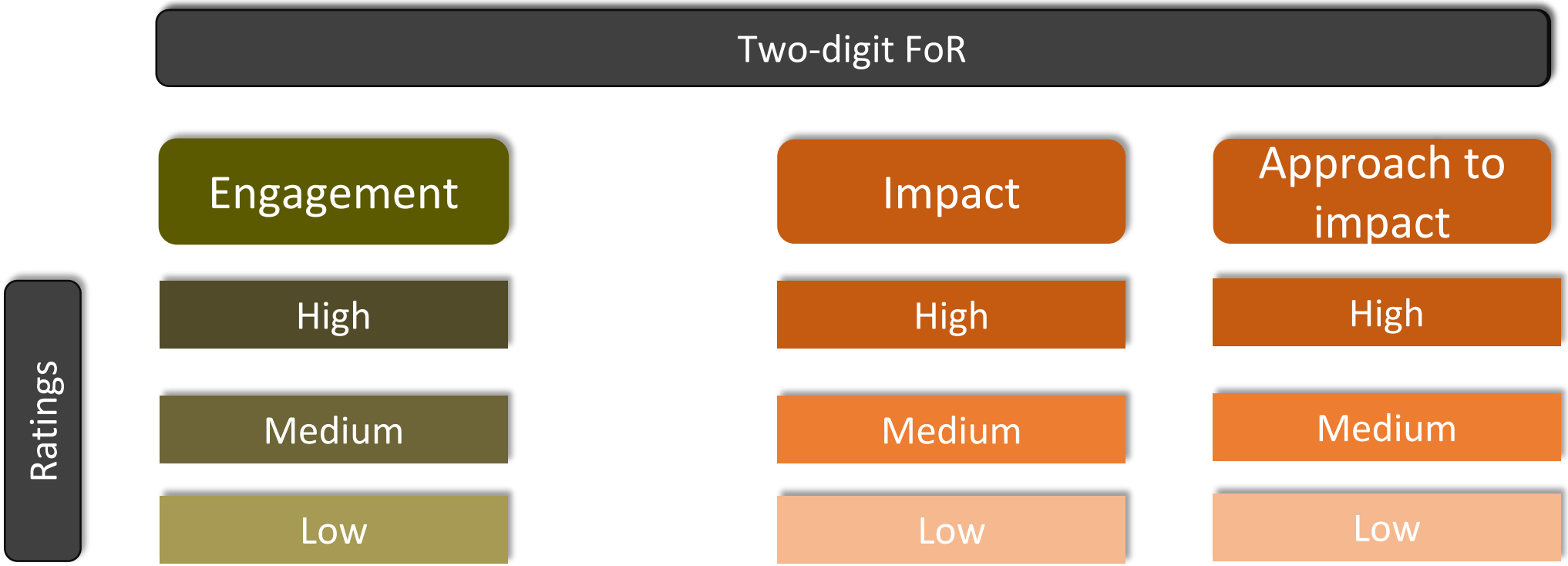
Broad discipline
Mandatory if meets low volume threshold and opt in

Aboriginal and Torres Strait Islander research
Opt in

Interdisciplinary
Opt in

EI 2018 rating scale

- Ratings made by panels of experts based on narratives and indicators provided.



- Assessments are ratings not rankings of either universities or disciplines

Distribution of ratings across all UoAs—Engagement

- High: 215 UoAs (34%)
- Medium: 317 UoAs (51%)
- Low: 94 UoAs (15%)

Distribution of ratings across all UoAs—Impact

- High: 277 UoAs (43%)
- Medium: 284 UoAs (44%)
- Low: 78 UoAs (12%)

Distribution of ratings across all UoAs—Approach to impact

- High: 159 UoAs (25%)
- Medium: 325 UoAs (51%)
- Low: 154 UoAs (24%)

