

THE ASSOCIATION OF THE GEOLOGICAL SURVEYS OF THE EUROPEAN UNION

EUROGEOSURVEYS Rue du Luxembourg 3 1000 Brussels Belgium

Tel: + 32 (0) 2 501 53 30 Fax: + 32 (0) 2 501 53 33 info@eurogeosurveys http://www.eurogeosurveys.org

Brussels, December 14th, 2007

# **Towards an International Consortium of Geological Surveys (ICOGS)**

CONCEPT NOTE FOR DISCUSSION IN PREPARATION OF THE ICOGS BUSINESS MEETING AT THE 33<sup>RD</sup> INTERNATIONAL GEOLOGICAL CONGRESS, OSLO, AUGUST 2008

**Prepared by:** Arne Bjorlykke, Chair of the IGC33 Organising Committee and Patrice Christmann, Secretary General of EuroGeoSurveys

This concept note is addressed to the Directors of regional geological organisations and to the Directors of national geological survey organizations of those regions where no regional organizations exist.

### Its purpose is:

- to invite you to comment this concept note and make suggestions up to 15/01/07;
- to invite you to appoint a representative of your region<sup>1</sup> to the ad-hoc statute drafting Committee. The EuroGeoSurveys statutes are attached as a separate document, as one possible example that may help to draft the ICOGS statutes;
- to prepare for the ICOGS meeting to be held at IGC33 in Oslo, in August 2008. It recalls the
  work on developing the ICOGS so far, outlines the possible scope for further development
  of the ICOGS concept, outlining some tentative objectives for ICOGS and a possible
  roadmap up to IGC33.

<sup>&</sup>lt;sup>1</sup> A tentative list of regions and of the countries in these regions is appended hereto (Appendix 2)

You may already have received this document by e-mail on 16/11. In that case, please kindly excuse the double posting. Please note that the two documents differ, this updated document being the valid version.

Please provide your reply as well as your comments/ suggestions on this paper not later than January 15<sup>th</sup> 2008 by e-mail to <u>secretary@eurogeosurveys.org</u> or by ordinary mail to:

Dr. Patrice Christmann
Secretary General
EuroGeoSurveys
3, rue du Luxembourg
B-1000-Brussels (Belgium)
Or by fax to: +32 4 501 53 33

Preferably include your comments and suggestions in the text, using the "track changes" mode of Word. Also kindly indicate if you would agree to come to a preparatory meeting that would be organized in Brussels on March 11, inviting one or two Geological Surveys representatives for each of the following regions to attend on behalf of the Geological Survey organisations of their region (see attached Excel database of the Geological Surveys of the World):

- Africa
- Central Asia
- Europe
- Latin America and the Caribbean
- Middle-East
- North America (Canada + U.S.A.)
- Oceania
- South and South-East Asia

These regional representatives would be the members of the Status Committee mentioned page statutes committee Error! Bookmark not defined..

The International Consortium of Geological surveys has so far been an informal organization of international geological survey organisations mainly responsible for a symposium every four-year at the IGC-meeting. The main task was to be a platform for exchange of information between the surveys.

This memo is intended to trigger a discussion between the Directors of the geological survey organisations of the world, and – where existing – the Directors of their Regional Organisations to prepare the next ICOGS Business Meeting, to take place in Oslo, in August 2006, at the occasion of the IGC33. This memo elaborates on the conclusions of the ICOGS Business Meeting that took place at Florence, Italy in August 2004 at IGC32 (attached as Annex 1).

At this time the participants decided to set-up a working group to outline the future directions of ICOGS. This paper builds on this, proposing thoughts (Why do we need an ICOGS?, How can it work?) for comments and discussion. These should be sent by December 31<sup>st</sup> by e-mail to:

- Arne Bjorlykke (<u>Arne.Bjorlykke@ngu.no</u>)

Patrice Christmann (p.christmann@eurogeosurveys.org).

An ICOGS partners business meeting will take place at IGC33 in Oslo next year, where we hope to have reached the stage where ICOGS will turn form a concept into an operational reality. You are kindly invited to participate to this meeting, which should bring together the Directors of the of the world and the leaders of their regional organizations. Once we will have received your comments on this memorandum, we will organize the business meeting with you.

