# UNITED NATIONS COMMITTEE OF EXPERTS ON GLOBAL GEOSPATIAL INFORMATION MANAGEMENT (UN-GGIM) HIGH-LEVEL GROUP OF THE INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK (HLG-IGIF) First Meeting (virtual) Thursday, 25 February 2021, 11:00 hrs. – 13:00 hrs. (UTC)/06:00 am. – 8:00 am. (EST/UTC-5)

### **SUMMARY REPORT**

#### Background

In September 2020 at its tenth session, the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM), in its decision 10/103<sup>1</sup>, adopted Part 2: Implementation Guide of the Integrated Geospatial Information Framework (IGIF), subject to further refinement and finalization, as a means of strengthening national geospatial information management arrangements within and across Member States at the institutional level and supporting the implementation of the Sustainable Development Goals (SDGs), especially in developing countries.

At its tenth session, UN-GGIM noted the global significance of the IGIF, which serves as a key umbrella for the many activities under the purview of the Committee of Experts, including the regional committees and thematic groups of UN-GGIM, which could be applied to any country to guide transformational change, and which would be a living and usable document to be reviewed and refined through an iterative process, on the basis of the practical implementation experiences of Member States.

UN-GGIM further encouraged consideration of a programme, in coordination with the regional committees and the regional commissions of the United Nations system, which would leverage the IGIF and its Implementation Guide with a view to strengthening national capacities to effectively manage geospatial resources in order to modernize national geospatial information arrangements in Member States, in particular in developing countries, and to advocate and raise awareness, as appropriate, including in the context of funding entities.

At its tenth session, UN-GGIM recognized that the IGIF now provides the basis and guide for developing, integrating and strengthening national geospatial information management arrangements in Member States, bridging the geospatial digital divide, and supporting the implementation of the 2030 Agenda and other global development Agendas. Both developed and developing countries are currently implementing the IGIF and developing Country-level Action Plans on an optional and voluntary basis, in accordance with the available guidance and tools. This represents a considerable achievement and body of work which needs to be sustained and maintained.

Therefore, in making decision 10/103, UN-GGIM endorsed the establishment of a dedicated high-level group of experts, with balanced geographical representation and expertise, as a mechanism to provide strategic leadership, coordination and oversight in order to ensure the sustained success of the IGIF, and to mobilize the resources necessary to maintain the momentum and refinement of the IGIF as a continuously evolving process.

<sup>&</sup>lt;sup>1</sup> E/2021/46 – E/C.20/2020/35, Report on the tenth session of the United Nations Committee of Experts on Global Geospatial Information Management (<u>http://ggim.un.org/meetings/GGIM-committee/10th-Session/documents/GGIM10\_report\_e.pdf</u>)



#### Membership

Membership of the HLG-IGIF comprises the UN-GGIM Bureau together with Member States nominated by the respective regional committees of UN-GGIM according to the following composition: Africa (4 members); America's (4 members); Arab States (2 members); Asia and the Pacific (4 members); and Europe (4 members). Member States nominated have demonstrated experience in the development and/or implementation of the IGIF during its journey, with balanced geographic representation between developed and developing countries, and with due consideration being given to countries in special situations where appropriate.

The inaugural membership of the HLG-IGIF is as follows:

