European Strategy Forum
on Research Infrastructures

ESFRI

Strategy Report on Research Infrastructures

ROADMAP **2018**

LANDSCAPE

Gabriela Pastori,
Chair of Health and Food Strategy Working Group, UK ESFRI delegate

Launch event
ICRI 2016
Cape Town
South Africa

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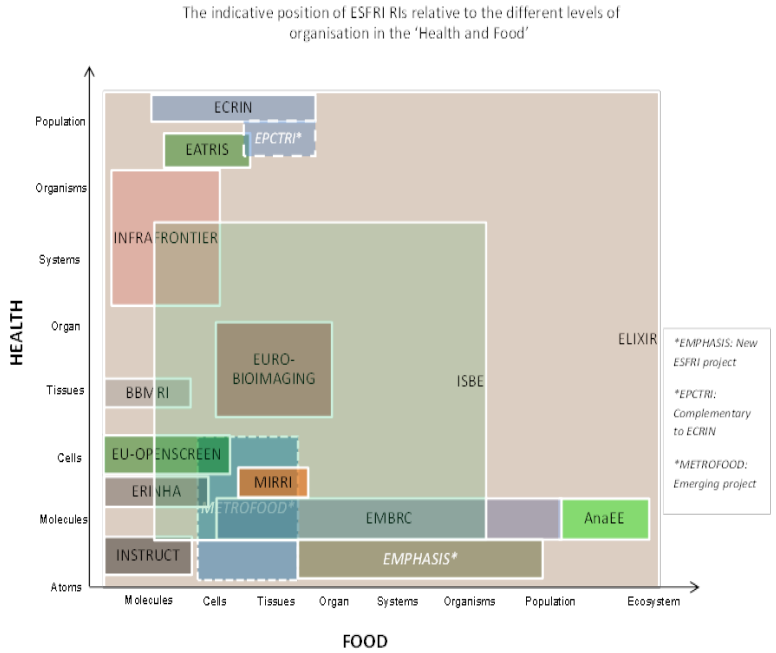
ROADMAP 2018

Landscape analysis

-essential component of the Roadmap
-current context of EU RI ecosystem
-a reference for monitoring and evaluation
-future trends

Strategy Working Groups

ENE – Harald Bolt
ENV – Gelsomina Pappalardo
HF – Gabriela Pastori
PSE – Jose Luis Martinez
SCI – Jacques Dubucs



