Crowdsourcing in National Mapping 2017
An International Workshop
Leuven, Belgium April 3rd and 4th 2017

Hackathon Challenge Introduction

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Marathons of development

- Hackathon: An event in which software developers and subject-matter-experts collaborate intensively on a software project.
  - Creating new software
  - Combining existing software
- Datathon: An event to add value to data by processing it with existing software.
- Mapathon: An event to improve map data

Ingredients of a hackathon

- Objective
- Planning: 1 event (1-2 days), Split event (Call-Development-Presentation)
- Software developers, subject-matter-experts
- Incentives: Learning, Prizes
- Challenges: Feasible tasks as part of overall plan and follow-up work
  - May vary from general proof-of-concept to specific development

Hackathon examples

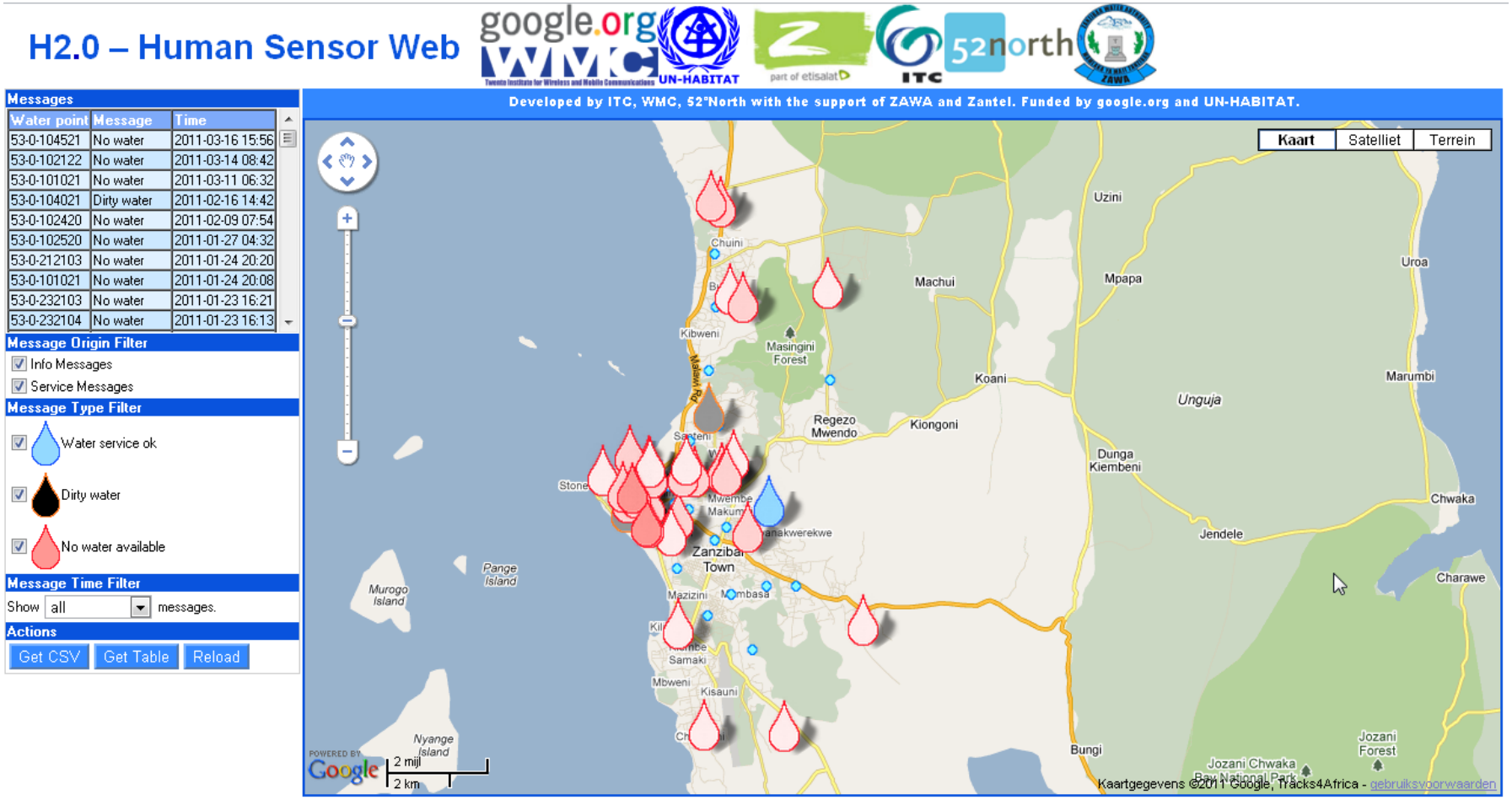
Project Human Sensor Web (Zanzibar-Tanzania)

Billboard at water tap

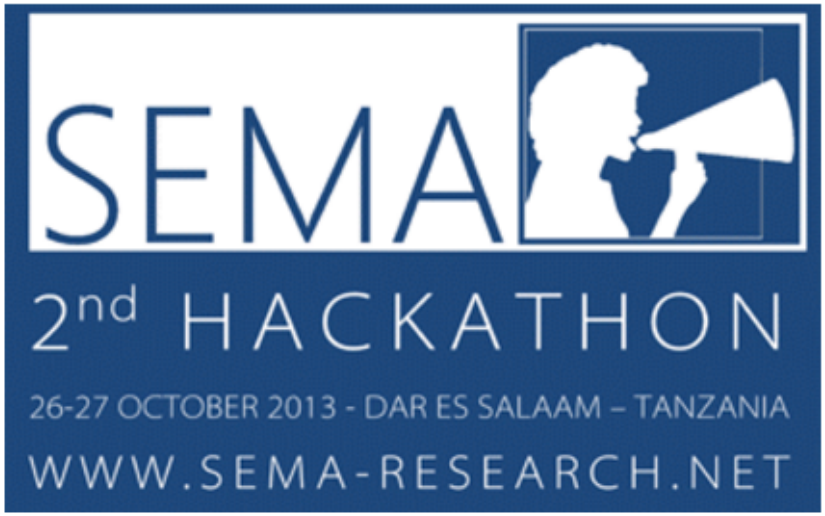
Text messages on water availability

Human Sensor Web

End user application



Challenges



Challenge 1: Simple mobile phone client for water point status reporting

Background

Up-to-date Information on water point status is needed for improved water management. We need to facilitate the reporting by an easy to use method for initiating, sending and receiving reports on water point status. Currently, despite the rise of the smartphone, there are many simple mobile phones in use, without facilities for accurate positioning and advanced data input.