#### Why do we need an ICOGS?

With 9 billion people on Earth by 2050 and persistent huge gaps in the intensities of natural resources uses between the richer and the poorer, highly populated, part of this world dreaming of enjoying lifestyles close to the ones of the better of enjoy, the demand for natural resources will just be exponential whatever the role of substitutions and recycling. Geological<sup>2</sup> resources are already in enormous demand, and that demand is likely to grow unless some deep, gloomy, recession occurs.

We see an increasing globalization also in Earth science, and a growing demand for global Geographic Information databases and geological models. The BGS OneGeology initiative<sup>3</sup> for the production of a 1:1 million digital map of the world is one important step in that direction, and ICOGS could be an important member of its governance structure. We also see the need for similar global thematic databases on fossil fuels, mineral resources, groundwater, natural hazards, or paleoclimate. As a possible part of the OneGeology governance structure, ICOGS could play an important part in bridging the gap between map and database owners ( Geological surveys, ... ), on one hand, and users of global knowledge and data ( Industry, UNESCO and other UN organizations, bilateral and multilateral donors), on the other hand.

The development of global databases need the contribution from all countries and the participation of all geological surveys. Their development requires to develop multilingual interoperability between our digital data and information assets, and between these and those thematic digital Geographic Information assets held by other geographic information communities of practice. This becomes a possibility thanks to the work carried out by the IUGS working groups on (1) interoperability and (2) on the development of multilingual thesauri. ICOGS may represent geological survey organizations at the global scale and develop into an umbrella organization promoting their interests at the global level.

Earth Observation is a domain of rapidly growing importance, whose importance has been fully acknowledged at the 2002 Johannesburg World Summit on Sustainable Development (See the UN

<sup>&</sup>lt;sup>2</sup> Geology and geological used throughout this document mean relate to the data, information and knowledge on the Earth's subsurface nature, structure, dynamics and history as well as on the related resources (georesources) and hazards (geohazards)

<sup>&</sup>lt;sup>3</sup> OneGeology website: www.onegeology.org

#### WSSD Implementation Plan:

http://www.un.org/jsummit/html/documents/summit\_docs/2309\_planfinal.htm). One very important implementation component that developed downstream, is the Global Earth Observation System of Systems programme and its 10 years implementation programme (GEOSS, 2005-2014, website: <a href="www.earthobservations.org">www.earthobservations.org</a>). This programme, based on voluntary initiatives, is currently hosted by the UN World Meteorological Organisation in Geneva, is supported by 71 countries and 46 participating organizations. It aims at developing a System of Systems for the integrated Earth Observation needed to address the issues\_related to 9 Societal Benefit Areas:

- Reducing loss of life and property from natural and human-induced disasters.
- Understanding environmental factors affecting human health and well-being.
- Improving management of energy resources.
- Understanding, assessing, predicting, mitigating, and adapting to climate variability and change.
- Improving water resource management through better understanding of the water cycle.
- Improving weather information, forecasting and warning.
- Improving the management and protection of terrestrial, coastal and marine ecosystems.
- Supporting sustainable agriculture and combating desertification.
- Understanding, monitoring and conserving biodiversity.

### (Please note the absence of mineral resources)

EuroGeoSurveys so far is the only regional representative of geological survey organisations and of geology in general in this programme that is widely driven by other Earth Observations communities of practice such as space and meteorological communities that have international set-ups that are lacking for geology.

In the competition for political support and for budgets there is a growing risk to see geology ignored while it has a role and a societal utility highly complementary to other strands of Earth Observation. However there is a need to effectively document and communicate this utility and to have the voice of geology heard in international fora and to gain support from political bodies and donors.

While IUGS internationally represents geological sciences, Geological Surveys, which represent a broad geoscience knowledge base, are missing a common international voice to foster better understanding of the role of geological surveys.

