Finnish Open Science and Research Initiative

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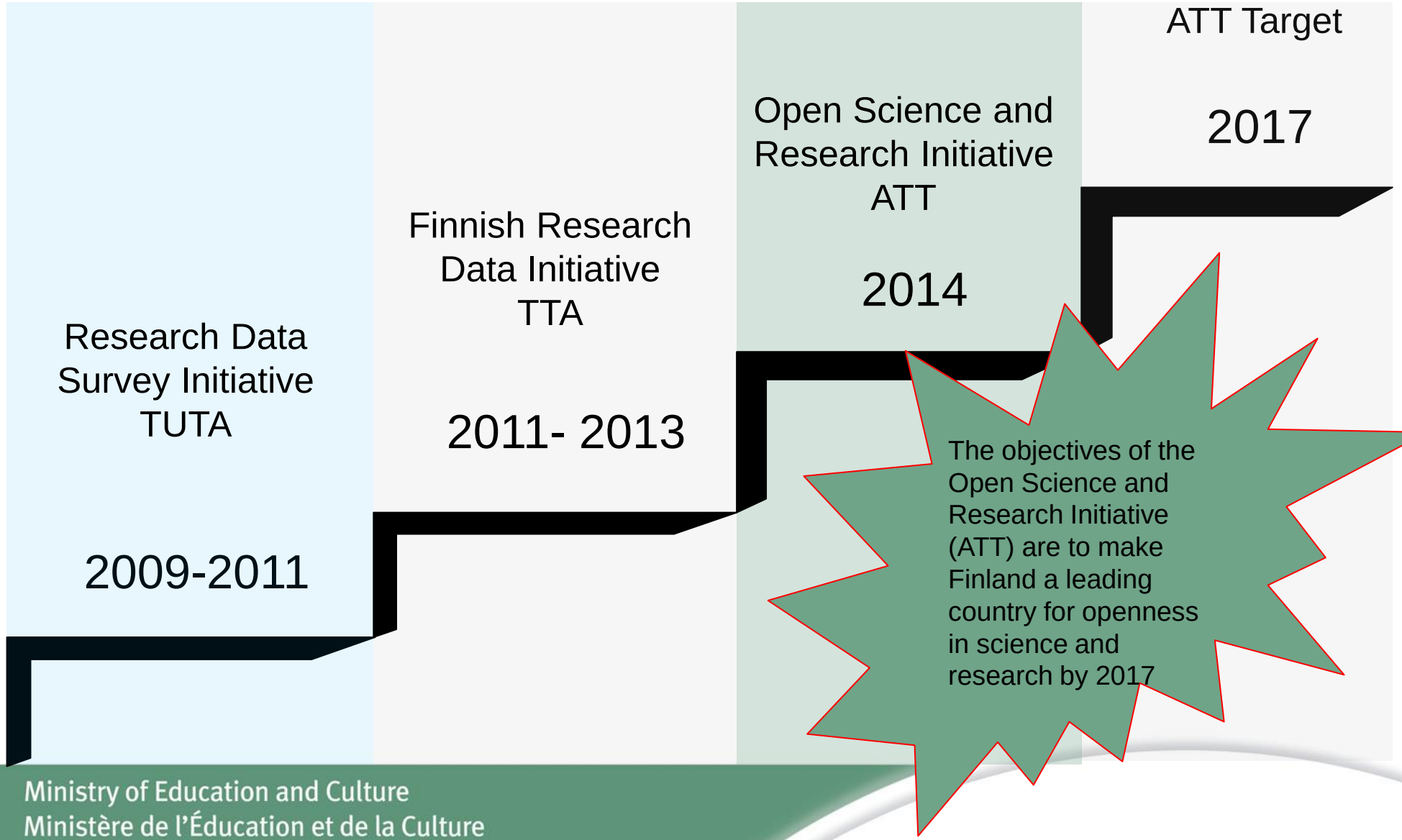
Introduction