EI data—additional data

Keywords listed in impact studies—All Units of Assessment

Additional data

Additional Fields of Research - impact

Additional Fields of Research – associated research

Socio-Economic Objectives (SEO) codes

Australian and New Zealand Standard Industrial Classification (ANZSIC) Codes

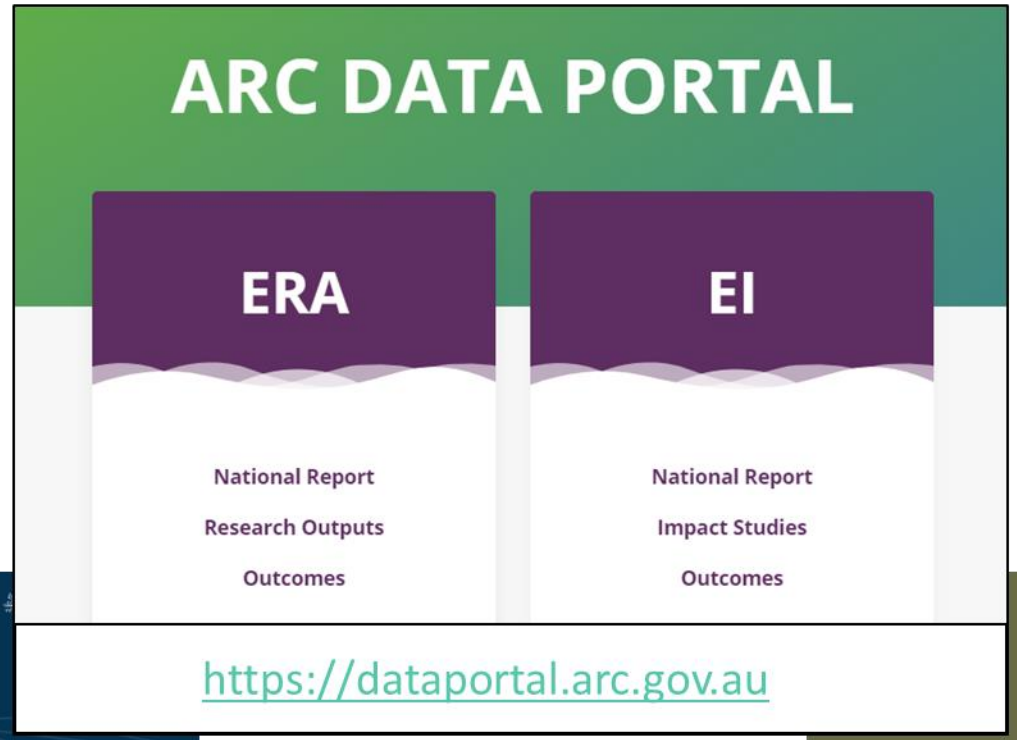
Science and Research Priorities

Keywords

Beneficiaries

Countries where impact is occurring

ERA and EI outcomes published



Reflections on conditions for a successful impact policy

Was it a success?

- 40/42 universities participated
- Methodology was able to be applied to all disciplines

