

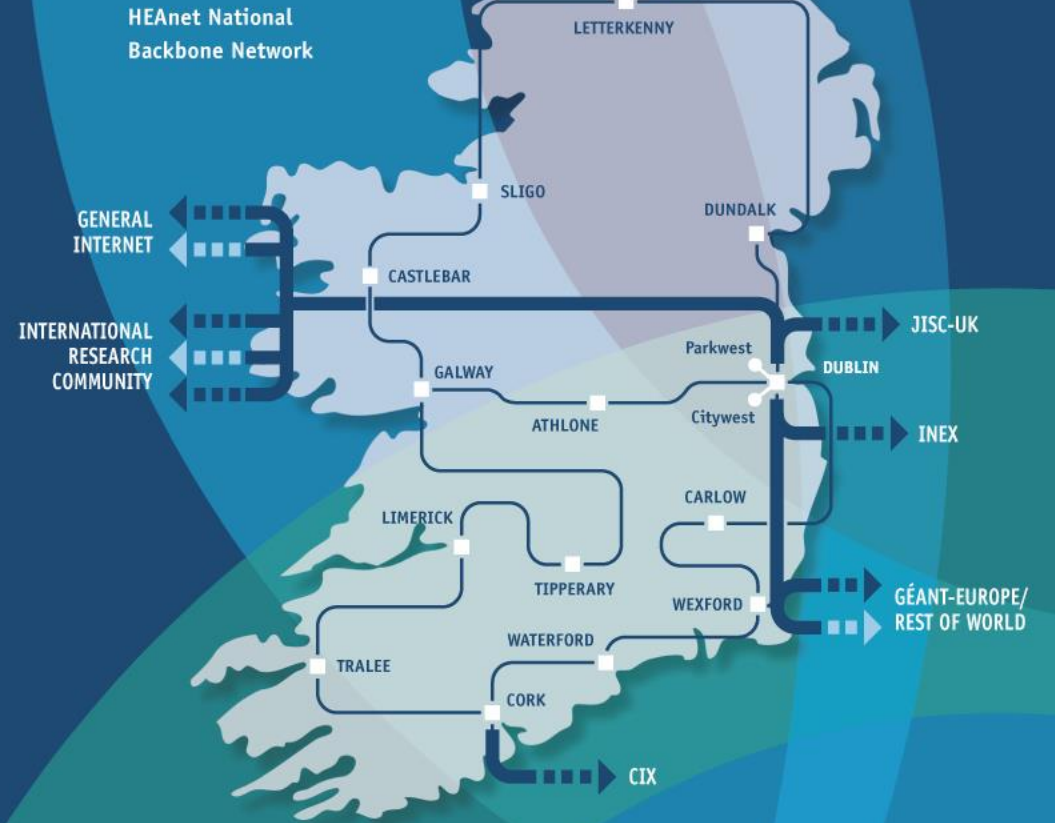


Developing EFSS for Research in Ireland

Joint CS3/SIG-CISS

11th March 2024

Roberto Sabatino



Some history and context...

- HEAnet – the Irish NREN
 - Connectivity, Identity, Brokerage, Security
 - Support to research done on “*I know them*” basis, or obvious national cases
 - I-LOFAR
 - EUMETCast with Met Eireann
 - Research in networking (TSSG, TCD, SFI-CONNECT)

National context

- No national service at present in Ireland for storing and sharing active research data
- Support for research, from digital infrastructure/IT perspective, best described as “patchy”. For both:
 - Institutes
 - *Server under desk managed by post-doc*
 - *Silos. Within and between institutes*
 - Funders
 - *National RI strategy ? What’s that ??*

But not all is bleak

- Open Science, FAIR RDM gained momentum in Ireland through NORF
- And to some degree EOSC
- Funding to bootstrap activities across the Open Science spectrum in 2022 and 2023.
 - Culture, Open Access, Infrastructure
 - ~1.8M/year
 - Up to 200K per project

And from 2020 HEAnet is a fully fledged NREN



- Addressing silos in Research Support and leading to a *first* sectoral national collaboration



National Shared Storage Service

NORF Open Research Fund 2022

Develop and run a pilot for a national service for active research data. Leverage findings to develop the specification of a national production-quality and sustainable service.

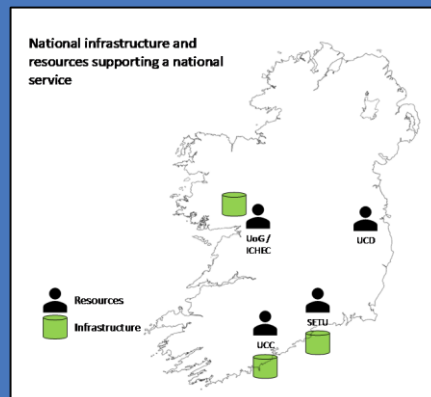
Phase 1

Verify services on EUDAT European infrastructure with 2 use cases.