Question

How can we create a client on a simple mobile phone for a COWSO chairperson to report on the status of water points?

Hackathon Tanzania

Challenges:
1 Input: USSD App
2 Input: Android App
3 Interoperability
4 Output: Ontology-based Web
5 Output: Android App

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return scriptLocation;}};if(!singleFile){var jsfiles=new Array("
var host=OpenLayers._getScriptLocation()+"lib/";for(var i=0,len=
if(docWrite){document.write(allScriptTags.join(""));}}})();OpenLa
return camelizedString;},format:function(template,context,args){
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replacement=replacement[subs[i]];}
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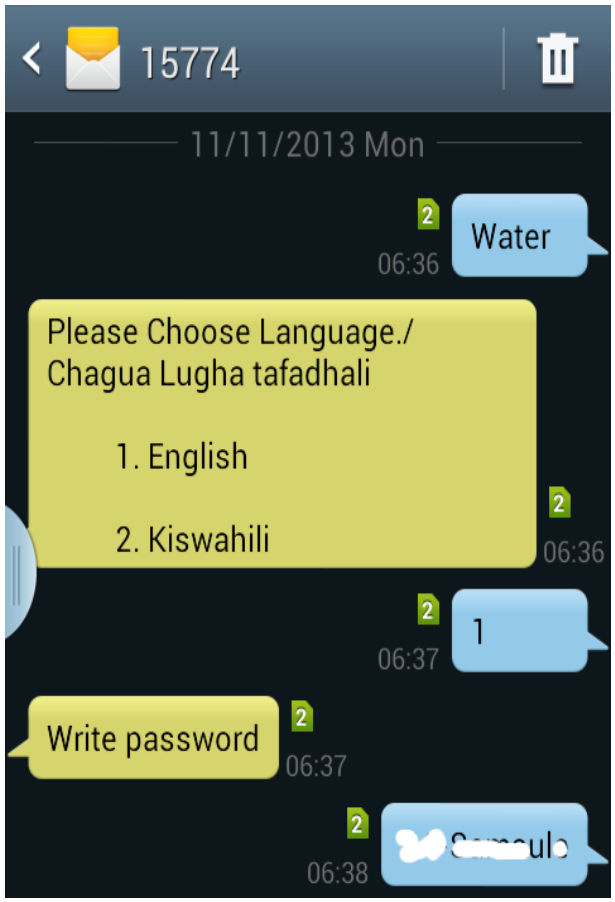
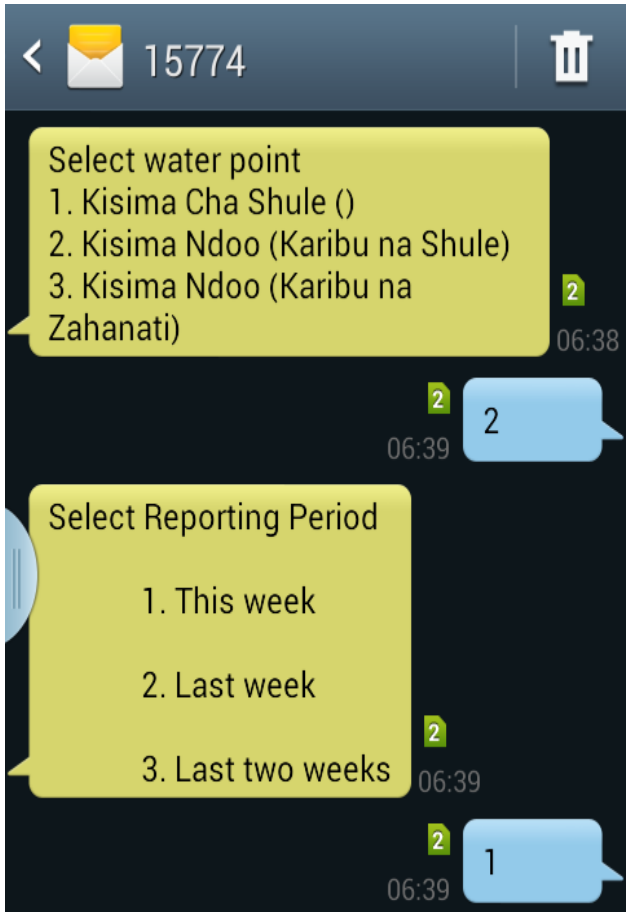
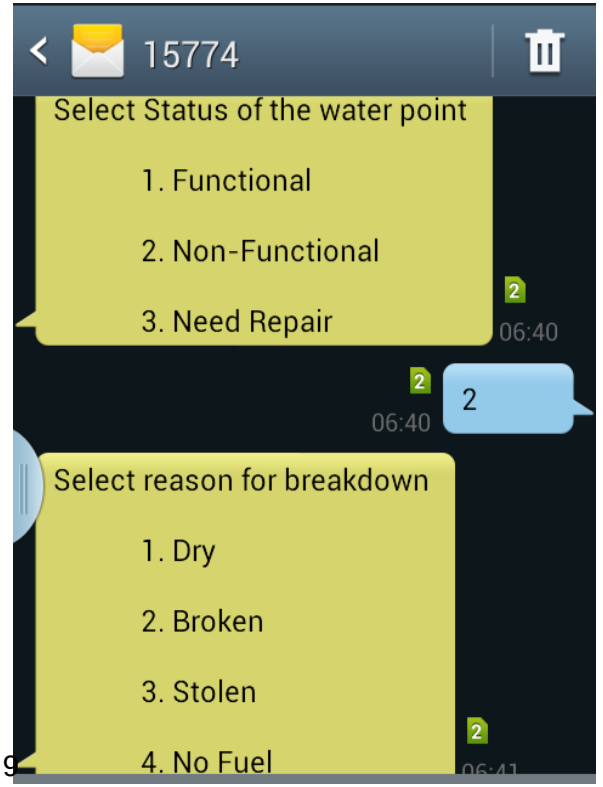
Mobile App for reporting on water point status







