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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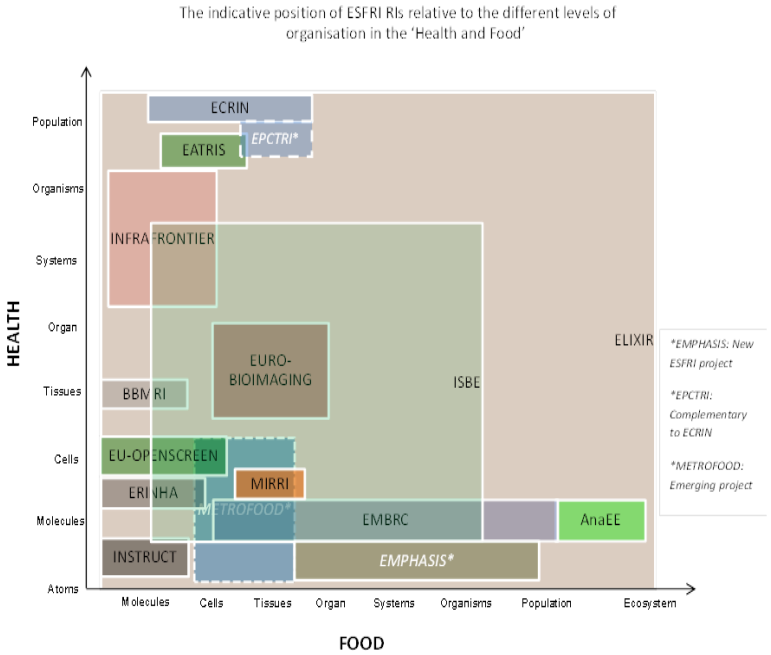
ROADMAP 2018

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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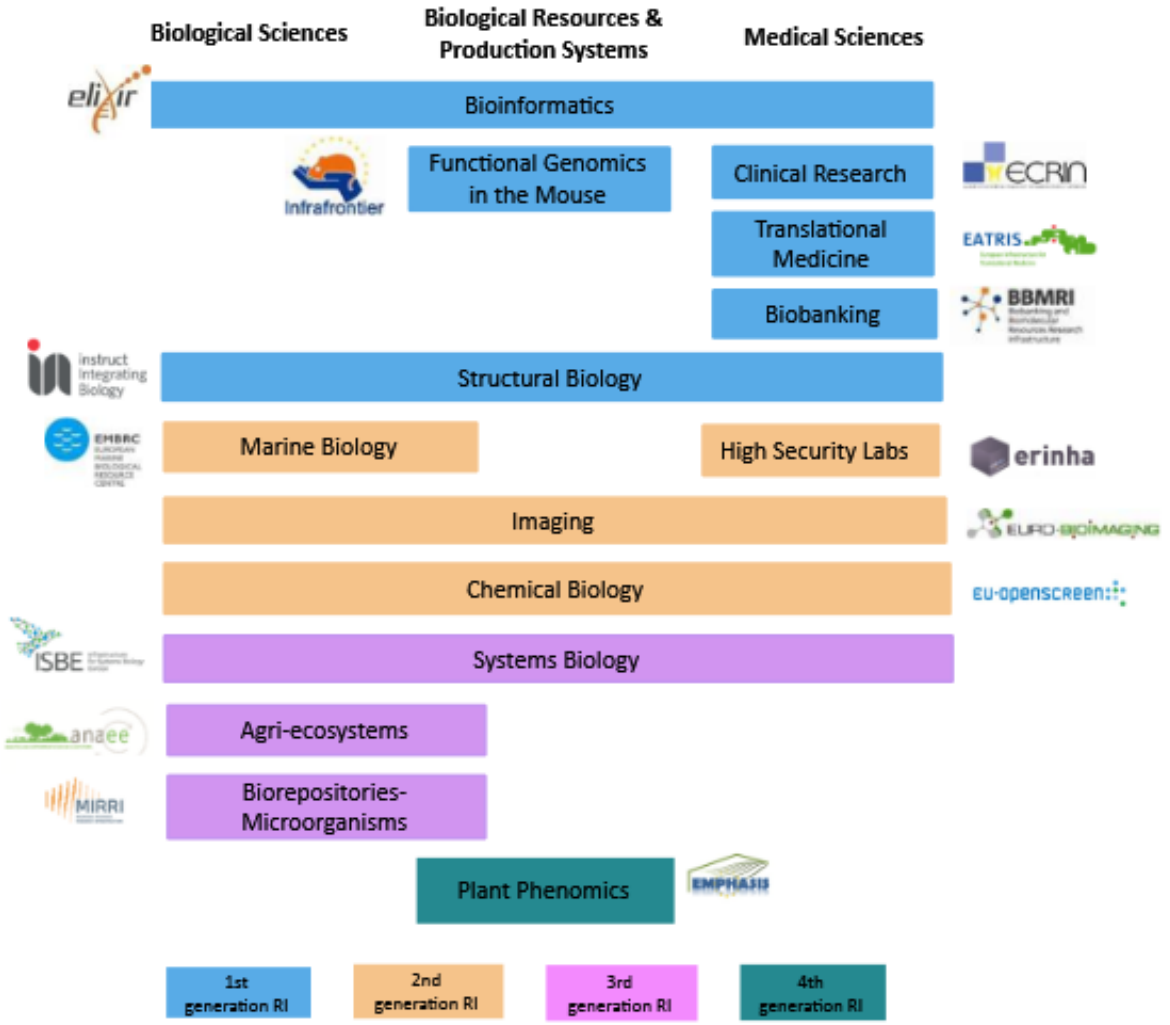
Landmarks and Projects



