The OSGeo Foundation

Transparency
Openness
Policy

Arnulf Christl, President

Seoul, Korea, 2011
Open Source Geospatial Foundation

The Open Source Geospatial Foundation, or OSGeo, is a not-for-profit organization whose mission is to support and promote the collaborative development of open geospatial technologies and data.
Content

Summary

What is Openness?
  • Open Standards
  • Open Source
  • Open Data

Outlook
Summary

We already have the **Software**, the **Standards** and the **Know-How**.

But we lack **Data**.

Future development should therefore focus on (Public) **Open Linked Data** to support true Transparency and allow broad Participation.
Whatever happens in the next 10 minutes, just think:

IT'S OKAY, I'M FROM THE INTERNET
Arnulf Christl, Spatial Systems Architect

- Member of OGC Architecture Board
- OSGeo President
- OpenStreetMap advocate

My alter ego Seven is an Ex-Borg
Bringing Order to Chaos?
No!

(Coordinated)
Chaos is Good!
The Internet Dis-Order

- DNS (Domain Name System)
- Internet Protocol Suite
- TCP/IP, TLS Security
- HTTP
- URI < Human error
- ... the Web
- Simple Mail Transfer Protocol (SMTP) < Spam

http://en.wikipedia.org/wiki/Internet
Openness – Opinions

sevenspatial Arnulf Christl
"@GISrobl: @sevenspatial don't forget to include the 'open minds' as foundation for open*everythingelse!' Thanks. Done.
22 minutes ago

sevenspatial Arnulf Christl
/me prepares 'slide set' for the intro of the afternoon session @ #AGIT2011 on #Openness by retweeting different view points.
51 minutes ago

edparsons Ed Parsons t3 by sevenspatial
@ReallvanSanchez :-)  
12 hours ago

ReallvanSanchez Iván Sánchez Ortega t3 by sevenspatial
@edparsons Do I have to explain free beer vs. free speech again? I thought we were over that. http://www.opendefinition.org/okd/ 
12 hours ago

sgillies Sean Gillies t3 by sevenspatial
RT @petermurrayrust http://bit.ly/nckUZo Open Scholarship means better science
10 hours ago

spatialguru Tyler Mitchell t3 by sevenspatial
we need an "open" test: suck=fail RT @lisa_cornish: Toronto's data open ... ~useless - torontosun.com/2011/07/06/tor... #opendata #gov20 via @DanAtSafe
8 hours ago
On Openness

- Frankness
- Candidness
- Candor
- Directness
- Forthrightness
- Ingenuousness
- Plainness
- Accountability
- Transparency
- Readiness to assume risk
- Predisposition
- Receptiveness
- Receptivity

http://www.dict.cc/englisch-deutsch/openness.html
More takes on Openness

- INSPIRE & Public Sector Information (EU)
- Data Liberation Front (Google internal initiative)
- Linked Open Data (W3C definition)
- Freedom of Information Act (USA gov)
- Maps for OSM (Imports, Microsoft Bing Maps, ...)
- WikiLeaks (Global Transparancy, mirror)
Open Definition
Defining the Open in Open Data, Open Content and Open Services

Open Definition

Version 1.1

Terminology
The term **knowledge** is taken to include:

1. Content such as music, films, books
2. Data be it scientific, historical, geographic or otherwise
3. Government and other administrative information

Software is excluded despite its obvious centrality because it is already adequately addressed by previous work.
Definitions of Openness in the Geospatial-Domain

- Open (Standards) http://opengeospatial.org
- Open (Source) Software http://osgeo.org
- Open (Free) Data http://openstreetmap.org
OGC's Word Cloud

Courtsey by Paul Ramsey
Vision:
Realization of the full societal, economic and scientific benefits of integrating electronic location resources into commercial and institutional processes worldwide.

Mission:
To serve as a global forum for the collaboration of developers and users of spatial data products and services, and to advance the development of international standards for geospatial interoperability.

http://www.opengeospatial.org/ogc/vision
Open in OGC

- All (with the appropriate financial background) can participate.
- All standards can be used royalty free (without cost) by anybody.
- All can comment on the standards during the public (open) discussion period.
- All can propose change requests
Consensus Oriented

*Is there any objection to unanimous consent?*

Discussion?