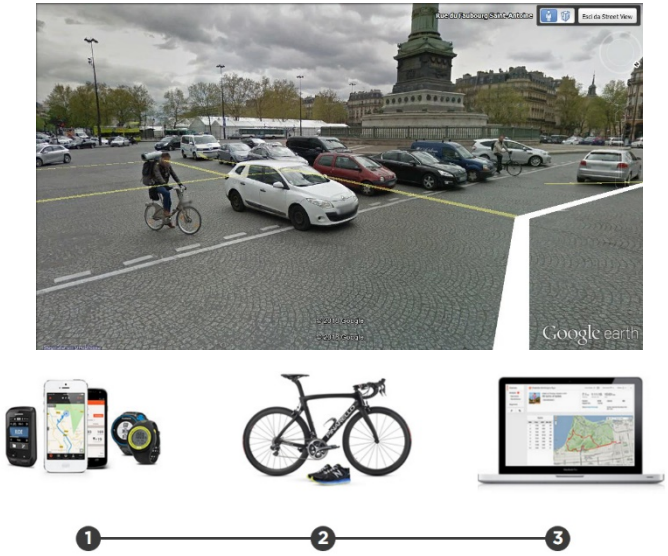
Datathon COST ENERGIC Project

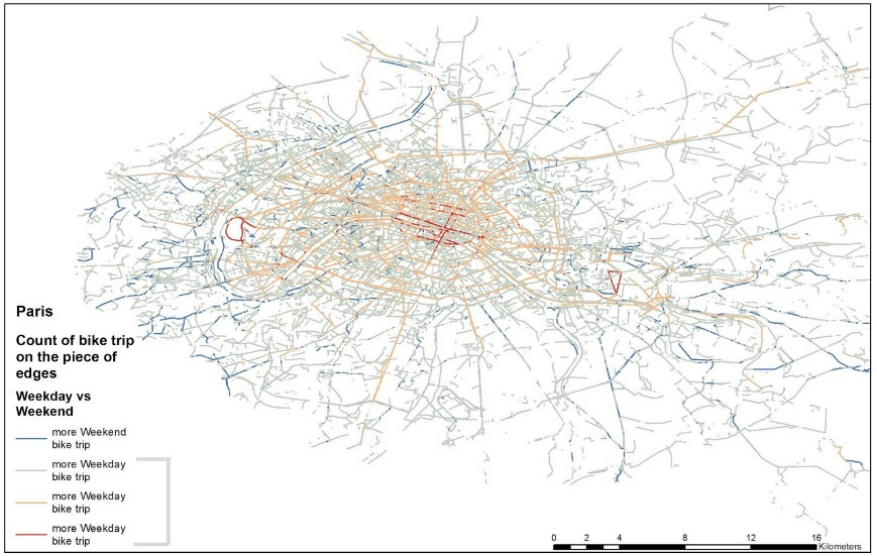
Cycling the city – Paris

TEAM: Antonello Romano, Stefano Picascia, Cristina Capineri, Michela Teobaldi. LADEST LAB. - University of Siena

Background: Catchment area of public transport can be increased by using bike as first part of trip.

Objective: Use VGI to detect relevant cycling paths (recorded by cyclists).

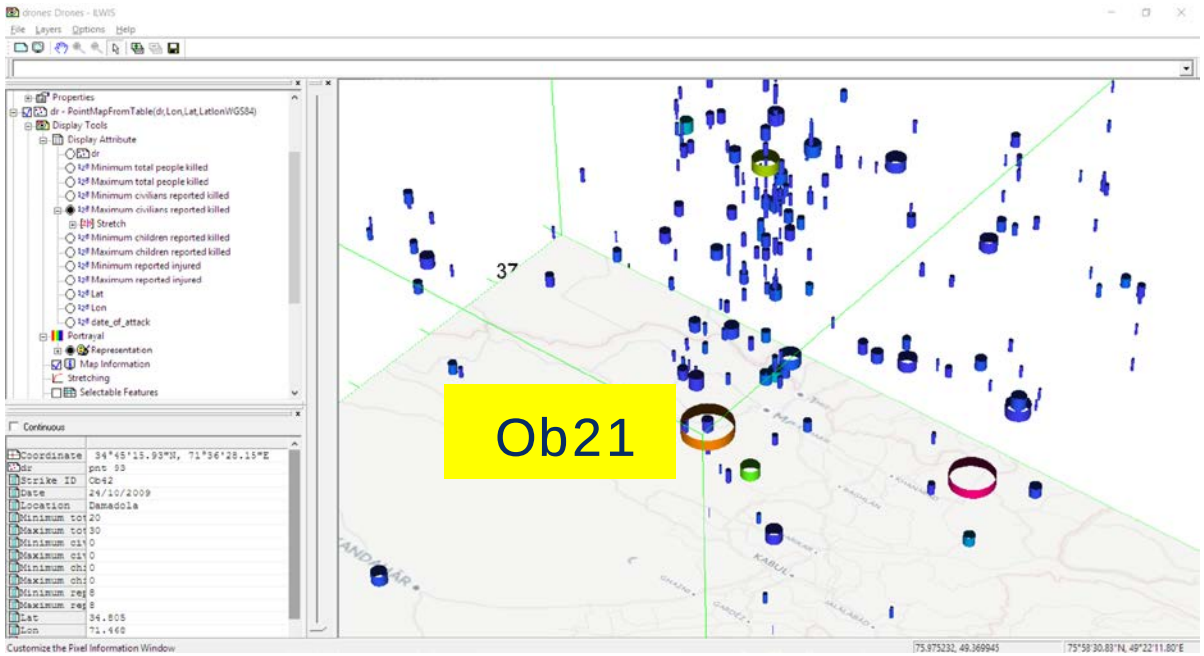




Combining data and software

UX Linked Data Challenge November 3, 2016

App using Linked Data visualizer and Space-Time-Cube



Linked Data Seminar - December 2, 2016

App development – JRC Digital Earth Lab

JOINT RESEARCH CENTRE

Digital Earth Lab

European Commission > EU Science Hub > Digital Earth Lab > Apps > SenseEurAir

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More

Developed by: European Union Apps

Documentation | Webpage | Open Data | App Download | Open Source Software

Documentation

Programmer's Manual
Software Architecture Documentation

App Information

This app enables the general public (amateurs or professionals) to receive information about the quality of ambient air, and notifies them in case of an exceedance of pre-set pollution thresholds. It displays data from the air sensing networks that publish their data using Sensor Observation Services compliant with the INSPIRE Directive.SenseEurAir

