

Monitoring Research Infrastructures - CESSDA performance

Widening meeting Skopje, Makedonija

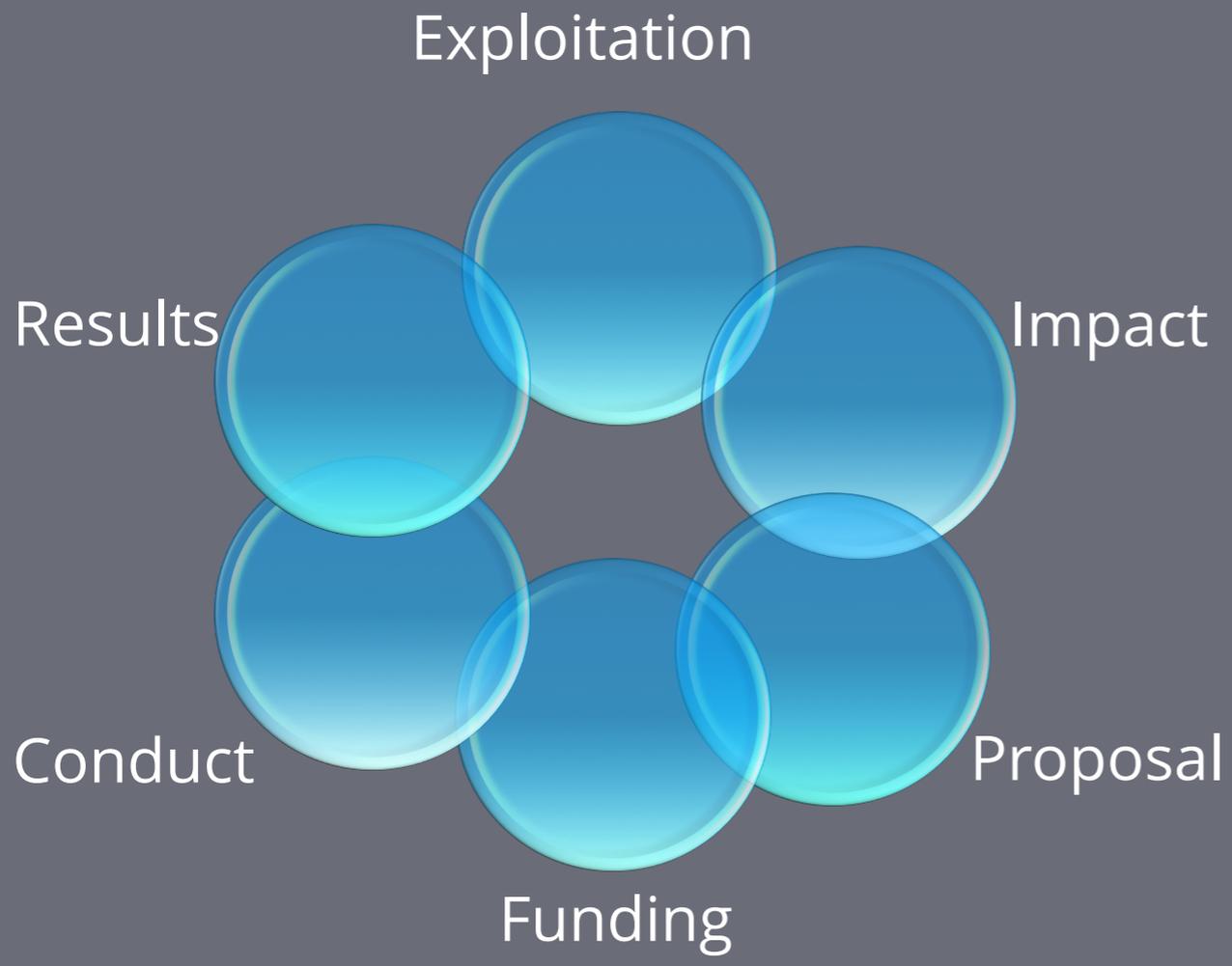
Ivana Ilijasic Versic, COO | CESSDA ERIC

05 November 2019

 cessda.eu

 [@CESSDA_Data](https://twitter.com/CESSDA_Data)





Analysis

Evaluation

Stakeholders

Socio-Economic

Data

KPIs

Potential

Monitoring

Goals

Missions

Impact

Horizon 2020

Definitions

Challenges

Measurable

Excellence

Innovation

Standards

Finance

Indicators

Horizon Europe

Sustainability of Research Infrastructures



Evaluation systems for RIs



Socio-economic impact



Mission, Vision, Goals



Measurable indicators (KPIs)



Organisational structure



FUNDING



Broader context

- ◇ **ESFRI long-term sustainability**
 - ◇ ESFRI WG 35 recommendations in 7 key areas (June 17)
 - ◇ EC Working Doc with 42 recommendations (Sep 17)
- ◇ **SCRIPTA Sustainability of Research Infrastructures**
 - ◇ 7 main recommendations:
 - ◇ Excellence;
 - ◇ Have the right people in the right place
 - ◇ Vision for convergent operation of RIs and e-Infra's
 - ◇ RI's as innovation hubs
 - ◇ Determine economic and wider social value of RI's
 - ◇ Effective governance and sustainable long-term funding
 - ◇ Foster coordination at national and European levels
- ◇ **OECD on the socio-economic impact of RI's**
 - ◇ Distinguish between performance, impact, time