UN-GGIM Bureau			
Belgium	Ms. Ingrid Vanden Berghe, National Geographic Institute		
Tonga	Ms. Rosamond Bing, Ministry of Lands and Natural Resources		
Cameroon	Mr. Fernand Isseri, National Institute of Geography		
UN-GGIM: Africa			
Burkina Faso	Mr. Halidou Nagabila, Institut Géographique du Burkina		
Ethiopia	Mr. Tulu Besha Bedada, Geospatial Information Institute		
Morocco	<i>Mr. Kamal Outghouliast</i> , Agence Nationale de la Conservation Foncière, du Cadastre et de la Cartographie		
South Africa	Ms. Maroale Mimi Chauke, Department of Agriculture, Rural Development and Land Reform		
UN-GGIM: Americas			
Chile	Mr. Cristián Araneda Hernández, SNIT-IDE de Chile		
Jamaica	<i>Ms. Simone Lloyd</i> , Ministry of Housing, Urban Renewal, Environment & Climate Change		
Panama	Ms. Isis Tejada, Instituto Geográfico Nacional Tommy Guardia		
United States	Ms. Deirdre Bishop, Census Bureau		
UN-GGIM: Arab States			
Algeria	Mr. Hamid Oukaci, Conseil National de l'Information Géographique		
Jordan	Mr. Mu'ammar Kamel Haddadin, Royal Jordanian Geographic Center		
UN-GGIM-AP			
Indonesia	Mr. Antonius B Wijanarto, Geospatial Information Agency		
Kyrgyzstan	Mr. Bakytbek Djusupbekov, State Agency for Land Resources		
Mongolia	Mr. Tsevelsodnom Gankhuu, Agency for Land Administration and Management, Geodesy and Cartography		
Nepal	Mr. Prakash Joshi, Survey Department		
UN-GGIM: Europe			
Germany	Mr. Pier-Giorgio Zaccheddu, Federal Agency of Cartography and Geodesy		
Netherlands	Mr Frank Tierolff, The Netherlands' Cadastre, Land Registry and Mapping Agency		
Sweden	Mr. Anders Sandin, Lantmäteriet		
United Kingdom	Mr. Jamie Clark, Geospatial Commission		

### Participation

United Nations Secretariat

Nineteen of the twenty-one Member States of the HLG-IGIF participated in its virtual first meeting. They are the expert representatives of Belgium, Burkina Faso, Cameroon, Chile, Ethiopia, Germany, Indonesia,

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Jamaica, Kyrgyzstan, Mongolia, Morocco, Nepal, Netherlands, Panama, South Africa, Sweden, Tonga, United Kingdom, and the United States. The meeting was facilitated by the United Nations Global Geospatial Information Management Section/UN-GGIM Secretariat.

#### Adoption of Agenda and Organization of the Meeting

After the initial welcome and brief self-introductions by all participants, the HLG-IGIF proceeded to consider, and then unanimously adopt, the agenda and organization for the meeting, which was as follows:

1)	Welcome and Introductions (Secretariat)	00:01
2)	Adoption of Agenda and Organization of the Meeting (Secretariat)	00:30
3)	) Mandate and Objectives of the HLG-IGIF (Secretariat)	
4)	Election of co-Chairs (Secretariat)	00:40
	a) co-Chair nominations and modalities for agreement	
	b) Opening statements from co-Chairs	
5)	Confirming the Role of the HLG-IGIF ( <i>co-Chair</i> )	00:50
	a) Key functions	
	b) Membership composition	
	c) Methods of work	
	d) Finalize and adopt Terms of Reference	
6)	Status of IGIF Implementation (co-Chair)	01:05
	a) Operationalizing the IGIF, Implementation Guide and Country-level Action Plans	
	b) Publicity, communication and marketing	
	c) Coordination and coherence	
	d) E-learning	
7)	Functions and Initial Programme of Work (co-Chair)	01:15
	a) Issues to be addressed	
	b) Programme of work	
8)	Other business ( <i>co-Chair</i> )	01:55
	a) Next Meeting	

### Mandate and Objectives of the HLG-IGIF

United Nations Secretariat

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The HLG-IGIF reviewed and confirmed its mandate and objectives, noting its critical importance within the UN-GGIM architecture. The HLG-IGIF also noted that the Secretariat had convened a 'brainstorming' session on 3 December 2020 with the Bureau of UN-GGIM and representatives of Member States and international organizations<sup>2</sup> who had expressed interest and offered to support the IGIF, inclusive of developing draft Terms of Reference for the proposed HLG-IGIF. The draft, which has been reviewed and refined by the Bureau, was provided together with the notice for this virtual first meeting.

**Mandate:** At its tenth session, in making decision 10/103, UN-GGIM endorsed the establishment of a dedicated high-level group of experts, with balanced geographical representation and expertise, as a mechanism to provide strategic leadership, coordination and oversight in order to ensure the sustained success of the IGIF, and to mobilize the resources necessary to maintain the momentum and refinement of the IGIF as a continuously evolving process.