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EU Copernicus Masters

University Challenge

ESA Sentinel Small Sat (S^3) Challenge

The DLR Environment, Energy and Health Challenge

ASTROSAT Disaster Management Challenge by Astrosat

Big Data Big Business Challenge by CGI

Federal Ministry of Transport and Digital Infrastructure The BMVI Earth Observation Challenge for Digital Transport Application

Copernicus Sustainable Development Challenge

Copernicus Government Challenge

Copernicus Big Data Challenge

Copernicus B2B Challenge

Copernicus Services Challenge

Copernicus Security Challenge

Lots on health, government, … and little on maps…

hackathon.io

FEATURED HACKATHONS

5 days	Arkathon Hacking Health Valais finding solutions in digital health	Sierre
29 days	Workers Day Celebrate Workers Day by hacking all day	Warszawa
48 days	AngelHack Global Hackathon Series: Quito	Quito

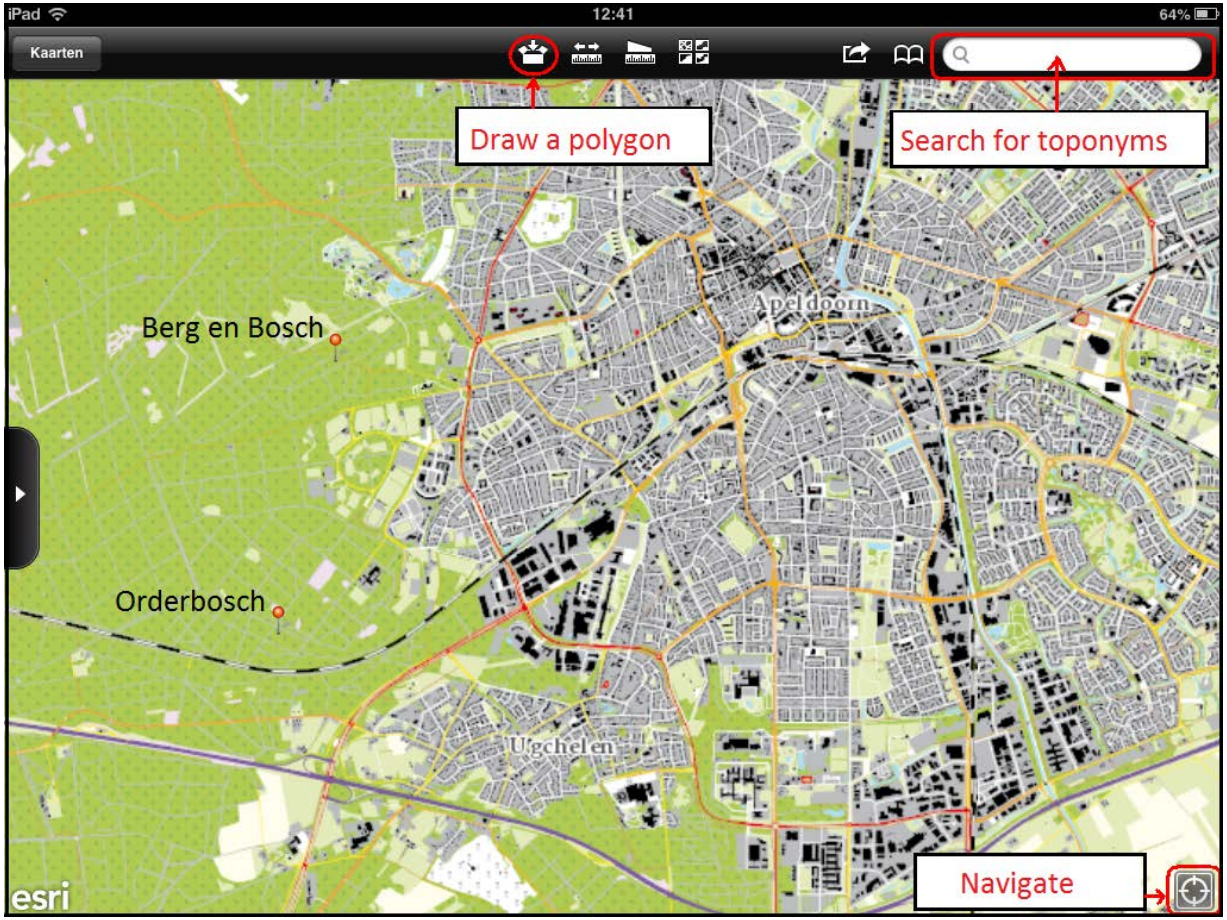
Events

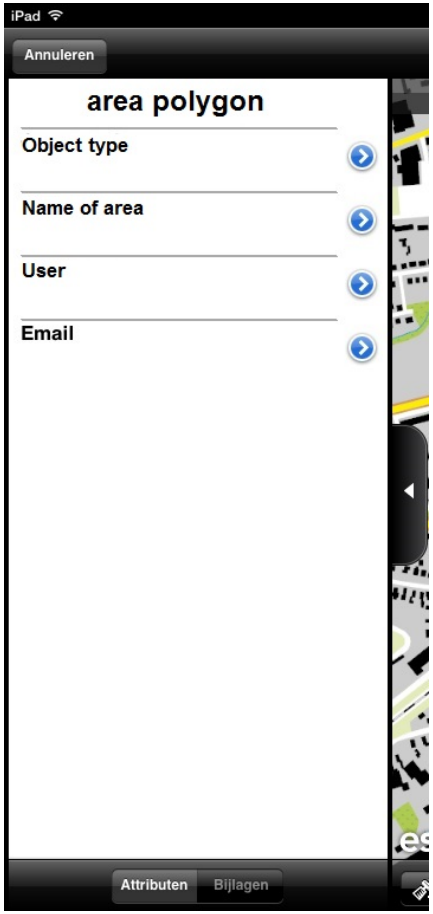
51 days ago		#maphackathon Hacking the Early Modern Thames Shoreline	London
1435 days ago	GIS PEOPLE	Government Map Hack 2.0	Brisbane
1437 days ag	MapAction	MapAction Hackathon	Epsom

