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FLOSS Cadastre Project – Status and developments

FIG-Commission 7 Annual Meeting, Verona, Italia,
12 Sept. 2008

Daniel Steudler



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Background and aim

- Many projects in developing countries seem to fail because of high software license fees
- OSS enjoys high attention also in the GIS market
- FAO is leading the project, with FIG and World Bank as partners
- Aims:
 - to explore the topic
 - to develop it for cadastral domain
 - to provide a platform for the benefit of developing as well as developed countries



Tentative phases

- **1st phase:** scoping paper by Gertrude Pieper, overview of OSS and recommendations
- Expert Group Meeting to discuss next steps
- **2nd phase:** to carry out several case studies
- In parallel: to look for funding for 3rd phase / to look for academic partner / to plan workshop → Workshop in Dunedin, May 2008
- **3rd phase:** to establish core team and platform.



EGM in Rome, Oct. 2007

Expert Group Meeting in Rome, Oct. 2007

- Presentation and discussion of scoping paper
- Presentation of other OSS projects, experiences and lessons learnt
- Result of EGM: the project should aim for the development and provision of OSS tools for the following:
 - basic cadastral operations
 - data modelling tools



Workshop in Dunedin, May 2008

Results

- participation and input from different countries
- set-up of a wiki site
(http://source.otago.ac.nz/oscar/OSCAR_Home)
- development of OSCAR modules and report by Univ. of Otago (OSCAR = Open Source Cadastral and Registry)
- Discussion at workshop showed that there would be a tremendous benefit when large national projects declare their software developments as open-source. Many others could potentially profit. The C&LR community should be more aware of high costs of software license fees and the potential of FLOSS.



Observations and critical points

FLOSS vs COTS

It is crucial for both FLOSS and COTS:

- to have local support facilities available
- to have education and training possibilities established
- to have a national contact person or institution in place, which is able to:
 - open the access to the international FLOSS Cadastre community
 - make translations from and to English
 - establish documentation in the national language
 - organize and support trainings

Advantages of FLOSS over COTS:

- no license fees
- highly motivated developers
- very flexible and scalable solutions
- BUT: users have to formulate their needs and commission their realization
- BENEFIT: local know-how is being established and remains there



Observations and critical points

Experiences and perspectives

Strengths:

- FLOSS allows cost effective solutions with high potential for added value
- further developments benefit all
- no limitations in terms of scalability

Challenges:

- more difficult and different challenges for the user, e.g. he/she has to master the technology (documentation and source code)
- user has to initiate further developments and – if a module does not yet exist – to pay for it

Perspectives:

- consolidation (architecture, code, user interface)
- further developments according to user needs



Observations and critical points

Observations

- FLOSS needs to be based on open concepts
- standardized data modelling is essential (no matter what the data model is or what the modelling mechanism is)
- The big issue in Europe at the moment: fees
- Discussions are currently more often about **open source data** rather than open source software

Private cadastral offices start to discover FLOSS possibilities while they grow tired of license restrictions, limitations and costs.



Observations and critical points

What we need to think about

- There are suspicions against FLOSS (can this be good? can this be reliable? who provides support in case of problems?)
→ How can these suspicions be overcome?
- How can an international forum or platform be established?
→ Probably we have to learn more about existing communities, or maybe even join them.
 - Should "FLOSS Cadastre" join OSGEO or should it establish a separate platform ?
 - Should "FLOSS Cadastre" participate in national OSGEO chapters or establish their own chapters ?
 - What should a possible FAO platform be able to provide ?