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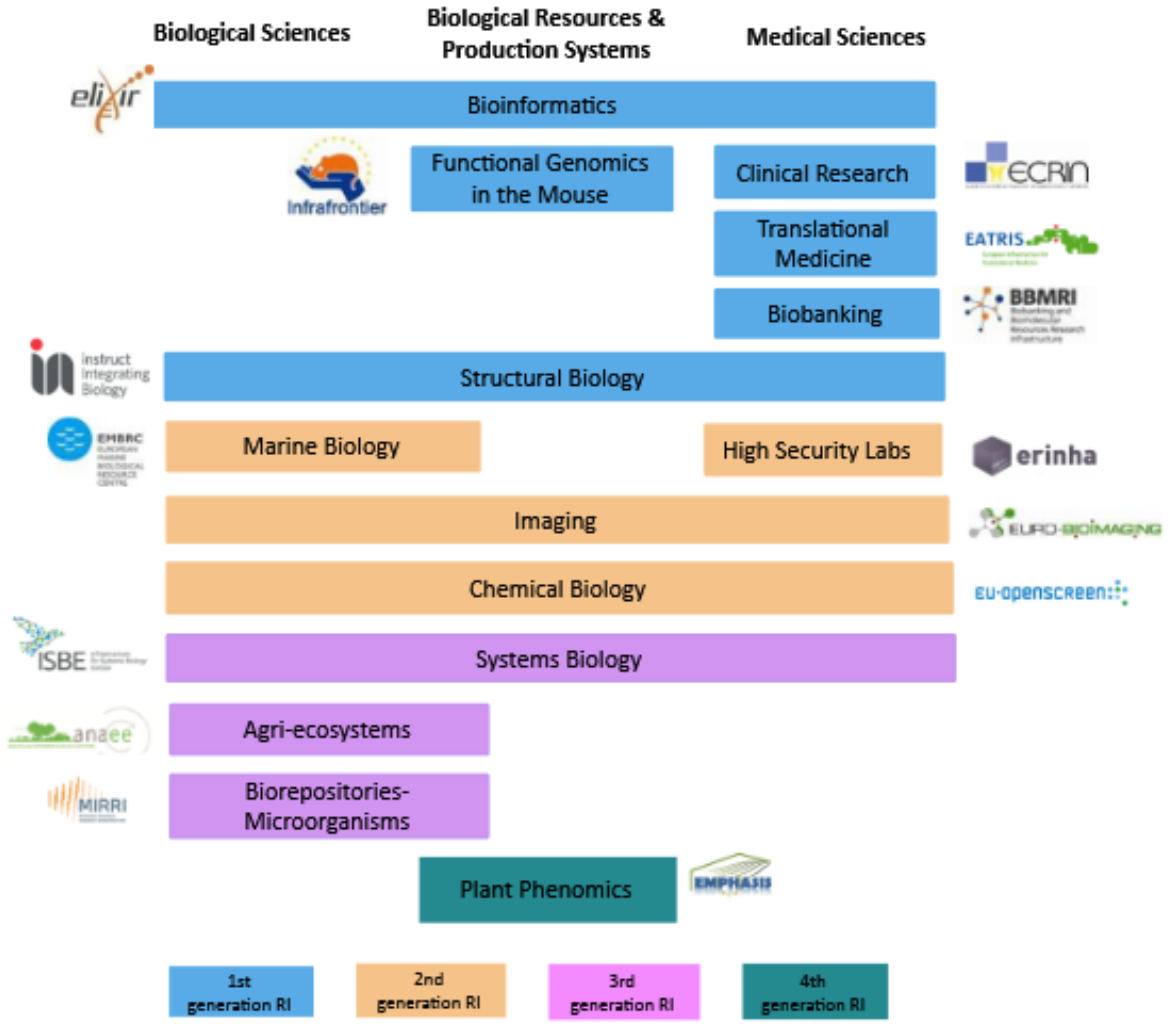
Landmarks and Projects



