
**United Nations Group of Experts on
Geographical Names****Second session**

New York, 3 – 7 May 2021

Item 14 of the provisional agenda ***Toponymic data files and gazetteers****Report of the Working Group on Geographical Names
Data Management (formerly known as Working Group on
Toponymic Data Files and Gazetteers) for 2019 and 2020**Submitted by the Working Group on Geographical Names Data
Management**

Summary:

Experts of the Working Group on Geographical Names Data Management collaborated to compile the present document, which covers the activities relating to the Working Group in 2019 and 2020. Owing to the coronavirus disease (COVID-19) pandemic, which has caused many changes and challenges to our working lives, the Working Group has not been as active as planned; nonetheless some progress can be reported.

In line with the actions agreed for the period 2019–2021, the Working Group has, among others things, monitored the activities and deliverables of the standardization bodies: Technical Committee 211 of the International Organization for Standardization (ISO/TC 211), the Open GIS Consortium (OGC) and the Unicode Consortium. It has continued to provide consultancy and technical advice on the content and structure of data management through, among other things, workshops and conferences. The Working Group maintained and updated a wiki online discussion forum, in particular on the topic of linked open data, and invited the United Nations Group of Experts on Geographical Names and the linked open data community to use the wiki pages.

In April 2020, a compromise was reached within the expanded Bureau: the name change for the Working Group from “Toponymic Data Files and Gazetteers” to “Geographical Names Data Management” was accepted temporarily. The Working Group informed the Group of Experts about the name change in the Group’s Information Bulletin No. 58 and was asked to request the Group to formally ratify the name change and to update the provisional agenda for 2023 accordingly.

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Scope of Work

To respond to UN resolutions and UN data needs, this Working Group on Geographical Names Data Management (formerly known as Working Group on Toponymic Data Files and Gazetteers) addresses various issues of toponymic data processing, including the creation, maintenance and outputs of geographical names data files (including gazetteer production) and aspects of data exchange formats and standards.

In April 2020, a compromise was agreed within the Expanded Bureau that the name change for the Working Group from 'Toponymic Data Files and Gazetteers' to 'Geographical Names Data Management' was accepted temporarily. The Working Group informed UNGEGN about the name change through the UNGEGN Bulletin No. 58, and was asked to kindly request UNGEGN to formally ratify the name change and to update the provisional agenda for 2023 accordingly.

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 to the agenda of the Working Group.

According to the Strategic Plan of UNGEGN particularly 'Strategy 1: Technical Expertise' has to be supported by the Working Group:

Strategy 1: Technical Expertise

- i. Deliver technical expertise and advice to interested parties in Member States for geographical names standardization, including romanization and quality geographical names data and gazetteer management as well as interoperability;
- ii. Develop, extend and share good data management practices of Member States; and
- iii. Identify trends on developments and future direction for geographical names data management and encourage the use of innovative methods, integrated approaches and technological advances to further the aims of UNGEGN.

Work Plan

The Working Group (as agreed in 2020, April 23) focused on the following objectives between 2019-2021:

- promote and provide consultancy and technical advice to national standardization programs on innovation and research in names collection, management and dissemination as well as to training courses. This comprises the development of multipurpose database solutions in the context of spatial data infrastructures for national, regional and global use;
- organize workshops in conjunction with UNGEGN Sessions or other UN Conferences with "geo-dimension", focusing on topics like data collection, categorization and modeling, database applications or lessons learned through national and international geographical names programs or projects, and, as required, provide presentations on such topics at international events;
- promote and support the geographical names database of the United Nations Group of Experts on Geographical Names (UNGEGN database);
- 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 geographical names information and to web (gazetteer) services for the provision of geographical names information through the Internet;

- provide consultancy and technical advice to the UN-GGIM activities related to the fundamental data theme ‘Geographical Names’ as well as to the support of geographical names data to the Agenda 2030, the Sustainable Development Goals (SDG) monitoring;
- examine processes and recommend best practice for the exploitation and validation of volunteered geographic Information, crowd sourced data and Linked Open Data (LOD) as part of national geographical names standardization work;
- promote, complement and support the “UNECA Africa GeoNyms database/gazetteer initiative”;
- promote the use of persistent unique identifiers as crucial element of consistent names data files and for, amongst others, Linked Open Data.
- Weblink: <https://wiki.gdi-de.org/display/wgGNDM/Work+plan>

Progress against the Work Plan since the 1st Session of UNGEGN in 2019

The following points summarize activities occurring during 2019-today according to the Work Plan:

Objective 1 - promote and provide consultancy and technical advice

Through the toponymic training courses the Working Group facilitated consultancy and gave technical advice for the establishment of multipurpose geographical names database solutions in the context of spatial data infrastructures. Within the reporting period no training courses were conducted.

