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Global Geospatial Information Management (GGIM)
Third Regional Committee Meeting

Addis Ababa, Ethiopia
22-23 November 2017

UN-GGIM: Africa

Third Session

Meeting Report

Final

I. Introduction and background

1. The United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) is a formal intergovernmental mechanism to discuss, enhance and coordinate geospatial information activities on a global level by involving Member States of the United Nations. The Regional Committee for Africa (UN-GGIM: Africa) was set up to address the issues of developing the capacities of African nations in the generation and dissemination of authoritative, accurate and sustained geospatial information in the continent.

2. UN-GGIM: Africa plays a leading role in making joint decisions and setting directions on the use of geospatial information within national, regional and global policy frameworks. It also works with Governments to improve policy, institutional arrangements and legal frameworks, addressing global issues, contributing to the collective knowledge as a community with shared interests and concerns. It facilitates and advocates the availability and capability of geospatial information as well as proposes work-plans and guidelines to promote awareness of how geospatial information can contribute to regional and global agenda, as well as on, common principles, policies, methods, mechanisms and standards for geospatial information interoperability.

3. UN-GGIM: Africa also works to develop effective geospatial capacity in African countries and promote the use of spatially-enabled information to meet key global challenges such as sustainable development.

4. Over the last three years UN-GGIM: Africa has developed regional frameworks to deal more particularly with relevant issues at various levels and support geospatial development. The current list of active topics for UN-GGIM includes:

- (a) The African Regional Spatial Data Infrastructures (ARSDI) as a framework with policies & structures to facilitate the availability of and access to spatial data, facilitating data-sharing among data producers and users.
- (b) The AFREF project, to develop a regional geodetic reference frame, aligned with the Global Geodetic Reference Frame (GGRF), to enable direct and seamless applications of all geospatial information on the continent.
- (c) The SALB project, to build authoritative and accurate second administrative level boundary databases with validated datasets from member States that will be used in a number of applications including census data analysis and disaster management.
- (d) The GeoNyms programme, to create an African gazetteer populated with Member State data and input through the UN Group of Experts on Geographical Names (UNGEGN).
- (e) The Fundamental Geospatial Datasets to develop a well-structured and comprehensive data foundation that would be consistent, comparable and compatible at the local, national, regional, and global levels.

- (f) The Integration of Geospatial Information and Statistics to mainstream geospatial information applicability in the various sectors and sub-national constituents of statistics.
 - (g) The 2030 Sustainable Development Agenda and the AU Agenda 2063, to develop common tools and data for applications of geospatial technologies for monitoring and tracking progress of the sustainable development goals.
5. The establishment of UN-GGIM: Africa has allowed the decisions and discussions of the global Committee of Experts to cascade to a regional level and focus on the issues facing Member States in the continent.
 6. The region has organized the Second Meeting of the Regional Committee of UN-GGIM: Africa as a back-to-back event with the StatCom Africa Meeting held from 28 November to 02 December 2016 in Grand-Bassam, Côte d'Ivoire. The meeting was attended by over 30 participants, comprising delegates from 10 African countries, as well as observers from international organizations including the United Nations Secretariat, the Africa Union, academia, regional organizations and networks, and the private sector. The meeting reviewed the following critical areas for the implementation of UN-GGIM: Africa activities: modalities for engaging the Working Groups to effectively deliver; strategy for resources mobilization; fostering the development of national data infrastructures in Africa; role and place of geospatial information in the implementation and monitoring of the SDGs; adoption of the African Action Plan on UN-GGIM.
 7. With the above, UN-GGIM: Africa has made substantive progress in terms of gaining some momentum and assuring the global community that Africa is serious about contributing.
 8. In order to pursue a strong advocacy action in the direction of the policy makers in Africa, and strengthen the effort to turn geospatial information into a real sustainable development enabler, the Executive Bureau is organising the 3rd Meeting of the Regional Committee of UN-GGIM: Africa as a back-to-back event with the AfricaGIS 2017 Conference being held from 20-24 November 2017 in Addis Ababa, Ethiopia..