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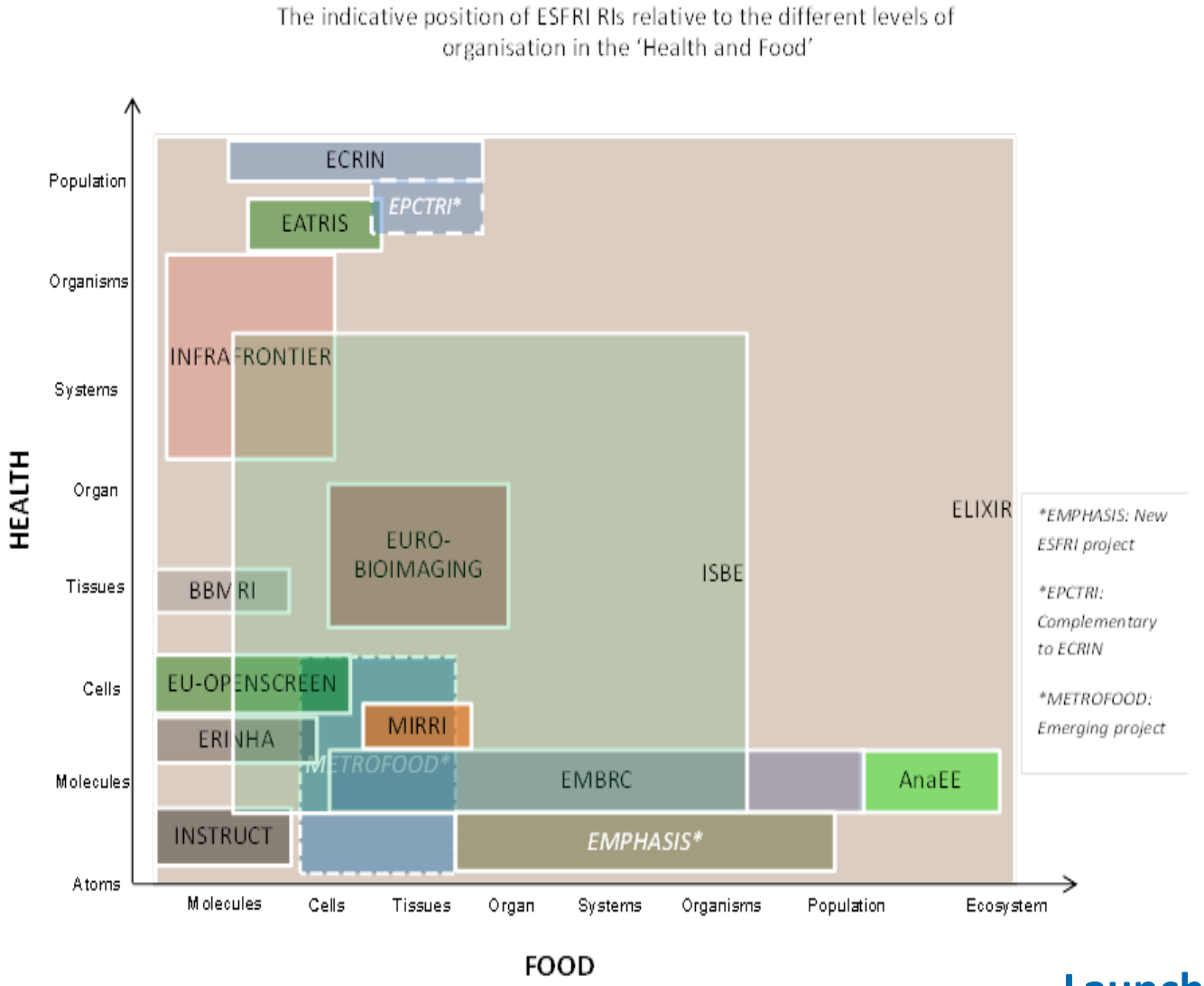
Landmarks and Projects

