

Introduction

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Dear OneGeology Members & Supporters,

What a year 2017 has been for OneGeology and global geoscience data interoperability!

Inside you will find updates from each of the OneGeology regions and information about major upgrades to be imminently released on the OneGeology Websites in time to celebrate 10 years of the OneGeology approach. There have been several meetings with OneGeology representation and we are working on a detailed specification led by Geoscience Australia and a consortium of Australian Universities and global partners to develop a new 3D capability.

As you know OneGeology can only continue with the support of the Principal Members and I commend Principal Membership to as many Geological Surveys and organisations as possible.

We wish you a very happy and healthy New Year and look forward to seeing you at events such as Resourcing Future Generations in Vancouver, Canada June 2018.

Matt Harrison

Director of Informatics | British Geological Survey

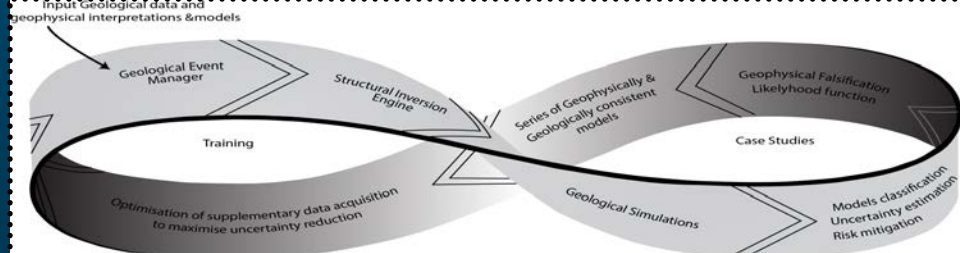
OneGeology Goes 3D

OneGeology members have teamed up with Academics from Monash University, the University of Western Australia, University de Lorraine and RWTH Aachen University to deliver a new 3D geological modelling platform – The Loop.

Members met in Southampton, UK in September following the Open Geospatial Consortium Technical Meeting to workshop the 3D modelling platform proposal and discuss interest from each National Geological Survey.

Geoscience Australia, The Canadian Geological Survey, The British Geological Survey, The French Geological Survey and the Polish Geological Institute have agreed to be involved and are preparing a consortium of geological surveys under the umbrella of OneGeology to collaborate on the Loop project. This initial group of surveys have been meeting over the past three months to finalise their proposal for involvement. The next face to face meeting will be during the [Resources for Future Generations Conference](#) (RFG2018) in Vancouver, Canada in June 2018.

The Loop 3D geological modelling platform will initially be conducted over three years from 2018 and will comprise research into producing a Geological Event Manager, a structural inversion engine, optimisation of supplementary data acquisition to maximise uncertainty reduction, methods for producing a series of geophysically and geologically consistent models, geological simulations, models classification, uncertainty estimation and risk mitigation and a geophysical falsification likelihood function. For more information please contact your OneGeology Board representative.



Regional Updates

ASIA: The CCOP-Geoinformation Sharing Infrastructure (GSI) Project is now in its third year of implementation. The URL of the GSI portal site is <https://ccop-gsi.org/main/> (Fig. 1). The geospatial contents on the GSI database presently includes more than 100 maps from the CCOP member countries. There are also more than 20 thematic portal sites available in the GSI main page, with the WebGIS portal of Thailand (<https://ccop-gsi.org/gsi/thailand/index.php>; Fig. 2) providing highest volume of contents.

