

LINDAT/CLARIN

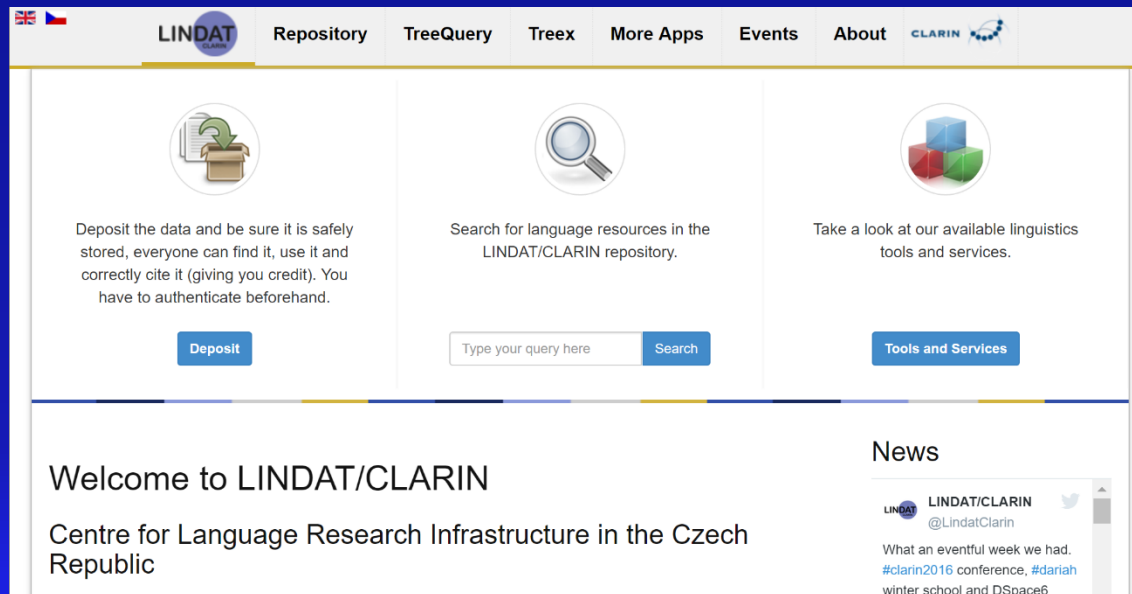
Language Resources and Technology

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LINDAT/CLARIN

- Data, tools and services
 - 1000+ repository items, Open Access, special Open Source SW
 - 14 major services & applications - all tools Open Source
 - 30,000 accesses / 2,000 downloads / mo
 - Ex.: Internet Language Reference Book, Holocaust archive access
- Coordinated by Clarin ERIC



The screenshot shows the LINDAT/CLARIN website homepage. At the top, there is a navigation bar with the LINDAT/CLARIN logo, flags of the UK and Czech Republic, and menu items: Repository, TreeQuery, Treex, More Apps, Events, About, and CLARIN. Below the navigation bar, there are three main sections:

- Deposit:** An icon of a document with a green arrow pointing into a box. Text: "Deposit the data and be sure it is safely stored, everyone can find it, use it and correctly cite it (giving you credit). You have to authenticate beforehand." A blue "Deposit" button is at the bottom.
- Search:** An icon of a magnifying glass. Text: "Search for language resources in the LINDAT/CLARIN repository." A search input field with "Type your query here" and a blue "Search" button is at the bottom.
- Tools and Services:** An icon of three colored cubes (blue, red, green). Text: "Take a look at our available linguistics tools and services." A blue "Tools and Services" button is at the bottom.

Below these sections, there is a "Welcome to LINDAT/CLARIN" section with the text "Centre for Language Research Infrastructure in the Czech Republic". To the right, there is a "News" section featuring a tweet from @LindatClarín: "What an eventful week we had. #clarin2016 conference, #darjah winter school and DSpace6".