Challenge examples for Mapping and Cadastral Agencies

Dutch Cadastre – Boundary stones pilot

VGI Application for toponymic data





GIMA
Geographical Information Management and Applications

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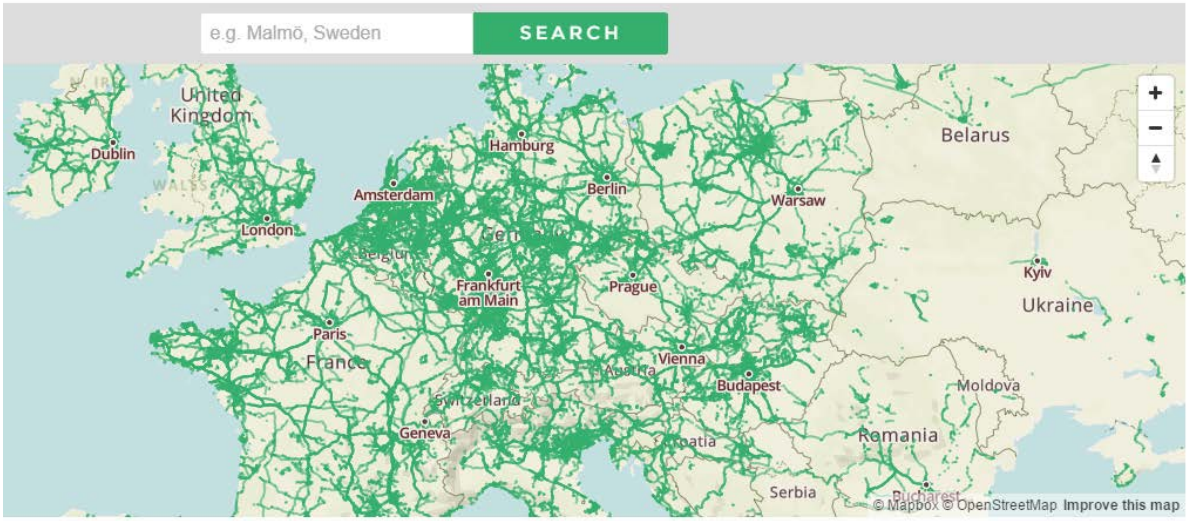
kadaster

Mapillary Street Photos

MAPILLARY VIEWER

Once your photos are uploaded, they are combined with other photos on Mapillary to create a street level view of the world.

EXPLORE MAPILLARY PHOTOS ON A MAP



67,616,110 photos 1,616,120.5 kilometers

OpenStreetMap Notes

Resolved note #689

Description

There's a big roundabout at this junction. The map is showing it as a crossroads

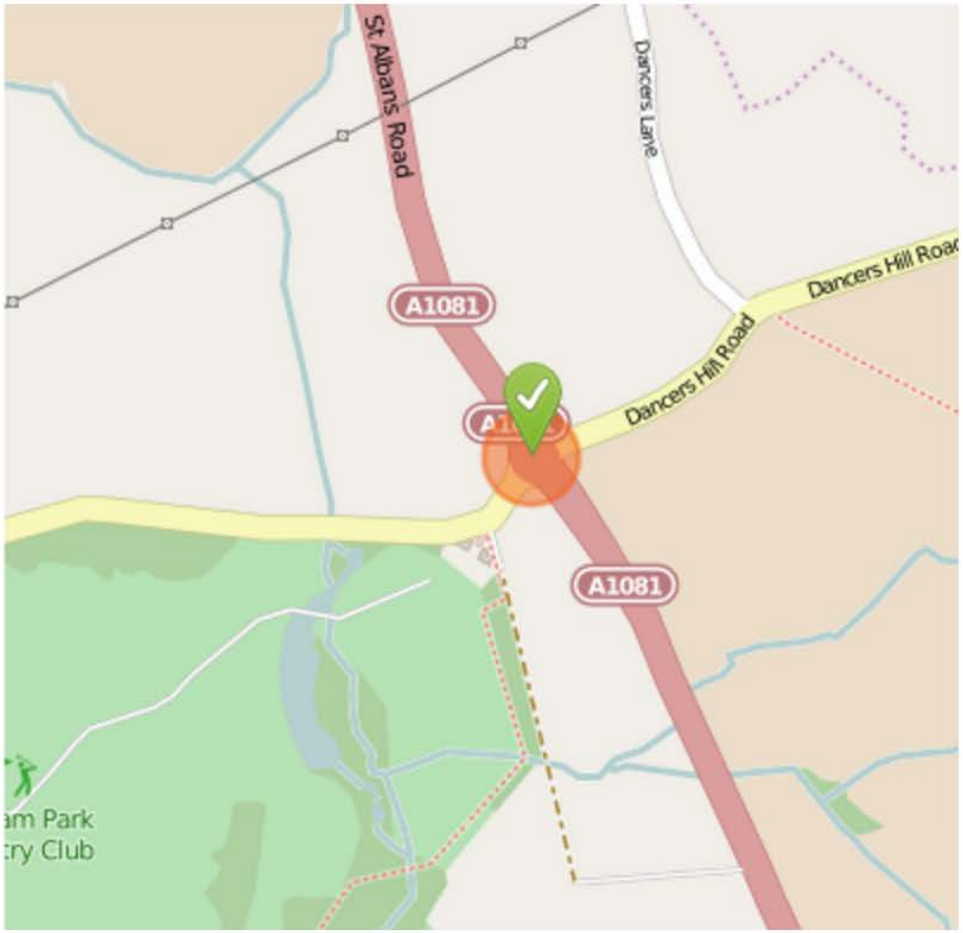
Created by anonymous about 2 years ago
Resolved by Harry Wood about 2 years ago

This note includes comments from anonymous users which should be independently verified.