Next steps

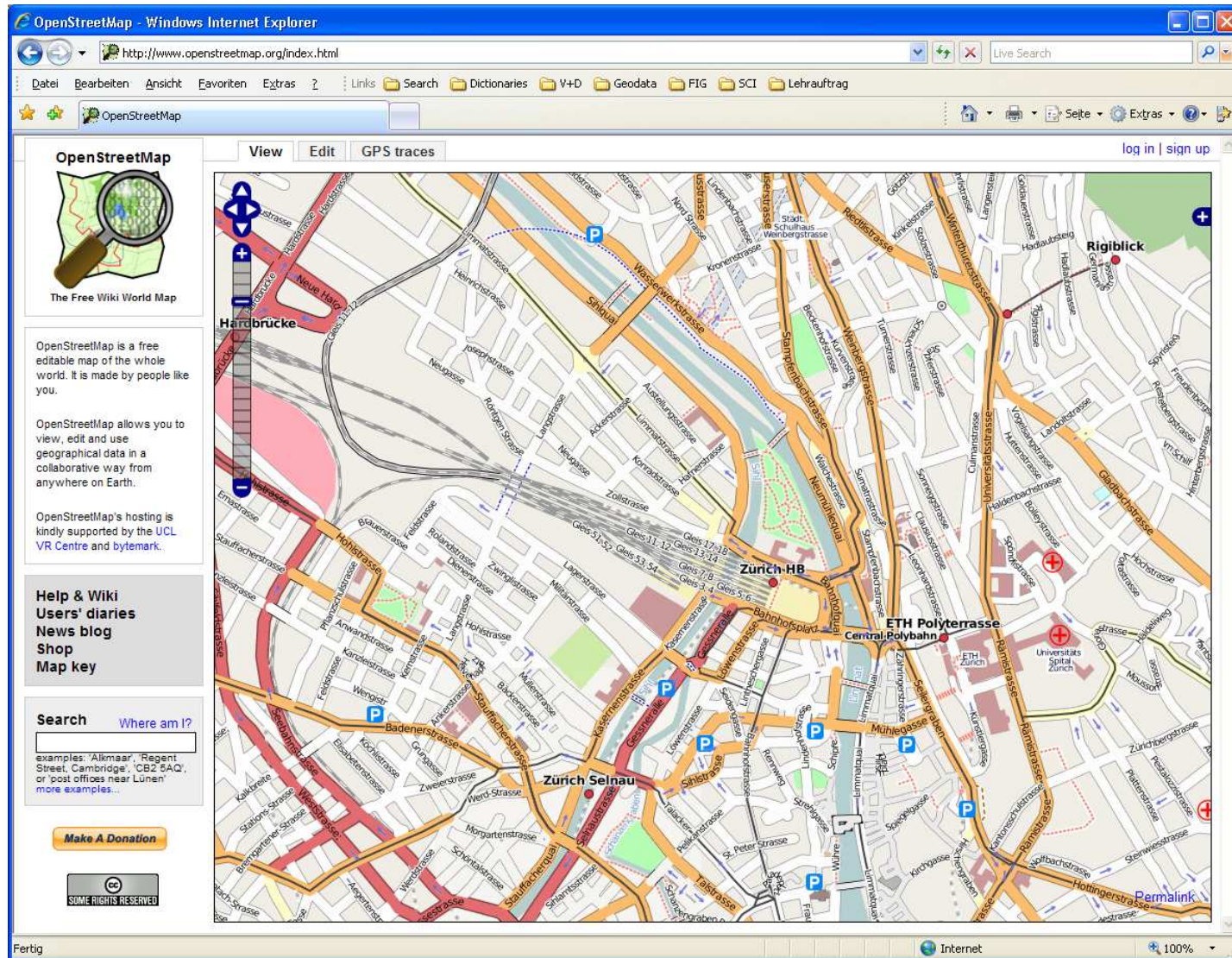
Next steps

- Project committee will discuss if and how developments can be applied on country level
- Dissemination of information
- FIG-Commission 7 will take lead in producing a publication with material so far