Panel questions

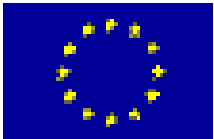
- ESFRI issues
 - Relevant: Excellence in Science, Human Resources (ext.), Coordination
 - Challenging: socioeconomic impact (to prove)
- Lifecycle concept
 - SSH area – commercial use < 20%
 - Cornerstones: international coordination, excellence of services, data, tools, match to changing user needs, funding
- Performance indicators
 - External mapped to internal (aligned)
- National and ESFRI coordination
 - ESFRI: must acknowledge successfully running Ris (landmarks)
 - National: well-managed process, useful feedback from evaluation

CzeCOS

Motto: „CHANGE IS CHALLENGE“

**Long term sustainability of research
infrastructure**

Jiří Kolman
**Scientific Secretary of Global Change
Research Institute**



Long term sustainability of research infrastructure

Benefits of current model that is OK:

- **Stable long-term funding**
- **Based on robust international regular and fair evaluation**
- **Significant funding** (surely more funding better funding)
- ❖ **Multisource funding supporting the RI development and operation is possible** (e.g. *H2020 project Readiness of ICOS for Necessities of integrated Global Observations (RINGO) implemented 2017-2020*)

- ▶ e-Infrastructures: trully horizontal activity
 - ▶ networks (GEANT), grid/cloud computing (EGI), supercomputing (PRACE), storage (EUDAT, EGI)
 - ▶ cross disciplinary collaboration essential
 - ▶ (e-)infrastructures contribute to and **serve** excellent science
- ▶ Interational collaboration and coordination
 - ▶ vertical within the e-infra segment
 - ▶ vertical and horizontal cross e-infra segments (PRACE in ESFRI)
 - ▶ with ESFRIs and other large scientific communities
 - ▶ horizontal and cross-collaboration not (much) explicitly supported
- ▶ Continuous self-evaluation
 - ▶ capacity consumption
 - ▶ quality of impact/outcome **in other scientific disciplines**
- ▶ Long-term strategy crucial
 - ▶ fast technology turnaround vs. trust in long term existence
 - ▶ can't directly compete with IT giants
- ▶ **Current funding cycles far too short**

Session II: Long term sustainability of research infrastructure

Personal experience with research infrastructures:

- Member of ESFRI WG Energy (project assessment, preparation of Roadmap)
- Member of MEYS committee for research infrastructures in Czech Republic
- Long term cooperation with CERN, ESA and JINR Dubna
- In IEAP CTU there are 2 RIs
 - LSM-CZ: multidisciplinary fundamental and applied research in ultra-low background conditions, deepest underground laboratory in Europe, 4 800 m.w.e., dark matter search, mass and type of neutrino, environment studies, microelectronics, radiobiology in „ZERO DOSE“ environment ...
 - VdG (accelerator of ions): fundamental and applied research in subatomic physics, material physics, development of detectors and space research.

Why the question of long term sustainability of RIs is important?

- 1) Every modern country (and CR is highly developed country) needs sophisticated research base in many areas
- 2) In last period Czech Republic donated large funds into RIs and into new research centers (effectiveness of the financial resources)
- 3) Quick changes in today's scientific world

How to support long term sustainability (items for discussion)?

- 1) Regular upgrade of the equipment
- 2) Attraction for international community (staff from abroad)
- 3) Ambitiousness towards results (articles, citations, patents)
- 4) Connection with education (attraction for young students)
- 5) International cooperation based on reciprocity (EU, USA, Canada, Japan...)
- 6) Cooperation with industry (in some area it is crucial question, direct sell of the results)
- 7) Financial budget:
 - a) governmental support (**based on international refereed process**)
 - b) part of budget based on results at Czech Republic scale (**based on strict system and not on committee decision**)
 - b) part of budget from business
 - c) part of budget from intergovernmental level (cooperation inside EU - H2020, ESFRI...)
 - d) part of budget from grant agencies in CR (**but to avoid double financing**)
 - e) philanthropy foundations

How to avoid the stiffness of the scientific environment (to close RI, to open new RIs)?

- 1) Regular (e.g. 5 years) control of the results and progress – international level
- 2) Regular (e.g. 5 years) estimation of new demands, changes in scientific world – international level, small support for emerging projects, different stages of the RI (preparatory, ...)
- 3) Not to loose experts from RIs at the end of exploitation.



Day of National Research Infrastructures 2017

Long term sustainability of research infrastructure

Jiri Vondrasek, ELIXIR CZ at IOCB AS CR



November 2nd, 2017

Long term sustainability of research infrastructure

- Sustainability of the RI services as well as RI investments is conditional on the sustainability of funding
- MYES as the major provider of the funds and the RI support should clearly define priorities and evaluation criteria
- Long-term vision of the RI utilization is necessary
- Anchoring the RI within European environment is key
- Quality of the RI depends upon national funding – quality of the RI services is a crucial condition to apply for European resources (competitiveness and eligibility)
- Sustainability of the funding is therefore the most important element towards a high-level quality RI and sustainability of its services