Complementary Emerging



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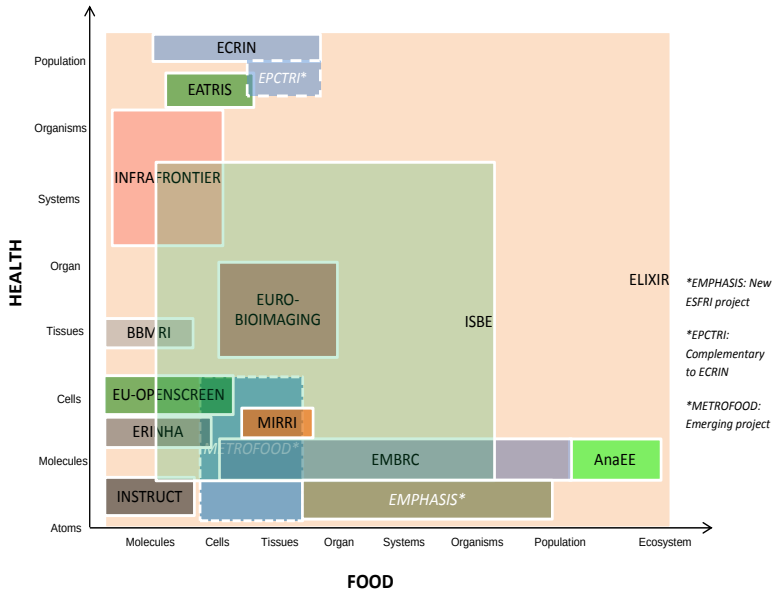
Landscape analysis

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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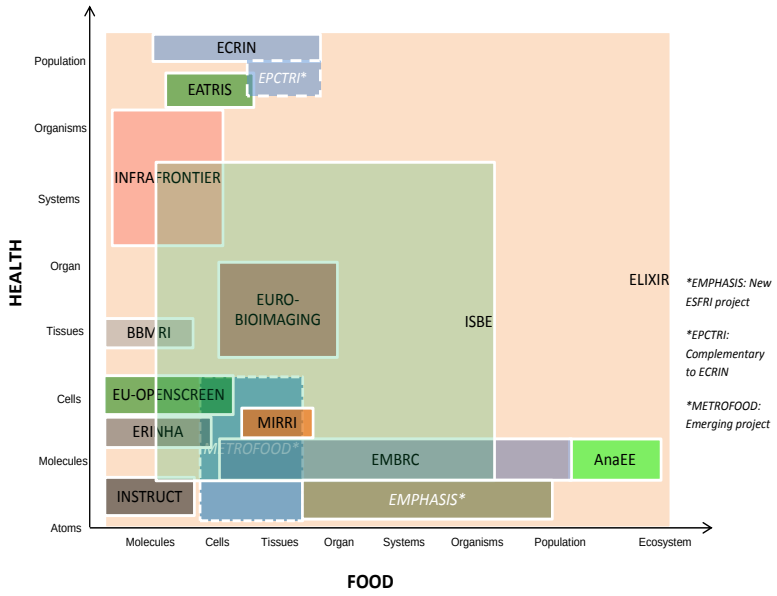