- Benchmark of performance

- Outcomes for impact and approach to impact support policy analysis

- Anecdotally, universities responding to incentives

Necessary conditions for impact policy

Extensive consultation

Commitment from sectors

- university
- industry/ end-user

Objective clear

- Assessment level discipline vs institution

Realistic assessment parameters

Low Volume Threshold

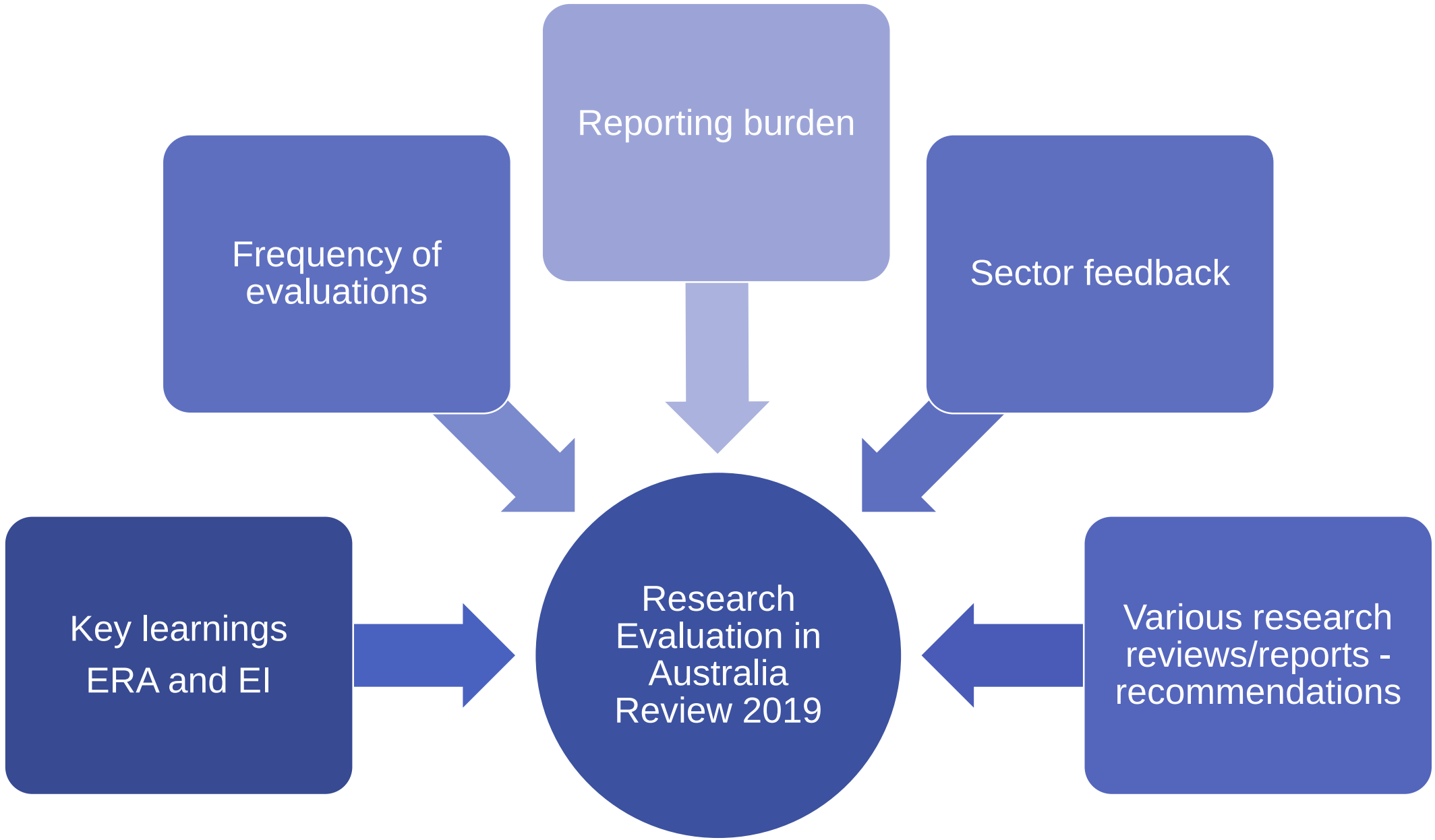
Option to request *not* to be assessed

Assessment design

Balance detail vs burden

Narrative based (supporting indicators)

Expert review


Reporting burden
Frequency of evaluations
Sector feedback
Key learnings ERA and EI
Research Evaluation in Australia Review 2019
Various research reviews/reports - recommendations

Questions—Discussion

What are the conditions you consider integral for a successful impact policy?

What do you consider is a measure of success?