Building on the capacities of its members ICOGS, if given a clear remit, if supported by regional constituencies<sup>4</sup>, where these exists, or individual surveys in other regions, could have following goals at the broad international level:

<sup>&</sup>lt;sup>4</sup> Some regions already have regional geological surveys organizations that could play an important role in support to ICOGS, in addition to the geological survey organizations from countries where no regional organization exist. Regional organizations are: Africa (Organisation of African Geological Surveys – OAGS); East and South-East Asia (Coordinating Committee for Geoscience Programmes in East and Southeast Asia - CCOP); Europe (EuroGeoSurveys); Latin America (ASOCIACIÓN DE SERVICIOS DE GEOLOGÍA Y MINERÍA IBEROAMERICANOS – ASGMI); the Pacific Islands (the Pacific Islands Applied Geoscience Commission – SOPAC). This draft is addressed to them and to the Geological surveys known to EuroGeoSurveys.

- Contribute to steer the OneGeology programme developed by BGS
- Represent global geology in GEOSS
- Serve as platform for the exchange of information between Geological Surveys, and their regional organizations, on issues of relevance to their strategies;
- Identify and discuss issues of common interest to Geological survey organisations and develop a strategy to address these issues;
- Document the costs and benefits of public geology, to develop economic and sustainable development argumentations;
- Document and communicate, especially with donors (World Bank, EU and global prescribers, such as the UN, private sector foundations) on the role and benefits of geological survey organisations to society and sustainable development in order to seek better integration of public geology in policy-making, donor's programmes and international programmes (GEOSS, UN Scientific Panel on Resource-efficiency and the Environment (Resource Panel<sup>5</sup>)
- Develop statistics and benchmarking on global geological survey organisations and their activities
- Contribute to the development of accessibility, interoperability and re-use of existing public digital geological data in complement and close coordination to existing developments such as GEOSS, the development of GeoSciML and the Multilingual Thesaurus by IUGS or the implementation of the European Spatial Data Infrastructure (INSPIRE);
- Develop a single-entry point to the global Geological survey organisations (Web portal);
- Promote and obtain support to institutional strengthening and capacity building in developing countries
- Reflect on and contribute to actions for the inclusion of geology and natural resources knowledge in education curricula
- Coordinate with IUGS and other global scientific bodies
- Assess the feasibility to develop towards an international organization (a World Geological Surveys Organisation?) under the UN System such as the World Meteorological Organisation

#### How can it work?

The development and the ICOGS concept needs further work to reach some decision at IGC33 and, even better, some practical commitments towards its effective implementation. A first step is to develop a consensus on the organisation's purpose and objectives.

One possibility is to formalize the present practice with a plenary meeting every four years, coupled with the IGCs, bringing together the geological survey organizations Directors. In between yearly meetings of the Directors or Secretaries General of the Regional Geological Organisations could be practical to steer the ICOGS development. The Directors of the national geological survey organisations of those regions that are not part of a formal regional association would be invited to appoint a regional representative to the yearly meetings.

Every geological survey organization may be a member of ICOGS, as well as their regional organisations. During the plenary both business meeting and symposia of common interest between the surveys, will be arranged.

<sup>&</sup>lt;sup>5</sup> Website: http://www.uneptie.org/pc/sustain/initiatives/resourcepanel/index.htm

ICOGS will only be a meaningful initiative if its broadly supported, and if some qualified human resources and material resources become available to make it operational. These resources should be essentially pledged by Geological survey organisations and their regional organizations, to safekeep ICOGS from external pressures. Co-funding from public donor's could be sought but it is uncertain at this stage whether this can be obtained.

ICOGS should, to keep the structure simple and manageable, be built on a regional structure. This would be greatly facilitated by the participation of existing regional associations/ organizations of national geological surveys (see above footnote 2) For the parts of the world not covered by such bodies, "regions" should be defined and surveys from each of those regions invited to nominate a representative. The ICOGS process should be moved forward even if a global coverage cannot be achieved, with the hope that the momentum will encourage the missing region(s) to join.

The name ICOGS may need revision (World Geological Organisation?) to pave the way for possible future recognition of ICOGS by UN or other international bodies, and it is suggested to invite UNESCO and UNEP as observers to its activities.