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Landscape analysis

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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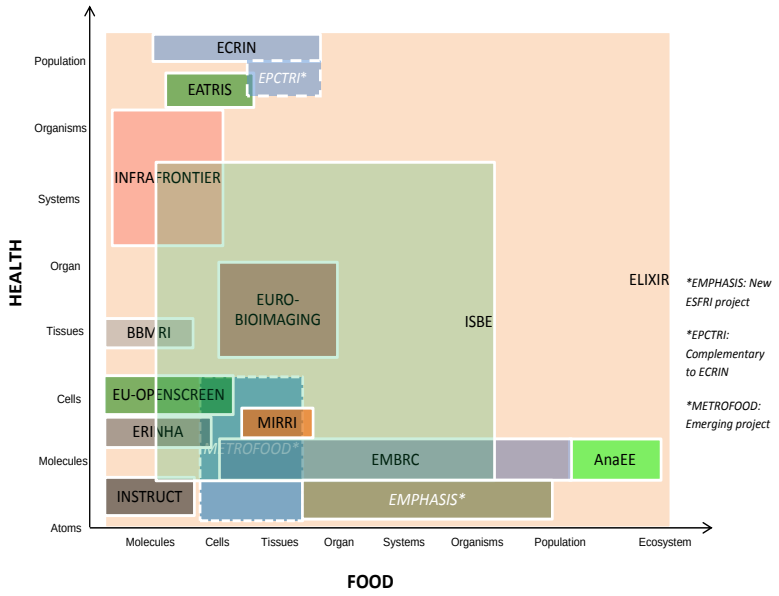

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Landscape analysis

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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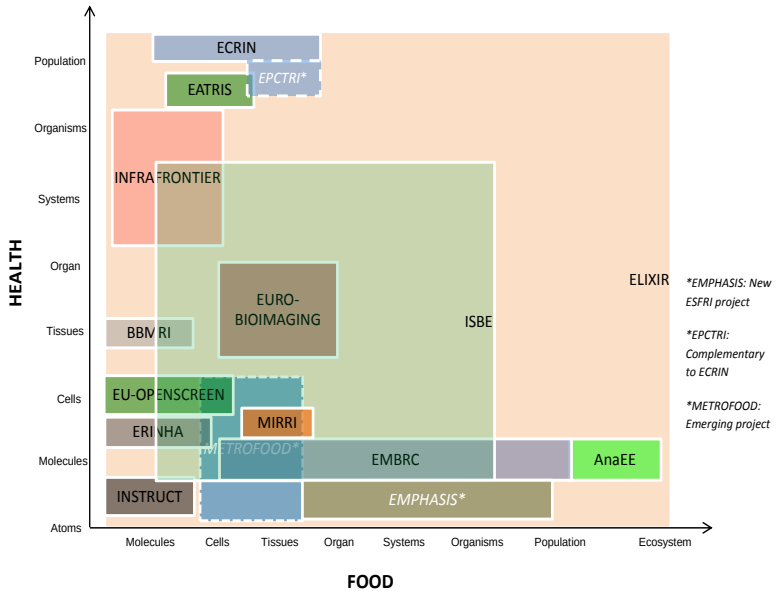