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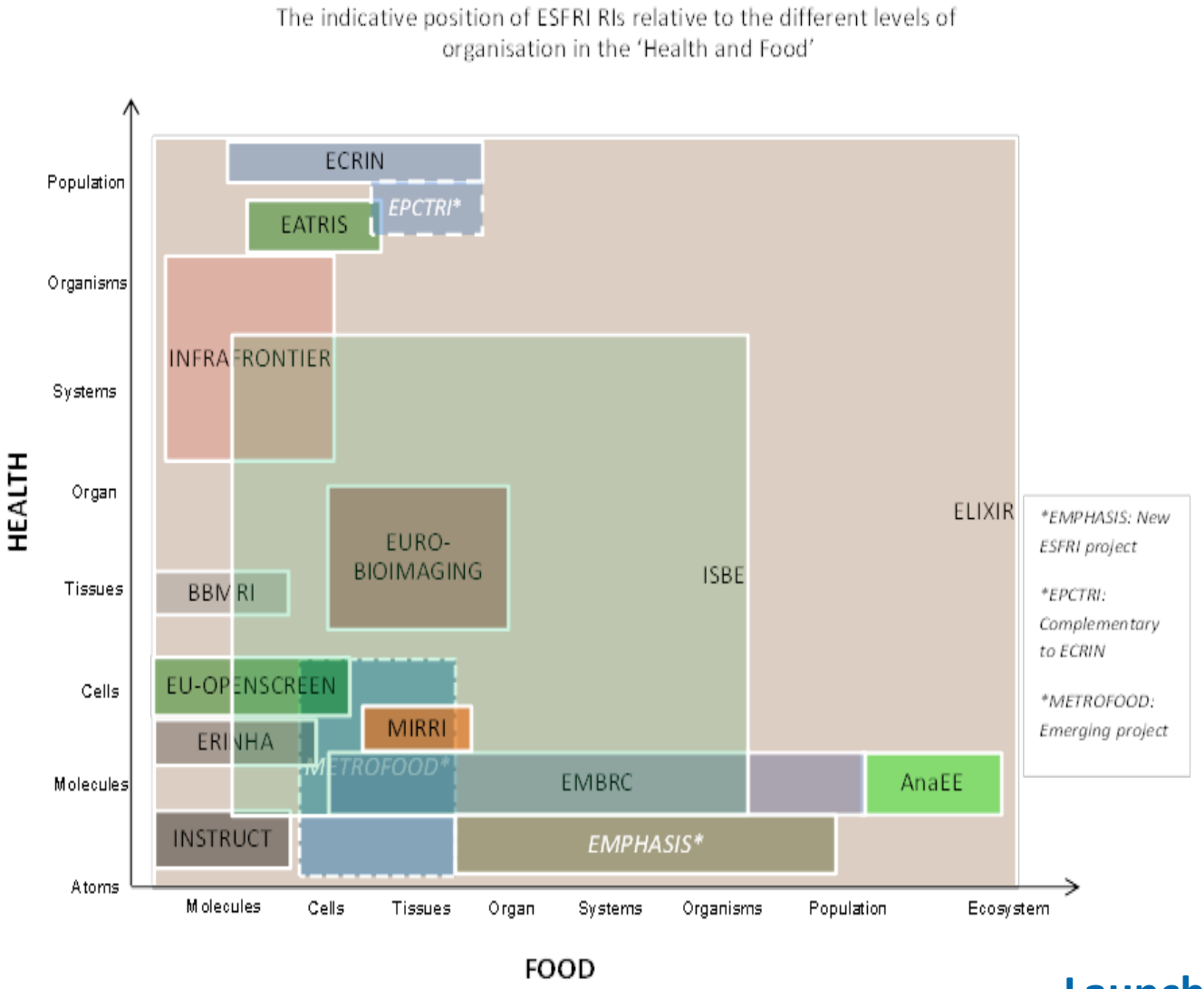
Landmarks and Projects

Complementary Emerging



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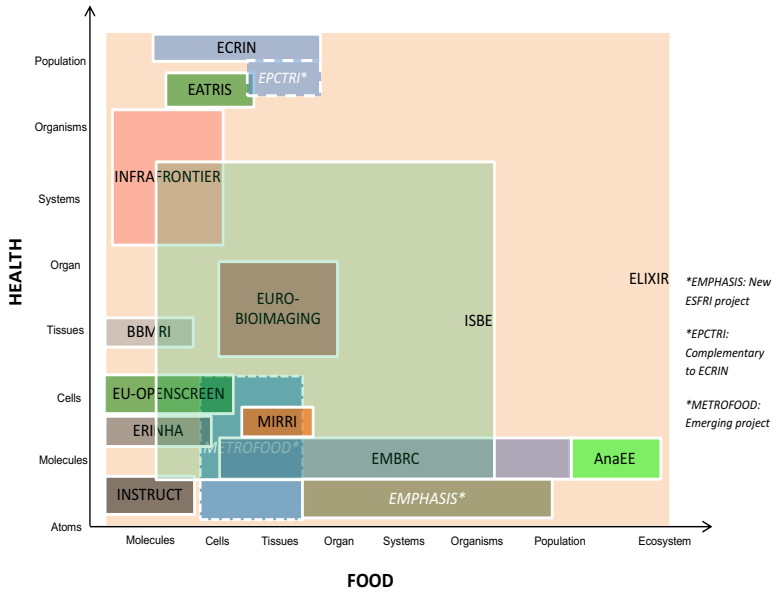
Landscape analysis

Brief

- Update the landscape analysis (Sep 2016 – Sep 2017)
- Provide an overview of RI ecosystems
- Identify gaps and promote inter- and cross-disciplinary aspects
- Explore complementarities and effectiveness at the boundaries
- Forward look and trends

The indicative position of ESFRI RIs relative to the different levels of organisation in the 'Health and Food'



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Landscape analysis

HF SWG plans its analysis in **four broad steps** that:

- set up a framework of the landscape analysis;
- evaluate the current status of the RI landscape and identify gaps;
- prioritise gaps to be filled, based on criteria defined at the beginning of the work;
- make recommendations to ESFRI Forum.