Benefits of open science and research

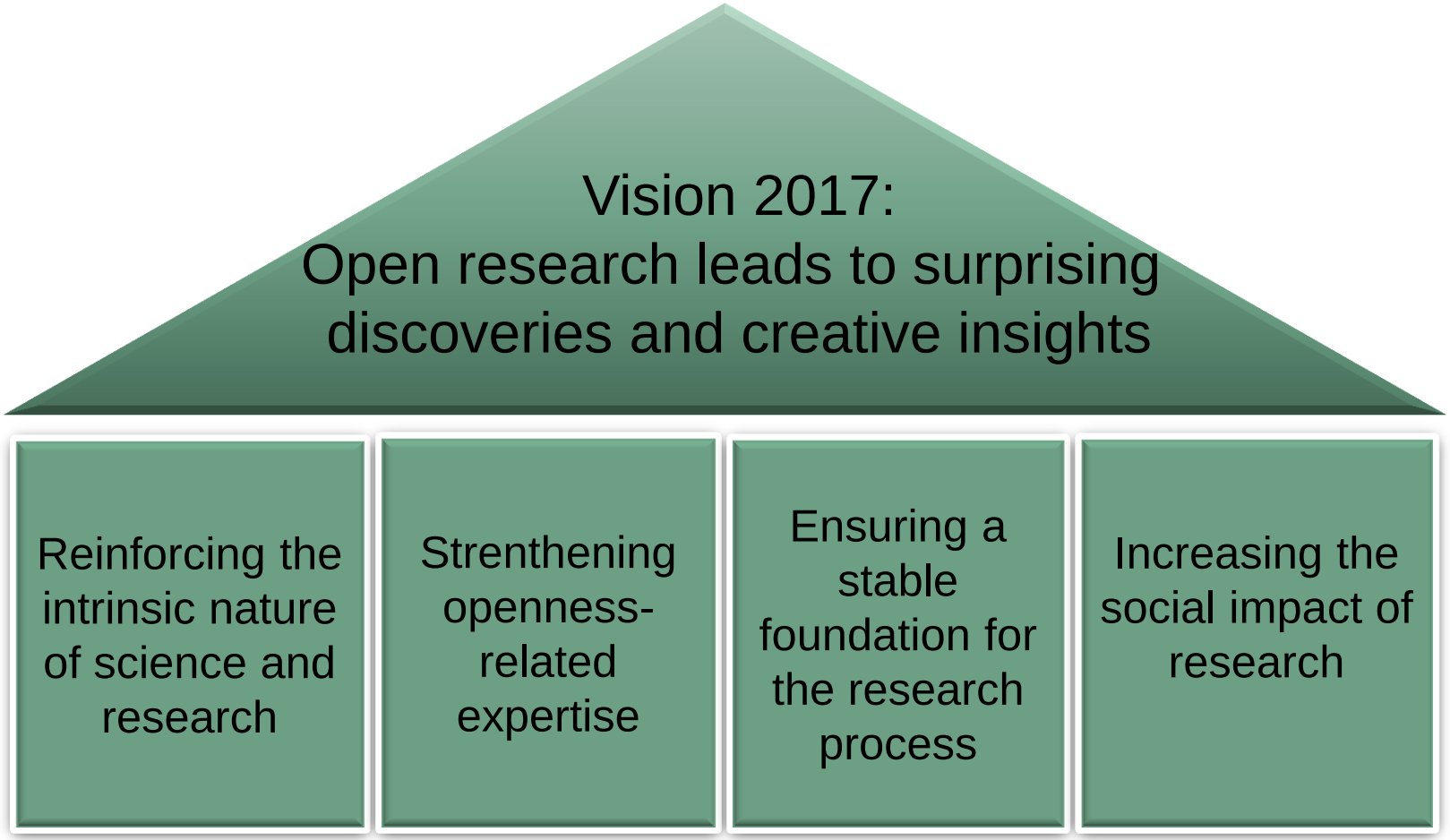
- Faster progress
- Greater impact
- Science-based decision-making
- Citizen science