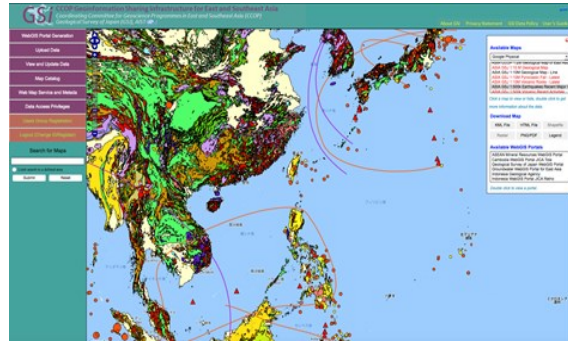


Fig. 1. CCOP Geoinformation Sharing Infrastructure (GSI) project main

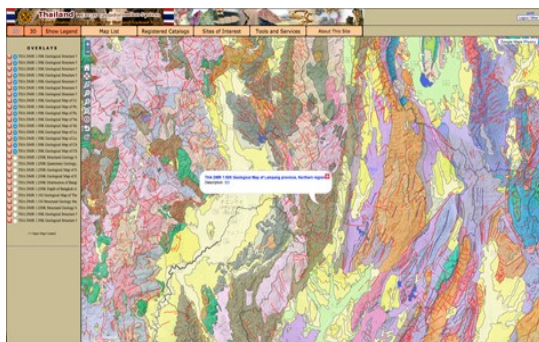


Fig. 2. CCOP GSI WebGIS Portal site of Thailand.

The CCOP-GSI project side meeting was also held on October 17, 2017 during the 53rd CCOP Annual Session in Cebu City, Philippine. The meeting was in preparation for the 2nd CCOP GSI International workshop which will be held in Luang Prabang, Lao PDR from December 5 to 7, 2017. We also plan to register some of the geospatial contents of GSI to OneGeology. The development of the mobile version of the GSI main portal and its registered WebGIS portal sites is presently ongoing.

Canada and North America: Canada continues to make progress on new national surficial and bedrock geology maps, and expect to have a new map for the Canadian North available to OneGeology in 2018, while the USGS and AASG continue to make progress on a new strategic planning for geological mapping

Eurasia: The II Eurasian Mining and Geological Forum (hereinafter, the Forum) and the 21st Session of the Intergovernmental Council of the CIS for Exploration, Use, and Protection of Mineral Resources (hereinafter, the Intergovernmental Council) took place in Sochi on 26-28 September 2017. Both events were held at the initiative of the Ministry of Natural Resources and Environment of the Russian Federation and the Federal Agency on Mineral Resources. Organization of the event was entrusted to A.P. Karpinsky Russian Geological Research Institute.

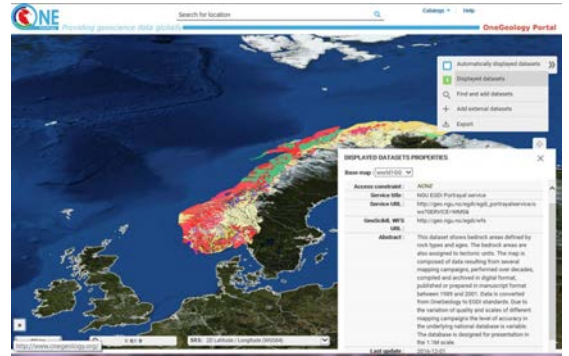
At the plenary session of the Forum "International cooperation of the CIS countries in the field of geological study, assessment, and use of mineral resources", VSEGEI Director General, member of the Board of Directors of OneGeology, for the Eurasia Region, Oleg Petrov made a presentation containing information on the current status of the OneGeology project, as well as the results of the 3 year integration of the CIS geological maps at 1:200,000 scale into the geological and cartographic portal OneGeology. Grigory Brekhov, VSEGEI Executive Director, told about the history of the OneGeology project, current tasks, as well as some aspects of the technology for integrating the CIS geological maps into the 1G portal.

Within the framework of the XXI session of the Intergovernmental Council of the CIS for Exploration, Use, and Protection of Mineral Resources, a message was received from the Republic of Tajikistan "On the state of preparation of geological maps at 1: 200,000 scale for the CIS area to integrate into the international OneGeology project", information was presented on the compilation of a seamless vector geological map of Tajikistan at 1: 200,000 scale, as part of the overall task of integrating the CIS geological maps into the OneGeology project.