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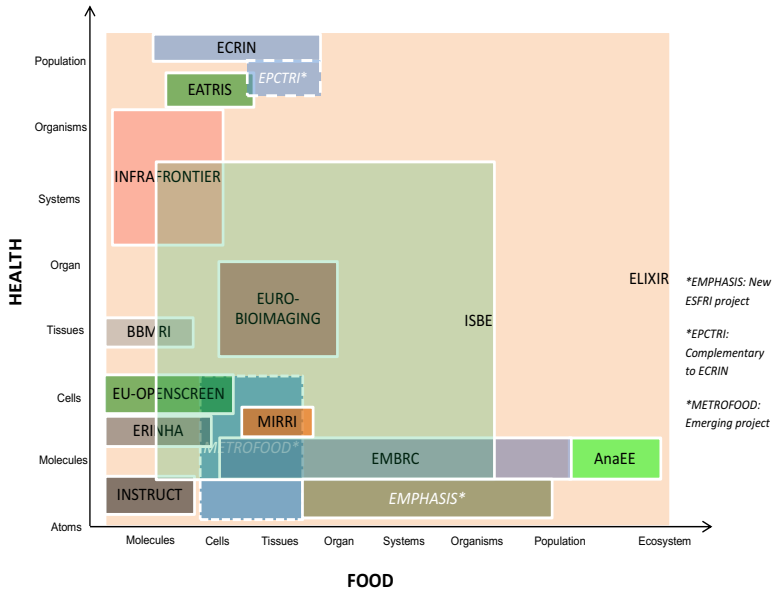

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Landscape analysis

Resources

- Analysis of National Roadmaps;
- Areas identified previously by the HFSWG and published in 2016 RM;
- Overview of all communities of research infrastructures;
- Recommendations from relevant established bodies/reports.

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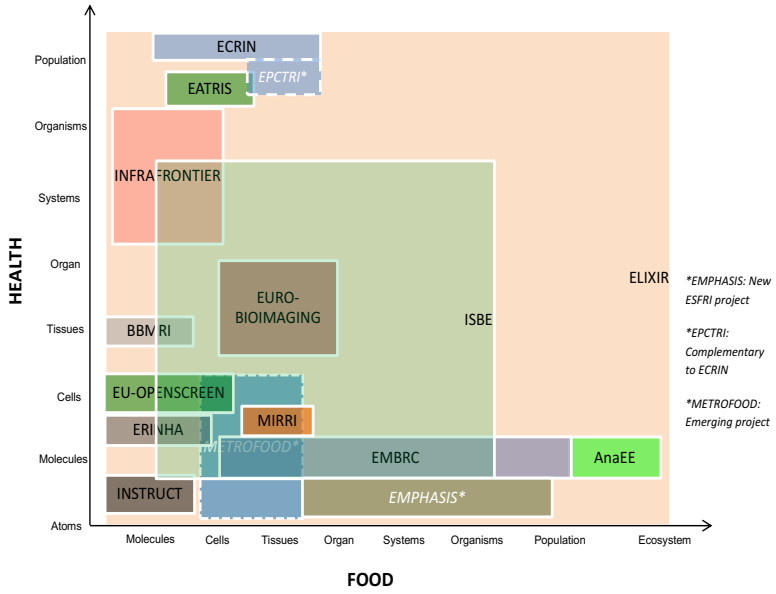

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Landscape analysis

Criteria

- Scientific and technological knowledge delivered (or contribution to the advancement of science and technology);
- Potential for structuring the ERA and addressing fragmentation;
- Timeliness (urgency; opportunities Europe will lose if delayed);
- Range of scientific communities covered and potential for integration;
- Potential for knowledge and technology transfer, training and increasing capacity;
- The extent to which the new infrastructure responds to the needs and improves the access for scientific communities;
- The extent to which the new infrastructure meets a gap in and connects to HF SWG landscape.