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Australian Government

Australian Research Council

Thank you

National Research Policy

Barend van der Meulen

Head of Research,
Rathenau Instituut, The Netherlands

Rathenau Instituut

Monitor national research policies for impact

Session: Conditions for developing successful national impact strategies

Barend van der Meulen

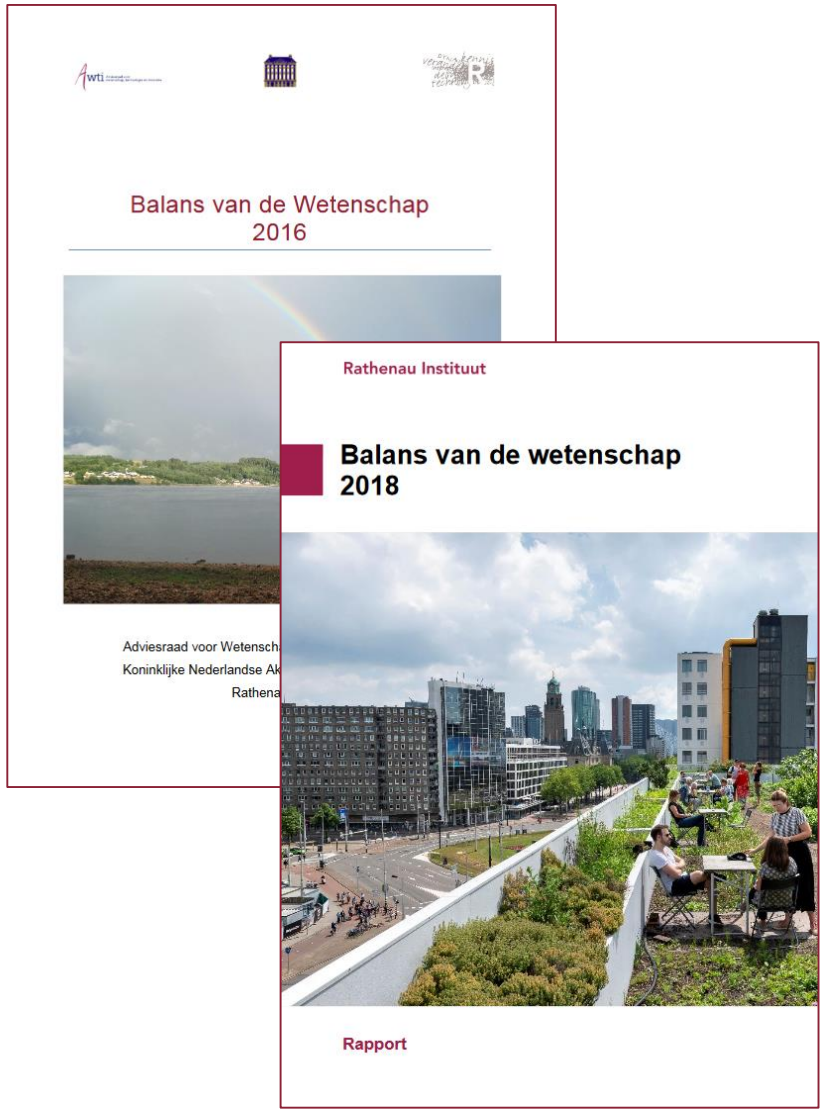
AESIS Impact of Science | Berlin 5-7 June 2019

Content

- A monitor for national science policy