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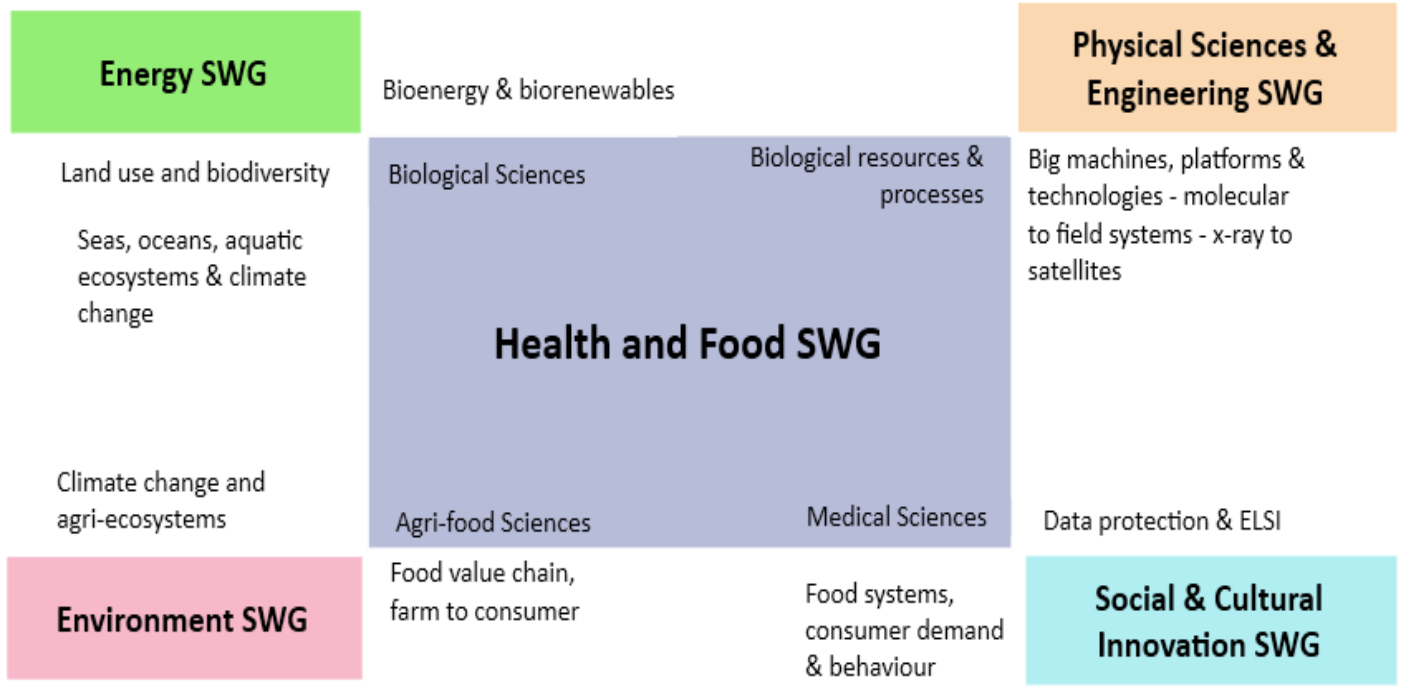
Working at the boundaries
New opportunities and new questions



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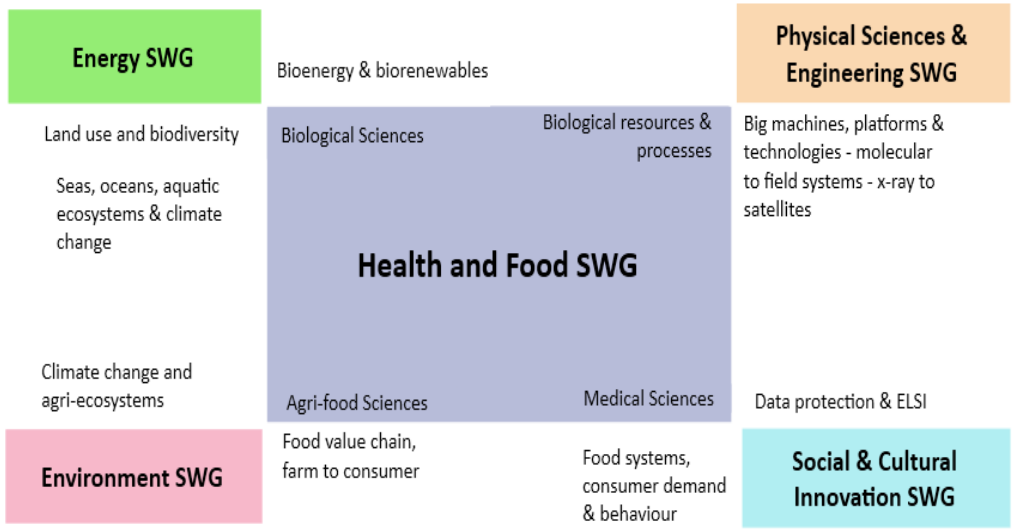
Working at the boundaries
New opportunities and new questions