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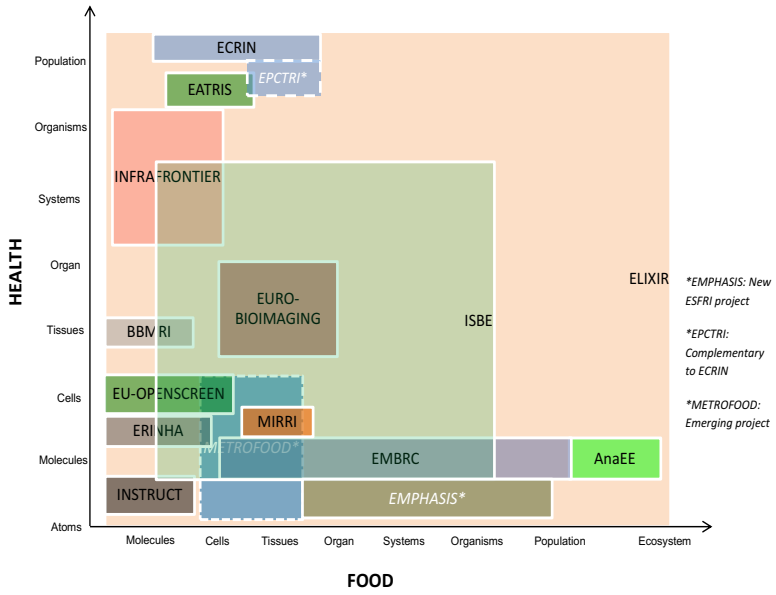

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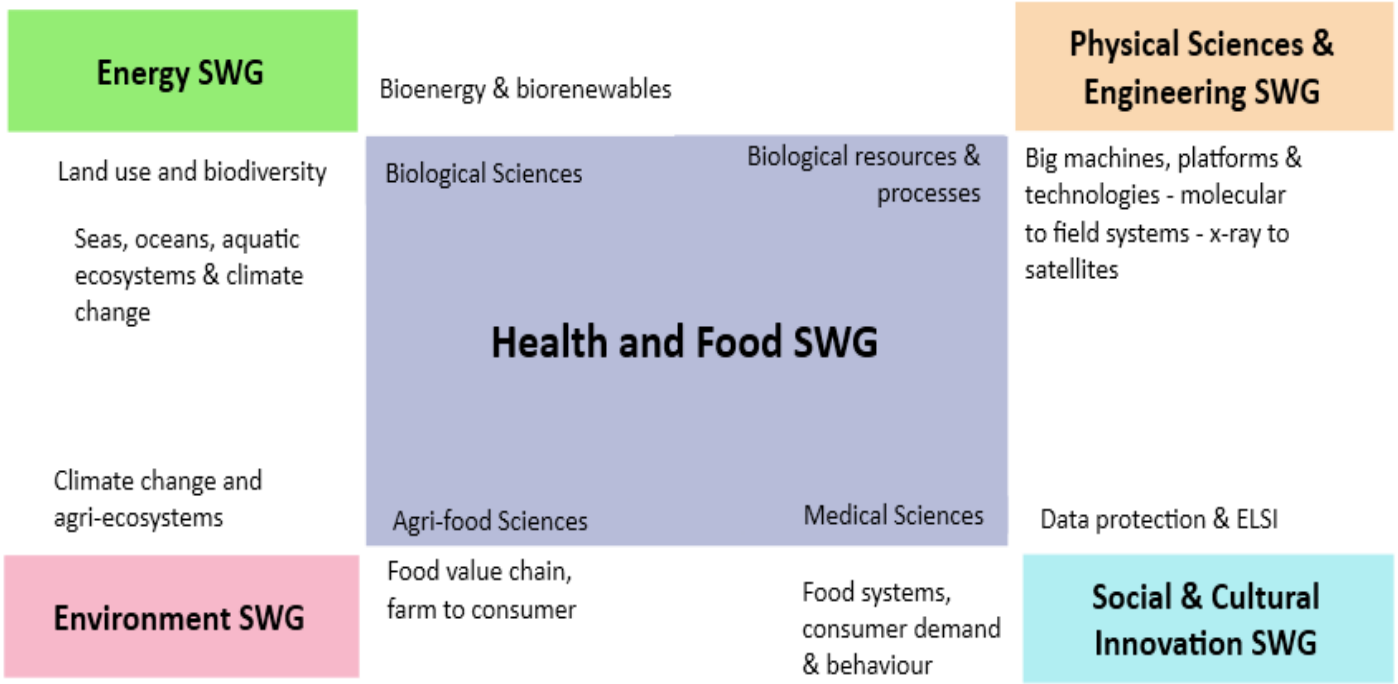
Working at the boundaries
New opportunities and new questions