- No, … then the motion passes.
- Yes? Then please explain ...
  - Friendly amendment …
  - Go back to start …
Open in OSGeo

- All can participate
- All software must be licensed as Open Source and Free Software.
- All processes of the organization are open to public scrutiny.
Vision and Mission

- A world where freely available geospatial data and tools are used for the benefit humanity.

- To support the collaborative development of open source geospatial software, and promote its widespread use.

http://www.osgeo.org/about
(Selected) Goals

- To support foundation projects (...) and the implementation of open standards to achieve interoperability.
- To provide support for the use of OSGeo software in education.
- To promote freely available geodata - free software is useless without data.

http://www.osgeo.org/about
Software

Education

Data

http://www.osgeo.org/about
Free Software

- Free Software is a license model!
- Not like "Free beer" but as in Free Speech
- Free to:
  - use anywhere and for any purpose
  - understand and improve
  - pass on to anybody else
  - provide services and grow a business around
  ...today and tomorrow!
Open Source

Open Source is a way of collaborating in a coordinated way:

- Do good things (code) and talk about them (publish early, release often)
- Do not reinvent, reuse & improve (collaborate)
- Open (coordinated) participation to everyone
- Make (coordinated & collaborative) decisions transparent
Education and Curriculum

• Develop a Curriculum using Open Source Software
• Create Software stack to support Education
• Cooperate with Universities, for example through Memoranda of Understanding
• Support trainers and students
• Conduct Workshops and Tutorials
Do-oocracy

A do-oocracy [...] is an organizational structure in which individuals choose roles and tasks for themselves and execute them.

Responsibilities attach to people who do the work, rather than elected or selected officials.

OSGeo's Structure

Charter Members vote

Board of 9 Directors and President

25 Officers represent

Local Chapters

Committees

Foundation Projects

104 Charter Members elected by Membership

Sponsors
But:

Software is worthless without data!

(Schuyler Erle)
OpenStreetMap
OpenStreetMap

OpenStreetMap is a free editable map of the whole world. It is made by people like you.

OpenStreetMap allows you to view, edit and use geographical data in a collaborative way from anywhere on Earth.

OpenStreetMap’s hosting is kindly supported by the UCL, VR Centre and bytemark. Other supporters of the project are listed in the wiki.

Help Centre
Documentation
Copyright & License
Community Blogs
Foundation
Map Key

Come to State of the Map, September 9-11th, Denver
The 5th annual international
OpenStreetMap

OpenStreetMap is a free editable map of the whole world.

It is made by people like you.
OpenStreetMap

- Free and Open Data (what)
- Crowd Sourced Data (how)

...the Wiki way of doing things

"Volunteered Geographic Information" (Goodchild, 2007) … but it lacks the all important aspect of free reusability of the data and thus participation.
Open in OpenStreetMap

- All can participate
- All can create maps
- All can use and get the maps
Future Evolution

- Resources & Representations
- Semantics
- ...
- .
- ...
- Fully Open
The Five Stars for Linked Open Data

From an idea by Tim Berners Lee:

★ make your stuff available on the Web (whatever format) under an open license
★ ★ make it available as structured data (e.g., Excel instead of image scan of a table)
★ ★ ★ use non-proprietary formats (e.g., CSV instead of Excel)
★ ★ ★ ★ use URIs to identify things, so that people can point at your structured data (make data addressable)
★ ★ ★ ★ ★ Link your data with other data to create new information

Slide set: http://inkdroid.org/journal/2010/06/04/the-5-stars-of-open-linked-data/
Online example: http://lab.linkeddata.deri.ie/2010/star-scheme-by-example/
Geo Data
Map Images

Swisstopo – the national map agency of Switzerland makes 500.000.000 tiles available through a cloud infrastructure for it's citizens.

