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Item 9 of the Provisional Agenda

Activities Relating to the Working Group on Toponymic Data Files and Gazetteers

## **Report of the Working Group on Toponymic Data Files and Gazetteers 2014-2016**

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

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## **Report of the Working Group on Toponymic Data Files and Gazetteers 2014-2016\*\***

### **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 since 2014.

Concerning the liaison with international standardization bodies (ISO, OGC, Unicode), the Working Group 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 Working Group's contacts with the Unicode Consortium had been re-established prior to the 26<sup>th</sup> Session of UNGEGN. The Working Group reviews character encodings required for geographical names and informs about gaps in the Unicode standard. Unicode released Unicode version 8.0 in 2015.

The Decision 28/107 and Decision 28/108 of the 28<sup>th</sup> UNGEGN Session in 2014 related to activities of the Working Group have been tackled and implemented within the update of the online discussion forum in March 2015. This forum has been set up to discuss several issues related to the Working Group: <https://wiki.gdi-de.org/display/wgtdfg/Discussion+forum>

As upcoming Actions for 2016 – 2017, the Working Group will, amongst others, assist the UNGEGN chairperson and secretariat in co-operating with the UN GGIM committee in order to emphasize, promote and support UNGEGN tasks and activities.

Furthermore, the Working Group will continue to provide consultancy and technical advice concerning the content and structure for data files and gazetteers, amongst others, through toponymic training courses.

## **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 (UNGEGN 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 28<sup>th</sup> Session of UNGEGN:**

The following points summarize activities occurring during 2014-2016:

*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)<sup>1</sup>. Many proposals have been drafted, discussed and some finally adopted, but none have had direct impact on toponymic data files and/ or gazetteers. All documents were addressed to general geographic information issues. The most recent discussion addresses a "New Work Item Proposal: ISO 19157:2013 Geographic information - Data quality – Amendment 1: Describing data quality using coverages" or the establishment of an "Ad hoc group to participate in a joint study group on Sustainable development goals and targets (SDG) of the UN - Call for participation".

Since 2012 the Convenor monitors the implementation of geographical names data services compliance with the COMMISSION REGULATION (EU) No 1089/2010 of 23 November 2010 - implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services.

Concerning the Open Geospatial Consortium (OGC) Best Practices Document: Gazetteer Service - Application Profile of the Web Feature Service Candidate Implementation Standard (OGC 11 122r1)<sup>2</sup> . no further activity can be reported since 2012. The documents listed have been adopted by the OGC Technical and Planning Committee. These specifications are under control of the Standards Working Group and will be released after the edits and revisions. The OGC Gazetteer Best Practice document is still available at: <http://www.opengeospatial.org/standards/requests/83>

The Working Group's contacts with the Unicode Consortium had been re-established prior to the 26<sup>th</sup> Session of UNGEGN. The Working Group reviews character encodings required for geographical names and informs about gaps in the Unicode standard. Unicode released Unicode version 8.0 in 2015. This latest version of the standard added a further 7,716 characters (<http://blog.unicode.org/2015/08/unicode-version-80-complete-text-of.html>). Notable additions included a set of lower-case Cherokee syllables, letters to support the Ik and Kulango languages in Africa, the new Ahom script for the Tai Ahom language in India, Arabic letters to support Arwi – the Tamil language written in Arabic script and the Georgian lari currency symbol.

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

The Convenor has not participated at 15th UNGIWG Plenary Meeting, Monday, August 3, 2015 (All day) to Wednesday, August 5, 2015, UNHQ, New York – USA, and no other activity of the Working Group can be reported.

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.

UN-GGIM has established regional committees of experts on Global Geospatial Information Management as an efficient way to make progress and provide useful input to the global UN-GGIM process. Amongst others, UN-GGIM: Europe was officially established on 1<sup>st</sup> October

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

<sup>2</sup> The Convenor is registered as an observer for the Open Geospatial Consortium Standards Working Group (SWG) for developing a Gazetteer Profile of a Web Feature Service (WFS).

2014 and first reported on its activities as a regional entity to the Committee of Experts at their 5<sup>th</sup> meeting in New York in August 2015. A number of work items were presented to the Committee in August, these include: sustainable development, global geodetic reference frame, global fundamental geospatial data themes, integration of geospatial, statistical and other information, land administration and management, trends in national institutional arrangements, legal and policy frameworks, implementation and adoption of geospatial standards, statement of shared guiding principles for geospatial information management, and knowledge base for geospatial information management. A number of these global work areas (shown in italics above) are being led or co-chaired by a UN Member State from Europe, in addition UN-GGIM: Europe has been mandated to lead on the global fundamental geospatial data themes.

The mandate for UN-GGIM was for five years, and the Committee of Experts will report on their progress to the UN Economic and Social Council (ECOSOC) in April 2016. Two key messages will be presented to ECOSOC: that the Committee of Experts has operated effectively and in line with the mandate given by the Council, and that the Committee is well placed to continue its further contribution to the work of the UN, especially in the context of the implementation of the sustainable development agenda and disaster risk reduction. Particularly different options for the improvement of the UN structures are explained.