Open Science and Research 2009-2017



Finnish Open Science and Research Roadmap 2014-2017

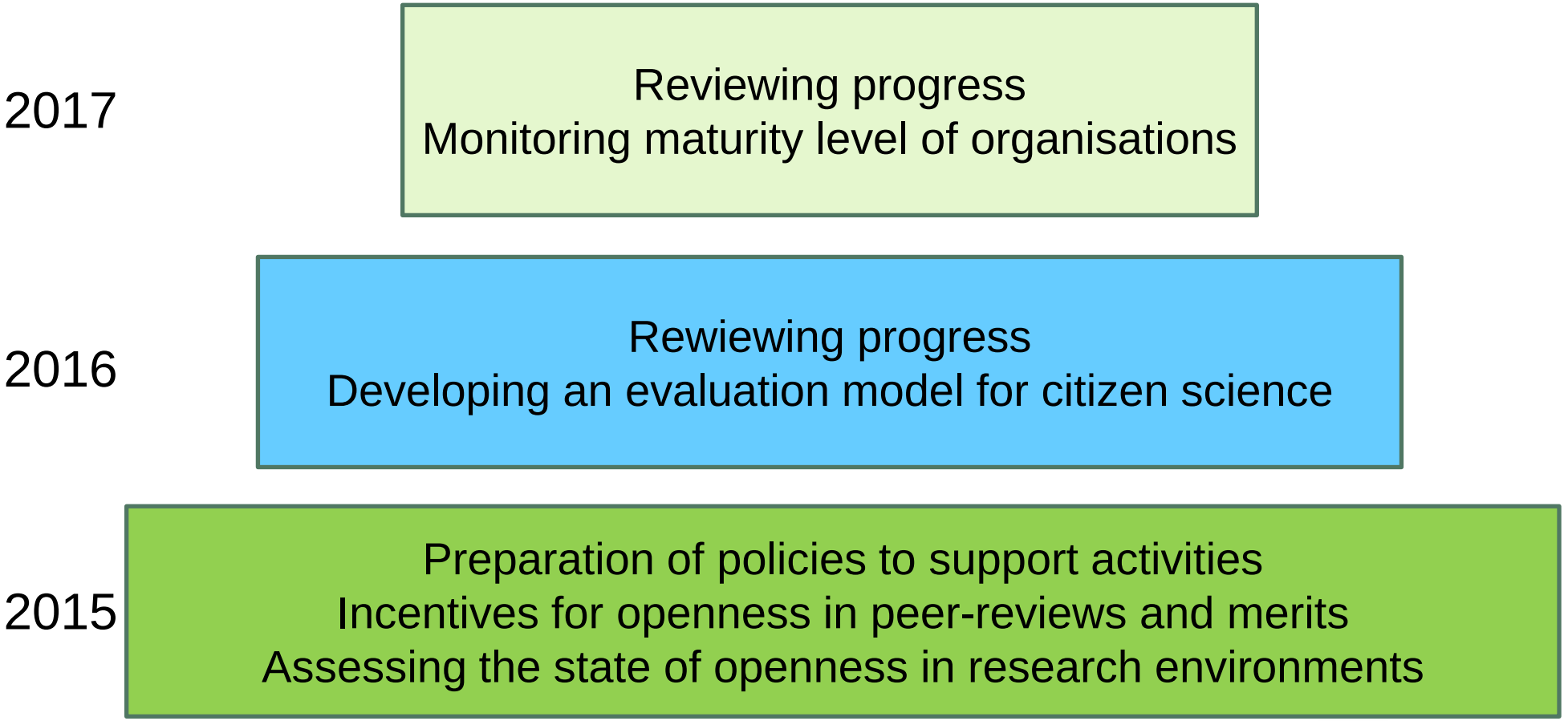
Vision


Vision 2017:
Open research leads to surprising discoveries and creative insights
Reinforcing the intrinsic nature of science and research
Strenthening openness-related expertise
Ensuring a stable foundation for the research process
Increasing the social impact of research

Objectives

Reinforcing the intrinsic nature of science and research	• Openness and reproducibility increase the reliability and quality of science and research
Strengthening openness-related expertise	• Opportunities afforded by openness boost Finland's competitive edge
Ensuring a stable foundation for the research process	• Good and clear basic structures and services
Increasing the social impact of research	• New opportunities for researchers, decision-makers, business, public bodies and citizens

Objective 1: Reinforcing the intrinsic nature of science and research



Objective 2: Strengthening the openness-related expertise

2017

Introducing the certificate of Open Science
Provision of training and guidance

2016

Piloting the certificate for Open Science
Provision of training and guidance
Establishing professorships focused on openess

2015

Development of certificate for Open Science
Updating the Open Science and Research Manual
Analysing the competency level - training packages and training