- ◆ Members: national ministries (General Assembly)
- ◆ Designated national Service Providers
- ◆ Scientific Advisory Board
- ◆ European Commission (annual reports, EC projects)
- ◆ ESFRI
- ◆ ERIC Forum
- ◆ EOSC
- ◆ Scientific community
- ◆ Specific – e.g. technical evaluation

- ◆ **Evaluation**

- ◆ Socio-economic impact

- ◆ KPIs

- ◆ Business model

- ◆ Funding

- ◊ **On national level**
 - ◊ influencing policy
 - ◊ trusted repositories
 - ◊ standards
 - ◊ jobs at Service Providers
 - ◊ outreach to new members
- ◊ **On EU level:**
 - ◊ Scientific community - data sharing and re-use, training, thematic data clusters
 - ◊ Policy level - working groups, ERIC Forum
 - ◊ EC funding – EOSC, widening, standards
- ◊ **International level**
 - ◊ Collaborations: RDA IG SSH Research Data, IASSIST, with other Disciplines

- ◊ Evaluation

- ◊ **Socio-economic impact**

- ◊ KPIs

- ◊ Business model

- ◊ Funding

- ◊ Developed by ESFRI
- ◊ Developed by ERIC Forum
- ◊ Measure of performance
- ◊ Measure of impact
- ◊ Measurable over time
- ◊ Qualitative, quantitative
- ◊ **CESSDA** – a distributed SSH RI
- ◊ **Not:** patents, publications.
- ◊ Evaluation
 - ◊ Socio-economic impact
 - ◊ **KPIs**
 - ◊ Business model
 - ◊ Funding

National example (DE)



© RatSWD 2019

Key figures of the accredited network of 34 research data centres in 2018

<https://www.ratswd.de/pressemitteilung/16102019>

ESFRI developments

Objective	KPIs
Achieving scientific excellence	<ul style="list-style-type: none"> 1. Number of user requests for access ✓ 2. Number of users served ✓ 3. Number of publications 4. Percentage of top (10%) cited publications
Delivery of education and training	<ul style="list-style-type: none"> 5. Number of MSc and PhD students using the RI ✓ 6. Training of people who are not RI staff ✓
Enhancing collaboration in Europe	<ul style="list-style-type: none"> 7. Number of Members of the RI from ESFRI countries ✓ 8. Share of users and publications per ESFRI member country ✓
Facilitating economic activities	<ul style="list-style-type: none"> 9. Share of users associated with industry and publications with industry 10. Income from commercial activities and the number of entities paying for service
Outreach to the public	<ul style="list-style-type: none"> 11. Engagement achieved by direct contact ✓ 12. Outreach through media ✓ 13. Outreach via the RI's own web and social media ✓
Optimizing data use	<ul style="list-style-type: none"> 14. Number of publicly available data sets used externally ✓
Provision of scientific advice	<ul style="list-style-type: none"> 15. Participation by RIs in policy related activities ✓ 16. Citations in policy related publications
Facilitating international co-operation	<ul style="list-style-type: none"> 17. Share of users and publications per non-ESFRI member country ✓ 18. International trainees 19. Number of members of the RI from non-ESFRI countries ✓
Optimising management	<ul style="list-style-type: none"> 20. Revenues 21. Extent of resources made available ✓

Relevant CESSDA KPIs

Quantitative (number of)

- Trust:
 - certified repositories
- Users:
 - data downloads, levels, registered, number of website visits, social media followers
- Studies (datasets):
 - new datasets added to collections, variables (if possible), published through CDC (or available in archive), openly available, restricted, data breaches (aiming at zero)
- Funding:
 - annual, share of project funding, staff (FTE equivalent)
- Training:
 - Organised seminars/training events/webinars, number of participants
-

Qualitative

- Purpose of use for downloaded data (i.e. study, teaching, BA/MA/ PhD thesis, research or other)
- Utilisation rate (i.e. the share of studies downloaded at least once)
- Institutional developments (non-quantitative description)

FAIR metrics, policies...etc.

Next steps

- ◊ Combine list of KPIs with CESSDA strategic goals
- ◊ Gap analysis of goals-KPI relationship
- ◊ Explore experiences of other domains (i.e. Humanities/CLARIN/Daan)
- ◊ Precise definition and description of KPIs
- ◊ Several iterations with SPs

CESSDA ERIC business model *(in progress)*

- ◇ CANVAS Business Model
 - ◇ Key partners
 - ◇ Key activities
 - ◇ Key resources
 - ◇ Value propositions
 - ◇ Customer relationships
 - ◇ Communication channels
 - ◇ Costs (investments, maintenance)
 - ◇ Return (money, indicators/metrics)



- ◇ Evaluation
 - ◇ Socio-economic impact
 - ◇ KPIs
 - ◇ **Business model**
 - ◇ Funding

CESSDA ERIC funding

- ◆ Membership fees
 - ◆ ministries, research councils
 - ◆ additional contributions
- ◆ Project funding, esp. EU
- ◆ **Future:**
 - ◆ Revenues from services (business models)

- ◆ Evaluation
 - ◆ Socio-economic impact
 - ◆ KPIs
 - ◆ Business model
 - ◆ **Funding**

Thank you for your attention!

ivana.versic@cessda.eu