In this regard the UNGEGN Bureau and the Convenors were invited to contribute to the discussion about the linkage of UNGEGN and UN-GGIM. The experiences of the last decade has revealed that the topic „geographical names“ is a complex one. These UNGEGN topics / domains are currently not tackled by UN-GGIM and are not foreseen to be touched on. Thus, UNGEGN’s mandate is still relevant. How UNGEGN could be integrated in a future / envisaged “geospatial” UN structure will be discussed between the Bureaus carefully. For the time being UNGEGN’s mandate has to be kept as one of the nine permanent UN expert groups / committees.

Another regional committee is the UN-GGIM Arab States regional group which has been established in accordance with Resolution No.4/111 of the fourth session of United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM), held in New York in August 2014. Some of its main objectives are: Establish a common framework of accurate and reliable geodetic reference in the Arab Region, in close cooperation with relevant international organizations, as well as the member countries. Improve the capacity of member countries in the development and establishment of policies for the national management of geospatial information, taking into account the needs and priorities of each member country. Develop strategies and guidelines to support the development of an authoritative source of geospatial information in each member country of the Regional Committee. For more information about the statutes of the Regional Committee of United Nations on Global Geospatial Information Management for Arab States refer to: <http://www.un-ggim-as.org/>

#### *Objective 3 - promote and support the UNGEGN database*

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*

The Working Group promoted the UN Economic Commission for Africa (UNECA) initiative at meetings, conferences and toponymic training courses and outlined the provision of a free tool to create names databases, particularly within the context of an African spatial data infrastructure.

Representatives from the Dutch- and German-speaking Division, as well as the Convenor took part as lecturers in the UNGEGN-co-organised and sponsored International training course for trainers in toponymy, September 15-17, 2015 in Oran, Algeria, Centre National de Recherche en Anthropologie Sociale et Culturelle (CRASC Oran). The GeoNyms database software package was used during the preparation and conduct of the technical workshop within the toponymy course. The continuous effort to improve GeoNyms and to evolve it to a common basis for all African countries has been expressed by the course participants.

The benefits for the African countries using GeoNyms and the statistical value of geographical names are obvious as well as the technical approach fits very well into the current global geospatial initiatives (like the Global Geospatial Information Management – GGIM).

#### *Objective 5 - promote and provide consultancy and technical advice*

Through toponymic training courses 2015 in Oran, Algeria, the Working Group facilitated consultancy and gave technical advice for the establishment of multipurpose toponymic database solutions in the context of spatial data infrastructures.

Within these courses the Convenor is responsible for lecturing 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.

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

Within 28<sup>th</sup> Session of UNGEGN, 28<sup>th</sup> April – 2<sup>nd</sup> May 2014, the Convenor contributed to

- Meeting on Operational Improvements of UNGEGN, Tuesday 29<sup>th</sup> April, 2014, 18:15 hrs.
- Strategic Meeting UNGEGN and UN-GGIM, Friday, 2<sup>nd</sup> May 2014, 08:00 hrs.

#### *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 28<sup>th</sup> UNGEGN Session this discussion forum shall be utilized to investigate on three tasks/issues assigned to the WG TDFG:

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

In order to activate the Working Group in the online discussion forum in March 2015 the aforementioned moderators and the Convenor provided the Working Group with two documents showing the potential of the forum in order to motivate and stimulate you to start to be active “online”:

- the current outcome, i.e. content of the questions & answers of the forum “offline”. This compilation can be either printed out and read immediately.
- a one-page file as “PDF portal” with direct links to all pages and questions in the forum. The idea behind was to provide an easy overall look and access to the topics and questions “online”.

It has been notified that many WG members are already registered, but not yet active.

If experts are interested in contributing to these issues, please contact the convenor of the WG or the moderators for the respective topics mentioned on the webpage of the discussion forum.

### **Decisions of the 28<sup>th</sup> UNGEGN relating to the Working Group**

*Decision 28/107: Activities relating to the Working Group on Toponymic Data Files and Gazetteers*

*“The Group of Experts (f) noted that the nature of the toponymical tasks of topographers and cartographers has evolved from names collection and processing to the maintenance of databases and web services and that maintaining data currency will increasingly require the cooperation of the general public through crowd-sourcing techniques, and in that context, encouraged additional outreach activities regarding geographical names.”*

Within the online discussion forum the pages of Forum 1 focus on the topic of volunteered geographic information and crowd sourcing. Forum 1 is divided into two sub-sites, F1.1 General Discussion and F1.2 Reliability. Within the sub-site F1.1 it was discussed how effective and valuable the collection of names data using volunteered geographic information currently is. Although the potential of VGI and crowd-sourcing has been recognized by organizations, as these sources provide unique elements of geospatial information, methods of processing the data are still lacking and have to be evolved. Concerning the public’s involvement easy methods, i.e. the ability to be able to simply click on a link from a web page, are preferred.