## **Working language**

As there are no resources to do otherwise, all ICOGS related documents and correspondence should be in English. We kindly ask for your understanding but this is important to drive the process forward.

### **Proposed roadmap until IGC33**

The period up to IGC33 could be used to fully develop the ICOGS concept (ICOGS Scope, ICOGS means and resources) in order to formally create ICOGS (or the WGSO depending on the choice to be made regarding the organisation's name)

The period remaining up to IGC33 could be used as follows:

#### Up to January 15, 2008:

- Circulation of this preliminary concept note to all the geological survey organisations of the world identified in the EuroGeoSurveys database
- Establish a statutes committee for the New ICOGS. This Statutes Committee should comprise one member of each of the regional organizations representing National Geological Survey organizations (ASGMI, CCOP, EuroGeoSurveys, OAGS, SOPAC), NrCAN, USGS, as well as, as far as possible a representative of each of the regions that do not have a regional organization of Geological Surveys (Middle-East, Central Asia).
- Get suggestions regarding the organisation's future name

- Launch of a Survey of the geological survey organisations of the World, for presentation at IGC33 (ICOGS Symposium).
- Continuation of the compilation of the contact details database of the geological survey organisations of the World. The first version of this database compiled by EuroGeoSurveys will be circulated before the end of November.

Comments and proposals on the basis of this document are to be addressed to EuroGeoSurveys up to 15/01/2008 (p.christmann@eurogeosurveys.org) as well as the designation by the Geological Surveys of each region listed in Annex 2 of up to two representatives that will represent the Geological Surveys of their region in the temporary Statutes Committees that will steer the process up to the plenary meeting that will take place at IGC33 in Oslo. You are invited to discuss with the other Directors of Geological Surveys of your region, and where these exist, with your regional geological surveys organisation to appoint these two representatives.

Designation by regional associations of national geological survey organizations and by regional representatives of geological survey organizations from those regions not represented by regional associations of one representative volunteering to be part of the ad-hoc ICOGS Working Group that will steer the process up to IGC33 (this is needed as the set-up of the ICOGS group designated at IGC32 in Florence needs to be reviewed due to unavailability of part of its members)

- **February 2008**: Issuance of a revised version of this document
- **End of February**: end of the period for contributions to the Survey
- March 11, 2008 Meeting of the Statutes Committee in Brussels to prepare the draft Oslo declaration and the ICOGS statutes to be then circulated to all geological surveys of the world. Each of the regions listed in Annex II is invited to delegate up to two representatives to this meeting.
- August 2008 ICOGS plenary meeting at IGC33 in Oslo

Please kindly note that no financial resources are available to cover any expenses such as travel costs. EuroGeoSurveys will provide the meeting room and the catering (lunch and coffee breaks) during the 11/03 meeting.

Arne Bjorlykke

Patrice Christmann

### **ANNEX 1**

Minutes of the ICOGS (International Consortium of Geological Surveys) Business Meeting during the IGC, Florence on August 26th, 2004

- 1. It was suggested to form a working group, which should communicate via e-mail, that should outline the future directions of ICOGS. The working group should be geographically balanced. Topics should be of common interest to Geological Surveys, like water (suggestion Irwin Itzkowitch, David Falvey) or databank systems for data relevant for e.g. global change (Arne Bjørlykke).
- 2. The members of the working group are:
- a) representatives of outgoing and incoming IGC-host country
- -Marco Amanti (Italy)
- -Arne Bjørlykke or other NGU-representative (Norway)
- b) representatives of countries/regions

Irwin Itzkovich

Assistant Deputy Minister Earth Science Sector Natural Resources Canada 580 Booth Street