- Monitoring national policies for impact: our approach
- Some results
- Some reflections

Monitoring national science policy

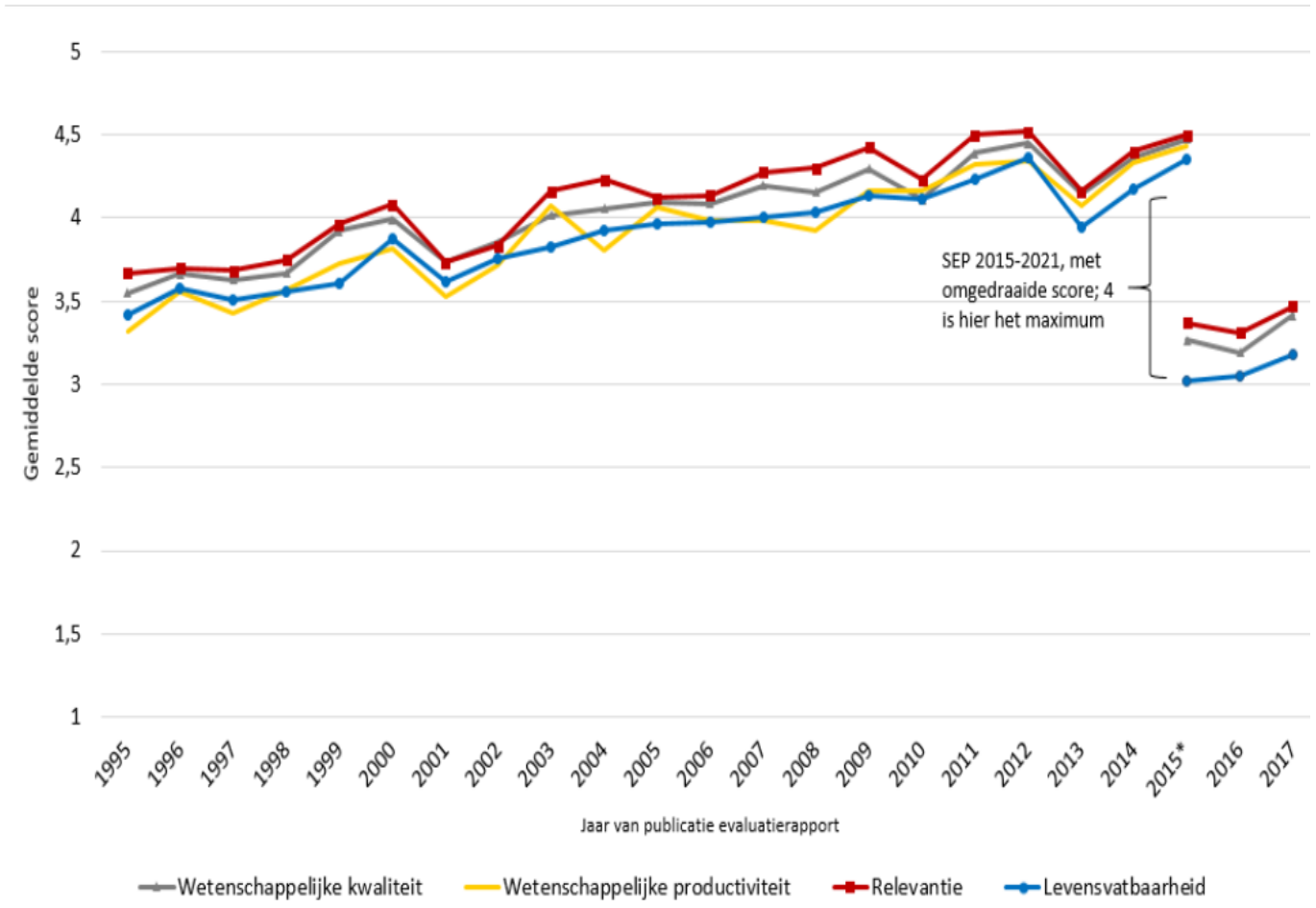
- Monitor to inform Cabinet and Parliament about the perfomances and functioning of Dutch research system
- Three policy objectives
  1. Global excellence
  2. Connected to industry and society, having maximum impact
  3. Developing academic talent
- Focus on national level!
- Monitoring “Global excellence” and “academic talent” not really difficult. Monitoring “impact” was and is.