*Decision 28/108: Activities relating to the Working Group on Toponymic Data Files and Gazetteers*

*“The Group of Experts: (g) Acknowledged the increasing efforts permitting the integration of geographical names data into spatial data infrastructures and the increasing importance of the utilization of volunteered geographic information and crowd-sourced data; (k) Recommended that the Working Group collect and publish examples, best practices and commonly shared issues, as provided by the countries/divisions, on the website of the Group of Experts.”*

Experts from several countries have related their experiences in collecting and utilising crowd-sourced geographical names data (supporting documentation where posted on this forum) and it is clear that there is no single established approach. Work is ongoing.

In order to assess the effectiveness and value of collecting names using volunteered geographic information, more experiences in other countries involved in such methods of geographical names collection will be collected within the forum.

### **Meetings & further activities of the Working Group since 2014**

The last Working Group meeting was held within the Within 28<sup>th</sup> Session of UNGEGN on Wednesday, 30 April 2014, in New York. The notes of the meeting are available through the Working Group website: [https://wiki.gdi-de.org/display/wgtdfg/Working+Group+on+Toponymic+Data+Files+and+Gazetteers+of+UN+GEGN](https://wiki.gdi.de.org/display/wgtdfg/Working+Group+on+Toponymic+Data+Files+and+Gazetteers+of+UN+GEGN)

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):

- 3rd HLF on UN-GGIM held in Beijing-China, from 22 to 24 October 2014 and organized by the United Nations Statistics Division and the National Administration of Surveying, Mapping and Geoinformation of China (NASG). The overarching theme of the Forum was ‘Sustainable Development with Geospatial Information’: <http://ggim.un.org/3rd%20HLF.html>
  - The UNGEGN expert participation in the 3rdHLF covered the following:
    - Panel member in session 1: “Geospatial information for the Post -2015 Development agenda- Local to National perspectives”
    - Making a statement about the role of geographical names in support of sustainable development as well as make the link between UNGEGN and UN-GGIM and their contribution to promote geospatial information in general and geographical names in particular.
- 7th Arab conference on Geographical Names (ACGN) which has been held in Amman Jordan 11-13 November 2014 .Web site for the 7th ACGN <http://www.adegn.net/index.php/ar/2015-11-02-02-49-16/2015-10-30-23-02-30>
- UN-GGIM-Africa meeting held in Tunis, Tunisia from 10-12 December 2014 and organized by the Economic Commission for Africa (ECA) in parallel with StatCom-Africa. <http://ggim.un.org/knowledgebase/KnowledgebaseArticle50199.aspx>
  - The main objective of the UN-GGIM Africa meeting was to discuss how to set this regional body to be in charge of coordinating UN-GGIM activities in Africa in concordance with international mechanisms, and to draw a road map outlining the action plan of its relevant responsibilities, taking into account institutional, technical, legal and economic aspects.
  - The UNGEGN participant made a presentation highlighting the mission of UNGEGN, its structure, the different issues UNGEGN is tackling, as well as its role in the standardization of geographic names in the world and particularly in Africa. The presentation was also an opportunity to make a call to ECA, the United Nations and all relevant parties present to assist the geographical names progress in Africa and to include the topic of geographical names in UN-GGIM-Africa meetings.

- International workshop in toponymy held in Tunis, Tunisia, 12 -16 January 2015 that covered the following issues:
  - a training session organized to train the newly appointed members of the national committee of toponymy,
  - fieldwork,
  - technical assistance to draw a road map for the National Committee of Toponymy (NCT) upcoming activities.
- 27<sup>th</sup> International Cartographic Conference, Rio de Janeiro, Brazil, 23–28 August 2015
  - Several UNGEGN expert attended this conference. Within the sessions for “Toponymy” e.g. Finland presented a paper “A Data Repository or Named Places and Their Standardised Names Integrated With the Production of National Map Series” (Mr. Teemu Leskinen)
- International Symposium of Onomastic and Toponymy for Arab region and Sea Shore African Countries Constantine Algeria, 1-3 February 2016. Link to program of the symposium:  
[http://constantine2015.dz/index.php?option=com\\_k2&id=16\\_7b02dee514b3c36f741b78dc7ec4d417&lang=fr&task=download&view=item](http://constantine2015.dz/index.php?option=com_k2&id=16_7b02dee514b3c36f741b78dc7ec4d417&lang=fr&task=download&view=item)

#### **Upcoming Actions for 2016 – 2017**

- The Working Group will assist the UNGEGN chairperson and secretariat 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 further promote UNECA’s provision of a free tool and contribute to reviews in order to support the creation of names databases in the context of an African spatial data infrastructure.
- 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 2016 very likely to be conducted in Brasil.
- The Working Group will contribute to and/or members will participate at international conferences, congresses and meetings.
- The Working Group’s websites will be updated regularly.