Phase 2

Design and implement national pilot infrastructure



Onboard pilot users on national infrastructure



Phase 3

Develop specification for a national production quality and sustainable service



Partners:

- HEAnet: co-ordinator
- EUDAT: expertise and technology provider
- ICHEC, SETU, UCC, UCD: expertise and infrastructure providers

11 Use cases from:

- GeoData
- IoT for smart roads
- Material sciences
- Social Sciences
- Humanities
- Life Sciences

Wider sector engagement through Stakeholder Advisory Forum

- Next meeting April 2024
- Contact: Roberto.Sabatino@heanet.ie



The challenges ?

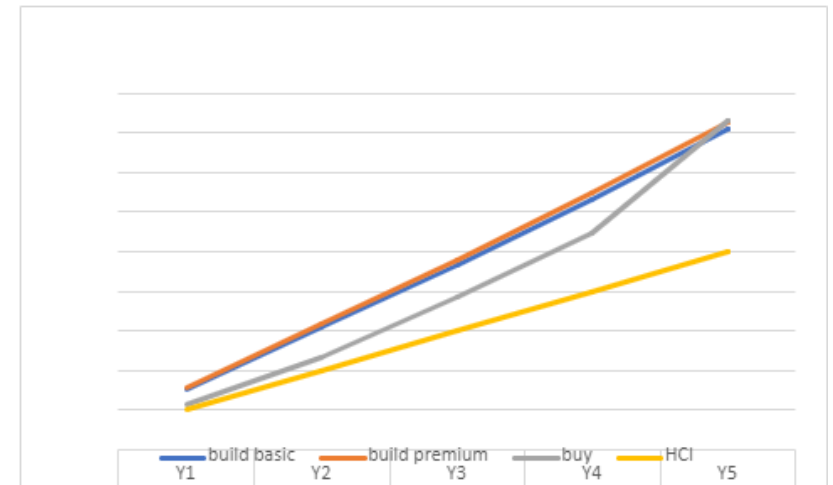
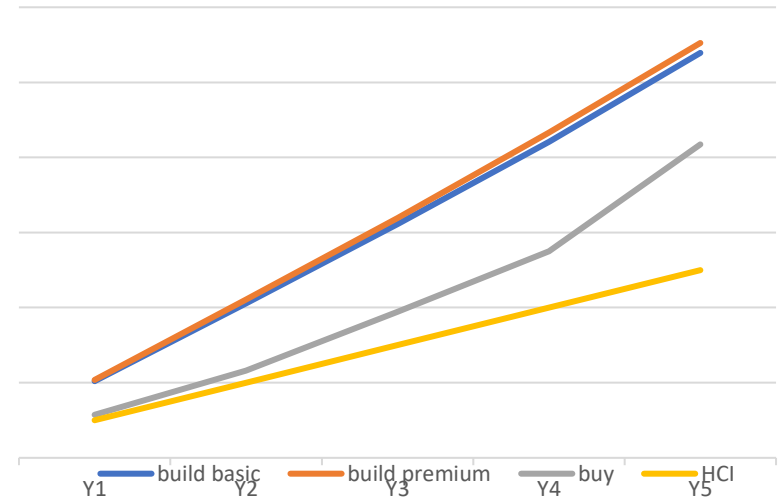
- Technically, it's straightforward and proven
- Demand planning hence service dimensioning
 - From short pilot only so much you can determine: many stars have to line up.
 - Pilot users need to change their way of working for a limited time *without funding*
- Outreach
- Sourcing additional resources: A more general challenge
 - Market competition, short term contracts
 - Headcounts

Our path

- Informed by discussions with our Stakeholder Advisory Forum and sessions with other NRENs
- Full service definition based on nextcloud + B2Drop done by October 2024
 - Includes Build vs Buy analysis
 - Business and operational model
- Likely to have a 5 year plan based on 1 central national service
 - Serving the average users
 - During 5 year period evaluate case for evolving towards, for example, SUNET Drive/Research Drive models
- Preference appears to be for hybrid funding model
 - Part centrally funded
 - Part user (Institutional) fees
 - Very large users/groups maybe treated separately ?

Build v Buy

- Example 5 year scenario based on:
 - progression from 100 users, 100TB to 1000 users, 500TB
 - Leveraging hypothetical existing HW and HW support staff.
 - ***But get the data right !***
- Cheapest or MEATest ?
 - Importance of HCI ?



We'd love your input

- Especially on service dimensioning and forecasting
- I'm around the next few days – let's talk !



Thank you

Any questions?