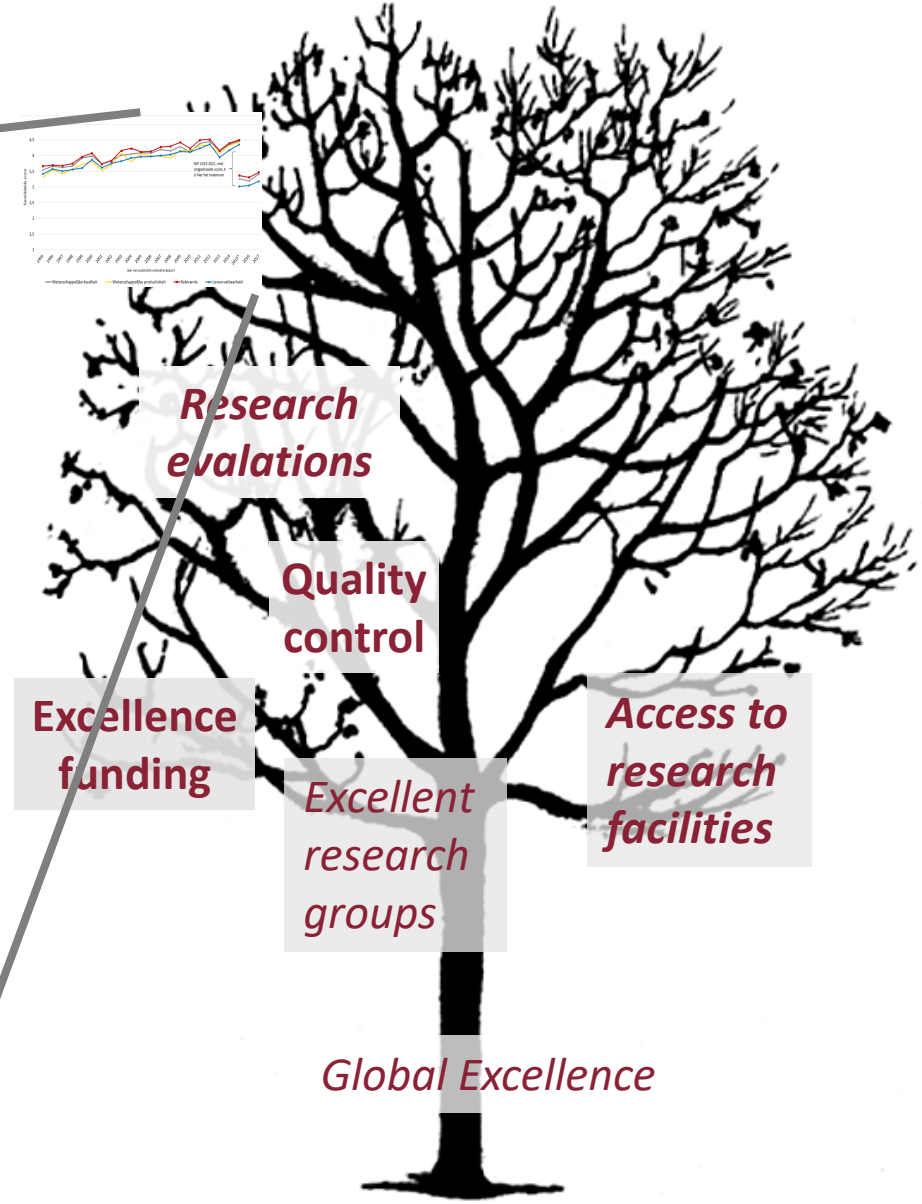


Connecting objectives and indicators

- Creating a “objectives tree”
  - Specifying the main objective into 3-5 objectives
  - Identifying actions and policy instruments linked to these specified objectives
  - Develop indicators measuring effects these instruments aim at.

