

**Thirtieth session
New York, 7 and 18 August 2017**

English

Item 3 of the Provisional Agenda*

Reports of the working groups

Report of the Working Group on Toponymic Data Files and Gazetteers 2016-2017

Submitted by Working Group on Toponymic Data Files and Gazetteers**

* GEGN/30/1

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Summary

As a result of collaboration between experts from the Working Group on Toponymic Data Files and Gazetteers (WG TDFG) of UNGEGN this document reports the activities relating to the Working Group on Toponymic Data Files and Gazetteers between 2016 and 2017. It is an extract of the Work Group report to the 11th UNCSGN summarizing the activities in the timeframe 2012 – 2017.

According to the agreed actions for 2016 – 2017, the Working Group has, amongst others, assisted the UNGEGN Bureau in co-operating with the UN GGIM committee in order to emphasize, promote and support UNGEGN tasks and activities.

The Working Group has monitored activities and deliverables of the ISO/TC 211, OGC and Unicode Consortium.

The Working Group has continued to provide consultancy and technical advice concerning the content and structure for data files and gazetteers, amongst others, through toponymic training courses in 2017 in Brazil.

Besides the maintenance of the Online Discussion Forum several WG members contributed articles about national efforts for databases and gazetteers to UNGEGN Bulletins and participated to national and international events related to Working Group issues.

Scope of Work

To respond to UN resolutions and UN data needs, this Working Group on Toponymic Data Files and Gazetteers addresses various issues of toponymic data processing, including the creation, maintenance and outputs of toponymic data files (including gazetteer production) and aspects of toponymic data exchange formats and standards. Issues of providing geographical names information within national and international spatial data infrastructures (SDIs) through web (gazetteer) services and multipurpose toponymic database solutions in the context of SDIs as well as the utilization of volunteered geographic information and crowd sourced data are becoming more and more important. The issue of appropriate definitions for gazetteers and data types and of general feature types/categories relates with the agenda of the Working Group.

Work plan

The Working Group focuses on the following objectives:

- maintain liaison with international standardization bodies like the Unicode Consortium regarding digital text encoding in the context of geographical names, the International Organization for Standardization (ISO) and the Open Geospatial Consortium (OGC) with reference to the development of exchange standards for toponymic information and to web (gazetteer) services for the provision of toponymic information through the Internet;
- maintain liaison with the United Nations Geographic Information Working Group (UNGIWG) in relation to UN developments and requirements;
- promote and support the geographical names database of the United Nations Group of Experts on Geographical Names (UNEGN database);
- promote, complement and support the "UNECA Africa GeoNyms database/gazetteer initiative";
- promote and provide consultancy and technical advice to national standardization programs and to toponymic training courses including the development of multipurpose toponymic database solutions in the context of spatial data infrastructures. This comprises issues like the discussion of appropriate definitions for gazetteers and data types and of general feature types/categories for a global use;
- organize workshops in conjunction with UNGEGN Sessions or UN Conferences, focusing on topics like data modeling, database applications or lessons learned through national and international geographical names programs or projects, and, as required, provide presentations on such topics at the UNGEGN Sessions and upcoming UNCSGN;

- recommend content and structure of nationally produced authoritative gazetteers and toponymic data files in particular making use of the Internet;
- examine processes and recommend best practice for the exploitation and validation of volunteered geographic information and crowd sourced data as part of national toponymic standardization work.

Progress against the Work Plan since the 29th Session of UNGEGN:

The following points summarize activities occurring during 2016-today:

Objective 1 - liaison with international standardization bodies (ISO, OGC, Unicode)

The Working Group convenor has been provided with all ballot event notifications and new standard publications of the International Organization for Standardization's Technical Committee 211 Geographic information/Geomatics (ISO/TC 211)¹. Many proposals have been drafted, discussed and some finally adopted, but only few have direct impact on toponymic data files and/ or gazetteers. In March 2017 ISO/CD 19112:2017(E) - Geographic information – Spatial referencing by geographic identifiers has been updated. This document defines the conceptual schema for spatial references based on geographic identifiers. It establishes a general model for spatial referencing using geographic identifiers and defines the components of a spatial reference system and of a gazetteer. However, the new content on the gazetteer structure has been put together by the geospatial community supporting general use cases. Generally, the gazetteer structure is one of many possible publication methods for geographical names data. Although it is assumed that the updated ISO/CD 19112:2017(E) won't have a huge impact on the geographical names data provision – reflecting the complexity of the named place concept – it will be assessed by the Working Group.