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



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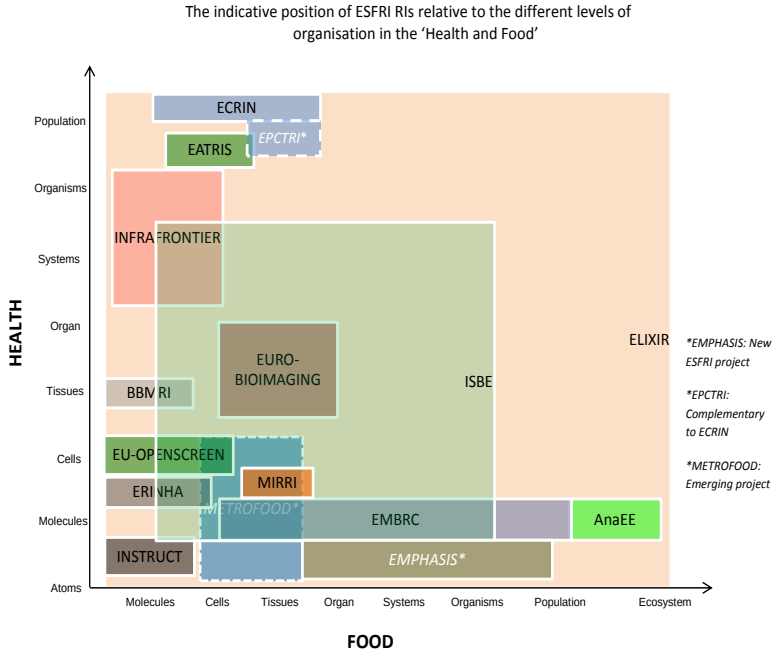
Towards a methodology for measuring socio-economic impact of RIs

- 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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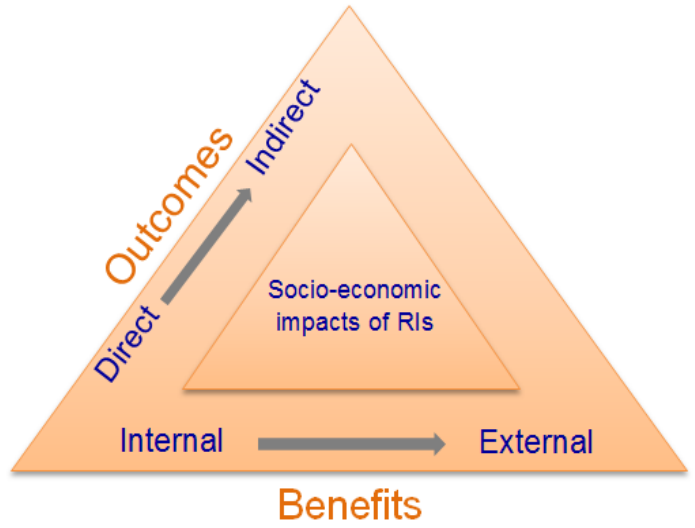
Towards a methodology for measuring socio-economic impact of RIs