At the last UNGEGN session a discussion about the need for an universal classification of geographical features was started. A short paper on feature codes for international uses – consideration for a common use prepared by an UNGEGN expert – was uploaded to the online discussion forum (forum 3). This wiki sub-site is for general discussion on the challenges and possibilities of developing harmonized named feature classifications for global purposes. However, no further activity could yet be started regarding this matter.

- Weblink: <https://wiki.gdi-de.org/pages/viewpage.action?pageId=17796874>

EuroGeographics, the European Association, continues the developments of serving European users by geographical names and other spatial data from National Mapping and Cadastral Authorities from single access point. In April 2019 the Open Regional Gazetteer was published. To add exonyms and variant names to the Open Regional Gazetteer, an UNGEGN expert for geographical names has regularly updated and enhanced the data base. A separate Working Paper submitted to this UNGEGN session deals with the European gazetteer.

- Weblink: <https://www.euro-geo-opendata.eu/service/open-regional-gazetteer-service>

Objective 2 - organize workshops in conjunction with UNGEGN Sessions or other UN Conferences

At the UNGEGN first session in April/May 2019 in New York a side event on "Linked Data" took place. The workshop provided an overview on the most relevant challenges and opportunities faced associated with Linked data. Issues related to geographical names data were specifically addressed. Three UN administration representatives presented challenges and opportunities as

keynote/motivational speeches by providing respective Linked data developments and Linked data provision examples. Based on these keynote/motivational speeches an open discussion took place and led to general statements about the challenges and opportunities with regard to provision of geographical names data as Linked Data to be considered in the work plan and within the online discussion forum of the Working Group.

The Group of Experts (in Decision 1/2019/13), recognised technological methods such as linked data to be considered by this working group in the future, noted that the developments were in line with resolution VIII/6 which recommended better integration of geographical names into spatial data infrastructures, and encouraged continued activities of this Working Group.

- Weblink: <https://wiki.gdi-de.org/display/wgtdfg/Topic+6+-+Linked+Data>

Objective 3 - promote and support the UNGEGN database

The Working Group usually reviews UNGEGN's World Geographical Names Database regularly and contributes to requests for updates and reviews for the UNGEGN website. No requests have been addressed to the WG GNDM from 2019 to today.

- Weblink: <https://unstats.un.org/unsd/geoinfo/geonames/>

Objective 4 - 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). The Convenor is the liaison member of the ISO/TC 211. Most documents of ISO/TC 211 were addressed to general geographic information issues. Generally, the WG GNDM members have been encouraged to get in touch with national representatives in ISO, OGC to make aware of GN issues and in order to be informed about draft standards.

Regarding the Open Geospatial Consortium no activity related to geographical names can be reported.

Regarding UNICODE the Working Group reviews character encodings published by the UNICODE Consortium. The WG GNDM informs the Consortium of any additional characters required for geographical names in the Unicode standard. Since the past UNGEGN Session, Unicode has published version 13.0.0 of the Standard, adding 4 new scripts and 5930 new characters (and 55 new emoji). The total number of encoded characters is now over 140,000.

- Weblink: <https://www.unicode.org/versions/Unicode13.0.0/>

Objective 5 - provide consultancy and technical advice to UN-GGIM

In a broader UN context the Working Group recognized the importance of co-operating with the UN initiative on Global Geospatial Information Management (GGIM), bringing together the integration of geospatial and statistical information to address key global challenges. The WG GNDM generally supports the collaborative activities, UNGEGN's areas of work and the way forward concerning future opportunities for collaboration with UN-GGIM. The support of UNGEGN to the Sustainable Development Goals (SDG) indicator framework has become a major part of the discussions.

- Weblink: <https://wiki.gdi-de.org/display/wgtdfg/Topic+5+-+Support+of+UNGEGN+to+the+Sustainable+Development+Goals+%28SDG%29+indicator+framework>

European UNGEGN experts provided their expertise by commenting and discussing a draft recommendation for content of the theme ‘Geographical Names’ elaborated by the Work Group on Core Data of the regional committee UN-GGIM: Europe. The activity is still ongoing and the recommendation has not yet been adopted by UN-GGIM: Europe.

