UNGEGN Webinar Series

Linked Open Data developments – what's in for UNGEGN and its experts?
30 September 2022
7:00am – 8:30 am (NY time)

Introduction

1. Linked Open Data (LOD) is a set of design principles for sharing machine-readable interlinked data on the Web. It is one of the core concepts and pillars of the Semantic Web, also known as the Web of Data. The Semantic Web is all about making links between data understandable not only to humans but also to machines, and LOD provides the best practices for making those links.

2. LOD has the power to greatly improve analysis and understanding of data, and this is increasingly recognized at national and international levels. This joining up of data has previously been done through other methods such as linkage of two or more datasets. Today, the diversity and complexity of big data sets increased and requires new thinking to allow these data/datasets to be queried and exploited in an easy way without using traditional techniques. LOD offers one methodology for exploiting these data/datasets by adding semantic structure to the datasets and by consolidating distributed datasets into a single resource which can be queried. The need to structure data to query and join makes geographical names a useful case study as geographical names and their associated geographic classifications means that - at least in theory – they could be mapped against a semantic vocabulary with relative ease.

3. During a side event at the 2019 (first) UNGEGN session, the topic LOD was addressed by experts in an open discussion. Representatives from the UN system presented challenges and opportunities as motivational speeches by providing LOD developments and examples. One of the main question was regarding the use of currently available spatio-temporal vocabularies, including geographical names. As an outcome of the side event the UNGEGN Working Group on Geographical Names Data Management included LOD considerations in their work plan and have been steadily building awareness of the topic.

4. In 2021, the Working Group submitted a paper to the 2021 second UNGEGN session in response to decision 1/2019/13 of the Group of Experts, made at its 2019 session, in which it recognized technological methods such as linked data for the provision of geographical names data to be considered by the Working Group in future. The paper contained a discussion on the opportunities and challenges to LOD approaches for geographical name data management, examples of national and regional developments and actions that could be taken by names authorities and the Group of Experts: https://unstats.un.org/unsd/ungegn/sessions/2nd_session_2021/documents/GEGN.2_2021_6_CRP6_14_Linked-Data_submitted-v2.pdf

5. Today, countries such as the United Kingdom, Netherlands, Poland, Finland, Germany and Norway are already managing and providing geospatial reference data, including geographical names data as LOD, or are under way to do so. One of the biggest challenges with LOD for the providers is the definition of objects/features within the existing databases. Problems arise when seemingly the same objects/features are linked, discrepancies will arise. The semantic vocabulary/ontology is therefore very important. Also, the temporal dimension makes objects/features change and therefore, difficult to link.

Objective

6. This webinar is aimed at providing an overview on the most relevant challenges and opportunities faced, associated with LOD. It shall give an overview on some countries' LOD implementations. Issues related to geographical names data will be specifically addressed, e.g. how to apply the methods and how to transform the current geographical names data – maintained according to well-known geospatial standards coming from ISO and OGC – into LOD.

7. The webinar shall reveal that LOD is another stage in the evolution of data management methodologies that the UNGEGN community needs to consider, to facilitate widespread use of standardized geographical names. It is hoped that the webinar will encourage collaborations between national names authorities and LOD practitioners and that they will continue to share national case studies to demonstrate the benefits of standardized geographical names provided as LOD.

8. The webinar is also being done to support the implementation of the UNGEGN Strategic Plan and Programme of Work 2021-2029, specifically Strategies 1 and 5, Technical expertise and Promotion and capacity building, respectively.

Overview of Presentations

9. The first presentation will briefly introduce what LOD is, its main requirements (e.g. a definition of vocabularies, commonly agreed ontologies, etc.) and its potential in the context of disseminating geographical names data as LOD in the geospatially related world. This will be followed by examples that demonstrate the various stages of implementing and benefits of considering Linked Data. Each example also gives Linked Data explanations in different ways by different experts.

Agenda

1. Welcome and opening remarks	Pierre Jaillard, Chair UNGEGN Stefan Schweinfest, Director UNSD
2. **Introduction of Speakers**	Pier-Giorgio Zaccheddu Convenor Working Group on Geographical Names Data Management Webinar Moderator
3. Presentations	
a. Introduction – from "Adam and Eve" W*hat is LOD? What are the main requirements and the potential of LOD?*	Henrik Askjer, University of Bergen, Norway
b. National LOD implementations or projects	
i. The Netherlands	Lexi Rowland, Cadastre, Land Registry and Mapping Agency, Netherlands
ii. Germany	Falk Würriehausen, Federal Agency for Cartography and Geodesy, Germany

c. LOD – Are we blessed or cursed? i. challenges & opportunities ii. benefits	Peder Gammeltoft, Norway Chair of Working Group on Publicity and Funding
4. **Questions and discussions**	Moderated by Pier-Giorgio Zaccheddu
5. Closing remarks	Susan Birtles & Pier-Giorgio Zaccheddu

Registration

Please register to attend the webinar: https://forms.office.com/r/vcSSZwwfuD

Organizer

UN Statistics Division, UNGEGN Secretariat, Cecille Blake, blake1@un.org
and Working Group on Geographical Names Data Management, chaired by Pier-Giorgio Zaccheddu, Germany.