- 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

**Keeping Research Data Safe (KRDS) Benefits Framework*



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

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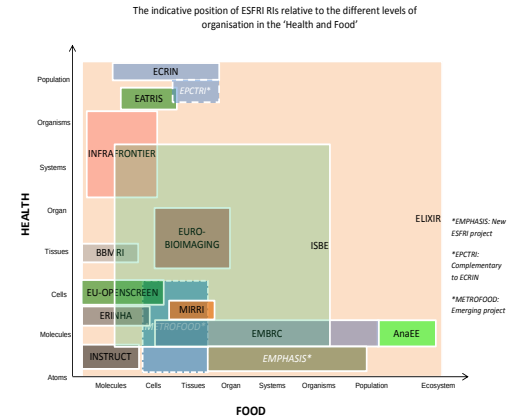
Towards a methodology for measuring socio-economic impact of RIs

- **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 remain urgent

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

- European leadership
- Internationalisation and Visibility
- Individuality and Convergence

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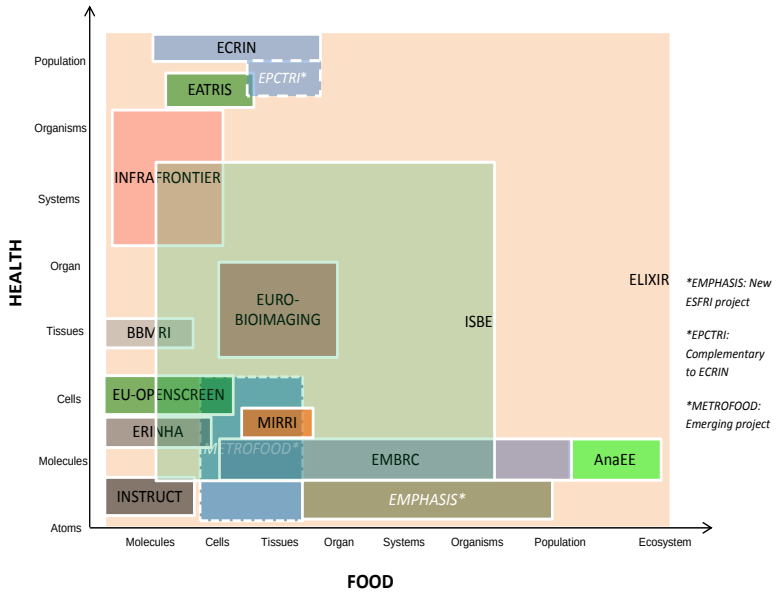

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Thanks!

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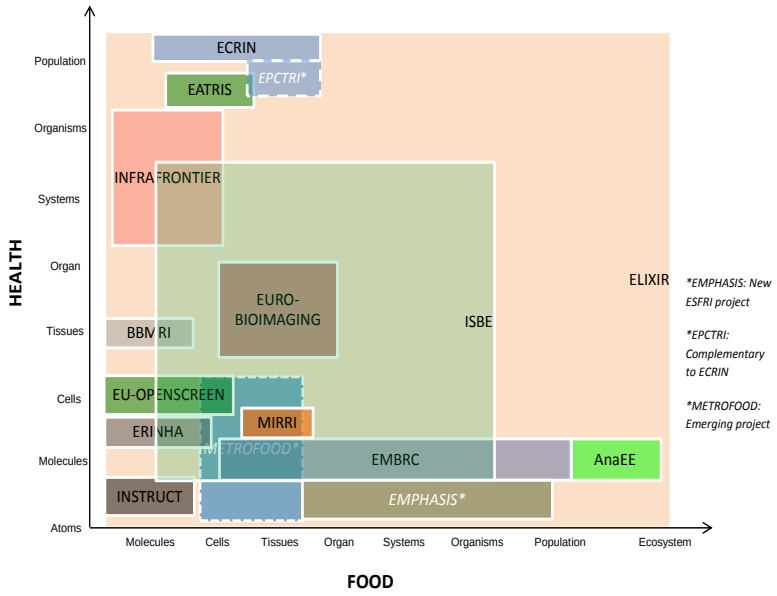

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