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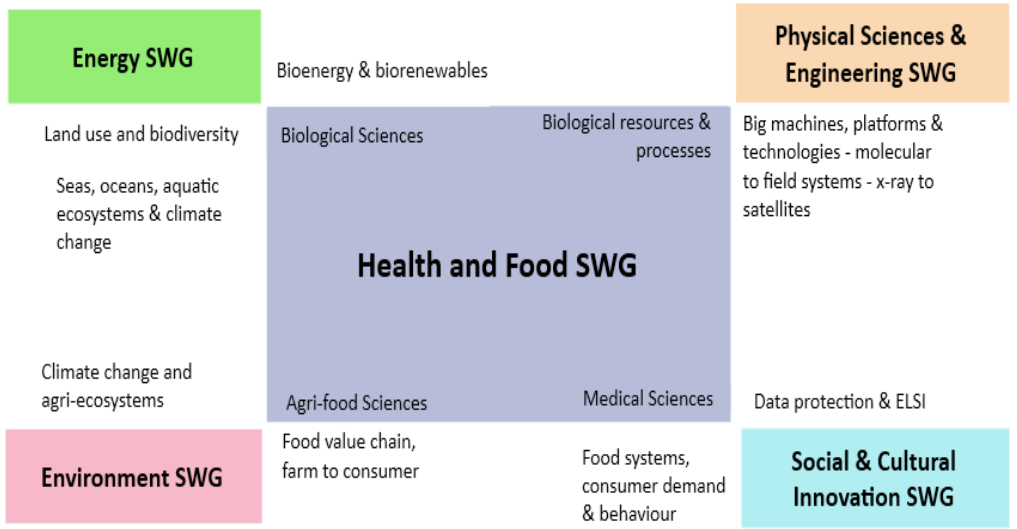
Working at the boundaries
New opportunities and new questions

CONNECTING THE LANDSCAPES
e.g. from ageing to food systems; from food and non-food systems to satellites



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Towards a methodology for measuring socio-economic impact of RIs

- Generic to HF specific approaches for measuring socio-economic impacts of RIs

- Need to consider:
  - Different stages of RI lifecycle (preparatory, operational and beyond)
  - Different types of RI (single sited, distributed, virtual services etc.)
  - Varying RI contexts (regional, national, pan-European, global)
  - Varying users and services types
  - …