Ottawa

Ontario K1 A OE4

CANADA

Tel.: 001 6139929983

Mai!: irwini @ nrcan.ac.ca

Somsak Potsiak

Director General

Department of Mineral Resources D MR 2nd Floor, Building 2

Rama VI Road, Ratchathewee Bangkok10400

**THAILAND** 

Tel. +6626409470 Fax +6626409471

Mail: somsak@dmr.Qo.th

David Falvey

Director

British GeologiGal Survey Kingsley Dunham Centre Keyworth

Nottingham NG12 5 GG UNITED KINGDOM

Tel: 00441159363226 Fax: 0044 115 936 3277 Mail: dfalvey@bgs.ac.uk

Eduardo Zappettini

Instituto de Geologia y Recursos Minerales

Avenida Julio A. Roca 651 8°piso -Sector 8, **Buenos Aires** ARGENTINA (for South America)

Tel.: 0054 11 4349 3131 Fax: 0054 11 4349 3171

Mail: ezappe@secind.mecon.aov.ar

Nei! Williams **Executive Director** Australian Geological Survey Organisation (AGSO) P.O.Box 378 Canbarra Citiy, ACT 2601 AUSTRALIA

Tel.: 0061 262499600 Fax: 0061 262499988

Mail: Neil.Williams@ga.gov.au

Fåtima Jussub Momade Deputy Director Direccao Nacional de geologia P.O.Box: 217 Praca 25 de Junho Maputo MOZAMBIOUE Tel.: 002581 427122 Fax: 00258 1 429216

Mail: geologia@zebra.uem.mz

Hussein M Sabir Director Saudi Geological Survey P.O. Box 5414 Jeddah Saudi Arabia Tel: 00966 2 6199896

Fax 00966 2 6199896 Mail sabir.hm@sgs.org.sa

(for Africa)

# **ANNEX ii**

Tentative list of the world regions ant their countries, based on the definition used by the United Nations found on http://www.un.org/depts/dhl/maplib/worldregions.htm . Note all EU Member States are attributed to Europe, even when the UN practice is different (e.g. case of Cyprus)

Region	Countries	Region	Conutries
Africa	Algeria	Africa	Nigeria
	Angola	(continued)	Rwanda
	Benin		Sao Tome and Principe
	Botswana		Senegal
	Burkina Faso		Seychelles
	Burundi		Sierra Leone
	Cameroon		Somalia
	Cape Verde		South Africa
	Central African Republic		Sudan
	Chad		Swaziland
	Comoros		Togo
	Congo		Tunisia
	Cote d'Ivoire		Uganda
	Dem. Republic of the		United Rep. of Tanzania
	Congo		Western Sahara
	Djibouti		Zambia
	Egypt		Zimbabwe
	<b>Equatorial Guinea</b>		
	Eritrea		
	Ethiopia		
	Gabon		
	Gambia		
	Ghana		
	Guinea		
	Guinea-Bissau		
	Kenya		
	Lesotho		
	Liberia		
	Libyan Arab Jamahiriya		
	Madagascar		
	Malawi		
	Mali		
	Mauritania		
	Mauritius		
	Morocco		
	Mozambique		
	Namibia		
	Niger		

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Latin America	Antigua and Barbuda	South-Central	Afghanistan
	Argentina	Asia	Bangladesh
	Bahamas		Bhutan
	Barbados		India
	Belize		Iran (Islamic Republic of)
	Bolivia		Kazakhstan
	Brazil		Kyrgyzstan
	Chile		Maldives
	Colombia		Nepal
	Costa Rica		Pakistan
	Cuba		Sri Lanka
	Dominica		Tajikistan
	Dominican Republic		Turkmenistan
	Ecuador		Uzbekistan
	El Salvador		
	Grenada		
	Guatemala		
	Guyana		
	Haiti		
	Honduras		
	Jamaica		
	Mexico		
	Nicaragua		
	Panama		
	Paraguay		
	Peru		
	Saint Kitts and Nevis		
	Saint Lucia		
	Saint Vincent and		
	Grenadines.		
	Suriname		
	Trinidad and Tobago		
	Uruguay		
	Venezuela		
North America	Canada	Eastern and	Brunei Darussalam
	United States of America	Southeastern	Cambodia
		Asia	China
		ASIG	Dem. People's Rep. of Korea
			Indonesia
			Japan
			Lao People's Dem. Republic
			Malaysia
			Mongolia
			Myanmar
			Philippines
			Republic of Korea
			Singapore
			Thailand
			Timor-Leste
			Viet Nam