Connecting objectives and indicators

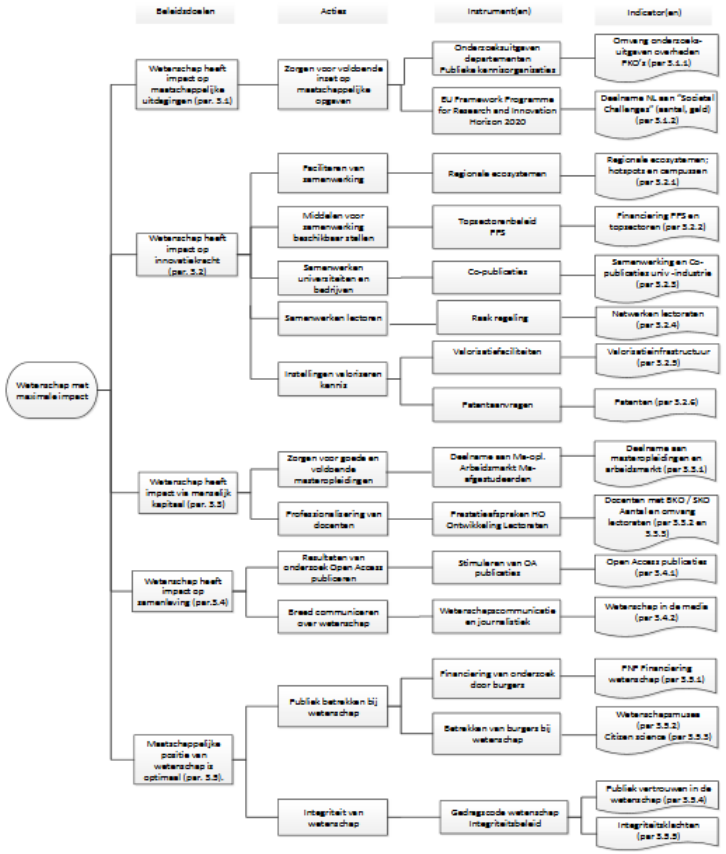




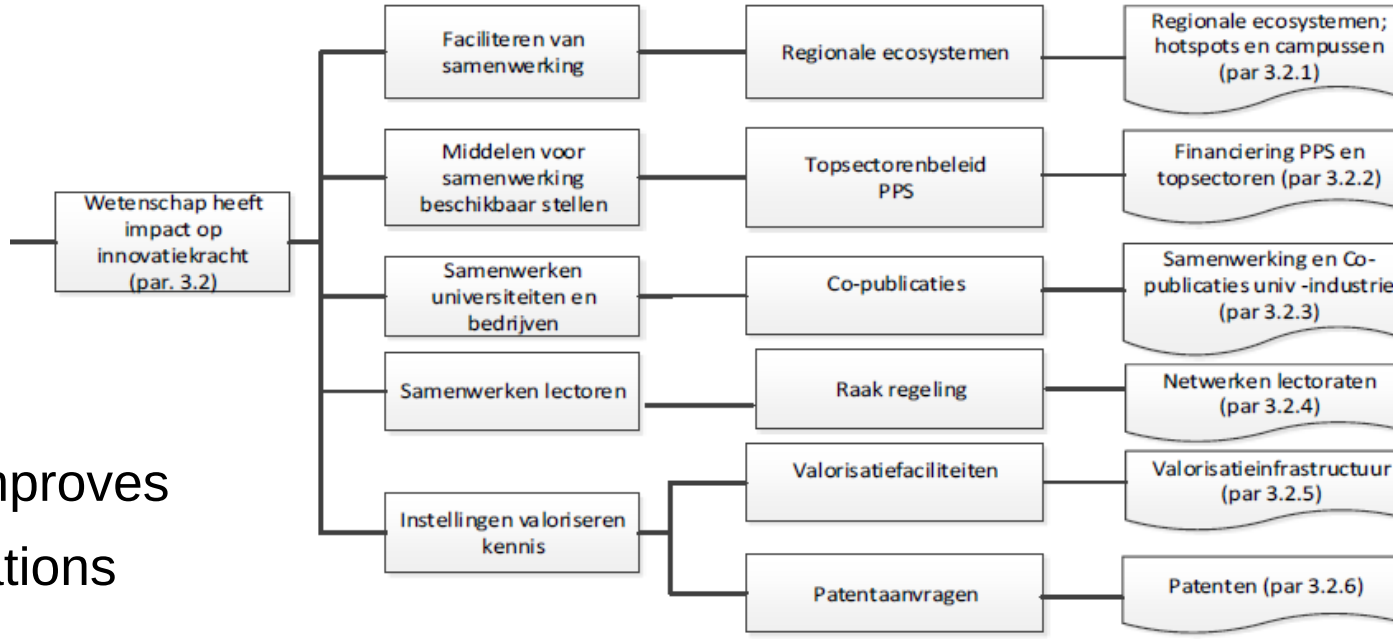
So how to do that for impact?

- Challenges
  - Impact policies are not well developed
  - There are many impacts possible
  - Many impacts are not documented
- Choices
  - Focus on three main areas of impact
    - Societal challenges
    - Innovation
    - Human Capital
  - Focus on conditions that facilitate impact
    - Funding
    - Interactions
    - Trust

Figuur 3.1 Schema ambitie 'wetenschap met maximale impact'