The underlying Data is not available freely (yet).

http://map.geo.admin.ch/
Ordnance Survey Open Data

http://data.ordnancesurvey.co.uk/

Ordnance Survey Linked Data.

A description of the resource identified by http://data.ordnancesurvey.co.uk/

Title
Ordnance Survey Linked Data.

Description
Ordnance Survey is Great Britain's national mapping agency, providing the most accurate and up-to-date information to help communities, businesses and individuals. OS OpenData is the opening up of Ordnance Survey data as part of the drive to increase the accessibility of data to a wider audience through the "Public" initiative. As part of this initiative Ordnance Survey has published a number of its products as Linked Data, where data is published on the Web and then linked to other published data in much the same way that a hyperlink connects web pages. Linked Data is used to describe a method of exposing, sharing, and connecting data via URIs on the Web. For more information on the OS OpenData "Public" initiative please go to data.gov.uk. If you are not familiar with Linked Data, OS OpenData products are available on the Ordnance Survey OpenData website. Ordnance Survey can provide support for the Ordnance Survey OpenData products using SPARQL or SPARQL Endpoints. Ordnance Survey has published three separate linked data resources: the administrative geography gazetteer for Great Britain, the administrative boundary geography gazetteer for Great Britain, and the administrative area geography gazetteer for Great Britain.
**Geoservicen**

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**Geoservicen – udstilling af centrale danske geokodede data**

Geoservicen udstiller geokodede danske adresser, vejnavne, postnumre, kommuner, regioner, politikredse, sogn, retskredse samt opstillingskredse. Derudover tilbyder Geoservicen koordinattransformation mellem ETRS89/UTM32, det koordinatsystem som de danske myndigheder anvender, og WGS84/geografisk, som er det koordinatsystem, som de fleste GPS’ere og de gratis kortjenester, som f.eks. Google maps, anvender.

Formålet med Geoservicen er at gøre det lettere for ikke-geokendte at anvende myndighedernes geokodede data i egne it-løsninger. Det kan være til mashups, GPS mobil apps, datavalidering, adressesøgning mm. Geoservicen funktionalitet tilbydes via en web API, som du kan anvende i dine it-løsninger. Beskrivelsen af API'ter er opdelte i emnerområder og kan findes under overskriften Web API til højre på siden.

**Hvad kan Geoservicen bruges til?**

Geoservicen er ikke rettet mod slutbrugere, så den er ikke forsynet med en decideret brugergrænseflade til servicens funktionalitet og data. Geoservicen er derimod rettet mod dem, som ønsker at udvikle applikationer, hvis funktionalitet kræver geodata med tilhørende funktionalitet.

Du kan f.eks. bruge Geoservicen i dine applikationer til:

**Adressesøgning**

Mange applikationer har behov for at kunne finde adresser ud fra mangelfulde oplysninger. Hvis du f.eks. ved at en adresse har husnummeret 77 og vejnavnet stårer med a og slutter med gade, kan du finde de adresser, der opfylder dette på følgende måde:

http://geo.oiorest.dk/adresser?husnr=77&vejnavn=a*gabe

**Adressevalidering**
Data Policy!

- Make public data freely available
- Pay by applying the polluter pays principle
- Data – not just maps!
- Freely available – to do whatever humanity deems suitable. **No restrictions.**
- Everywhere and for everyone
No restrictions.
Data Policy: *No restrictions!*
The Five Stars for Linked Open Data

From an idea by Tim Berners Lee:

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★★★★ use URIs to identify things, so that people can point at your structured data (make data addressable)
★★★★★ Link your data with other data to create new information

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Online example: http://lab.linkeddata.deri.ie/2010/star-scheme-by-example/
Thank you for your Attention!

Download slide sets:
http://arnulf.us/publications/what_is_openness.odp
http://arnulf.us/publications/what_is_openness.pdf

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More Links...

- http://www.semic.eu/
- http://www.ffii.org/
- http://ec.europa.eu/information_society/activities/eg
- http://www.epsiplus.net/
- http://www.osgeo.org
- http://opendata.org