Information and suggestions of the Russian party have been taken into consideration and included in the final Minutes of the XXI Session of the Intergovernmental Council for the Exploration, Use, and Protection of Mineral Resources as the results of the work of geological surveys in the CIS member states for the implementation of the Cooperative Action Plan for the States Members of the Commonwealth of Independent States for 2016-2020

Regional Updates Cont...

EUROPE: The latest country to provide web services suitable for the highest 5 star accreditation of highly interoperable web services including GeoSciML 4 WFS, is Norway in Northern Europe and here is a WMS portrayal of it displayed in the new OneGeology portal:



A poster entitled 10 Years of OneGeology; a Glimpse From the Perspective of the Polish Geological Institute – National Research Institute (PGI_NRI) was presented during the INSPIRE conference in Strasbourg in September 2017.

Apart from conveying the work that PGI-NRI has carried out over the last 10 years (not only by adjusting its 1:1M geological maps and relevant services to conform to OneGeology standards but, also by sharing good practices among other OneGeology members, providing some of them with technical support, as well as promoting OneGeology within non-member geological surveys) the poster also highlighted the most important OneGeology's global events and deliverables starting from the Brighton Accord and the Geological Map of the World presented for the first time at the International Geological Congress in Oslo, through OneGeology-Europe and its contribution to INSPIRE and EGD, up to the current dynamic geological map data of the world with 119 nations involved.

One of the ideas behind the poster presentation was to show that OneGeology influences European initiatives and organizations by shaping international data standards.

Central and South America: Geological Map of Uruguay, scale 1:500.000

Based on the previously agreement between OneGeology and CPRM – The Geological Survey of Brazil, in order to help and buddy the Geological Survey Organizations (GSO's) in South & Central America, CPRM has participated actively in the process of merging the data and information of the Geological Map of Uruguay, scale 1:500.000. The map was developed by the Dirección Nacional de Minería y Geología (DINAMIGE) - the Geological Survey of Uruguay. The head of the CPRM Geoprocessing Division, Eng. Hiran Dias, and his team have trained the DINAMIGE geologists and TI people to process the geological data of Uruguay, according to the OneGeology standards. This capacity building has been supported by videoconference meetings and exchanges of emails. The DINAMIGE group under the supervision of Judith Loureiro Olivete, was training on the OneGeology/CGI vocabularies and the geological data of the country have been processed. The Simple Lithology and Geochronological Maps of Uruguay are nearly finished. The expectation is both maps in WMS (3 stars accreditation) will be accessible at the OneGeology portal during January, 2018.

Geological Map of Venezuela, scale 1:750.000

Prof. Franco Urbani, the first author of the Geological Map of Venezuela, scale 1: 750.000, demonstrated to CPRM to be interested about the process of merging the data and information of the geological map of the country, according to the OneGeology standards. The president of INGEOMIN recognising the fact as relevant to the geological knowledge of the country and has authorized CPRM to start the work. However, at the same time it was accepted that INGEOMIN did not have appropriate IT infrastructure in place at this time. Guidelines for evaluation the situation were discussed at CPRM and a virtual machine was made available to host the Geological Map of Venezuela and CPRM people are ready to training the INGEOMIN team. It is expected that during April, 2018 the Geological Map of Venezuela, in WMS format will be available to OneGeology portal. Tectonic Map of South America, 1: 2.500.000 scale.

The president of the Commission for the Geological Map of World (CGMW) has approved and authorized CPRM to harmonize the data of the Tectonic Map of the South America, 1: 5.000.000, published by CGMW during the 35th International Geological Congress in Cape Town, in 2016. CPRM has contact Prof Umberto Cordani (Coordinate of the map) at USP/ São Paulo to get access to the shape file of the map and begin to process the data for GeoSciML. The suggestion is to discuss the first version of the map during the CGMW meeting, next February, 2018 in Paris. The final version should be accessible at the OneGeology portal during May 2018 I