Objective 3: Ensuring a stable foundation for the research process

2017

Putting into practice digital preservation of research outputs

2016

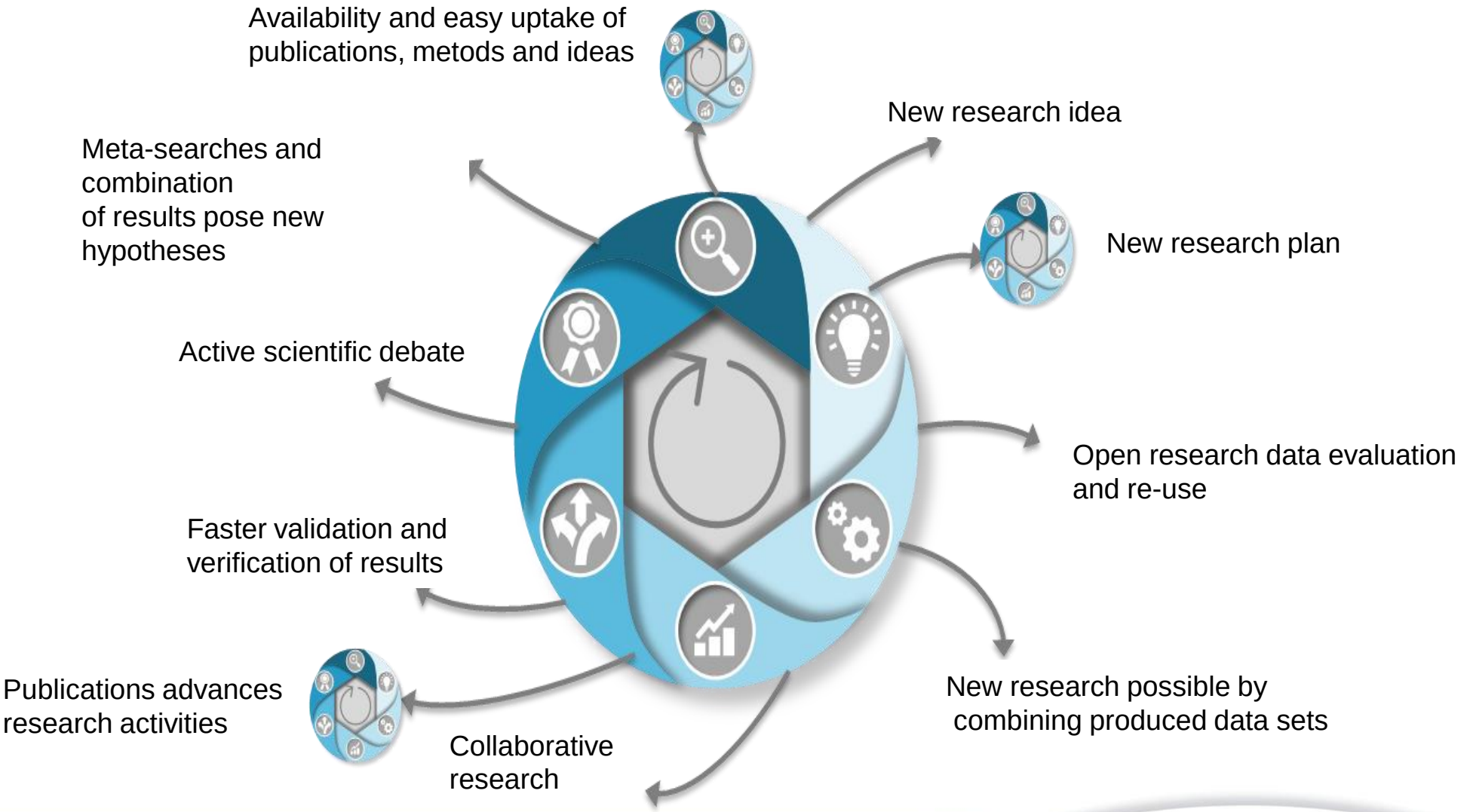
Development of digital preservation
Opening up new major national research data
Creating permanent operating model for open publication

2015

Development of services for utilization of open data
Piloting the open publication of Finnish scientific publications
Development of common practices for storage, distribution and publication of outputs & promotion of service design and usability

Objective 4: Increasing the social impact of research

Science accelerator



Implementation

Key performance indicators

The number of organisations at the highest level of openness

- openness as strategic strength
  - 10 % of HEIs in 2017
  - 25% of HEIs in 2018
  - 50% of HEIs in 2020