- Weblink: <https://wiki.gdi-de.org/display/wgGNDM/Forum+4+-+UNGEGN-UNGGIM+relationship>:

Objective 6 - examine processes and recommend best practice

The Working Group started to examine, evaluate and assess best practices for the exploitation and validation of volunteered geographic Information and crowd sourced data. Concerning the Linked Open Data (LOD) topic the Working Group updated the Wiki with content and invited the UNGEGN and LOD communities to use the Wiki pages.

A separate Working Paper has been prepared in response to the decision made at the first UNGEGN Session in 2019 (Decision 1/2019/13) that "Recognized technological methods like linked data for the provision of geographical names data to be considered by the Working Group in future". It discusses some opportunities and challenges to LOD approaches for geographical names data management, collates stories about national and regional developments, and seeks to identify actions that could be taken by names authorities and the Group of Experts.

- Weblink: <https://wiki.gdi-de.org/display/wgtdfg/Topic+6+-+Linked+Data>

Objective 7 - promote/support the UNECA “Africa GeoNyms database/gazetteer” initiative

In 2019, UNECA stressed the importance of continued cooperation between UNGEGN and UNECA. UNECA announced to re-design and develop the application, organize ad hoc workshops to present the application within geo-related events as well as to carry out advisory missions to African countries. No exchange can be reported from 2019 to today.

Objective 7 - promote the use of persistent unique identifiers

The Working Group has agreed to promote the use of persistent unique identifiers as crucial element of consistent names data files and for, amongst others, Linked Open Data. No activities have been started by the WG GNDM from 2019 to today.

Meetings & further activities of the Working Group since 2017

The last WG GNDM meeting was held in New York, 2019, May 2. The notes of the meeting are available through the informal Working Group website.

- Weblink: https://wiki.gdi-de.org/pages/viewpage.action?pageId=7569729&preview=/7569729/820641844/0_WGTDFG_Meeting_AnnotatedAgenda_Notes_NewYork_2019_final.pdf

Within the formal UNGEGN website the section for the Working Group has been regularly updated.

- Weblink: https://unstats.un.org/unsd/ungegn/working_groups/wg2.cshtml

Members of the WG GNDM participated in the following meetings and conferences (in chronological order):

- A Working Group member participated at a LOD webinar (Statistics Technical Network Webinar 'Caliper – Serving statistical classifications on the Web', in May 2020, a platform for statistical classifications based on RDF and linked data technologies)

Actions for 2021 – 2023 (taken from the draft 'Programme of Work')

- Evaluate and assess exchange standards for geographical names information and for web services (gazetteer, feature and mapping) for the provision of geographical names information (comprising the review of Part II of the UNGEGN Technical Reference Manual). Report on exchange standards in 2023
- Present geographical names data management topics at national and international conferences organized in the fields of geospatial information management. Assess annually
- Promote, agree and disseminate romanization systems for national and global use. Assess annually
- Promote and support the establishment of an authoritative international database/gazetteer of geographical names to be disseminated to the public through UNGEGN. Report on opportunities for an international database/gazetteer activity in 2023
- Promote the use of the online discussion forum (Wiki). Assess annually, e.g.
 - on the relationship UNGEGN – UN-GGIM or SDG indicator monitoring
 - on data modelling and database design
 - on general issues in the context of data maintenance (like feature classifications)
 - on geographical names data production and distribution in the context of national, regional or global Spatial Data Infrastructures (SDIs)
- Monitor the availability of free and easily-accessible authorized digital geographical names data as it is seen as a key driver in encouraging the use of nationally-standardized geographical names. Assess annually
- Organize workshops and on innovative, research and/or technical issues/topics like e.g. volunteered geographic information, crowd sourced data, Linked Open Data or speech technology. Workshops in 2022-2025 (likely in conjunction with Division meetings)

Points for discussion

The Group of Experts is invited to:

- (a) Adopt and formally ratify the name change to 'Working Group on Geographical Names Data Management' and to update the provisional agenda for the UNGEGN Session 2023 accordingly

- (b) Take note of the report and progress made by the Working Group on Geographical Names Data Management;
- (c) Express its views on the way forward concerning the Working Group's work plan and the upcoming actions for 2021-2023
- (d) Express its support on the maintenance of the Online Discussion Forum as a useful tool for the exchange of ideas on new and well-known issues