**Objectives:** The High-Level Group of the Integrated Geospatial Information Framework (HLG-IGIF) aims to: provide the strategic leadership, promotion, coordination, planning and oversight to successfully sustain the uptake and implementation of the IGIF; explicitly demonstrate the societal value and impact

egrated Geospatial Information Framework

High-level Group on the



<sup>&</sup>lt;sup>2</sup> Belgium, Cameroon, Germany, Ireland, Italy, Netherlands, Singapore, Sweden, United Kingdom, Tonga, ECLAC, and World Bank

of the IGIF, and associated progress towards enabling the achievement of the SDGs; provide expertise and advice to assist countries in their implementation of the IGIF at the country level; and mobilize needed resources for implementation and to maintain the momentum and evolving refinement of the IGIF with Member States and other key stakeholders.

#### **Election of co-Chairs**

#### a) Co-Chair nominations and modalities for agreement

The HLG-IGIF recognized that, as a newly established group with a specific mandate from UN-GGIM, it needed to quickly ensure it was able to provide strategic leadership, coordination and oversight in order to ensure the sustained success of the IGIF. In this regard, the HLG-IGIF concurred with the view that having its first co-Chairs with a sound understanding, experience, and even more importantly, leadership, in both the history and development of the IGIF, would be most valuable especially in the critical establishment phase of this new group.

The HLG-IGIF was requested to consider Mr. Tulu Besha Bedada, Geospatial Information Institute of Ethiopia and Mr. Anders Sandin, Lantmateriet, Sweden, as the first co-Chairs of the HLG-IGIF.

Mr. Sandin has been personally involved and engaged in the development of the IGIF and its Implementation Guide since the first meetings in Washington D.C. at the World Bank, and subsequent other major IGIF engagements, such as the initial 'Implementation Guide' workshop in Kuala Lumpur in June 2019. He, along with the delegation of Sweden, continues to be a prominent advocate of the IGIF within UN-GGIM over the past two years. Mr. Bedada is both a champion of the IGIF for Africa, as well as leading efforts within his country to operationalize the IGIF by developing a country-level Action Plan for Ethiopia. Through his leadership, the countries of Africa – the countries with the most to benefit from the IGIF – are embracing the IGIF and its implementation.

Given their background and comprehensive understanding of the 'IGIF journey' over the past several years, the HLG-IGIF, by consensus, accepted and affirmed both nominees by acclamation.

#### b) Opening statements from the co-Chairs

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Mr. Bedada thanked the HLG-IGIF membership for the trust placed on Mr. Sandin and himself. He pledged full commitment to the implementation of the IGIF, recognizing that the IGIF provides the much-needed strategy and leadership. He noted that the HLG-IGIF will work with relevant entities and invited members to work together with the co-Chairs. In this regard, he expressed his enthusiasm to work with all members of the HLG-IGIF, and also UN-GGIM, to strengthen collaboration to sustain the success of the IGIF, to exchange knowledge and experience, and to accelerate cooperation in the implementation of the SDGs. He commented that Ethiopia has a draft Country-level Action Plan to operationalize the IGIF and thanked the HLG-IGIF.

Mr. Sandin acknowledged and thanked UN-GGIM: Europe for nominating Sweden as a member of the HLG-IGIF. He expressed his excitement to work with the HLG-IGIF membership to deliver its mandate and objectives. He noted that the HLG-IGIF is 'we', the team that will make the difference, and that the HLG-IGIF would do this as a team and with a lot of joy. He observed the need to work to the HLG-IGIF Terms of Reference and to explicitly demonstrate the societal impact of the IGIF. He further noted that the HLG-IGIF should reach out to all regional committees, lay foundations, and making sure that the SDGs are implemented with geospatial information. He looked forward to jointly setting the agenda and programme of work for the HLG-IGIF.

The co-Chairs thanked the Secretariat and proceeded to chair and facilitate subsequent deliberations.



## Confirming the Role of the HLG-IGIF

The co-Chairs observed that the role and functions of the HLG-IGIF were provided in the draft Terms of Reference. The meeting reviewed the following:

## a) Key functions

The key functions of the HLG-IGIF shall include, but not be limited to:

- Communicate, promote and grow the importance and relevance of the IGIF and other relevant UN-GGIM frameworks to policy and decision-makers within and outside the global geospatial information community;
- Engage with and provide guidance on how geospatial information can be communicated and managed at the executive leadership level, and can be elevated in decision-making roles within and across government to support global to national development agendas and priorities;
- Provide an enabling environment to discuss strategies and activities for strengthening national capacities to effectively manage geospatial resources in order to modernize national integrated geospatial information arrangements within and across countries and regions;
- Identify opportunities and arrangements to develop reference resources and training materials for implementing the IGIF in order to provide the best possible support for countries, in particular, countries in special situations;
- Address and advocate for resource mobilization, including in the context of funding entities, to sustain and maintain the momentum and refinement of the IGIF as a continual evolving process; for strengthening capacities to implement the IGIF at the country-level; as well as identifying ways to leverage the resources and creativity of academia, international geospatial societies, and the private sector;
- Mobilize resources and institutions inside and outside the geospatial information community, understand their needs, and if required, coordinate their actions, thereby further extending partnerships (i.e. with philanthropic foundations and development organizations); and
- Review and make recommendations on the IGIF, including revisions and future trends, to UN-GGIM, as appropriate.

# b) Membership composition

The membership of the HLG-IGIF composes a maximum of 22 Member States, made up of members of the Bureau of UN-GGIM and representatives of Member States, at the highest executive leadership level, from national geospatial information (or related) agencies nominated by the Bureaus of each of the five UN-GGIM regional committees as follow: Africa (4 members); America's (4 members); Arab States (2 members); Asia and the Pacific (4 members); and Europe (4 members). Regional committees noted that their nomination should be regionally representative and, as appropriate, of equal balance between developed and developing countries, and with due consideration being given to countries in special situations.

### c) Methods of work

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The HLG-IGIF noted that it shall principally work through electronic exchanges and regular biannual meetings. Additional meetings may be decided by the co-Chairs in consultation with the HLG-IGIF as appropriate. An in-person meeting of the HLG-IGIF will be conducted in conjunction with the annual session of UN-GGIM, when feasible. It is the expectation that the HLG-IGIF shall work in an open, inclusive and transparent manner.

Additionally, the HLG-IGIF may establish sub-groups or task teams, utilizing the expertise and experiences of Member States and relevant experts, including from regional commissions of the United Nations and



the World Bank on particular aspects of its work. In this regard, the HLG-IGIF may also invite subject matter experts from international geospatial societies, academia, civil society, and the private sector, when appropriate, to contribute their expertise and experiences for the implementation of the IGIF. The HLG-IGIF shall formally report on its progress and the implementation of the IGIF to UN-GGIM at its annual sessions.

### d) Finalize and adopt the Terms of Reference

The HLG-IGIF confirmed the mandate, objectives, role, membership composition and methods of its work, and unanimously adopted its Terms of Reference. The HLG-IGIF noted that it may review its Terms of Reference as the need arises, in consultation with UN-GGIM, to ensure that it functions efficiently and effectively based on its mandate.

### **Status of IGIF Implementation**

#### a) Operationalizing the IGIF, Implementation Guide and Country-level Action Plans

The Secretariat briefed the meeting on the status of the development and implementation of the IGIF and the refinement and finalization of the Implementation Guide. It was stressed that the IGIF aims to translate high-level strategic concepts into practical implementation guidance and action for use by Member States. Presently, the Secretariat is refining the Implementation Guide after the broad global consultation carried out after the ninth session of UN-GGIM. The broad global consultation of the Implementation Guide realized 68 responses, yielding 1350 separate items to review.

The Secretariat convened workshops and seminars to raise awareness, share information and exchange experiences, including on the operationalization of the IGIF, in all five regions of UN-GGIM over a period of approximately eighteen months. More than 730 participants from 133 Member States (almost 70% of the Member States of the United Nations) participated in-person. The broad global consultation was significantly aided by these workshops and seminars where participants could be informed, seek clarification and contribute their experience and expectations.

Many countries, both developed and developing, are now implementing the IGIF and developing Countrylevel Action Plans, based on the guidance and resources that are presently available. The Implementation Guide has benefitted from, and been informed and enhanced by, the experience and national circumstances of these implementing countries.

As a living document, there is still more that can be done to refine and improve the Implementation Guide going forward. It was suggested that the HLG-IGIF consider establishing a task group, initially, to assist with the current refinement of the IGIF, and subsequently to maintain the momentum for the refinement and improvement of the IGIF as an evolving process.

