#### UNITED NATIONS GROUP OF EXPERTS ON GEOGRAPHICAL NAMES

WORKING PAPER NO. 19/9

Twenty-eight session 28 April – 2 May 2014

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 2012-2014 \*

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#### Summary

As a result of collaboration between experts from the Working Group on Toponimic 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 2012.

Within the 10th UNCSGN three new tasks/issues were proposed and afterwards added to the "Scope of work" and to the "Work plan" of the WG TDFG respectively. Regarding the methods to be used to start actions the set up of a discussion forum within the website was agreed by the WG. Three separate Wiki "rooms" / pages for these specific topics has been created and initial documents has been uploaded to it.

Concerning the liaisons with international standardization bodies (ISO, OGC, Unicode), particularly the Unicode activity should be mentioned. Unicode has released version 24 of its Common Locale Data Repository and has published Unicode version 6.3.0 with updated Annexes, code charts and Character Database. The Working Group reviews character encodings required for geographical names and informs about gaps in the Unicode standard. Concerning the Open Geospatial Consortium (OGC) activity for a 'Best Practices Document: Gazetteer Service - Application Profile of the Web Feature Service Candidate Implementation Standard (OGC 11 122r1)' no progress can be reported.

Furthermore, the Working Group provided consultancy and technical advice concerning the content and structure for data files and gazetteers, amongst others, through toponymic training courses. The UN Economic Commission for Africa (UNECA) initiative 'GeoNyms' has been promoted at meetings, conference and 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 27th Session of UNGEGN:

The following points summarize activities occurring during 2012-2014:

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

The Working Group convenor has been provided with all ballot event notifications 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. Examples are: ISO/TC 211 N 3726 - NWIP 19157-2, Geographic information - Data Quality - XML Schema Implementation of ISO 19157; ISO/CD 19119.2 - ISO/TC 211 N 3706 - Geographic information – Services.

Concerning the European core location vocabulary (ISA programme), the broadest European vocabulary is that for location which covers places, addresses, and geographical geometries, no further activity can be reported since 2012. In March 2012 the Working Group requested compliance with definitions for geographic names considered in 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. These definitions are compliant with those published by UNGEGN.

Concerning the Open Geospatial Consortium (OGC) Best Practices Document: Gazetteer Service - Application Profile of the Web Feature Service Candidate Implementation Standard  $(OGC 11 122r1)^2$ . no further activity can be reported since 2012, too. Generally, the Working Group expressed concerns about keeping ISO 19112 in this updated WFS-G (Best Practice) document, and by extension keeping terms like 'LocationInstances', 'geographicIdentifiers' OGC Gazetteer Best Practice document is still available etc. The at: http://www.opengeospatial.org/standards/requests/83

The Working Group's contacts with the Unicode Consortium had been re-established prior to the 26th Session of UNGEGN. In 2013 Unicode has released version 24 of its Common Locale Data Repository (see <a href="http://cldr.unicode.org/index">http://cldr.unicode.org/index</a>) and has published Unicode version 6.3.0 with updated Annexes, code charts and Character Database (see <a href="http://www.unicode.org/versions/Unicode6.3.0/">http://www.unicode.org/versions/Unicode6.3.0/</a>). The Working Group reviews character encodings required for geographical names and informs about gaps in the Unicode standard.

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

<sup>&</sup>lt;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).

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

The Convenor has not participated at 13th UNGIWG Plenary Meeting, February 27, 2013 (All day) to Friday, March 1, 2013, Istanbul – TURKEY and no other activity of the Working Group can be reported. The 14th UNGIWG Plenary will be held in New York, USA on 14 - 16 May 2014.

One of the objective of the Center of Excellence for UN Spatial Data Infrastructure (CoE4UNSDI), an initiative being led by the Office of Information and Communication Technology (OICT) of the UN Secretariat, has been to set up a gazetteer framework project as an important initial element of the UNSDI. With the support of UNGEGN, the convenor of the Working Group joined the Science and Technical Advisory Group (STAG) of the UNSDI gazetteer framework project. The purpose of the STAG has been to review the scientific and technical directions taken by the Project Leader and to ensure that technical decisions are compatible with the environments into which they may eventually be delivered. The STAG met by telephone conference only once and its activity has been stopped in 2013 as the gazetteer framework project in Indonesia has been stopped.

In a broader UN context the Working Group recognized the importance of co-operating with the planned UN initiative on Global Geospatial Information Management (GGIM) being promoted by the UN Statistics Division and Cartography Section. It has been agreed that UNGEGN has different responsibilities and its own mandate must be preserved.

