LENS LEAGUE OF ADVANCED EUROPEAN NEUTRON SOURCES

LENS, PaNOSC and ExPaNDS

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LENS members

European (stand alone legal entities)

- Institut Laue Langevin
- European Spallation Source (construction project)

National (part of other legal entities)

- ISIS Neutron and Muon Source
- Heinz Maier-Leibniz Zentrum
- Swiss Spallation Neutron Source/Muon Source
- Budapest Neutron Centre

Neutron knowledge centres

- Jülich Centre for Neutron Science
- Laboratoire Léon Brillouin
- Institutt for Energiteknikk

LENS WG4 sub-projects

- Open Data
- Software repository
- Analysis
- Simulation
- AI/ML
- Automation and Robotics
- Controls

PaNOSC, ExPaNDS

DiTARI

Sustainability

What does sustainability mean?

- Finishing/Implementing what has already been started?
- Maintaining these services?
- Further development?

Why does this need to be sustained?

- Does it provide what we want/need?
- What is the long term (10 year) goal?

Opportunities

Pandemics

- Forced us to develop and implement remote access (but based on years of previous work, just like the vaccines ...)
- Shows how quickly we can act given the resources (just like the vaccines ...)

Climate change

- All steps in the data value chain use energy
  – Measurement, Storage, Analysis, Exploitation
- Optimising this process has to be the future goal

Challenges

Common services

- Individual RI may be asked to standardise with multiple organisations
- Requirements are often similar but not identical
- Truly common services are difficult – governance, commitment. Inter-operable?

Budget/schedule

- Times are tough! Making data a priority is difficult.
- Defining/maintaining a schedule/budget for common projects is difficult without an externally imposed (e.g. EU) timetable.

EOSC

- Sets the ‘direction of travel’ but doesn’t pay for (most of) the journey
- FAIR is an aspiration, not a law. All data are not equal ...

Conclusions

- Neutrons and photons should continue to collaborate
- Not all LENS members will be able to proceed at the same rate
  (even implementing already developed systems requires resources)
- Priorities need to be examined and (re)set
  (recognising there are differences, e.g. data volume is not a problem for neutrons)
- Democracy may not be the best way of setting priorities
- Focus on science, not on technique

Conclusions

- Users need to see the added value to open data, and accept the risks, before you change the culture
- Data policy (common principles for raw data) – get it done and move on
- FA for all data – IR where there is value
- Data management plans – useful or useless?
- Data policy (published data) – where the real value lies
- Turning case studies into routine practice
- Databases not datasets
- Who is the audience?
- Optimising the energy use of the data value chain

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Make a proposal (please)