Report on PLDN/EuroSDR conference: SDI.Next: Linked Spatial Data in Europe

March 12th 2019 – Amersfoort the Netherlands

Organized by Erwin Folmer (Kadaster, University of Twente) with support of Linda van den Brink (Geonovum) , Pieter van Everdingen (PLDN) and Juliska de Vries (ECP).

Attendees: 120 (registrants)

Program/Slides/Phots: http://www.pilod.nl/wiki/SDI.Next:_Linked_Spatial_Data_in_Europe

Summary:

The opening was done by Erwin Folmer (the day chair) and Martijn Rijsdijk (Kadaster) who highlighted the characteristics of both PLDN and EuroSDR organisations and their activities. This event was the follow-up of an earlier PLDN-EuroSDR event 3 years ago, when many organisations were at the first stage of investigating Linked Data. Erwin introduced the impressive program featuring 21 presenters from 13 countries.

Simon Scheider (University Utrecht), the first keynote speaker addressed what was needed to be done to enable geospatial question answering (using e.g. Alexa) based on linked spatial data. There is a big potential for this idea in analytical querying.

The first block for the roundtrip through Europe contained Slovakia, Austria (both presented by Miroslav Liska from Semantic Web Company), Belgium (Raf Buyle from Informatie Vlaanderen) and France (Emmanuel Seguin from IGN). All the speakers showed a history of experimenting with linked data. Slovakia launched a platform for sharing the ontologies, including a cookbook as approach, but so far, no instance data has been published. The presented plans from Austria look very promising from a smart city perspective. Belgium impressed by having published a lot of linked data, including the development of linked data tools (open source), and all within a vision/approach (OSLO). They work in a triple helix model (government – industry – academia). This all in contrary to France, where Linked Data is currently not a priority.

In the second block the standardization perspective was addressed by Paul Janssen (Geonovum), Martin Bauer (NEC Laboratories) and Ivan Herman (W3C/CWI). Paul addressed the issues with INSPIRE, and the possibilities to have alternative encodings, and the recent attempts to bring the spatial work and the linked data experts together in a NEN standardization workgroup focusing on the transformation of GML into Linked Data. Martin focused on the developments in an ETSI working group for Context Information Models. It includes property graphs in which properties are modelled as resources. The topic of property graphs was continued by Ivan, by reflecting on the W3C workshop on Graph data that took place a week earlier. It was an impressive workshop, based on the amount of presentations, discussions, but also based on the list of recommendations that were put together during the workshop, including potential improvements to RDF.

The final block before the lunch contained short pitches. First Frans Knibbe proposed the idea of the "space ontology", and this was acknowledged by a large part of the audience. Marco Brattinga

challenged the audience with the inconvenient truth that most data is published without context, what he called Fake Data. He questioned the audience for taking the blue pill (without context/leaflet) or the red pill (with context) as medicine: the audience chose the red pill. Joop Vanderheiden talked about the linked data developments at the Culture Heritage Institute, which should go live within a month. And finally Wouter Beek (Kadaster / Triply) showed an impressive demo to visualize the SPARQL query results in 3D.

After lunch, the first block contained presentations related to the OpenELS project. Roy Mellum (Kartverket Norway) introduced the project, and in particular the OpenELS Datastory which was demonstrated by Stanislav Ronzhin (Kadaster, University of Twente). It perfectly highlighted the power of Linked Data, by querying at once data from Norway, Finland, Netherlands and Spain, and showed the results on maps, tables, and so on.

The current status of Linked Data was presented by Roy for Norway (experimenting) and the Netherlands by Erwin Folmer (Kadaster). At Dutch Kadaster Linked Data is a production technology and offered as a service. Esa Tiainen (National Land Survey of Finland) and Eduardo Martín (National Centre of Geographic Information Spain) both showed the process of linked data creation for the openELS countries, and the promising future plans.

Within the final block of presentations for the day, the attendees were impressed by the developments in Swiss. Both Pasquale Di Donato (Swisstopo) and Adrian Gschwend (Zazuko) talked about recent and future developments. Swisstopo is planning the publish zip codes and addresses this year, and on national level a new Swiss open data platform is being developed based on linked data. A promising development that needs to be followed.

Rob Engels (Cap Gemini Norway) inspired the audience by presenting a case study outside the spatial domain: The music scene in Norway. The case study showed the maturity of Linked Data; solutions build on SPARQL were stable for many years. The final keynote was presented by Bill Roberts (Swirrl); he introduced the most important spatial data on the web best practices, and highlighted those with examples from the UK, and in particular the Scottish government portal.

During the closure section the attendees were questioned about their opinions regarding the progress that has been made during the last 3 years. All agreed on the impressive leap forward that became apparent based on the presentations. Maybe not as fast or disruptive, but that fits with the topic: Linked data is serious business and not a hype that will come and just as fast will go again. Linked Data is here to stay, and recent attention for AI, SOLID and Knowledge Graphs will bring a new boost to the Linked Data developments.

A big part of the program was related to present status updates from different countries, and it became apparent that some have made more progress than others. There is a leading group of Belgium, Netherlands, Swiss and UK, who all have linked data platforms with linked spatial data in production (or almost: Swiss) closely followed by Slovakia with a linked data platform but only hosting the linked data models (no instance data yet), followed by Austria, Spain, Finland, who all have experimented with linked data, but mostly in labs kind environment. Followed by Norway and France. (Countries such as Ireland, Denmark, Germany, did not present at this conference; probably Ireland is also part of the leading group)

As kind of as follow-up to this conference, and to continue the discussion, EuroSDR announced the start of a Linked Data working group: http://geometadatalabs.eu/Linked_data_main_page.

The conference was ended by the request to organize this event in 2-3 years from now. From the attendees an organization already offered to host the event (RIVM campus, Utrecht).