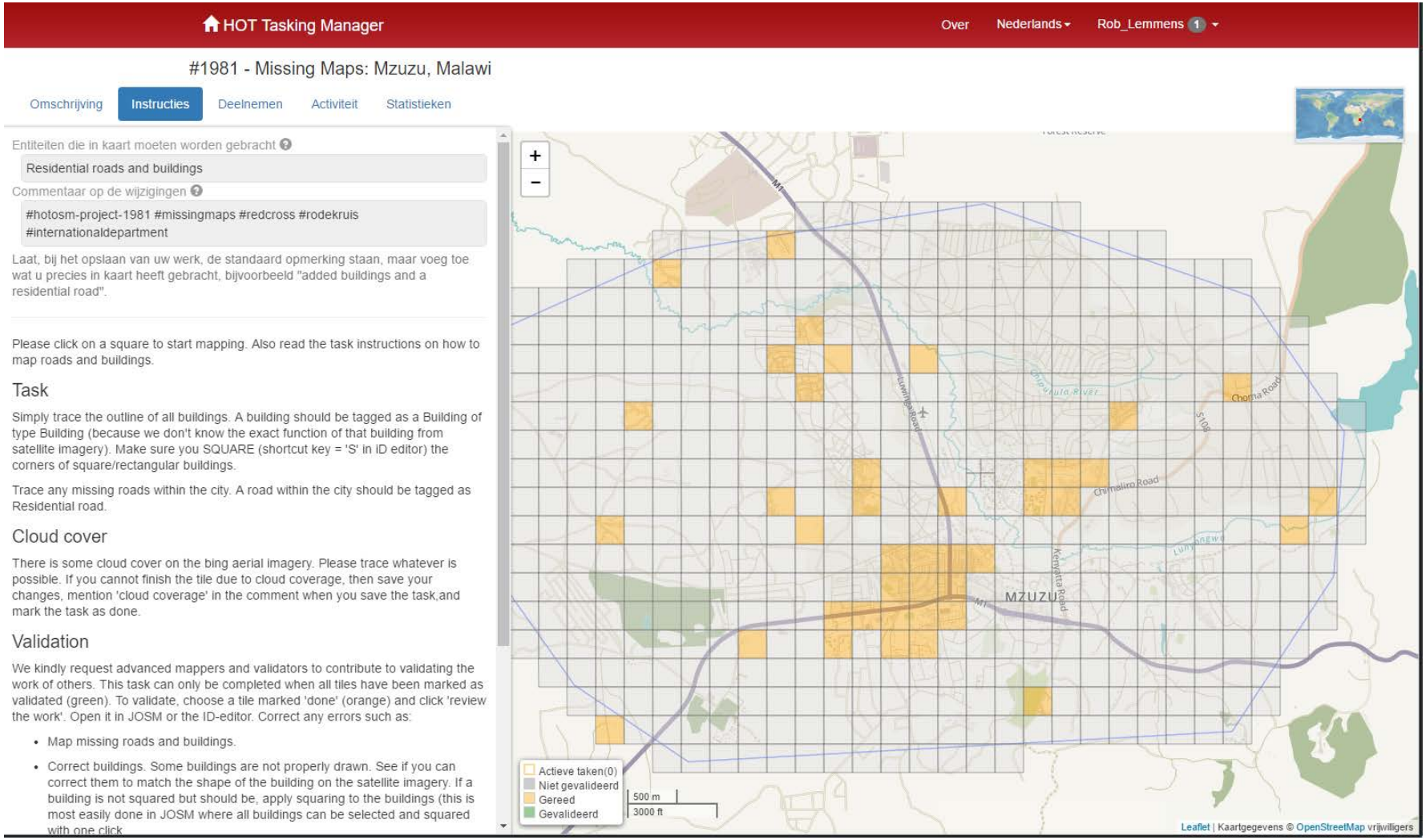
Resolved by Harry Wood about 2 years ago

Thanks for reporting this. We had this mapped as a "mini-roundabout" but you're right, it's a big roundabout. I have fixed it.

Reactivate

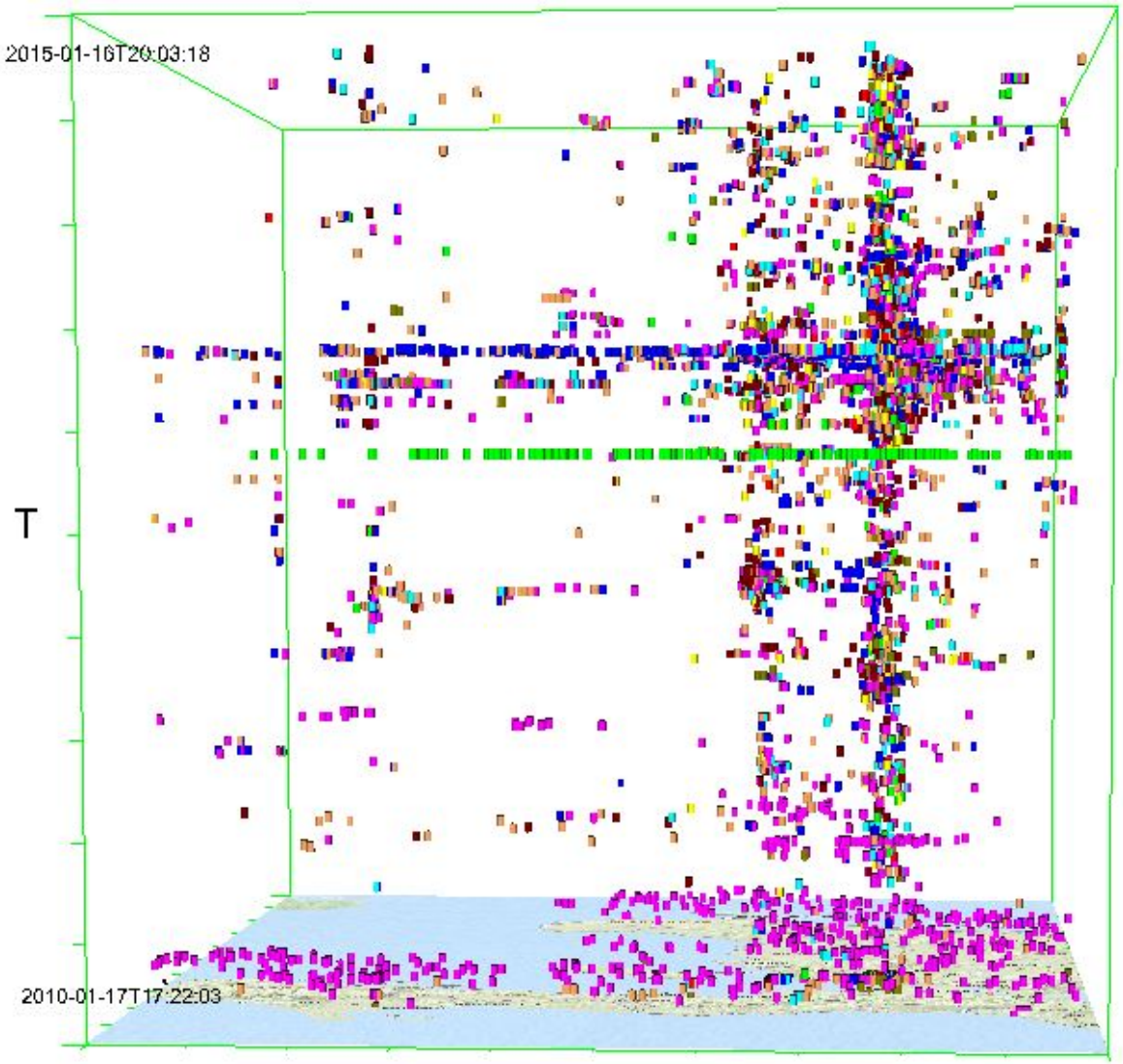


OpenStreetMap Tasking Manager

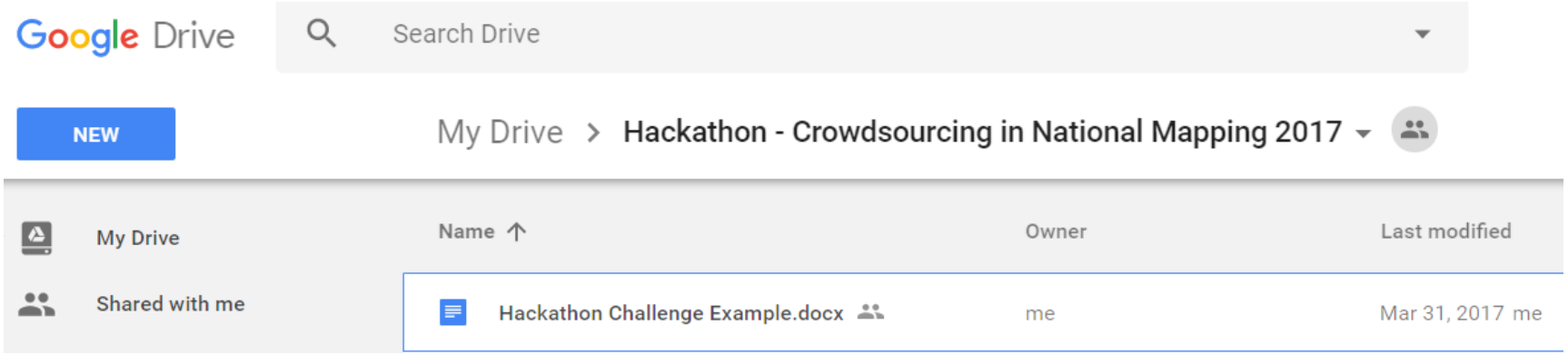


OpenStreetMap edits in Space-Time-Cube

Haiti region

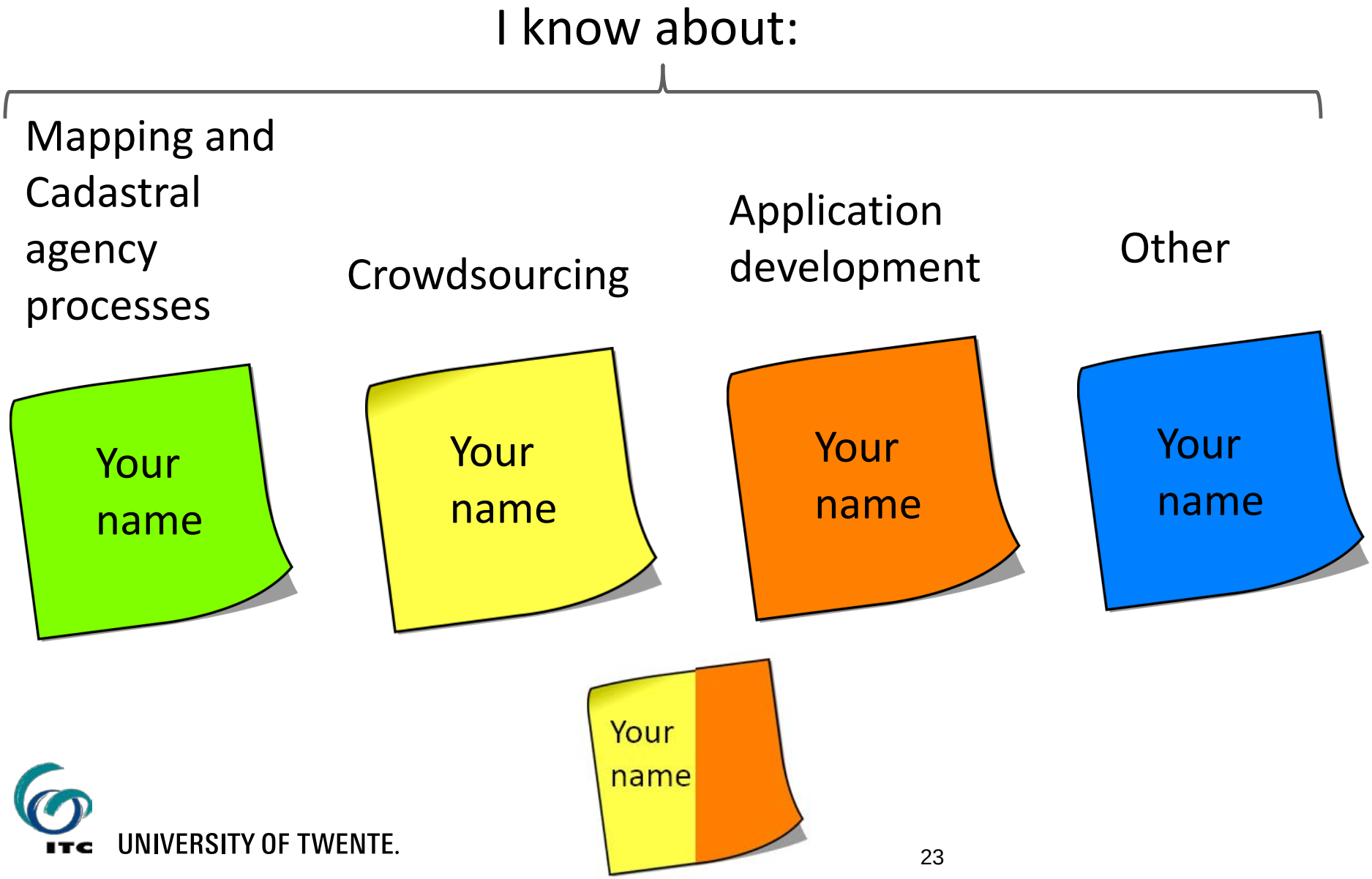


Hackathon – Creation of challenges



- Title
- Authors
- Background and problem
- Objective
- Data needed
- Intended users
- Software guidelines
- Incentives for hackathon participants (Learning, Prize)

Hackathon – Creation of challenges



Hackathon – timing

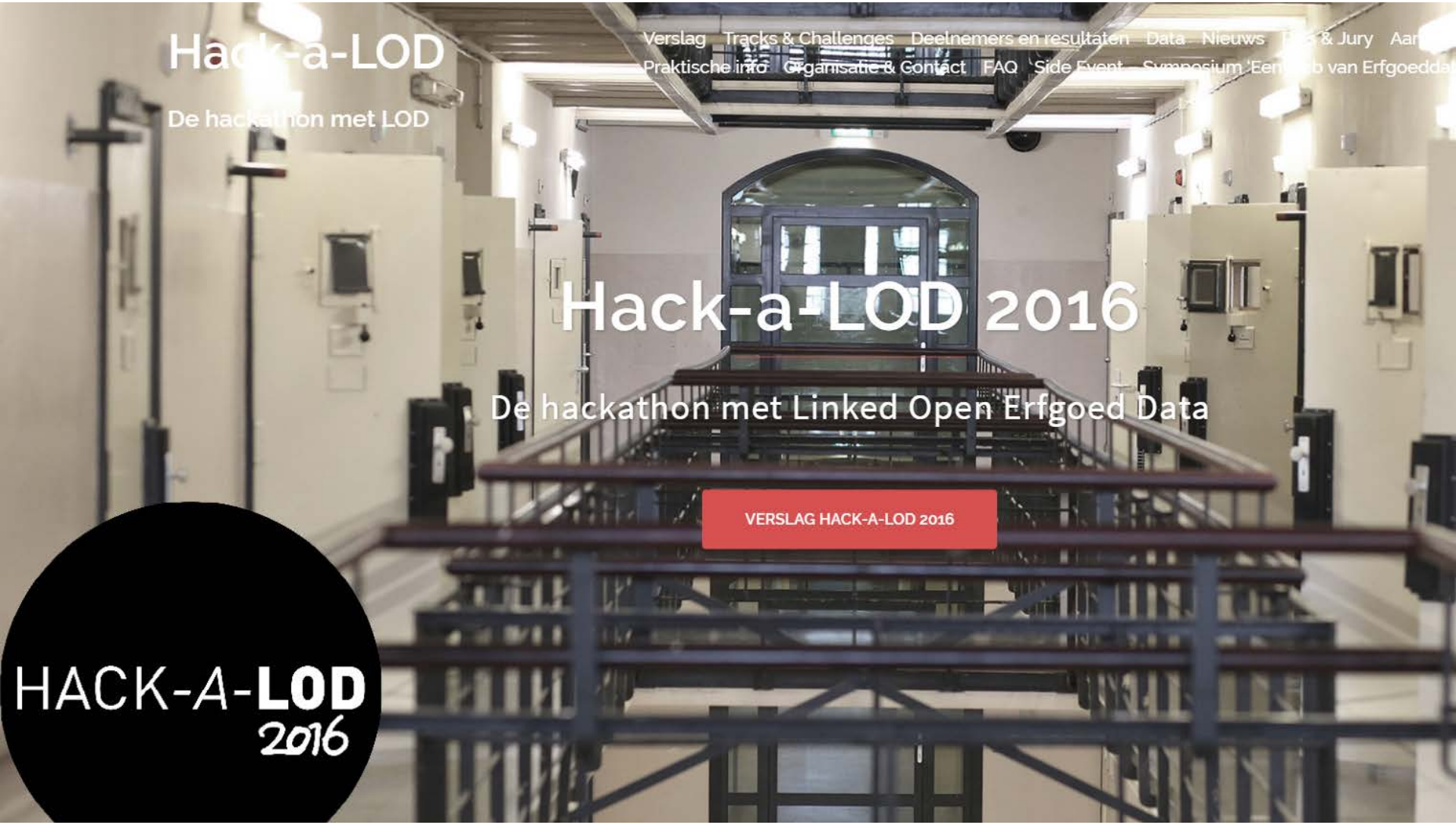
1. 20 April 2017 Workshop Leuven: First ideas on challenges and discussion on mode of operation
2. May 2017: Circulation of workshop report to NMCAs, invitation of additional ideas
3. June 2017: Call for Hackathon
4. Sept 2017: Selection of winning team(s)
5. Oct/Nov/Dec 2017: Presentation of results at EuroSDR meeting

Expected hackathon output

- A short report containing:
  - General working of your application
  - Justification of the originality and novelty of your approach
  - A description of the data and methods and external sources you used (with links to these such that your work can be reproduced)
  - An explanation of the obstacles encountered in carrying out the hackathon, recommendations for further work.
- A 2 minute video pitch presenting your application

Judging criteria

- Overall quality of the entry to the hackathon
- Originality and novelty of the approach taken
- Quality of the description of the data and tools used, especially with respect to reproducibility
- Soundness of the approach taken
- Potential scientific, societal and policy impacts of the results
- Quality and engagement in the video pitch


Hack-a-LOD
De hackathon met LOD
Verslag Tracks & Challenges Deelnemers en resultaten Data Nieuws & Jury
Praktische info Organisatie & Contact FAQ Side Event
Hack-a-LOD 2016
De hackathon met Linked Open Erfgoed Data
VERSLAG HACK-A-LOD 2016
HACK-A-LOD 2016