UN-GGIM is establishing 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. The Committee of Experts on Global Geospatial Information Management in July 2013 "*Noted with satisfaction the progress being made towards establishing UN-GGIM Europe, and invited European representatives to report back to the Committee at its next session*". In response the European UN Member States have prepared the Articles and Rules of Procedure for UN-GGIM Europe. These will be presented to the next meeting of the Committee or Experts on UN-GGIM. The Fourth Session of the UN Committee of Experts will be held in New York 4-6 August 2014.

## Objective 3 - promote and support the UNGEGN database

The Working Group reviewed UNGEGN's World Geographical Names Database and contributed to 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. Within the international toponymy course targeted at the countries of the UNGEGN Africa-East division and held in Antananarivo from June 17 - 21, 2013 UNECA enabled Mr. Yoseph Mekasha to join in the lecturing team. 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. Madagascar is already using the software, Ethiopia and Botswana are next in line and many more have shown interest to learn more and test it. Additionally the course (and the Africa East Division) expressed that further training is required for the GeoNyms system and that it would be useful for UNECA to explore ways of cooperating with Regional Center in Nairobi (RCMRD) to offer training on GeoNyms and to further get hands on and promotion.

The convenor expressed by a letter to UNECA to strengthen these requests to make available all resources needed to achieve these objectives.

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 2012 in Yogyakarta (Indonesia) and 2013 in Antananarivo (Madagascar) 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 of the Working Group was 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.

Concerning the EuroGeoNames (EGN) project its content is planned to become part again within the European Location Framework (ELF), the new project of EuroGeographics. The coordinator an ELF Work package and EGN coordinator contacted the convenor and asked for advice on certain geographical names related topics. UNGEGN experts with affiliation to National Mapping and Cadastral Agencies have been nominated to provide consultancy and advice if possible.

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

Within  $27^{\text{th}}$  Session of UNGEGN and  $10^{\text{th}}$  UNCSGN, 30 July – 10 August 2012 the Working Group contributed to

- Demonstration of new gazetteers/databases on Tuesday, 2012 July 31, 13:15 14:15
- Discussion about web training courses on Thursday, 2012 August 2, 14:15 14:45
- Lunchtime workshop on Names boards dealing with volunteered geographic information (VGI), crowd-sourcing, web harvesting on Friday, 2012 August 3, 14:00 14:45

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

Within the 10th UNCSGN three new tasks/issues were proposed and afterwards added to the "Scope of work" and to the "Work plan" of the WG TDFG respectively. Regarding the methods to be used to start actions the set up of a discussion forum within the website was agreed by the WG. Three separate Wiki "rooms" / pages for these specific topics has been created and initial documents has been uploaded to it:

- Forum 1 discussing the topic "volunteered geographic information (VGI)/crowd-sourcing"
- Forum 2 discussing the topic definitions for gazetteers and data types
- Forum 3 discussing the topic general feature types/categories

This discussion forum should be utilized to commence investigations on these three issues mentioned. The outcome and findings of the discussion forum shall be used, amongst others, to recommend content and structure for gazetteers and data files.

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: <u>https://wiki.gdi-de.org/display/wgtdfg/Discussion+forum</u>

## Meetings & further activities of the Working Group since 2012

The last Working Group meeting was held within the Within 27<sup>th</sup> Session of UNGEGN and 10<sup>th</sup> UNCSGN, 30 July – 10 August 2012 in New York. The notes of the meeting are available through the Working Group website: <u>https://wiki.gdi-de.org/display/wgtdfg/Working+Group+on+Toponymic+Data+Files+and+Gazetteers+of+UN GEGN</u>

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

Members of the Working Group participated in the following meetings and conferences:

- 6<sup>th</sup> Meeting of the Committee of Director -Generals of National Statistics Offices (30 November - 2 December 2012, Yamoussoukro - Côte d'Ivoire)
- 7th session of GEOTUNIS (8-12 April 2013, Hammamet-Tunisia) http://www.geotunis.org/fr/

- Meeting of WGs Publicity/Funding and Implementation/Evaluation (4-6 July 2013, Seoul-South Korea)
- Baltic-Nordic seminar on the integration of onomastic data into geo-spatial infrastructure, jointly organized by the Baltic and Norden Divisions and the WG TDFG of UNGEGN (19 September 2013in Tallinn, Estonia)
- The 19th International Seminar of Sea Names (22-24 August 2013, Istanbul-Turkey)
- UN Statistical geospatial expert group meeting (30 October-1 November 2013, New York, USA)
- Arab conference for survey and geographical names (29-31 October 2013, Amman-Jordan)

## Upcoming Actions for 2014 – 2016

- 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 2014 very likely to be conducted in Algeria.
- The Working Group will contribute to and/or members will participate at international conferences, congresses and meetings:
  - IGU Regional Geographic Conference (18-22 August 2014, Cracow [Kraków], Poland)
  - 25th International Council of Onomastic Sciences (ICOS) Congress (25 29 August 2014, Glasgow, UK)
- The Working Group's websites will be updated regularly.