

«ONE GEOLOGY», THE GLOBAL GEOLOGICAL JIG-SAW PUZZLE CONCEPTS AND CONTRIBUTIONS FROM NORWAY

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Abstract

One Geology is a world wide project to make geological map data for the Earth accessible on the Web at a scale of about 1:1 million, as a contribution to the International Year of Planet Earth (2007-2009). The results of the project will be useful for the environment, the industry, development aid and planning, both locally and globally. It is based on standards (ISO) and distributed technology. At present (2008), over 90 countries participate and over 30 of these provide services for their own country or on behalf of others. Standards are developed (GeoSciML) to increase the level of interoperability. Interoperability on the semantic and scientific level will enhance and increase the use of geological data. The service types are WMS for raster images and simple queries and WFS for GeoSciML which contains geometry and a unified global data model with a common geological classification. The One Geology Portal at www.onegeology.no contains a registry service and cookbooks in addition to the map viewer itself. Norway is currently contributing through a European project called «One Geology Europe» which is split into several work packages focused on metadata, interoperability, portal, services etc. Norway has delivered a WMS service to the project which will constantly be improved and expanded thematically. We will through a Nordic co-operation with Sweden, Denmark and Finland, together with technical assistance from the French part, acquire knowledge on GeoSciML to be able to map our databases to the GeoSciML application schema and finally deliver data through a WFS this autumn.

1 Introduction

Due to milestones this autumn, the results of this work [1] will be finished and downloadable at that point.

2 References

[1] Iversen, S. (2009) «One Geology», the global geological jig-saw puzzle - concepts and contributions from Norway, ICC Conference Santiago Chile 15-21. November 2009, URL: <http://geo.ngu.no/pub/ICC09SverreIversenNorway1G.htm>