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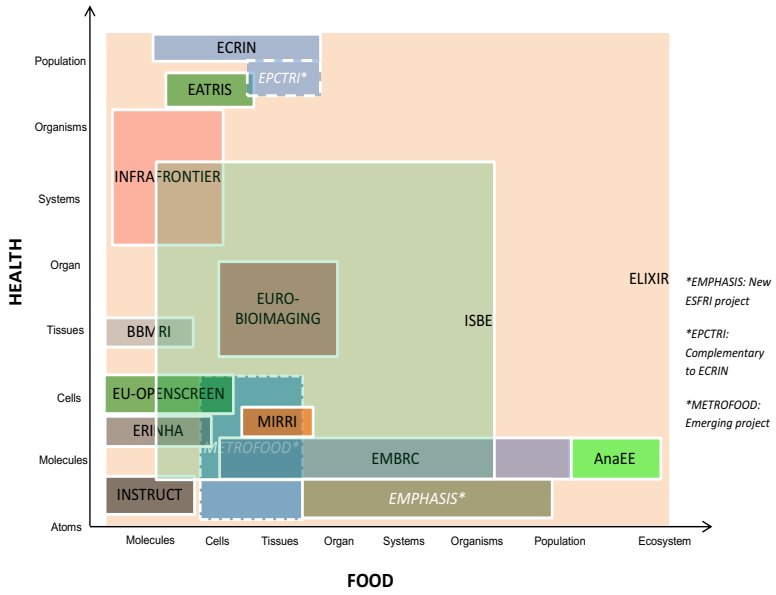

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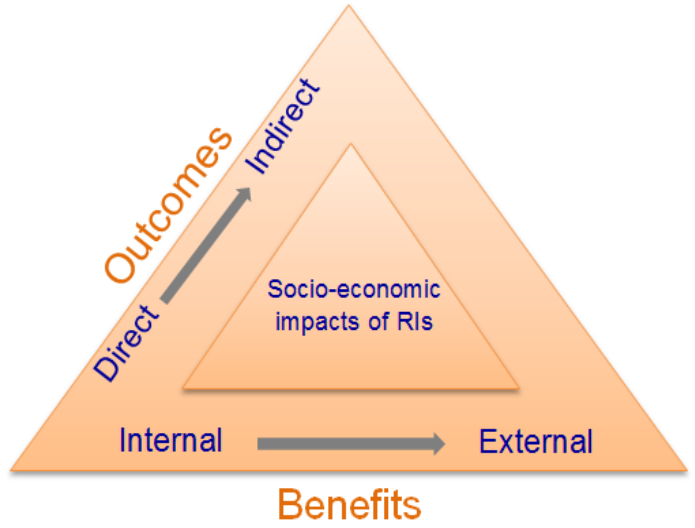
Towards a methodology for measuring socio-economic impact of RIs

- Socio-economic impacts can be identified as 'benefits' that impact economic growth and social changes

- KRDS* Benefits framework – organises outcomes in broad 'dimensions' of benefits
  - Direct and indirect benefits
  - Near term and long term benefits
  - Internal and external benefits (i.e. private and public benefits)

- Given the specificity of each RI, difficult to comprehensively identify all potential benefits from RIs



Outcomes and benefits framework (adopted from Beagrie et al 2010, Charles Beagrie 2011)

Keeping Research Data Safe (KRDS) Benefits Framework

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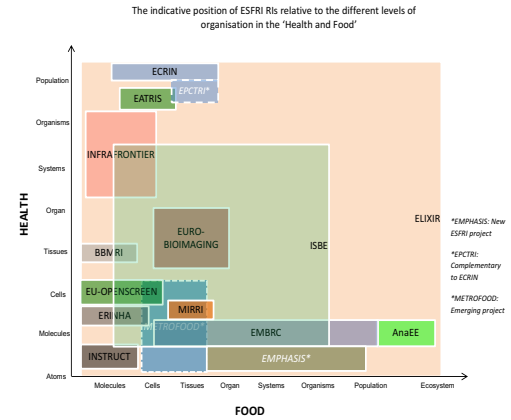
Towards a methodology for measuring socio-economic impact of RIs