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Western Asia	Armenia	Europe	Albania
	Azerbaijan		Andorra
	Bahrain		Austria
	Georgia		Belarus
	Iraq		Belgium
	Israel		Bosnia and Herzegovina
	Jordan		Bulgaria
	Kuwait		Croatia
	Lebanon		Czech Republic
	Oman		Cyprus
	Qatar		Denmark
	Saudi Arabia		Estonia
	Syrian Arab Republic		Finland
	Turkey		France
	United Arab Emirates		Germany
	Yemen		Greece
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			Ireland
			Italy
			Latvia
			Liechtenstein
			Lithuania
			Luxembourg
			Malta
			Monaco
			Netherlands
			Norway
			Poland
			Portugal
			Republic of Moldova
			Montenegro
			Romania
			Russian Federation
			San Marino
			Serbia
			Slovakia
			Slovenia
			Spain
			Sweden
			Switzerland
			1964/2000/C30760-5/00/6/1 (EC000944000-160)
			The Former Yugoslav
			Republic of Macedonia
			Ukraine
			United Kingdom
Oceania	Australia		
	Fed. States of Micronesia		
	Fiji		
	Kiribati		
	Marshall Islands		
	Nauru		

New Zealand
Palau
Papua New Guinea
Samoa
Solomon Islands
Tonga
Tuvalu
Vanuatu



## Towards an International Consortium of Geological Surveys (ICOGS)

Reply formular to be please sent back to EuroGeoSurveys not later please than 15/01/2008, either by e-mail (preferably) or by airmail (15/01/08: date of the post stamp).

### We need your timely reply:

- To update and improve the on-line public Excel database of the Geological surveys of the World we prepared. Its last version is available for download from here:

  http://81.188.3.226/assets/files/Links/Geology%20Worldwide/National%20G
  - eological%20Surveys%20of%20the%20World%20database%20V3c%20081207.xls
    You are welcome to use it.
- To prepare the IGC33 Congress Oslo and the ICOGS Business Meeting that will take place on that occasion
- To organise an ICOGS preparatory meeting in Brussels on March 11

## Where to send your reply?

EuroGeoSurveys 3, rue du Luxembourg B-1000-BRUSSELS (Belaium)

e-mail: p.christmann@eurogeosurveys.org

## 1) Update of your contact details (for the World):

Name of your organisation:	
Mother organisation (such as Ministry)	
Director's name:	
Full address (P.O. Box, Street, County, Zip Code,	
City)	
Country	
Telephone	+
Fax	+
Director's personal e-mail address	
Survey's general e-mail address	
Surveys website	
Member of a regional Geological Surveys	
organisation (such as ASGMI, OAGS, CCOP,	
SOPAC) (please reply in indicating the regional	
organisation of which your Survey is a member)	
Member of the OneGeology Programme (please	
reply Yes or No)	

## 2) Participation to the 11 March ICOGS Preparatory meeting?

Will you participate to the 11 March ICOGS preparatory meeting in Brussels? The meeting will take place from 10:00 to 17:00 at the Royal Belgian Academy of Sciences, Humanities and Fine Arts in Brussels?



	Académie royale de Belgique Rue Ducale, 1 1000 Bruxelles			
	Ideally, the Surveys of each of the below listed regions should agree to mandate up to two persons to attend that meeting.			
	Regions:			
	<ul> <li>Africa</li> <li>Central Asia</li> <li>Europe</li> <li>Latin America and the Caribbean</li> <li>Middle-East</li> <li>North America (Canada + U.S.A.)</li> <li>Oceania</li> <li>South and South-East Asia</li> </ul>			
	Reply:  Yes, I will participate. Please send me further information and an invitation letter (for those participants who would need a visa)  No, I will not participate. The following person will represent my Survey organisation:			
	organisation:			
3)	Comments on the ICOGS Concept Note (free form, please add as many pages as you wish)			
Da	te:			
Na	me:			
Or	ganisation:			
Country:				
۵.	nature:			

Address: