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3 December 2013

Dear Jiri,

I would like to share my observations from the Node visit that you kindly hosted on November 25-26, 2013 together with some ideas on how to further develop the Czech node and support the formation of an effective Czech bioinformatics network.

First, I do want thank you for organising two very useful and interesting days and to all of your colleagues that took time out of busy schedules to participate in the discussions. I thought both the discussions in Prague and Brno were very good and hopefully also helpful in terms of start shaping a national network and Czech node. As an old NMR spectroscopist I also very much enjoyed the visit to the stellar facilities at CEITEC!

During the discussions the question on how to demonstrate value from ELIXIR in the Czech republic came up several times and I would like follow up on those discussions; this is of course a key issue and agreeing on this will be important to both articulate the strategy of the Czech node as well as identifying and propose the assessment criteria for reviews by the funding bodies. In this context the question on ELIXIR "kite-marks" and pilot projects were raised and while I agree that this can be an important demonstrator of value I do think the fundamental role of these tools is to exemplify technology integration project in key areas for ELIXIR. EGI, as highlighted by Ludek Matyska, has set a good precedence here - they had a open process for technical pilots during the last two years of the INSPIRE grant with excellent results and many good ideas from the community.

ELIXIR is a *distributed* research infrastructure for life-science data and the distributed organisation, with national nodes is a key part of the strategy - this was one of the main conclusions from the ELIXIR preparatory phase and a key enabler to demonstrate value at the national level. Similarly all the other life-science infrastructures are distributed with national (sometimes several) centres. This is a major opportunity for the Czech ELIXIR Node which can, at the national level, act as an bridge between the other infrastructures - interoperability is a key part of the overall ELIXIR strategy and supporting the national research community with the



infrastructure, services and training is important to demonstrate value of the investments. This is also a key area where the Czech node can benefit, many of the other nodes have long experience in organising the national bioinformatics community (e.g. SIB has its 20th anniversary, NBIC in NL and the Norwegian network has been funded for >10 years) as well as running national services (e.g. the Finnish biomedical cloud, the Swedish node minting DOI for dataset storage and reference) - a very concrete proposal would be to invite colleagues from other nodes to share experience and support the shaping of a Czech network. Similarly to Czech other nodes have made use of structural funds and that could be another useful area of knowledge exchange. There is currently a lot of discussion on structural funds and "smart specialisation" strategies (e.g. <http://en.vleva.eu/smartspecialisation>) that can be important components of nodes but it is important to recognise that nodes have national funding to demonstrate value in the ELIXIR member state.

Thus, building an effective national network that interfaces and support the broader national research community in using the research infrastructures and international resources (e.g. through training exchange programmes) is key value drivers for ELIXIR nodes. This often focus on key national focus areas and local expertise and demand, the pilots running with our Finnish colleagues on authentication and data-transfer is good examples - the pilots will support the national research community (through access of reference data at the Kajaani HPC centre but the technologies are of course available and useful to the rest of ELIXIR. In the discussions the links to the infrastructures such as EU-Openscreen, EATRIS and INSTRUMENT were clear and building on those with a focus on benefits and value for a broader community is a foundation for sustainable national services and impact and visibility at the European level. The strong links with e-Infrastructures is also a good opportunity to demonstrate impact in the Czech republic and beyond.

Hence there are two important components of an ELIXIR node, one is the national services and impact - what are the key infrastructure services needed by research groups in the country. This is likely to be a broad set of services, cutting across many domains of life-science. In contrast, and in particular for smaller countries, the *capacity* and services offered with European significant and impact is likely focused on one or a few key areas. Again the Nordics, which are similar in size to Czech, could be good models with the Danish Node ("Service registry"), Swedish Node ("HPA") and Finnish Node ("Biomedical cloud and AAI") having very focussed and clear offerings building on national strengths and priorities. This is rooted in strong national priorities with support from institutions and funding organisations - reviewing the node applications it is clear that the highly prioritised services all enjoy significant and sustainable institutional and national support. For the Czech node there are of course opportunities around screening and structural biology with strong community and links to other infrastructures but a clear and focussed offering is key to visibility and impact internationally - where would the Czech node take the lead?

In closing I would again like to thank you and your colleagues for hosting the visit, I found the discussions very interesting and I hope they also were of some use in start shaping the Czech Node and national network. I would also like to thank Ludek Matyska for the effort he currently is spending in developing the overall ELIXIR technical strategy where he co-chairs a work stream together with Finland and Jan Burianek for the work that positioned Czech Republic as one of the founding ELIXIR members. I look forward to seeing you soon again and I would look forward to further opportunities to support and work with the Czech Node.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Niklas Blomberg". The signature is fluid and cursive, with a long, sweeping tail on the final letter.

Niklas Blomberg