The Working Group's contacts with the Unicode Consortium were re-established prior to the 26th Session of UNGEGN. The Working Group reviews character encodings published by the Unicode Consortium required for geographical names and informs the Consortium of any additional characters required for geographical names in the Unicode standard. The latest version 9.0 was published on 21 June 2016. Unicode 9.0 adds exactly 7,500 characters, for a total of 128,172 characters, covering 135 scripts. These additions include six new scripts and 72 new emoji characters. The new scripts and characters in Version 9.0 add support for lesser-used languages worldwide. (<http://www.unicode.org/versions/Unicode9.0.0/>). Version 10.0.0 is currently in beta version with a planned publication in mid-2017; this version adds a further 8518 characters for a total of 136,690 characters, including 4 additional scripts (Masaram Gondi, Nushu, Soyombo and Zanabazar Square) and 56 emoji.

Objective 2 - liaison with the UN Geographic Information Working Group (UNGIWG)

In a broader UN context the Working Group recognized the importance of co-operating with the UN initiative on Global Geospatial Information Management (GGIM) being promoted by the UN Statistics Division since 2011. UN-GGIM is about bring together the integration of geospatial and statistical information for better decision making and to address key global challenges. The Convenor has been very much involved in activities of UN-GGIM from 2014- today.

In both communities, UNGEGN and UN-GGIM, geographic information, as an underpinning enabling infrastructure, is used in general or with a distinct relation to geographical names. Even though the similar terms “geographical” and “geospatial” are found in the titles of the two organizations, the actual connection between UNGEGN and UN-GGIM thus far has been limited, and the potential for sharing work, avoiding overlap, and agreeing areas of common interest has not yet been realized. In order to foster the relationship between UNGEGN and UN-GGIM the Convenor contributed to the document “Relationship of UNGEGN with UN-GGIM – “Building bridges” proposing a cooperation model.

Objective 3 - promote and support the UNGEGN database

¹ The Convenor is the liaison member of the ISO/TC 211

The Working Group reviewed UNGEGN's World Geographical Names Database regularly and contributed to requests for updates and reviews for the UNGEGN website: <http://unstats.un.org/unsd/geoinfo/UNGEGN>

Objective 4 - promote/support the UNECA "Africa GeoNyms database/gazetteer" initiative

Unfortunately, no activity has been identified by the Convenor at UNECA to evolve the software in order to make implementations sustainable.

Objective 5 - promote and provide consultancy and technical advice

Through the toponymic training course in Rio de Janeiro, Brazil, the Working Group facilitated consultancy and gave technical advice for the establishment of multipurpose toponymic database solutions in the context of spatial data infrastructures.

The European UNGEGN experts provided expertise for commenting and discussing a draft recommendation for content of the theme 'Geographical Names' provided by UN-GGIM: Europe Work Group A on Core Data. This draft aims to "help decision makers (from governments, data producers, national coordination bodies, etc.) to define their policy regarding the improvement of existing data and production of new geospatial data". It proposes core recommendations and good practices in addition to the (technical) INSPIRE Data Specification on Geographical Names – i.e. to recommend solutions/approaches for issues which have not been solved within the INSPIRE Data Spec GN. Some of the GN issues have been tackled by the so-called ELF project (European Location Framework promoted by EuroGeographics), but not always to the satisfaction as UNGEGN expert. The activity is still ongoing and the recommendation has not yet been adopted by UN-GGIM: Europe. The following documents have been referenced:

- INSPIRE Data Specification on Geographical Names – Technical Guidelines 3.1: <http://inspire.ec.europa.eu/id/document/tg/gn>
- European Location Framework (ELF) Data Specification (chapter 5.3.6): http://elfproject.eu/sites/default/files/ELF_DataSpecification_v0.12_20160328.pdf

Concerning the EuroGeoNames (EGN) project its content has become part again within the European Location Framework (ELF), an EU-funded project coordinated under the umbrella of EuroGeographics. The ELF coordination team contacted the convenor and asked for advice on certain geographical names related topics. UNGEGN experts with affiliation to National Mapping and Cadastral Agencies were nominated to provide consultancy and advice if possible.

Objective 6 - organize workshops in conjunction with UNGEGN Sessions or UN Conferences

Within 29th Session of UNGEGN, 25th – 29th April 2016, the Convenor contributed to the meetings of UNSD with UNGEGN-Bureau and Convenors

- on the operational model for UNGEGN on 25.04.2016
- on the relationship of UN-GGIM and UNGEGN on 26.04.2016

Objective 7 - recommend content and structure for gazetteers and data files

The discussion forum for several issues related to this WG TDFG has been updated: <https://wiki.gdi-de.org/display/wgtdfg/Discussion+forum>

As presented at the 29th UNGEGN Session this discussion forum shall be utilized to investigate on tasks/issues assigned to the WG TDFG, amongst others:

- Forum 2 - definitions for gazetteers and data types (moderators: Ms. Laura Kostanski, Australia, and Ms. Vita Strautniece, Latvia)
- Forum 3 - general feature types/categories (moderators: Ms. Naima Friha, Tunisia and Mr. Teemu Leskinen, Finland)

Apart from this information in the online discussion forum the Working Group has recommended content and structure for gazetteers and data files through the toponymic training courses as well as through the Advanced Manual to be published on the occasion of the 11th UNCSGN.