Tectonic Map of South America, 1: 2.500.000 scale: The president of the Commission for the Geological Map of World (CGMW) has approved and authorized CPRM to harmonize the data of the Tectonic Map of the South America, 1: 5.000.000, published by CGMW during the 35th International Geological Congress in Cape Town, in 2016. CPRM has contact Prof Umberto Cordani (Coordinate of the map) at USP/ São Paulo to get access to the shape file of the map and begin to process the data for GeoSciML. The suggestion is to discuss the first version of the map during the CGMW meeting, next February, 2018 in Paris. The final version should be accessible at the OneGeology portal during May 2018

Others Initiatives of the Geological Survey Organizations (GSO's) : In addition, Paraguay and Cuba contacted CPRM and asked for a buddy to process the data of the geological maps of the countries based on the OneGeology standards to be accessible on OneGeology portal. These countries are waiting for CPRM decision to start the buddy work. CPRM has to arrange the priorities to attend the GSO's in South & Central America to contribute to strengthen the OneGeology initiative in the continent. The main tasks should be the Tectonic and Geological Maps of South America, scale 1: 5.000.000.

Oceania: Geoscience Australia has established new mineral deposit and resources web services, using the new ERML data standard, that might be of interest to 1G in the future. They are also looking at using the 1G metadata keywords in its own metadata catalogue for all of its geoscience datasets.

The 1:250,000 Geological Map of NZ seamless GIS will be GeoSciML Lite-compliant in its next edition (due October 2017) and will be exposed to the OneGeology portal as soon as its ready. The Transantarctic Mountains geological GIS compilation has expanded in scope to include all Antarctica through considerable international collaboration (led by GNS through SCAR) but it still making excellent progress. It will be exposed to the OneGeology portal in stages; the first tranche potentially in 2018.

James Johnson (GeoScience Australia) will be promoting OneGeology at the Australian Geoscience Council Convention in October 2018. This will be a major showcase of the geosciences in Australia and his focus for Geoscience Australia will be to highlight the many ways in which geoscience touches the lives of citizens. There will be scope to specifically promote OneGeology. He will also promote OneGeology at the annual Chief Government Geologists Conference, mainly from the perspective of pro-

OneGeology Board

The OneGeology Board met face-to-face on, 07-09 March 2017, in Gdańsk Poland, hosted by the Polish Geological Institute at their National Research Institute. The meeting was full and very productive with lots of good outcomes, you can find the full minutes on the [OneGeology Website](#). As Chris Pigram (Chair) resigned from his post earlier in the year, we took the opportunity during this meeting, to begin the election process for a new Chair. The outcome, which concluded in May17, was a unanimous decision, to elect James Johnson, CEO of GeoScience Australia, to take over the position for the next

During our visit to this beautiful region, our courteous hosts also arranged a guided tour at the European Solidarity Centre, which was a very educational and humbling experience.



The Board has also convened several telephone conversations during 2017, all of the notes and actions from these can be found on the [OneGeology Website](#)

The Next face-to-face OneGeology Board Meeting will be hosted by the Geological Survey of Canada at the Natural Resources Canada Offices in Vancouver. The meeting will take place 13-15 June 2018, 3 days prior to the [Resources for Future Generations Conference](#) where we are hoping that OneGeology will have a strong presence. Keep an eye on the [OneGeology Website](#) for updates



As well as the tour we were also treated to a field trip to the Baltic coastal area, Jastrzębia Góra cliff, for a presentation on the local geology. The Board would like to thank the Geological Survey of Poland for their Hospitality.



Current Membership Status

There are currently
13 full Principal Members of OneGeology
3 Associate Members of OneGeology
1 Corporate Member of OneGeology

For more information on Membership Benefits and/or a copy of the Consortium Agreement please contact us;

onegeology@bgs.ac.uk or visit our Website: www.onegeology.org

Contacts

Useful Links

OneGeology web site (www.onegeology.org)

OneGeology Portal (<http://portal.onegeology.org>)

OneGeology Brighton Accord (http://www.onegeology.org/what_is/accord.html)

OneGeology help (onegeologyhelp@bgs.ac.uk)

General questions (onegeology@bgs.ac.uk)

OneGeology Administration

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