II. Meeting objectives, format and outcomes

9. The main aim of the meeting is to review progress achieved on the recommendations and actions of UN-GGIM: Africa previous meetings. The meeting offered the opportunity to share knowledge and best practices on the development of geospatial information in the continent; raise awareness on the benefits to be derived through the utilization of geospatial information for sustainable development; look at policies, measures and steps that African countries could take to ensure a successful implementation of the UN-GGIM initiative in the region. The meeting outcomes shall contribute to consolidate the consensus and drive the political will in leveraging the enabling capabilities of geospatial information technology to meet African development agenda and in support of the emerging global challenges.

III. Attendance

10. The meeting was attended by over 50 participants, including delegates from 14 African countries, as well as observers from international organizations including the Economic Commission for Africa (ECA), the African Union Commission (AUC), the UN-GGIM Secretariat, academia, industry organisations and the private sector.

11. Delegates from the following African Member States participated in the meeting: Algeria, Burkina Faso, Cameroon, Côte d'Ivoire, Ethiopia, Egypt, Gambia, Kenya, Mali, Senegal, Somalia, South Africa, Swaziland, and Tunisia.

12. Also were in attendance, resource persons and observers from the following organizations: African Association for Remote Sensing and the Environment (AARSE); African Regional Institute for Geospatial Information Science and Technology (AFRIGIST); the Centre d'Étude de Recherche et de Production en Information pour l'Environnement et le Développement Durable (CERPINEDD, Burkina Faso); le Comité National de Télédétection et d'Information Géographique (CNTIG, Côte d'Ivoire); the Council of Scientific & Industrial Research (CSIR, Ghana); The Council for Scientific and Industrial Research (CSIR, South Africa); the Global Monitoring for Environment and Security in Africa (GMES & Africa); GTOPIC (Sarl, Morocco); Information Network and Security Agency (INSA, Ethiopia); Frontier Surveyors (Kenya); the Institute for Conscious Global Change (ICGC, USA); Laboratoire de Géomatique / Université de Moncton (Canada); National Space Research and Development Agency (NASRDA, Nigeria); Ordnance Survey (UK); PASCO Corporation (Japan); the Regional Centre for Mapping of Resources for Development (RCMRD); Research & Development Unit of Italian Geographical Society and University Roma Tre (Italy); SCISYS (UK); TBIWRDP (Ethiopia); Umvoto Africa (South Africa); Ardhi University (Tanzania); the University Amadou Bello of Zaria (Nigeria); the West African Economic and Monetary Union (UEMOA).

13. A full list of participants is provided in Annex 2.

IV. Opening Session

14. The opening session was chaired by Mr. Andre Nonguierma, Chief of the Geoinformation and Sectoral Statistics Section, at the United Nations Economic Commission for Africa (ECA). The following opening remarks were delivered.

15. First, Mr. Sultan Mohammed Alya (Ethiopia), current Chair of the Executive Bureau of UN-GGIM: Africa, welcomed the participants and he thanked them all for making time in their busy schedules to attend the meeting.

16. Next, Mr. Guillaume Le Sourd, on behalf of the UN-GGIM Secretariat, delivered an opening remark. Mr. Le Sourd commented that the GGIM Africa meeting gathering member state representatives, observers and partners of all geoinformation sectors, provides an opportunity to exchange experiences and continue to strengthen the UN-GGIM: Africa programme. He further commented on the work of UN-GGIM: Africa toward the operationalisation of principles set by UN-GGIM and the importance of capacity building, cross-country cooperation and sharing of good practice as critical in this phase. He also referred to the critical

importance of the work of GGIM Africa for strengthening countries' coherence and integration of geospatial information with other national systems in particular national statistics. He concluded his remarks by extending his gratitude to conference participants and the meeting organizers for their engagement to organise this meeting and wished a successful deliberation and proceedings to the meeting.

17. Last, the Director of the African Centre for Statistics, Mr. Oliver Chinganya during his opening statement underscored the need for Member States to share their experiences and to engage in discussion on both policy and technical issues in the area of geospatial information. This is compounded by the need for systematic and comprehensive framework – a global approach for managing geospatial information products and resources. He praised the effort made by UN-GGIM: Africa to develop an African Action Plan on Global Geospatial Information Management. He also stressed that while this is highly laudable, it must not end there, it requires action by implementing it. He concluded his statement with the expectation that the participants will make solid recommendations and a check-list of desirable actions to implement the Action Plan that will guarantee that the African countries follows the course in molding policy that is suited to African issues.

V. Sessions

A. Session 2 – Setting the Scene: Procedural issue

18. The meeting started with the reviewing and adoption of the agenda. The Agenda was adopted as presented, the adoption proposed by Côte d'Ivoire and seconded by Cameroon. See Annex 1.

B. Session 2 - Setting the Scene: Meeting objectives

19. Mr. Andre Nonguierma, presented the objectives of the meeting which aimed at:

- (a) Reviewing progress achieved on the recommendations and actions of UN-GGIM: Africa previous meetings.
- (b) Sharing knowledge and best practices on development of geospatial information in the continent
- (c) Raising awareness on the benefits to be derived through the utilization of geospatial information for sustainable development
- (d) Looking at policies, measures and steps that African countries could take to ensure a successful implementation of the UN-GGIM initiative in the region
- (e) Promoting networking among institutions and practitioners
- (f) Generating synergy at national level to facilitate its management
- (g) Ensuring linkages with partners and other regional subcommittees.

C. Setting the Scene: Report on Invitations

20. The UN-GGIM: Africa Secretariat reported on the invitations sent out to Member States. Formal letters of invitations were sent to the following stakeholders:

- (a) Members of the Executive Bureau and the Convenors of the Working Group.
- (b) Heads of National Mapping Agencies of all African countries.
- (c) Partners and other stakeholders.

21. Formal responses were received from the following countries, in addition to the fourteen others countries in attendance: Liberia, Lesotho, Madagascar, Morocco, and South Sudan. Without travel support, these countries couldn't participate in the meeting.

D. Session 2 - Setting the Scene: Report of the Executive Bureau

22. Mr. Sultan Mohammed Alya reported on the activities carried out by the Executive Bureau since the last meeting held in November 2016. The key achievements obtained by the Executive Bureau include the following:

- (d) Participation and contribution to the seventh Session of the Committee of Experts of GGIM and its side events, held in New York in 1 – 5 August 2017. The session offered good opportunity for many formal and informal contacts with various interlocutors on common interest in order to continue strengthening UN-GGIM: Africa interaction with public/private organizations, institutions and individuals that are involved in the development of geospatial information to effectively support the African geospatial community by raising awareness, funds and learning from the experience of other regions.
- (e) Contribution to the work of the United Nations Expert Group on the Integration of Statistical and Geospatial Information (UN EG-ISGI).
- (f) Contribution to the work of the WG on Fundamental Data in providing the initial thematic descriptions on Water, Biosphere and Land Cover / Land Use
- (g) Participation and contribution to the Expanded UN-GGIM Bureau Meeting that was held 7 – 9 December 2016 at UNHQs in New York.
- (h) Participation and contribution in the 2nd meeting of IAEG-SDG WGGI in Mexico City, Mexico 12 – 14 December 2016 and the 3rd meeting of IAEG-SDG WGGI in Kunming, China 8 – 10 May 2017.
- (i) and International workshop on Legal & Policy Frameworks for Geospatial Information Management in Tianjin, China, 7-9 November 2017.

E. Session 3: Report of UN-GGIM: Africa Working Groups

23. **AFREF.** Mr. Cesare Mbaria, Chair of the AFREF Working Group (Kenya) reported on the progress of activities of the AFREF programme. He presented the outcomes of the 2nd AFREF WG meeting which was held 20th to 24th November 2017 in the United Nation Economic Commission for Africa (UNECA). The meeting was attended by about twenty five (25) experts in the geospatial field from Africa and other parts of the world. The meeting deliberated on: i) The review of objectives and structure of AFREF WG; ii) Presentation on Distribution of GNSS Stations in Africa; iii) Presentation to establish an African Geodetic Organization ; iv) Possible interrelationship between AFREF and GGRF. The participants of the meeting reviewed the objectives and the structure of AFREF working group, made recommendations and drew resolutions as follows:

- (a) Amend AFREF Objectives;
- (b) Current AFREF Steering Committee to become the UN-GGIM: Africa Working Group 1 (WG.1) on African Geodetic Reference Frame (AFREF) with the revised structure [UN GGIM: Africa WG.1 AFREF];
- (c) A permanent Central Bureau is to be established with a fully employed staff member to take the role of the Bureau Manager plus two assistants;
- (d) At least one additional Operational Data Centre should be identified through a Call for Participation;
- (e) e) Three Working Groups (AFREF WGs 1.1, 1.2 and 1.3) are to be established through Calls for Participation;
- (f) Analysis Centres are to be identified through a Call for Participation and an Analysis Centre Co-ordinator to be elected from the successful Analysis Centres; The policies, charters and standards of the IGS and the Asia-Pacific Reference Frame (APREF) Station Operator Guidelines to be used as guide for the preparation of the policies, charters and standards of AFREF;
- (g) UN GGIM: Africa AFREF WG.1 to draft the Statute, Rules of Procedure and Terms of Reference for the Working Group including the various components within the Working Group;
- (h) UN GGIM: Africa AFREF WG.1 to be guided by and contribute to the efforts of UN GGRF including the use of an open data policy and the use of the ITRF as the standard reference frame.

24. **Fundamental Geospatial Data Sets and Standards.** Mr. Derek Clarke, Chair of the Working Group on Fundamental Data Sets and Standards reported on progress of work. He further presented the outcomes of the expert group meeting on geospatial standards for Africa held from 20-21 November 2017 in the United Nations Economic Commission for Africa. The meeting gathered around 50 experts in the geospatial field from Africa and other parts of the world. The meeting reviewed and discussed on the position paper prepared by ECA on geospatial standards for Africa. It also received presentations and discussed on the existing practices in the use of standard, developing common regional standards in line with international policies and standards, mechanisms for partnership and collaboration as well as integration of geospatial and statistical information.

25. The Convenors of the three other Working Groups (Institutional Arrangements and Legal Frameworks Working Group Chair: Nigeria; Capacity and Capability Development Working Group Chair: Morocco; Integration of Geospatial and Statistical Information Working Group Chair: Namibia) were not in attendance and no activity report was provided.

F. Session 4: UN-GGIM: Africa Key Pillars

26. **African Geospatial Policies.** Mr Andre Bassole, made a presentation on a position paper on the dimensions of geoinformation overarching policies in Africa. The document is being developed by ECA pursuant the resolution made by UN-GGIM: Africa 2nd Session held in Côte d’Ivoire in 2016. Because UN-GGIM: Africa is designed as an intergovernmental statutory organ of the African nations, a comprehensive policy and strategy is a prerequisite in achieving a better coordination mechanism for geospatial information management. The document, outlining the common geospatial vision, strategy and goals for Africa, will be circulated by ECA for comments.

27. **SALB.** Mr. Guillaume Le Sourd made a presentation on the Second Administrative Level Boundaries (SALB) project which aims to avail a working platform for the collection, compilation, management and dissemination of a homogeneous global repository on administrative boundaries and their names from authoritative source such as the National Geospatial Information Authorities, at 1:1million scale. He presented how SALB can support the global agenda including Rio+20: The Future We Want through the “provision of reliable geospatial information for risks and disasters” and the 2030 agenda on sustainable development through the promotion of “geospatial information while ensuring national ownership” and of “a framework for disaggregated data to link between statistics and geographic location”. He provided an update on the current status of SALB with respect to Member States contribution at global level and for Africa. He further noted the good participation of Africa and encouraged the continuous engagement of Africa to the SALB initiative.

28. **Integration of Geospatial and Statistical Information.** Mr. Andre Nonguierma presented a summary of the integration of geospatial and statistical information. The presentation outlined the overarching principles for the integration of geospatial information and statistical information in Africa. These principles are drawn from the Global Statistical Geospatial Framework being developed at international level. For the integration to happen, there is a need for a paradigm shift to re-tool the way we produce and use the foundational, authoritative and up-to-date spatially-enabled statistical information that are consistently available, accessible, and usable over time for informed decision-making at the local, national, regional, and global levels. The new model of developmental information is conceptualised (Derek, 2016) as the National Development Information Infrastructure (NDII). The NDII is the basic information infrastructure that ensure that appropriate data, information products and resources are used in policy making and hence sustainable development. He outlined the low participation of the African countries to the work of the United Nations Group of Experts on the Integration of Statistical and Geospatial Information (UN-EG-ISGI).

22. **UNGEGN:** Mr. Andre Nonguierma delivered a presentation on the United Nations Group of Experts on Geographical Names (UNGEGN) on behalf of Ms. Cecile Blake of the UNGEGN Secretariat. The presentation gave an overview of UNGEGN, its mandate, functions and achievements. UNGEGN is one of the seven standing expert bodies of ECOSOC, with over 400 members from over 100 countries. Outside its meetings, UNGEGN functions through 24 geographical/linguistic divisions and through working groups, currently addressing issues of training courses, digital data files and gazetteers, romanization systems, country names, terminology, publicity and funding, and toponymic guidelines. As fundamental to the need for global standardization of geographical names, UNGEGN promotes the recording of locally-used names reflecting the languages and traditions of a country. UNGEGN's goal is for every country to decide on its own nationally standardized names through the creation of national names authorities or recognized administrative processes. With the wide dissemination of the nationally standardized forms through gazetteers, atlases, web-based data bases, toponymic guidelines, etc. The presentation urged and encouraged Member States to consider creating as soon as possible their national geographical names authorities.

VI. Session 5: Where we want to be

23. The associated challenges in implementing the global geospatial information management mechanism include the inadequate response and lack of political will by countries to carry out geospatial initiatives and the lack of financial resources to assist member States.

24. With regard to technical assistance, including developing various databases and applications, it became obvious that the necessary data were not always available, emphasizing the importance of including data collection, management, dissemination and access policies in development information strategies and plans.

25. This session received three technical presentations. The presentations are outlined below:

29. Ordnance Survey (UK): Mr. John Kedar made a presentation conceptualising the Future National Geospatial Agencies: Shaping our contribution to society'. The geospatial community continues to transform as the world increasingly uses location to unlock value. Disruption sees new ideas, new providers, often bypassing the traditional surveying and mapping authority. The mantra 'evolve or die' has never held so true to national mapping authorities. But this increasing reliance on location, from delivery of SDGs to the internet of things, is also our opportunity. Managing the fundamental geospatial data layer, fit for purpose, maintained and trusted underpins the integration of all spatial data and allows machine to human and machine to machine activity. Future national geospatial agencies may become data brokers as well as collectors/managers, SDI authorities, service providers and service consumers. Whichever, national geospatial agencies have to be the 'go to' authority for trusted fundamental geospatial data. The future national geospatial agency cannot sit aloof; it will connect with customers, government, business, academia and consumer. It will support and lead innovation, be an incubator of change as well as a reliable 'foot on the ground' that does not bend to every breath of wind. The talk will consider

some of the findings of the 2017 Cambridge Conference, where national mapping, cadastre and geospatial leaders debated these very points.

26. GeoDyn: Mr. Rolf Beker made a technical presentation on “Temporal Aerial Photography”. Based on experience gained in Ethiopia he demonstrated the technicalities of converting analog aerial photographs into digital referenced database, accessible online.

27. JICA: Mr. Tsuda Kaoru presented the mapping activities currently undertaken by the Japan International Cooperation Agency (JICA). JICA has been providing technical assistance to African countries on issues related to geospatial information for more than 40 years. Over the last five years, JICA has conducted geospatial information projects in Djibouti, Ethiopia, Mali, Burkina Faso, Guinea, Senegal, Zimbabwe, Burundi, and Côte d'Ivoire. Some new projects in Africa are expected for 2018. Technical cooperation by JICA is under the form of grant aid. Most of the projects consist of data standardization, map production, supply of equipment, capacity building, and many others aspects. Thus, JICA's technical cooperation is effective and meaningful to build sound geospatial information infrastructures, including installation of GNSS Continuous Operating Reference Stations (CORS) and the improvement of capacity in the field of geospatial technology and science. Interested Member States may want to contact JICA and solicit technical support in mapping and cartography. Mr. Tsuda offered to assist countries to prepare their proposals to JICA following the required guidelines.

28. CNTIG: Dr. Edward Fonh Gbei presented “Geospatial Data Standards, NSDI, Data Governance and Applications”. He presented the country experience of Côte d'Ivoire of developing the *Plan National Géomatique*, the country National Spatial Data Infrastructure (NSDI). The process started three years ago through a "bottom-up" approach that addresses concrete governance and business issues by developing specific applications based on the NSDI. As per the issue of implementation of standards, three working groups (WGs) were formed to provide guidance on three sub-themes:

- WG1: Standards for Geospatial Data Collection
- WG2: Standards for Geospatial Data Processing and Sharing
- WG 3: Best Practices in Geomatics and Related Sectors.

29. Launch of the UN-GGIM: Africa Action Plan – Mr. Andre Nonguierma made a short introductory note on the UNGGIM: Africa Action Plan. The document entitled Geospatial information for sustainable development in Africa (GI4SD), was published by ECA and the meeting offered the opportunity to officially launch this strategic document that may guide Member States efforts in developing global geospatial information management. It's worth noting that Africa is the first region all over the world that has developed an action plan on UN-GGIM. The action plan conceptualizes the overarching principle of holistic geospatial governance that strengthens the significance of geospatial information for sustainable development goals in Africa. It outlines the essential actions with related responsibilities, timescales and costs that will steer the future implementation of the initiative in Africa. Through the Action Plan, Member States have agreed on a basic set of concepts, practices, standards and guidelines for the development and management of geospatial information in Africa.

30. The Chairperson of the Executive Bureau of UN-GGIM: Africa, Mr. Sultan Mohammed, emphasised the need for Member States to take full ownership of the document. Developing the action plan is laudable and commendable but it must not end there, it requires action by implementing it.

VII. Resolutions

31. The participants made the following recommendations:

Acknowledging the need for authoritative geospatial information in evidence-based planning, decision making and monitoring for development, with the objective of achieving ‘the future we want for Africa’ through the African Agenda 2063 and the United Nations (UN) 2030 Agenda for Sustainable Development,

Noting that the desire ‘to leave no one behind’ will require the inclusion and involvement of all African countries, with appropriate capacity and capability building,

Noting with appreciation the key role of ECA and AUC in providing a regional focus and leadership for geospatial information activities in Africa,

Noting decades of ECA and Member States’ efforts and progress in building Geospatial Data Infrastructures in Africa,

Noting the good progress made with the integration of geospatial and statistical information,

Noting the African Action Plan on Geospatial Information Management – Geospatial Information for Sustainable Development in Africa (GI4SD), which was adopted at the Second Meeting of the UN-GGIM: Africa Regional Committee meeting:

We, the representatives of National Mapping Authorities (NMAs) of African States, supported by the African Union Commission (AUC), the United Nations Economic Commission for Africa (ECA), the United Nations Geospatial Information Management (UN-GGIM) Secretariat, and other partners, gathered in Addis Ababa, Ethiopia from 22nd to 23rd November 2017 during the Third Meeting of the Regional Committee of the United Nations Geospatial Information Management for Africa (UN-GGIM: Africa), deliberated and resolved as follows:

1. Recommendations on fundamental geospatial datasets and geospatial information standards

Encourage member States to:

- (a) Generate and integrate fundamental geospatial datasets that could contribute to the Sustainable Development Goals (SDGs) and for regional agendas.
- (b) Adhere to and adapt international geospatial standards focusing on priority areas for sustainable development at national and regional level in Africa.

- (c) Establish a high-level coordination mechanism at national level, engaging all stakeholders, including users, to work collaboratively on the adoption and implementation of geospatial standards.
- (d) Put in place appropriate institutional arrangements for collaboration and coordination between geospatial producers, including national mapping agencies (NMAs), national statistical offices (NSO), academia and private sector taking into consideration user requirements and available best practices for spatial data infrastructure (SDI) implementations.
- (e) Participate actively and work through the UN-GGIM: Africa coordination mechanism to identify and implement best practices and relevant standards.

Request the Executive Bureau of UN-GGIM: Africa to:

- (a) Undertake a review of the fundamental geospatial datasets for Africa, taking cognizance of the fundamental geospatial datasets determined at the international level by UN-GGIM.
- (b) Prepare a recommended list of standards, as the initial list, for implementation by member States, taking cognizance of the need for contributing to the SDGs, and to prepare implementation guidelines by African countries of such standards, based on best practices.

Request UN ECA to:

- (a) Collaborate with the African Union Commission (AUC) and the Regional Economic Communities (RECs) to provide relevant regional and sub-regional policy frameworks and support to countries.
- (b) Identify relevant stakeholders to be engaged in the processes of implementing geospatial standards.
- (c) Develop capacity, create and implement training courses, and raise awareness at the regional, sub-regional and national levels on geospatial standards development and implementation.
- (d) Develop and implement communication action plans for outreach to share good practices, case studies, experiences, documents and models for implementation of geospatial standards.

Encourage ECA, regional and specialized institutions, and member States to participate actively in ISO/TC211 – Geographic Information/Geomatics meetings and activities, and to create a mechanism to disseminate the relevant standards to the geospatial information community in Africa.

2. Recommendation on the African Reference Frame (AFREF)

Encourage African countries to:

- (a) Adopt an Open Data Policy as per the objectives of UN GGIM and GGRF.
- (b) Establish and maintain at least one (1) GNSS Continuously Operating Reference Station (CORS) that meets the recommended standards and specifications of IGS.

Request the Executive Bureau of UN-GGIM: Africa to adopt the proposed objectives, structure and recommendations of the meeting of UN GGIN-Africa Working Group on AFREF held in Addis Ababa in November 2017.

3. Recommendation on communication and the participation in UN-GGIM matters

Urge member States to participate to their fullest extent in the meetings and activities of UN-GGIM: Africa.

Request the ECA to undertake a feasibility study of alternative methods for communication and conducting meetings, taking into account the available electronic communication channels in member States.

4. Recommendation on participation of academia and the private sector

Request the Executive Bureau of UN-GGIM: Africa to determine appropriate mechanisms for the participation of academia and the private sector in the activities and meetings of UN-GGIM: Africa, taking note of such arrangements already in place in UN-GGIM.

5. Recommendation on formulating an overarching policy on geospatial information management

Request ECA and AUC to continue work, in consultation with member States, on formulating an African Geospatial Information Management Policy as a framework policy for formulating national policies for geospatial information management, with the intention to submit the final adopted policy to the African Union (AU) for adoption by the African leaders in the frame of the Africa Space Policy and Space Strategy.

VIII. Conclusion

32. The establishment of UN-GGIM: Africa has allowed the decisions and discussions of the global Committee of Experts to cascade to a regional level and focus on the issues facing Member States in the continent.

33. It was noted that UN-GGIM: Africa plays a leading role in making joint decisions and setting directions on the use of geospatial information within national, regional and global policy frameworks. It also works with Governments to improve policy, institutional arrangements and legal frameworks, addressing global issues, contributing to the collective knowledge as a community with shared interests and concerns. It facilitates and advocates the availability and capability of geospatial information as well as proposes work-plans and guidelines to promote awareness of how geospatial information can contribute, common principles, policies, methods, mechanisms and standards for geospatial information interoperability.