Doctoral programs with open science training

  - 90% of programs in 2018
  - 100% of programs in 2020

Open access of publications in the EU assessment

- 65% in 2017
- 75% in 2018
- 90% in 2020

Of new datasets

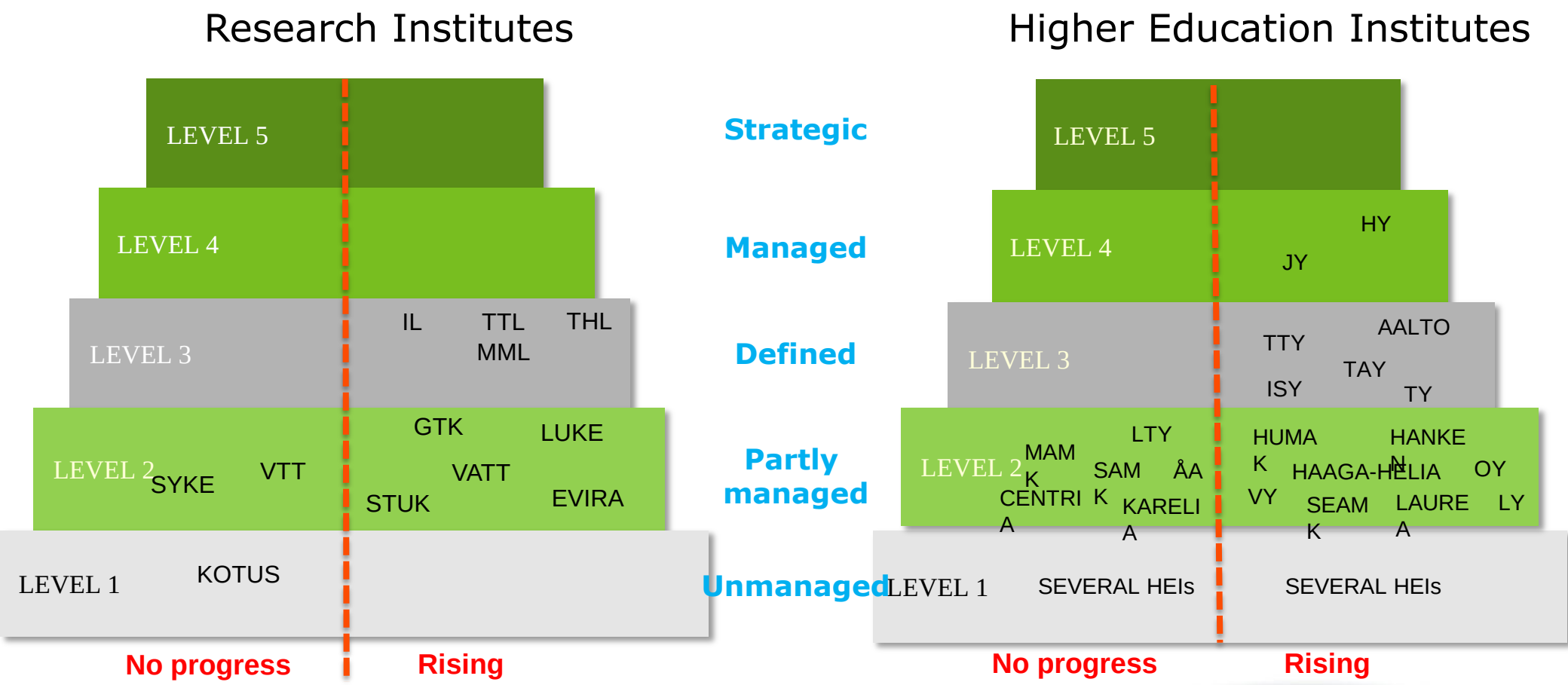
- 25% are licenced in 2017 and 30% in 2018
- In 2020 50% of new datasets are licenced and their metadata are found in national metadata catalogues

Implementing open science in Finnish research organisations

- The culture of openness was studied in four sections
  - Strategic guidance
  - Policies and principles
  - Support for openness
  - Reinforcing expertise

- The maturity assessment
  - Basic information from openly available material to assess the open science culture
  - This information base was improved with supplementary information from a survey

The overall level of maturity in open science in 2015



Improving the Framework for Open Science and Research

- The Enterprise Architecture (EA) method is used for designing and planning complex IT infrastructure, services and related capabilities
- It creates a coherent understanding of the existing situation with the shortcomings and problems
- The lack of analytical planning leads to unneeded and costly overlaps and non-interoperable infrastructure and services
- EA creates a uniformal vocabulary and helps in identifying the roles and responsibilities of stakeholders and also common targets
- EA is a tool for governance, it aims at a global optimum solution instead of a partial one
- Despite the business connotation of the EA name, in Finland the method is also used in the public sector
- EA can be studied at many information levels: physical (with what), logical (how), conceptual (what) and principal (why)
- Produces assessment tools
- If done systematically EA helps in comparison of different frameworks

More information

OPEN SCIENCE AND RESEARCH

Frontpage | About the Initiative | Services | Training and Documentation | Exploring Open Science

For Researchers

- Find services that support research
- Read the Open Science Handbook
- Explore the Data Management Guide

Support for Research

- Explore UNESCO's Open Access Curriculum
- Read selected articles on openness

For Organisations

- Open Science policy in other countries
- Explore other Open Science Initiatives