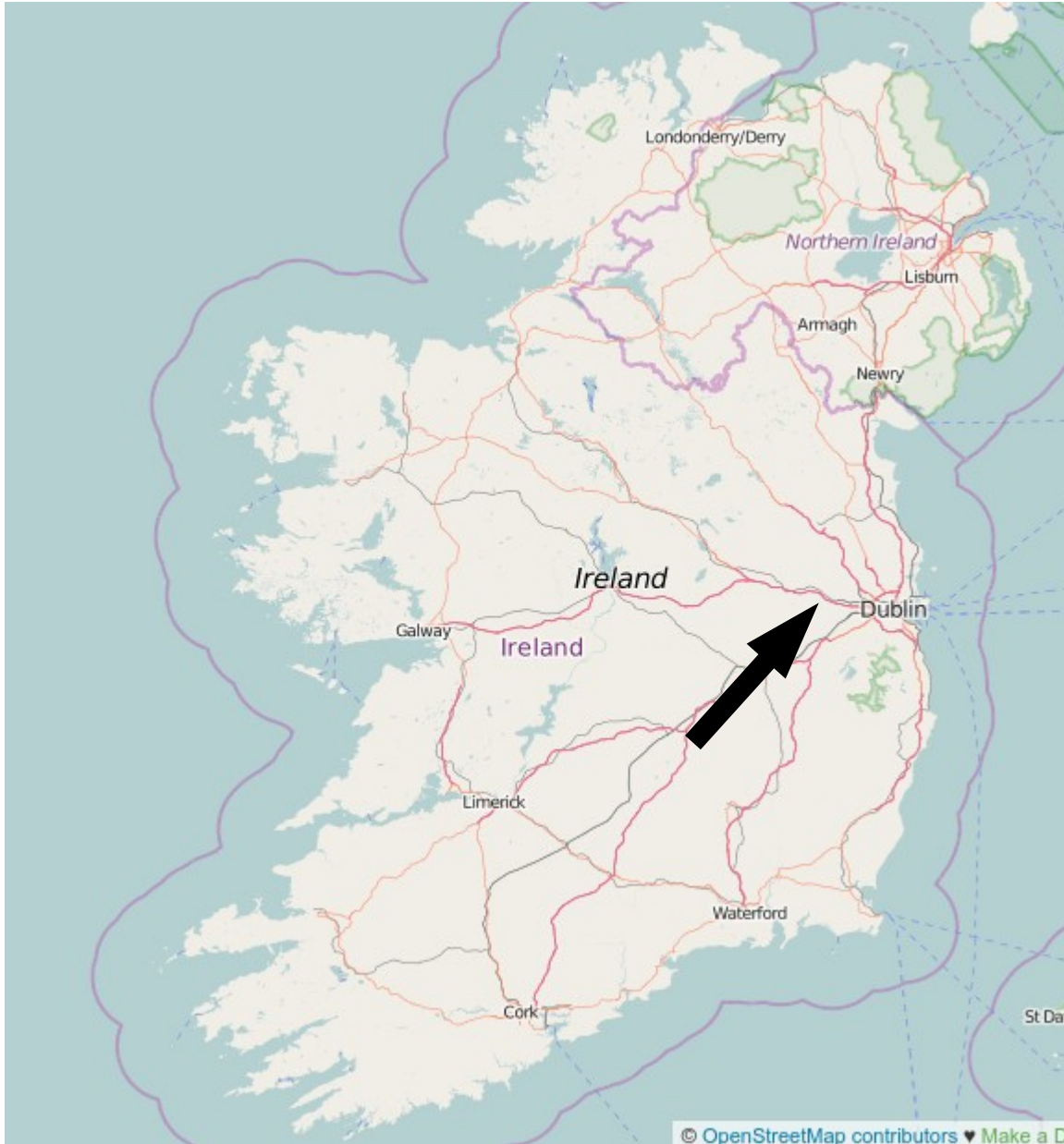# VGI Research at Maynooth University

VGI Research

Limited to myself with the Computer Science Dept

Observations on an OpenStreetMap mapping party organised as a social event during an open source GIS conference*

Peter Mooney[1], Marco Minghini[2], Frances Stanley-Jones[3]

[1]Department of Computer Science, Eolas Building, Maynooth University, Maynooth, Co. Kildare, Ireland, Peter.Mooney@nuim.ie

[2]Departmen...
Campu...

[3]Profess...

Towards an Automated Comparison of OpenStreetMap with Authoritative Road Datasets

Maria Antonia Brovelli,[*] Marco Minghini,[*] Monia Molinari[*] and Peter Mooney[†]

[*]Department of Civil and Environmental Engineering, Politecnico di Milano, Como
[†]Department of Computer Scien
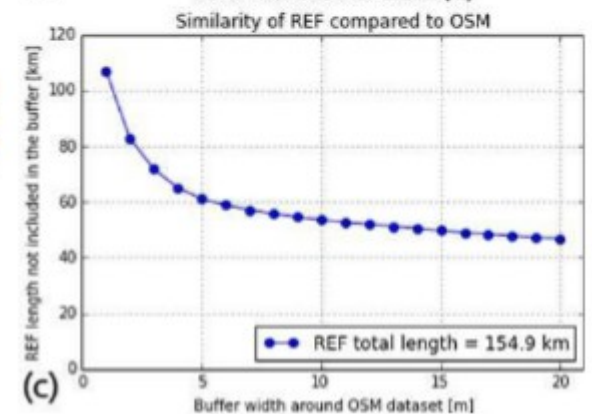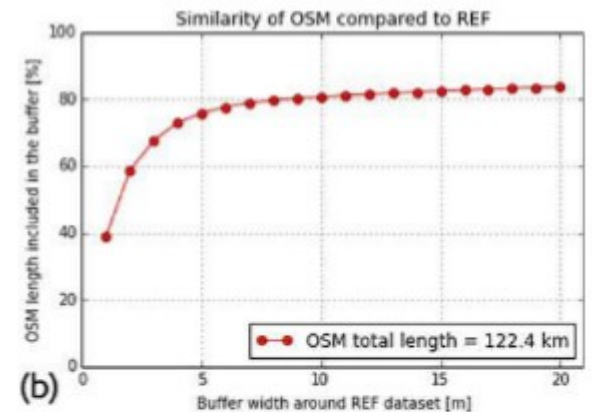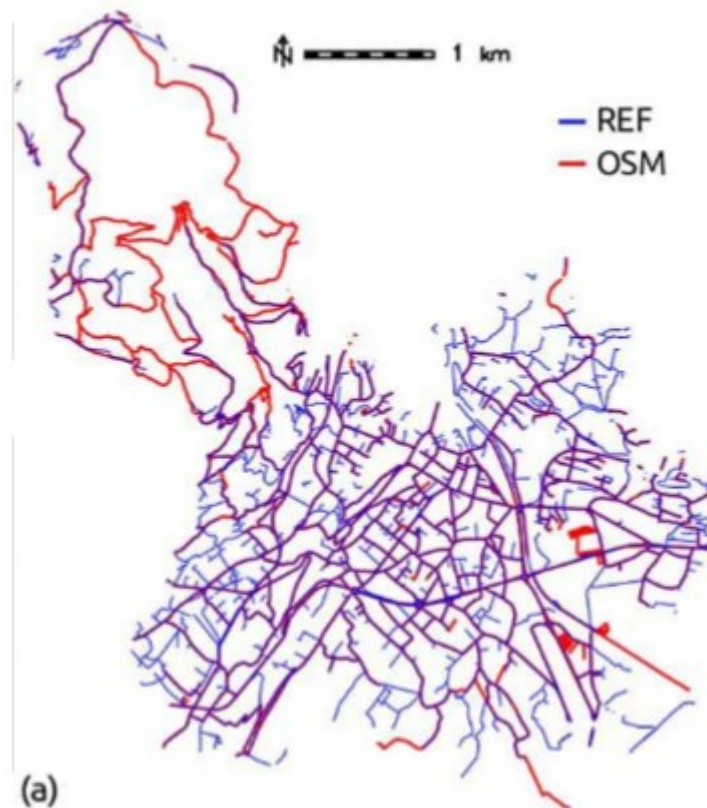
Towards a Protocol for the Collection of VGI Vector Data

Peter Mooney [1*], Marco Minghini [2], Mari Laakso [3], Vyron Antoniou [4], Ana-Maria Olteanu-Raimond [5], Andelina Skopeliti [6]

[1]*Department of Computer Science, Maynooth University, Maynooth, Co. Kildare, Ireland +353 1 708 3849, Peter.Mooney@nuim.ie*

[2]*Department of Civil and Environmental Engineering, Politecnico di Milano - Como Campus, Via Valleggio 11, 22100 Como, Italy, +39 031 3327540, marco.minghini@polimi.it*

[3]*Finnish Geospatial Research Institute, Geodeetinrinne 2, 02430 Masala, Finland, +358 50 3695390, mari.laakso@nls.fi*

[4]*Hellenic Military Geographical Service, Evelpidon 4, Athens, Greece, +30 2108206680, v.antoniou@ucl.ac.uk*

[5]*Université Paris-Est, IGN France, COGIT Laboratory, 73 avenue de Paris, 94165, Saint-Mandé, France, +33 1 43 98 80 00, ana-maria.raimond@ign.fr*

[6]*School Of Rural and Surveying Engineer, National Technical University of Athens, Heroon Polytechniou 9, 15780 Zografou, Greece, +30 210 7722639, askop@survey.ntua.gr*
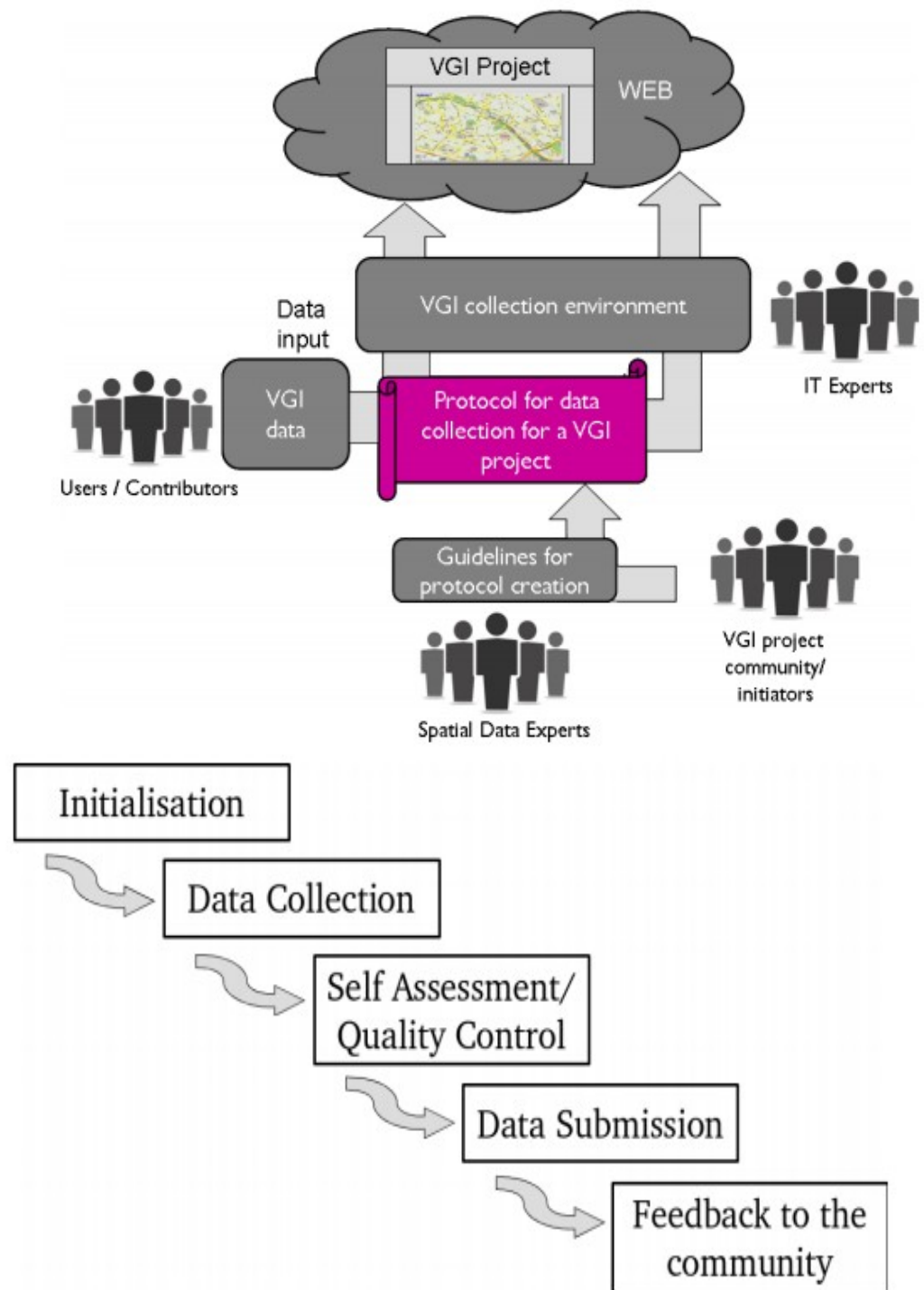
IN REVISIONS (June 2016)

Figure 2. Sequence of the 5 main stages of the protocol for VGI vector data collection.

GISRUK 2016 London

Session A2 Citizen GIScience QA065
Patterns of tagging in OpenStreetMap data in urban areas
Nikola Davidovic and Peter Mooney

Gazetteer building with volunteered geographical information: Working with Wikidata a...
Paula Auc...
Stoner

Utilizing C...
Analysis
Peter Law...
Veeraswa...

Volunteer...
Symons a...
Martin Ch...

Building=yes N=3 Co-Tag Keys

City	N=3 Co-Tag Keys			Total Objects	%
Vilnius	addr:city	addr:housenumber	addr:street	28606	62.30
Duesseldorf	addr:city	addr:housenumber	addr:street	142219	51.29
Warsaw	addr:city	addr:housenumber	addr:street	57818	46.64
Frankfurt	addr:housenumber	addr:postcode	addr:street	266260	29.15
Ottawa	addr:city	addr:housenumber	addr:street	3838	23.10
Singapore	addr:country	addr:housenumber	addr:street	6910	15.54
Vienna	addr:housenumber	addr:postcode	addr:street	39573	15.04
Helsinki	addr:housenumber	addr:street	building:fi:id	16281	13.51
San Francisco	addr:city	addr:housenumber	addr:street	24560	11.49
Madrid	addr:city	addr:housenumber	addr:street	4230	10.08
Saint Petersburg	addr:city	addr:housenumber	addr:street	13487	7.30
Dublin	addr:housenumber	addr:street	house	2369	7.11
London	addr:city	addr:housenumber	addr:street	30276	6.72
Sydney	addr:housenumber	addr:postcode	addr:street	837	6.61
Manchester	addr:city	addr:postcode	addr:street	1168	5.27
Kyoto	building:levels	roof:orientation	roof:shape	1987	2.82
Mexico City	addr:housenumber	addr:street	name	149	2.73
Prague	building:levels	building:ruian:type	ref:ruian:building	7962	2.13
Milan	it:lo:ID_E	it:lo:STRA	it:lo:UN_V	2093	2.12
Lyon*	addr:housenumber	addr:postcode	addr:street	5152	0.35

SESSION 1 (Room: Sali 13)

SPATIAL ANALYSIS ON CROWDSOURCED DATA

Chair: Maribel Yasmina Santos

Presenting Citizen Engagement Opportunities Online: The Relevancy of Spatial Visualization - *Thore Fechner and Christian Kray*

An analysis of tagging practices and patterns in urban areas in OpenStreetMap - *Nikola Davidovic, Peter Mooney and Leonid Stoimenov*

Geo-Privacy Beyond Coordinates - *Grant McKenzie, Krzysztof Janowicz and Dara Seidl*

Identification of disaster-affected areas using exploratory visual analysis of georeferenced Tweets: application to a flood event - *Valentina Cerutti, Georg Fuchs, Gennady Andrienko, Natalia Andrienko and Frank Ostermann*

Report for tag:highway = bus_stop

Key	London			Warsaw			Helsinki		
Total	45611			5868			7237		
	No.	Percent	Compliance	No.	Percent	Compliance	No.	Percent	Compliance
public_transport	1663	3.65%	POOR	2768	47.17%	AVERAGE	86	1.19%	POOR
name	43832	96.10%	EXCELLENT	5587	95.21%	EXCELLENT	5413	74.80%	GOOD
operator	342	0.75%	POOR	1740	29.65%	FAIR	7	0.10%	POOR
Diff. Tags	144			46			151		

City-to-City comparison of tag key corpus for different target tags

Region	amsterdam	auckland	bangkok	beijing	berlin	bonn	boston	brussels	bucharest	buenos-aires	dublin
amsterdam		0.293	0.458	0.648	0.688	0.603	0.623	0.584	0.459	0.839	0.366
auckland	0.293		0.642	0.735	0.372	0.243	0.252	0.503	0.674	0.489	0.656
bangkok	0.458	0.642		0.744	0.468	0.222	0.479	0.506	0.505	0.652	0.579
beijing	0.648	0.735	0.744		0.542	0.505	0.434	0.529	0.594	0.756	0.687
berlin	0.688	0.372	0.468	0.542		0.745	0.806	0.704	0.561	0.749	0.422
bonn	0.603	0.243	0.222	0.505	0.745		0.66	0.85	0.557	0.685	0.459
boston	0.623	0.252	0.479	0.434	0.806	0.66		0.595	0.61	0.744	0.115
brussels	0.584	0.503	0.506	0.529	0.704	0.85	0.595		0.58	0.666	0.687
bucharest	0.459	0.674	0.505	0.594	0.561	0.557	0.61	0.58		0.42	0.583
buenos-aires	0.839	0.489	0.652	0.756	0.749	0.685	0.744	0.666	0.42		0.38
dublin	0.366	0.656	0.579	0.687	0.422	0.459	0.115	0.687	0.583	0.38	
duesseldorf	0.705	0.152	0.174	0.554	0.708	0.853	0.581	0.695	0.625	0.768	0.458
edinburgh	0.623	0.623	0.136	0.566	0.686	0.703	0.749	0.67	0.611	0.638	0.429
frankfurt	0.689	0.432	0.386	0.675	0.82	0.77	0.7	0.788	0.595	0.798	0.503
geneva	0.575	0.505	0.477	0.603	0.424	0.67	0.406	0.686	0.643	0.619	0.681
helsinki	0.626	0.412	0.204	0.477	0.335	0.525	0.23	0.451	0.615	0.736	0.432
johannesburg	0.738	0.716	0.668	0.674	0.664	0.534	0.655	0.755	0.688	0.848	0.626
kyoto	0.602	0.156	0.612	0.496	0.449	0.214	0.578	0.346	0.335	0.64	0.415
london	0.708	0.456	0.368	0.509	0.676	0.84	0.58	0.827	0.43	0.776	0.392
lyon	0.446	0.621	0.611	0.835	0.492	0.574	0.336	0.731	0.562	0.626	0.799
madrid	0.592	0.607	0.369	0.64	0.417	0.548	0.502	0.691	0.542	0.77	0.488

Projects

🔍 Search   Sort by: **High priority first** ▾

#1964 Milange District, Mozambique -- Africa Indoor Residual Spraying Campaign
👤 8   ▮   43%

This project directly supports programs under the U.S. President's Malaria Initiative (PMI), which was launched in 2005 with the goal to reduce malaria-related mortality by 50 percent across sub-Saharan Africa. The OpenStreetMap data created through this task will be used to plan the logistics of an Indoor Residual Spraying campaign in Milange.

Before you begin mapping please review the Malaria Prevention in Mozambique tracing guide. This guide provides pictures and information on features needed to support Malaria prevention efforts in Mozambique.

Created by CourtneyMClark - Updated about a minute ago - Priority: high

#1924 M7,8 Earthquake in Ecuador, Bahía de Caráquez - Post-event imagery
▮ 61%

PILOT PROJECT: Only for experienced JOSM mappers (post event damage assessement)

An earthquake of magnitude 7.8 hit the coastal region of Ecuador on April, 16th at 23:58 UTC. This major event was followed by several posterior quakes (http://earthquake.usgs.gov/earthquakes/map). The tasks consists on drawing roads, towns, villages, for coordinating help efforts from government institutions and civil society initiatives of rescue. Infrastructure has been damaged and the main access roads are blocked, leaving coastal towns disconnected from rescue efforts.

Development of a HOT preparedness score for OSM Regions

Crowdsourcing and National Mapping

Leuven, Belguim: September 2016

A EuroSDR funded workshop

Find Out More

Rectangular Snip

EuroSDR

European Spatial Data Research

April 2014

Change Detection in High-Resolution Land Use/Land Cover Geodatabases (at Object Level)

Emilio Domenech, Clément Mallet

A survey on state of the art of 3D Geographical Information Systems

Volker Walter

Dense Image Matching Final Report

Norbert Haala

Crowdsourcing in National Mapping

Peter Mooney, Jeremy Morley