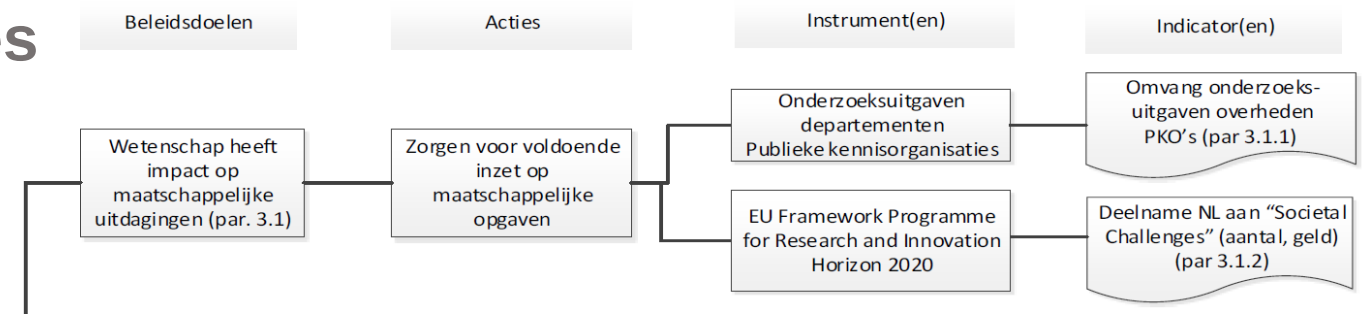
Branch 1 Impact on Innovation



Choice: Focus on Interactions

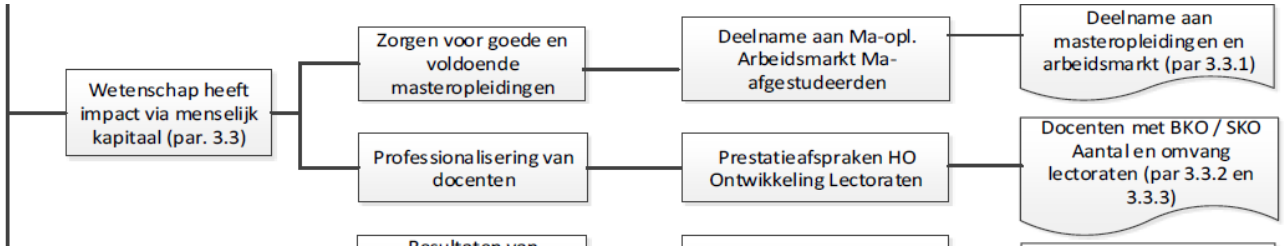
1. Facilities to collaborate:
   ⇒ Health of regional ecosystems improves
2. Funding university-industry collaborations
   ⇒ Public funding for UIC increases
   ⇒ Private funding for HE-research declines
3. Collaborations between HE and industry
   ⇒ Copublications indicate high level of collaborations
   ⇒ Networks between Applied universities and SMEs grow
4. HE institutes aim at valorisation of knowledge
   ⇒ Increase of Tech Transfer Offices in HE sector
   ⇒ No Patenting by public research institutes and universities stabilizes

Branch 2: Societal challenges



- Choice
  - Focus on public funding targeted towards these challenges
    - Funding for government research institutes
    - Participation in EU funds related to Societal challenges
- Findings
  - Government funding for research institutes and for applied funding is declining.
  - Participation in H2020 funds for societal challenge above average, esp
    - Integrated transport program
    - Food safety program

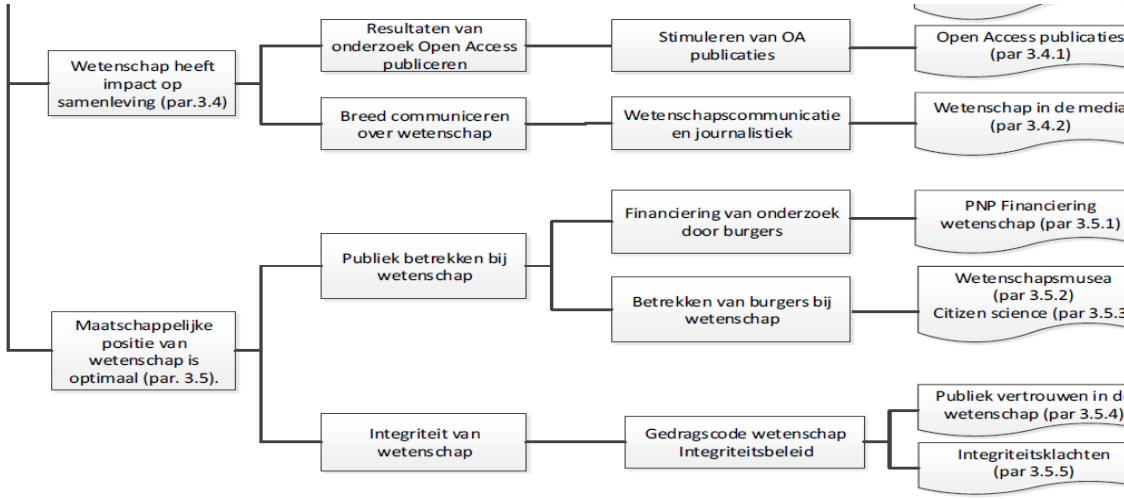
Branch 3 Impact on human capital



- Assumption:
  - main impact happens through Master programmes at universities
  - PhD training covered in policies for academic talent
- Indicators
  - quality of teaching: qualified teachers
  - participation in Ma-programs
  - labour market position of Ma graduates

Branch 4 & 5 relations with the public

- Open Access publishing
  - ⇒ No OA publications increase
- Science communication
  - ⇒ Science in the media: stable
  - ⇒ visitors science musea: increase
- Public attitude towards science
  - ⇒ Private non profit funding for research: stable
  - ⇒ Public trust in science: high and stable
  - ⇒ Integrity of science: No of cases low and stable



Some reflections on the monitor

- It is selective, structured and comprehensible.
- It covers wide range of impacts
- It can be repeated
- It structures the notion of impact, and
- can help governance actors to set objectives and create instruments more systematically

- All indicators are proxies
- Imported question like: does research support public health, quality of governance, climate change etc. not addressed

Thank you!

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