Besides the discussion forum the new chapter on gazetteers in the Advanced Training Manual (which will be launched in August 2017) is worth to be mentioned. Furthermore, several WG members contributed articles about national efforts for databases and gazetteers to UNGEGN Bulletins.

Objective 8 - examine processes and recommend best practice for the exploitation and validation of volunteered geographic information and crowd sourced data as part of national toponymic standardization work.

As presented at the 29th UNGEGN Session this discussion forum shall be utilized to investigate on tasks/issues assigned to the WG TDFG, amongst others:

- Forum 1 - volunteered geographic information (VGI)/crowd-sourcing (moderator: Ms. Annette Torensjö, Sweden)

Apart from this information in the online discussion forum the Working Group has not yet taken any further actions since the last UNGEGN session to examine processes or to recommend best practices.

Decisions of the 29th UNGEGN relating to the Working Group

Decision 29/108: Activities relating to the Working Group on Toponymic Data Files and Gazetteers

The United Nations Group of Experts on Geographical Names:

[...]

(h) Requested the Working Group, in conjunction with the secretariat of the Group of Experts, to validate and update the hyperlinks published on the website of the Group of Experts;

(i) Acknowledged that action needs to be taken to maintain and update the world geographical names database of the Group of Experts, and encouraged the submission of data to support this initiative.

The Working Group tackled both activities. The hyperlinks published on the website had been revised and updated. The Working Group encouraged Member States to submit data for the world geographical names database of the Group of Experts through toponymic training courses and at conferences.

Meetings & further activities of the Working Group since 2016

The last Working Group meeting was held within the 29th Session of UNGEGN on Wednesday, 27 April 2016, in Bangkok. The notes of the meeting are available through the Working Group website: [https://wiki.gdi-de.org/pages/viewpage.action?pageId=7569729&preview=/7569729/304971820/20160427_Minutes_WGTDFG%20Agenda_Bangkok_UNGEGN-29_v1.pdf](https://wiki.gdi.de.org/pages/viewpage.action?pageId=7569729&preview=/7569729/304971820/20160427_Minutes_WGTDFG%20Agenda_Bangkok_UNGEGN-29_v1.pdf)

Within the UNGEGN website the section for the Working Group has been regularly updated. The section is accessible through: <http://unstats.un.org/unsd/geoinfo/UNGEGN/wg2.html>

Members of the Working Group participated in the following meetings and conferences (in chronological order):

- UN-GGIM 4th High Level Forum, Addis Ababa, Ethiopia, 20-22 April 2016
- Geospatial World Forum, Rotterdam, The Netherlands, 23-26 May 2016
- Sixth Session of UN-GGIM, UN Headquarters, New York, 1-5 August 2016
- The 33rd International Geographical Congress, Beijing, China, 21-25 August 2016
- UN-GGIM International Forum on Geospatial Information and Services for Disasters, Bridgetown, Barbados, 4-5 September 2016
- UNGEGN Arab Division of experts on geographical names Meeting 9-11 May 2017, Riyadh, Saudi Arabia
- 11th International Congress of Gis and Geospace Applications Geo-Tunis from 25 to 29 April 2017 in Tunis: The Vice-Chair of UNGEGN gave a presentation entitled: "The geographical names, part of our cultural heritage: The role of the UNGEGN in their preservation"
- UN-GGIM-Europe Plenary Meeting on 7-8 June 2017 in Brussels. The Vice-Chair of UNGEGN and member of this Working Group gave a keynote about UNGEGN.

Upcoming Actions for 2017 – 2019

- The Working Group will assist the UNGEGN Bureau in co-operating with the UN GGIM committee in order to emphasize, promote and support UNGEGN tasks and activities.
- The Working Group will monitor the availability of free and easily-accessible authorised digital geographical names data as it is seen as a key driver in encouraging the use of nationally-standardised names.
- The Working Group will consider a review of the 2007 UNGEGN Technical reference manual for the standardization of geographical names co-ordinated with the Working Group on Publicity & Funding.
- The Working Group will continue to support toponymic training courses, in 2018 very likely to be conducted in the Philippines.
- The Working Group will contribute to and/or participate at international conferences, congresses and meetings.
- The Working Group's websites will be updated regularly.
- The Working Group will update its work plan.