Annex 1: Work Programme

| Time | Wednesday, 22 November 2017 |
|---------------|--|
| 08:00 - 09:00 | Registration |
| 09:00 – 09:30 | <p>UN-GGIM Africa – Session 1: Opening Venue: CR.6 Chair: UN-GGIM: Africa Secretariat [Andre Nonguierma] Rapporteur: Cameroon Welcome address:</p> <ul style="list-style-type: none"> ▪ Sultan Mohammed Alya, Chair UN-GGIM: Africa Executive Bureau ▪ Oliver Chinganya, Director African Centre for Statistics, ECA <p>Goodwill messages:</p> <ul style="list-style-type: none"> ▪ African Union Commission (AUC) ▪ UN-GGIM Secretariat |
| 09:30 – 10:30 | <p>UN-GGIM Africa – Session 2: Setting the scene Venue: CR.6 Chair: South Africa [Derek Clarke] Rapporteur: Cameroon</p> <ul style="list-style-type: none"> ▪ Adoption of the agenda ▪ Report on Invitations ▪ Report of UN-GGIM: Africa Executive Board Chairperson ▪ Meeting Objectives and Expected Outcomes, UNECA [A.Nonguierma] |
| 10:30 – 11:00 | Coffee break/Exhibition |
| 11:00 – 12:30 | <p>UN-GGIM Africa – Session 3: Report of UN-GGIM: Africa Working Groups Venue: CR.6 Chair: Ethiopia [Sultan Mohammed] Rapporteur: Cameroon</p> <ul style="list-style-type: none"> ▪ African Geodetic Reference Frame (AFREF) Working Group Chair: Kenya ▪ Fundamental Datasets and Standards Working Group Chair: South Africa ▪ Institutional Arrangements and Legal Frameworks Working Group Chair: Nigeria ▪ Capacity and Capability Development Working Group Chair: Morocco ▪ Integration of Geospatial and Statistical Information Working Group Chair: Namibia <p>Discussions on the reports presented</p> |
| 12:30 – 13.30 | Lunch break |
| 13:30 – 15:00 | <p>UN-GGIM Africa – Session 4 : UN-GGIM: Africa Key Pillars Venue: CR.6 Chair: Ethiopia [Sultan Mohammed] Rapporteur: Cameroon</p> <ul style="list-style-type: none"> ▪ African Geospatial Policies [Andre Bassole] ▪ SALB [Guillaume Le Sourd] ▪ AFREF [Richard Wonnacott] ▪ Integration of Geospatial and Statistical Information [A.Nonguierma] ▪ UNGEGN [TBD] |
| 15:00 – 15:30 | Coffee break/Exhibition |
| 15:30 – 17:00 | Africa GIS Plenary 5 : |

| <i>Time</i> | Thursday, 23 November 2017 |
|---------------|---|
| 08:00 – 09:00 | Registration |
| 09:00 – 10:30 | Africa GIS Plenary 6 |
| 10:30 – 11:00 | Coffee break/Exhibition |
| 11:00 – 12:30 | <p>UN-GGIM Africa – Session 5: UN-GGIM: Africa – Where we want to be</p> <p>Venue: CR.6</p> <p>Chair: Burkina Faso [Mr. Abdoulaye Belem]</p> <p>Rapporteur: C</p> <ul style="list-style-type: none"> ▪ Presentations: Ordnance Survey and Geodyn ▪ Review of activities to date ▪ Status Review of the African Action Plan on Geospatial Information Management (GI4SD)/UNECA – Mr. Andre Nonguierma ▪ Governance, Partnership and Resources Mobilization ▪ The Way Forward |
| 12:30 – 13:30 | Lunch break/Exhibition |
| 13:30 – 15:00 | <p>UN-GGIM: Africa – Session 6: Reporting</p> <p>Venue: CR.6</p> <p>Chair: Burkina Faso [Mr. Abdoulaye Belem]</p> <ul style="list-style-type: none"> ▪ Main outcomes of the 3rd Session of UN-GGIM: Africa and Recommendations ▪ Draft Report Presentation ▪ Election of Executive Bureau Members and Working Group Members |
| 15:00 – 15:30 | Coffee break/Exhibition |
| 15:30 – 17:00 | <p>UN-GGIM Africa – Session 7: Closing</p> <p>Venue: CR.6</p> <p>Chair: Ethiopia [Sultan Mohammed]</p> <ul style="list-style-type: none"> ▪ Adoption of the report ▪ Proposed date and venue for next meeting ▪ Closing Remarks ▪ Group Photo |