- **Direct benefits**: Positive impact directly made by RIs
  - Examples: directly created jobs; direct outputs from using RI service; reduced time for data acquisition etc.
- **Indirect benefits**: Positive impact resulting indirectly from the *RIs (negative impact avoided due to the existence and use of RIs)*
  - Examples: commercial supplier's turnover due to procurement of equipment/resources for RI, reduced duplication of effort as a result of using RI services etc.
- **Near term benefits**: Benefits received in the near term (up to 5 years)
  - Examples: publications, professionals trained etc.
- **Long term benefits**: Benefits received in the longer term (beyond 5 years)
  - Examples: new spin offs as a result of scientific output through the use of RI services,
- **Private benefits**: Benefits to individuals and stakeholders directly affiliated to the RI
  - Examples: financial benefit to RIs, publication in journals, theses etc.
- **Public benefits**: Benefits to individuals and stakeholders not directly affiliated to the RI
  - Examples: impact on policy decisions as a result of research outcomes etc.

From generic to HF specific



Aligned to value of RIs and connected to investment strategies

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The landscape keeps evolving – our challenges are the same

- How will our RIs evolve?
- What will the future user needs be?

- European leadership
- Internationalisation and Visibility
- Individuality and Convergence

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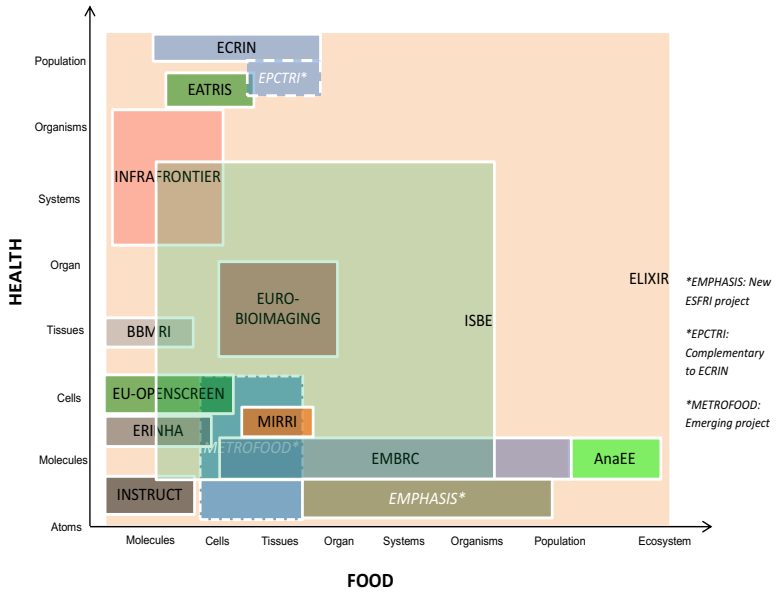

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Thanks!

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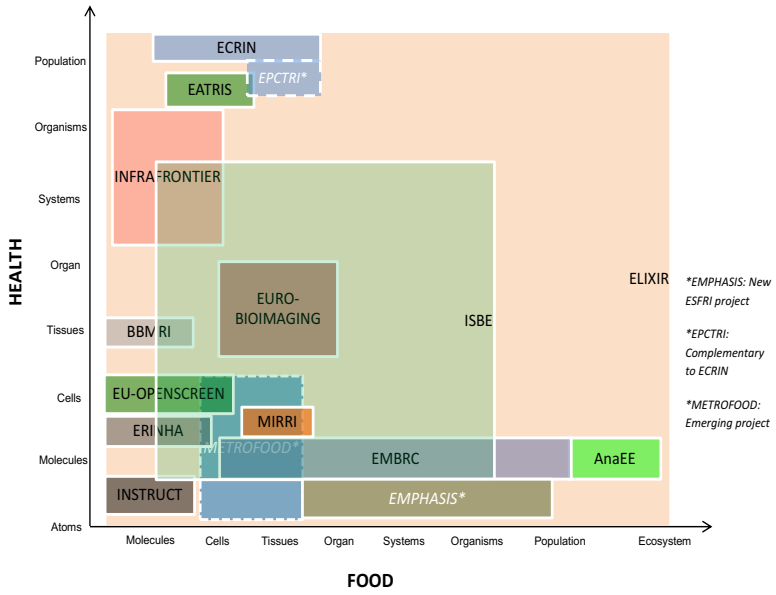

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