#### b) Publicity, communication and marketing

United Nations Secretariat

It is important to communicate, promote and grow the importance and relevance of the IGIF to decisionmakers, including those outside the global geospatial information community. This includes communicating and advocating more broadly what 'geospatial information' is. From the broad consultation on the Implementation Guide, it was noted that some Member States sought support to elevate key messages around the importance and value of geospatial information. Questions include: who should we be engaging? what are the key messages? how to communicate, promote, market and grow understanding of geospatial information to decisions-makers all over?



#### c) Coordination and coherence

The HLG-IGIF should be aware of new initiatives, including development support to some countries by, e.g. World Bank, and twinning and bilateral projects and support from some Member States, in efforts to strengthen national geospatial information management arrangements. It is the understanding that such support is happening, including leveraging the IGIF. Coordination with these contributing organizations and Member States who are providing the needed capacity, resources and consultancies would help to ensure that messages and strategic thrust are aligned with the IGIF, and linking the strategic concepts to practical implementation guidance that is needed. Regional entities, including the regional commissions of the United Nations, are also contributing. Additionally, there have been specific requests for support from Member States at recent annual plenary meetings of the regional committees of UN-GGIM.

#### d) E-Learning

The meeting was informed that the World Bank, through its Open Learning Campus, has developed a modular e-Learning course based on the IGIF. The first modules of the e-Learning course were conducted in January and February 2021, where some 350 persons participated in the self-paced learning. The course was open to all Member States and the global geospatial community. The World Bank is finalizing its next series of modules of the e-Learning course, which will focus on how to use the IGIF through its nine strategic pathways. This course has been launched and will be conducted from mid-March to mid-April 2021.

It was commented that the HLG-IGIF may benefit from the discussions within the e-Learning course conducted in January/February. The Secretariat agreed to reach out to the World Bank and ascertain if any of these materials can be made available, along with pertinent comments and discussions.

#### e) <u>Summary</u>

The co-Chairs observed that while a lot has been done, more still needs to be done, and suggested that task groups be considered to refine and finalize the Implementation Guide, develop a communication strategy and strengthen coordination.

#### **Functions and Initial Programme of Work**

### a) Issues to be addressed

United Nations Sec

The co-Chairs led this discussion and asked questions such as: What are the major areas of focus? What should be the modality of work – through task or sub-groups? What are the priorities? and What other issues need to be considered?

The co-Chairs observed that key focus areas may vary from region to region, depending on the current maturity of national geospatial information management. Diversity in the key focus areas can be considered as an opportunity, to identify areas of cooperation between regions in the course of implementing the IGIF. While it was observed that most developed countries have well-functioning national geospatial information management arrangements with relevant policies and legal frameworks, standards and infrastructures, hence the IGIF will further improve their national geospatial information management, including in areas such as data governance and integration, innovation, financing, and communication on the importance of the geospatial data for the SDGs.

However, in developing countries, the maturity level is still relatively low and there are significant gaps between the current state of geospatial information management and the future desired state that can be achieved through the sustained and successful implementation of the IGIF. Some of the major gaps include standardization, data governance, policy and legal frameworks, financing, innovation, and



communication. Hence, the HLG-IGIF is urged to bridge these gaps by being strategic in its areas of focus and establish sustainable cooperation between Member States to strengthen nationally integrated geospatial information management, particularly in developing countries. Another area for consideration is on the 'how' to ensure successful operationalization of the IGIF across all regions, leaving no country behind.

The co-Chairs invited participants to reflect and respond as the HLG-IGIF collectively consider issues to be addressed in preparing its initial programme of work. It was commented that the geospatial community should not be inward looking, rather focus on the 'whom' that will benefit from geospatial information more broadly, the wider society and impacts. It's not about 'us', it's about 'the community out there'. It was agreed that the HLG-IGIF must develop an agenda to <u>strategically</u> scope its work and priorities.

### b) <u>Programme of work</u>

The co-Chairs observed that the aim of establishing the HLG-IGIF is to successfully sustain the uptake and implementation of the IGIF across the five geographic regions. In this regard, the HLG-IGIF is expected to work in synergy to provide strategic leadership and be the champion in meeting its key functions. To do so, the HLG-IGIF must define an initial programme of work, deliverables, and delivery milestones.

It was observed that the HLG-IGIF also identify areas where it may need additional support and possibly from whom. In this regard, task or sub-groups may be tasked to look into some areas of focus, while the HLG-IGIF concentrates on the strategic oversight and coordination.

