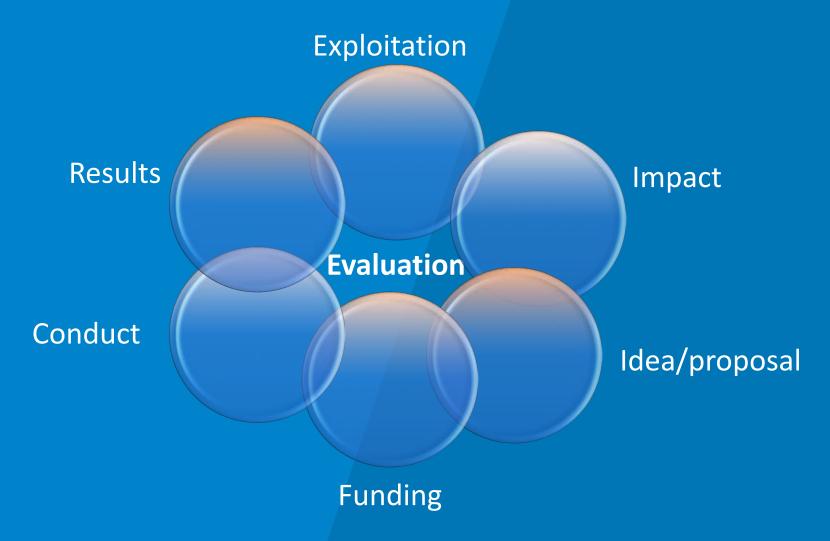


# Long-term sustainability of RIs - CESSDA ERIC

Ivana Ilijašić Veršić

CESSDA widening event Milano, 5 June 2018





The focus within sustainability - evaluation systems for RIs.

### Sustainability issues

- Funding (long-term);
- Viable business models generating revenues;
- Organisational (including procedural) issues;
- Technical requirements;
- Legal frameworks (governance, IPR, procurement...);
- Certification as contribution to reliability and durability;
- .....

Current funding models – annual fees (RC, ministries), EC.

## ESFRI Long-term sustainability of RIs

- ESFRI WG 35 recommendations in 7 key areas (June 2017);
- EC Working document (September 2017) with 42 recommendations.

- 1. Scientific excellence;
- 2. Human capital;
- 3. Data;
- 4. Innovation;
- 5. Socio-economic impact;
- 6. Governance and funding;
- 7. European and national coordination.



## Scripta Volume II: 'Long-Term Sustainability of Research Infrastructures' main recommendations:



- 1. Establish and maintain excellence;
- 2. Ensure that RI's have the right people in the right place;
- 3. Harmonise and integrate a vision for convergent operation of RIs and e-Infrastructures;
- 4. Fully exploit the potential of RI's as innovation hubs;
- 5. Set up effective means of determining economic and wider social value of RI's;
- 6. Establish conditions for effective governance and sustainable long-term funding for RI's at every stage in their lifecycle;
- 7. Foster broader coordination at national and European levels;

#### 1. Establish and maintain excellence

• An ERIC should attract funding, best users and staff to enable excellent science (independent technical review, stabile funding, facilitation open access, international cooperation, knowledge transfer, evaluating impact, supporting multidisciplinarity)

### 2. The right people in the right place

- Human capital the best RI asset;
- Selection of best possible staff, with unique skills; 5-10 years of dedication to organisation;
- Incentives (competitive salaries, challenging working environment, advancements in training, improvements and mobility).
- Includes users awareness, training, OA policy, networking...

### 3. Harmonise and integrate the operation of RIs and e-Is

- Bigger and more complex data emerging no traditional use (individuals scientists or groups);
- Coordinated approach across RIs needed (clusters); new culture and skills to optimise use, re-use, and multiple use of data across disciplines;
- Develop stable, robust and certified repositories for data preservation following FAIR principles;
- Data management plans as an integral part of the business plan for the entire lifecycle of RIs (part of evaluations).

Discussed in other documents – i.e. EC SWD Roadmap for EOSC.

### 4. Fully exploit the potential of RI's as innovation hubs;

- User services establish a culture at RIs where innovation is encouraged and rewarded, with means to support it and enable it;
- Technology developments set up mechanisms to enable partnerships wide range of stakeholders;
- Innovation ecosystem with industry and academia.

No distinction between single site (and mostly high tech, data producing) RIs and distributed RIs. No current industry links.

### 5. Set up effective means of determining economic and wider social value of RI's

- Increasing requirements from funders to prove the economic and wider benefits to society of RIs;
- Direct economic impact (construction, operations, decommissioning...salaries, building and service contracts...);
- Indirect impact (of science on society and economy delayed and hard to measure);
- Develop KPI, applicable as possible to enable comparison across domains;
- Funders should be explicit about the role SEI will play in strategic and funding decisions;
- RIs should build SEI into business models, plan SEI studies.

## 6. Establish conditions for effective governance and sustainable long-term funding for RI's at every stage in their lifecycle

- Clear vision, strategy and delivery plans to be agreed between RI and stakeholders for all stages of lifecycle;
- Sharing of best-practice and know-how between RIs (ERIC Network);
- European and national initiatives to develop business models in areas of specific concerns (OA and innovation...);
- Improvement of ERIC Regulation (VAT exemption, human mobility, legal obligations...);

Developing viable Business Models and ensuring long-term funding (contradictory).

### 7. Foster broader coordination at national and European levels

- Harmonisation and synchronisation of national investment strategies for RIs (ESFRI roadmaps);
- Encourage interaction between RIs (ESFRI, EIROForum, or community initiatives e.g. LEAPS);
- RIs should take initiative to communicate between themselves more efficiently (ERIC Forum).
- Improve international outreach engage in international fora and add international dimension in landscape and roadmap exercises.

MS and EC to align plans and policies for RI's.

### Coordination of RI's policies and evaluation plans

OECD Global Science Forum Expert Group meeting on "Reference Framework for assessing the socio-economic impact of RI's" (Paris, 19-20 March 2018):

- 1. Connect impact more closely with KPIs. Couple the strategy (vision/mission) with the stakeholders (e.g. demands and the priorities of the RI).
- 2. Main categories: performance, impact, time.

The same indicators used to monitor strategic goals (KPIs) should be used by funders to assess RI's impact:

- a) develop core KPIs for looking at performance and monitor the activities of the RI;
- b) deal with the Core Impact Indicators (CII) which should have little or no value in measuring performance, but do indicate levels of impact;
- c) overall list of indicators, which are open and mostly meaningful in comparison over time in an RI.

### For all three approaches, there should be:

- limited list of indicators,
- indicators must be meaningful (and explainable),
- all indicators should relate to objectives.

### Identified issues:

- "European Added-Value" (i.e., coordination) not easily measurable,
- position in life-cycle,
- social responsibility,
- environmental and ethical impacts...

The major focus in this discussion is on large-scale RIs – usually physical and usually places where researchers can do experiments.

## CESSDA Approach

For distributed RIs like CESSDA, it is not about publishing ourselves, or to develop patents. It is about serving the scientific community, and about serving society.

- A number of tools and policies on standards and evaluation (i.e. CDM, CMM, Data Access, PID...);
- Annex 2 of Statutes with SP's obligations/requirements (+ national evaluations);
- Ongoing CTS certification CESSDA as a trusted repository;
- Evaluation of CESSDA by:
- a) Members/General Assembly,
- b) ESFRI/EC,
- c) other parties.



## Thanks for your attention!

ivana.versic@cessda.eu Chief Operations Officer