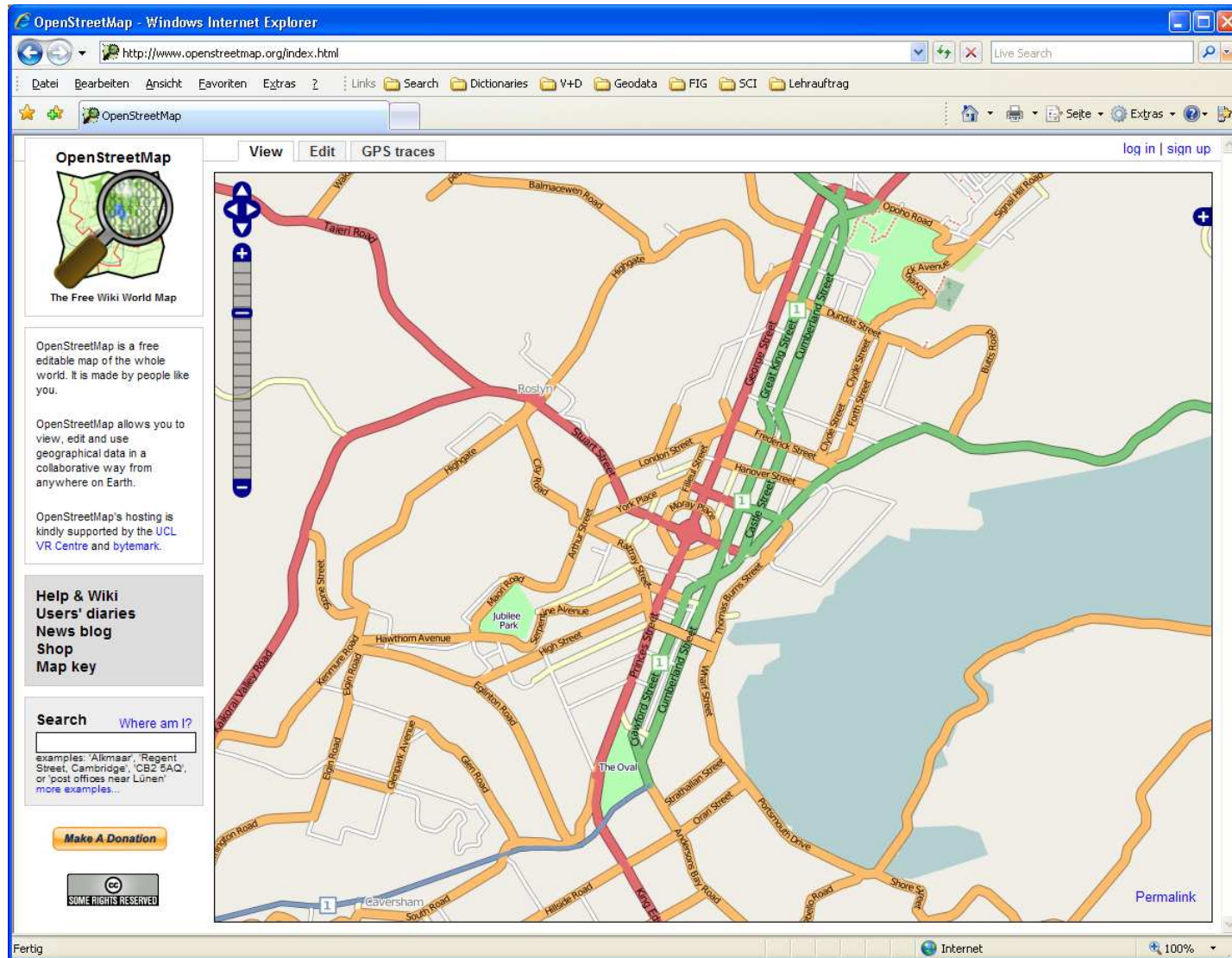


openstreetmap.org (→ Zurich, Switzerland)





openstreetmap.org (→ Dunedin, New Zealand)





openaddresses.ch

OpenAddresses - Anwendung zur Erfassung von Adressen in der Schweiz © FHNW/IVGI - Windows Internet Explorer

http://www.openaddresses.ch/en/

OpenAddresses - Anwendung zur Erfassung von Adre...

Idea Instructions **Map** Batch Download Statistics About

developed by **n|w** Fachhochschule Nordwestschweiz

The Map...

USER
Name:

SEARCH
Street:
Number:
Postcode:
Location:

Result:

LEGEND
 My today's addresses
 My addresses
 Community addresses

CO-ORDINATES
Swiss Co-ordinates: 607539 / 229579
World Co-ordinates: 7.5382 / 47.2171

SAMPLE-DATA
MuttENZ Basel

Map Satellite Hybrid

Imagery ©2008 DigitalGlobe Kanton Solothurn, Map data ©2008 Tele Atlas - Terms of Use

Fertig Internet 100%



Project for Publication

Introduction, Background about project	Daniel, Mika
Overview of existing tools and possibilities (scoping paper)	Gertrude Pieper
Existing OS platforms (Geonetworks at FAO): lessons learnt and experiences	FAO-person
OSCAR modules developed by University of Otago	Brent Hall
Country experiences: BiH, Fiji, Bayern, Solothurn	
View of Software and IT companies (ESRI, Schindler/Wagner, Land Equity, Pullar NZL)	
Conclusions	Daniel, Mika



Publication

- Funding: try FIG first, FAO might be able to help
- Time Schedule:
 - Apr./May 2009: Contact authors (→ Daniel)
 - Sep. 2009: Submission of contributions (→ authors)
 - Oct.-Dec. 2009: Editing (→ Daniel, ...)
 - Jan.-Feb. 2010: Design (→ by designer)
 - Mar. 2010: Printing (→ by printing company)
 - Apr. 2010: Publication (→ at FIG congress)