## **Summary and Actions**

The HLG-IGIF confirmed its mandate, objectives, role, membership composition and methods of work, and unanimously adopted its Terms of Reference.

The immediate priority is to now develop the initial Programme of Work as a roadmap for the next 1-2 years, and with early touchpoints being the next HLG-IGIF meetings in May and August 2021. Key items for consideration include the following, which may also require the establishment of a task group(s) amongst the membership of the HLG-IGIF:

- Refinement and finalization of the IGIF Implementation Guide, and update of the IGIF Overarching Strategy.
- Developing a communication strategy to strengthen coordination and support the implementation of the IGIF.
- Establish a dialogue with the UN Regional Commissions and Regional Committees of UN-GGIM to strengthen the cooperation and advocate resource mobilization.
- Led by the co-Chairs, develop a Strategic Plan, with objectives and outcomes, for the HLG-IGIF.

### **Other Business**

# a) Next Meeting

United Nations Secretariat

It was agreed that meetings of the HLG-IGIF will normally be convened on a six-monthly rhythm. However, given the importance of its establishment phase, the HLG-IGIF considered and agreed to meet again in three months' time, on 20 May 2021, to focus on strategic issues and to discuss the initial programme of work and its details. The HLG-IGIF will then meet in August, either immediately before or after the eleventh session of UN-GGIM. The Secretariat will follow-up with a summary report for the virtual first meeting of the HLG-IGIF.

The co-Chairs concluded the meeting after thanking all participants for their contributions.



# Annex 1: Participants of the virtual first meeting of the HLG-IGIF

UN-GGIM Bureau	
Belgium	Ms. Ingrid Vanden Berghe and Johannes Van Geertsom, National Geographic
0	Institute
Tonga	Ms. Rosamond Bing, Ministry of Lands and Natural Resources
Cameroon	Mr. Fernand Isseri, National Institute of Geography
UN-GGIM: Africa	
Burkina Faso	Mr. Halidou Nagabila, Mr. Bako Ferdinand and Mr. Sanon Oumar, Institut Géographique du Burkina
Ethiopia	Mr. Tulu Besha Bedada, Geospatial Information Institute
Morocco	<i>Mr. Kamal Outghouliast</i> , Agence Nationale de la Conservation Foncière, du Cadastre et de la Cartographie
South Africa	Ms. Maroale Mimi Chauke, Department of Agriculture, Rural Development and Land Reform
UN-GGIM: Americas	
Chile	Mr. Cristián Araneda Hernández, SNIT-IDE de Chile
Jamaica	<i>Ms. Simone Lloyd</i> , Ministry of Housing, Urban Renewal, Environment & Climate Change
Panama	Ms. Isis Tejada, Instituto Geográfico Nacional Tommy Guardia
United States	Ms. Deirdre Bishop, Census Bureau
UN-GGIM-AP	
Indonesia	Mr. Antonius B Wijanarto, Geospatial Information Agency
Kyrgyzstan	Mr. Bakytbek Djusupbekov and Mr. Almaz Abdiev, State Agency for Land Resources
Mongolia	<i>Ms. Bayarmaa Enkhtur on behalf of Mr. Tsevelsodnom Gankhuu</i> , Agency for Land Administration and Management, Geodesy and Cartography
Nepal	Mr. Prakash Joshi and Mr. Susheel Dangol, Survey Department
UN-GGIM: Europe	
Germany	Mr. Pier-Giorgio Zaccheddu, Federal Agency of Cartography and Geodesy
Netherlands	Mr Frank Tierolff, The Netherlands' Cadastre, Land Registry and Mapping Agency
Sweden	Mr. Anders Sandin, Lantmäteriet
United Kingdom	Mr. Jamie Clark, Geospatial Commission
UN-GGIM Secretariat	
	Mr. Stefan Schweinfest
	Mr Greg Scott
	Mr. CheeHai Teo
	Ms. Eva-Maria Unger
	Ms. Cecille Blake
	Mr. Mark Iliffe
Apologies from:	
UN-GGIM: Arab States	
Algeria	Mr. Hamid Oukaci, Conseil National de l'Information Géographique
Jordan	Mr. Mu'ammar Kamel Haddadin, Royal Jordanian Geographic Center

