INSPIRE CONFERENCE 2020

ELISE Webinar "Co-innovation with public-private sector data ecosystems" (03/06/20 11.00 CEST) – Event Report

The session discussed 'location intelligence' approaches and technologies and public / private sector collaboration from the perspective of diverse data ecosystems. This was done through a 'landscape' overview and a series of case studies.

Guido Van Der Harst from **Gartner** introduced location Intelligence as "*the process of deriving meaningful insight from geospatial data relationships – people, places or things*". He identified various technologies helping to transform policy and public service models, their potential impact and timeframe to mainstream adoption. Of the technologies with high transformational impact for government, Cloud services will be important in the short term, whereas with technologies such as GeoAI and Digital Twins, although there are early adopters today, we will not see mainstream adoption for 5-10 years. The risks associated with early adoption need to be balanced with the opportunities afforded.

The perspective of the **ELISE**[1] action in the ISA[2] programme, was provided by **Ray Boguslawski**, an external consultant working for the **JRC**. He explained the role of data ecosystems and effective public / private sector collaboration in delivering innovation and supporting location intelligence applications. "*A data ecosystem is where a number of actors interact with each other and their environment for a specific purpose, generating value by producing, exchanging and consuming data in a collectively governed and operated way*". It is highly important for SDIs to become more user-focused and this means not only addressing policy and digital public service needs but the needs of the many data ecosystems in different sectors and levels of government, as well as support to and involvement of businesses and citizens.

These ideas were illustrated and some important messages brought out in a number of case studies – very different applications but all in the same overlapping geographical context.

Mapping utility networks: The **KLIP Cable and Pipeline Information Portal** portal facilitates efficient scheduling of public works by utility companies in Wallonia. "*Setting up a digital exchange was the way to go*" said **Liesbeth Rombouts** of **Informatie Vlaanderen**[2]**.** The companies are 50% public sector and 50% private sector. All agreed to use the **INSPIRE** utility services model for data exchange, with extensions for common symbologies. The service is self-sustaining. Map requestors pay to use KLIP because of the improved lead times and quality of information. The data can also be download and is being used, for example, in BIM models. From a small start KLIP has evolved into a true data ecosystem creating value for all parties.

Smart cities: The **Urban Platform** developed by **Ubiwhere**[3] provides municipalities with integrated views of their cities. **Ricardo Vitorino** from Ubiwhere used their developments for the city of Guimarães in Portugal to demonstrate. The Urban Platform combines datasets from different domains in a flexible way to serve different purposes (spatial planning, traffic monitoring, air quality monitoring…) and dynamically analyse relevant KPIs. The service is built on open standards and APIs. Information can be collected in real-time from sensors or from citizens to facilitate operational decisions (e.g. managing traffic congestion, dealing with city problems). Information can also be analysed over time to inform city policy or delivered through standard indicators for SDG reporting.

[1] https://ec.europa.eu/isa2/actions/elise_en
[2] https://overheid.vlaanderen.be/informatie-vlaanderen/flanders-information-agency-en
[3] https://www.ubiwhere.com/en/home

The Urban Platform represents an excellent example of a cross-sector data ecosystem involving location intelligence for policy and operational decisions.

COVID-19: CARTO[4] has been collecting a large array of data from different sources all over the world on COVID-19 trends to elaborate spatial-based analyses and risk assessments. "*There has never been a more important time to do geography*", said **Javier de la Torre**, the founder of CARTO. The Carto location intelligence platform integrates and analyses data from many different sources. It is being used to calculate risks with demographic and health factors, assessing both outdoor and indoor social distancing measures, and analysing which places will be most affected economically due to changes in mobility. According to Javier "*those who can control the location data better can open up their countries faster*". Carto has made their tool available through grants in 42 countries to help realise this aim.

Mobility: Google Maps has evolved from initial mapping tools to a highly sophisticated array of **mobility services** requiring a massive effort in data integration to support over 1 billion users worldwide. **Ed Parsons**, from Google, saw "*the humble bus stop as an example of a failure to meet user need*". Bus operators don't know where passengers are and passengers don't know where the buses are. However, with access to timetable, positioning and arrival information, the traveller is much better informed. Transport companies still have schedules to meet but on-demand ride sharing services are emerging. Google's capabilities also enable insights on crowding in public transport – a comparison of the impact of lockdown measures in Paris and Stockholm was shown. In using public sector data, Google sees challenges in data quality for journey planning, complexity in data models (e.g. NeTEx, INSPIRE), constraints in licensing, and issues with scalability (accessing real time data everywhere).

The session concluded with a discussion on the contribution of the SDI to data ecosystems. If easily available, public sector data will be used, if not other solutions will be found. To secure its role in the data economy, the public sector needs to focus on collecting data and making it interoperable and easily accessible – delivering a data infrastructure capable of supporting the types of data ecosystems highlighted in this session. According to one of the participants "*governments have not been able to deliver data in a way that is useful for citizens and the private sector*". The time for change is now.

[4] https://carto.com/