

OGC, GEO & UN-GGIM - Driving the Global Geospatial Agenda



This article sets out to explain the distinct but interrelated roles of the three international bodies which are driving the global geospatial agenda which underpins the need for smart and sustainable growth in the 21st century: The Open Geospatial Consortium (OGC), the Group on Earth Observations (GEO), and the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM).

If you are interested in how the geospatial industry and associated policy supports government and broader commercial sector activities, then it is important to understand the global influences which are shaping these sectors. You need to look at the world from the perspective of policy-makers who set the agenda for how geospatial tools, technologies, data, and information will be used to solve real-world problems; from the

perspective of the people who want to help us to better understand our planet; and from the perspective of the people who wish to ensure that we manage information about our planet to the very highest of standards.

It is important to mention that these bodies have been around for some time. Each has established foundations and are led by an international network of authoritative members. However, unlike many other industry representative bodies which are fighting off the 'legacy' label which is commonly used in today's disruptive world, the partnership between these organisations is undoubtedly among the most dynamic and forward thinking out there.

Before explaining the synergy, which has been achieved between these three bodies, we first need to briefly distinguish the role and background of each of the organisations.

United Nations on Global Geospatial Information Management

The UN-GGIM Secretariat is headquartered in New York where the intergovernmental Committee of Experts meets annually and reports to UN's Economic and Social Council (ECOSOC). UN-GGIM's objective is to promote through policy-making the use of geospatial technology among the global decision-making community and it provides a forum to liaise and coordinate among and between UN Member States and international organisations (including GEO and OGC). The Committee of Experts often provides a futuristic vision of the opportunities facing governments worldwide and the challenges to the industry in one of its regular publications.

Group on Earth Observations

The geospatial industry would be nothing if it were not for our ability to collect and reference information about our planet. This is the primary purpose of GEO, a body which is focused on advocating the benefits of coordinated, comprehensive and sustained Earth observations to inform decisions and actions for the benefit of humankind. GEO, which is headquartered in Geneva, Switzerland is a partnership of governments and international organisations which works to Ministerial guidance from national government members (there are 105 today), and it has many relationships with international and multilateral organisations. It is worth mentioning that GEO's profile is likely to grow significantly over the coming years. It currently operates the largest open Earth observations portal in the world, geoportal.org, which, with in excess of 200,000,000 open data and information resources, is already playing a leading and essential EO data provision role.

Open Geospatial Consortium

The OGC has been developing open geospatial standards for about as long as the web has existed and is much of the reason why geographic information about our world is easy to share and compatible with the systems we use. UN-GGIM and GEO are more focused on policy and decision making, while the OGC provides the technical interfaces and specifications that they use and promote, as well as cross domain and industry communication. In particular, the OGC can be credited with opening up well-known data formats like KML, WFS, WMS and GeoPackage.

The OGC is a consensus-based voluntary standards development organisation which is focused on developing quality open standards for the global geospatial community and it has a particular focus on interoperability and compliance. It has developed longstanding partnerships with other standards organisations such as ISO TC211 and ITU that see a number of OGC standards also co-published in other SDOs. Perhaps the reason why the OGC is so innovative is that it boasts an active membership from organisations in the business,

government, academic and NGO sectors. If you don't believe this, then just attend one its quarterly technical meeting gatherings or check out its scenario focused 'Testbed' initiatives which are well represented by the likes of Google, Ordnance Survey, Esri, NASA, and the NGA. OGC views its openness and equality of access to all sectors of the industry as being of key importance to developing quality standards to benefit the world's entire population.

Interdependent Relationship

Although each of these bodies serve distinct roles, the trio has a strong alliance and interdependent relationship with one another. The OGC is the only non-governmental member which interfaces with UN-GGIM along with IHO and ISO; GEO is a UN-GGIM Observer and vice versa; OGC is also represented across the GEO Work Programme. One of the main reasons why this relationship 'clicks' is because the bodies have a shared focus on advancing the geospatial industry for long-term purposes, in particular for achieving the UN's Sustainable Development Goals (SDGs). The second reason for the success of this partnership is that in an age of social and political instability, the existence of stable intergovernmental international bodies which facilitate collaboration is considered to be of critical importance.

The OGC-GEO-UN-GGIM alliance is necessary because the world is entering into an exciting age of technology which requires strong leadership from the geospatial community. Smart Cities, IoT, Machine Learning, AI, and even Augmented Reality are underpinned by locational information and an established global network of Spatial Data Infrastructure (SDI). However, it is becoming clear that if people are going to pass control of cars, utilities and devices to computers then, first, the right systems to oversee this need to be in place.

In the age of mass proliferation of maps, data, and geospatial tools, there is growing recognition of the role of leading authorities such as the OGC, GEO and the UN-GGIM. When ripples in one part of the world can be felt far away, we need to be more aware of and adaptable to potential change. Ultimately, in the information age this comes down having relevant policy, having well-designed standards, and having high quality, timely information about our planet. This is exactly what these bodies are providing.

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