



C+LR KEN
Cadastre + Land Registry
Knowledge Exchange Network

Workshop Beyond Limits – Developments in Cadastral Domain

19-20 March 2015, Zurich, Switzerland



Lifelong
Learning
Programme



@geoskills_plus
paula.dijkstra@kadaster.nl

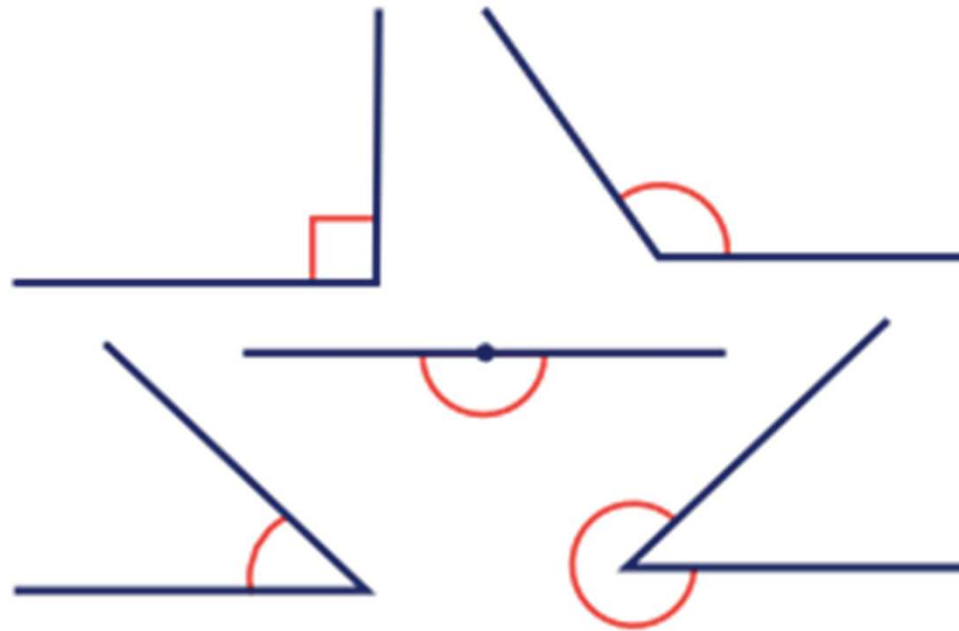
GEO SKILLS PLUS

GEO
Education



Labour
Market

Cooperation



Source: www.getgeometry.com

Awareness Raising



Gap Analysis

- 1 - GAP (SHORTAGE OF GEO SPECIALISTS)
- 2 - SURPLUS OF GEO SKILLED SPECIALISTS



Case

The Netherlands - 2008

A Mismatch in the Netherlands

- 2008
- Labour demands graduates:
 - \pm 125 graduate Vocational level
 - \pm 120 graduate Bachelor level
 - \pm 80 graduate Masters level.
- Only 16 to 23% of this demand is realized



Geo Employment Market Foundation Results

- Establishment of cooperation model
 - Private sector
 - Public sector
 - Education
- Awareness Raising Campaign 'Go Geo'
- Bridging the gap: New curricula and renewed programs
 - GI Minor
 - GeoMedia & Design
 - Surveying Program at VET level

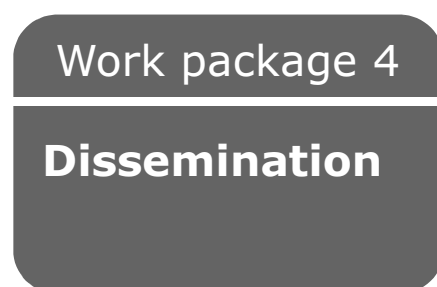
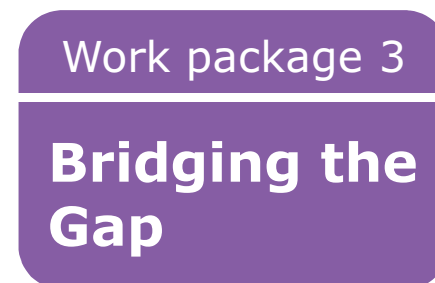
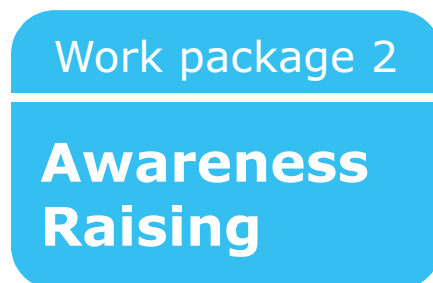
European Approach 2013 - ... (beyond limits)

GEO SKILLS PLUS will bundle and examine additional examples...

- Of cooperation
- Of raising awareness activities
- Of bridging the gap activities
- ... in Europe



The Work Packages

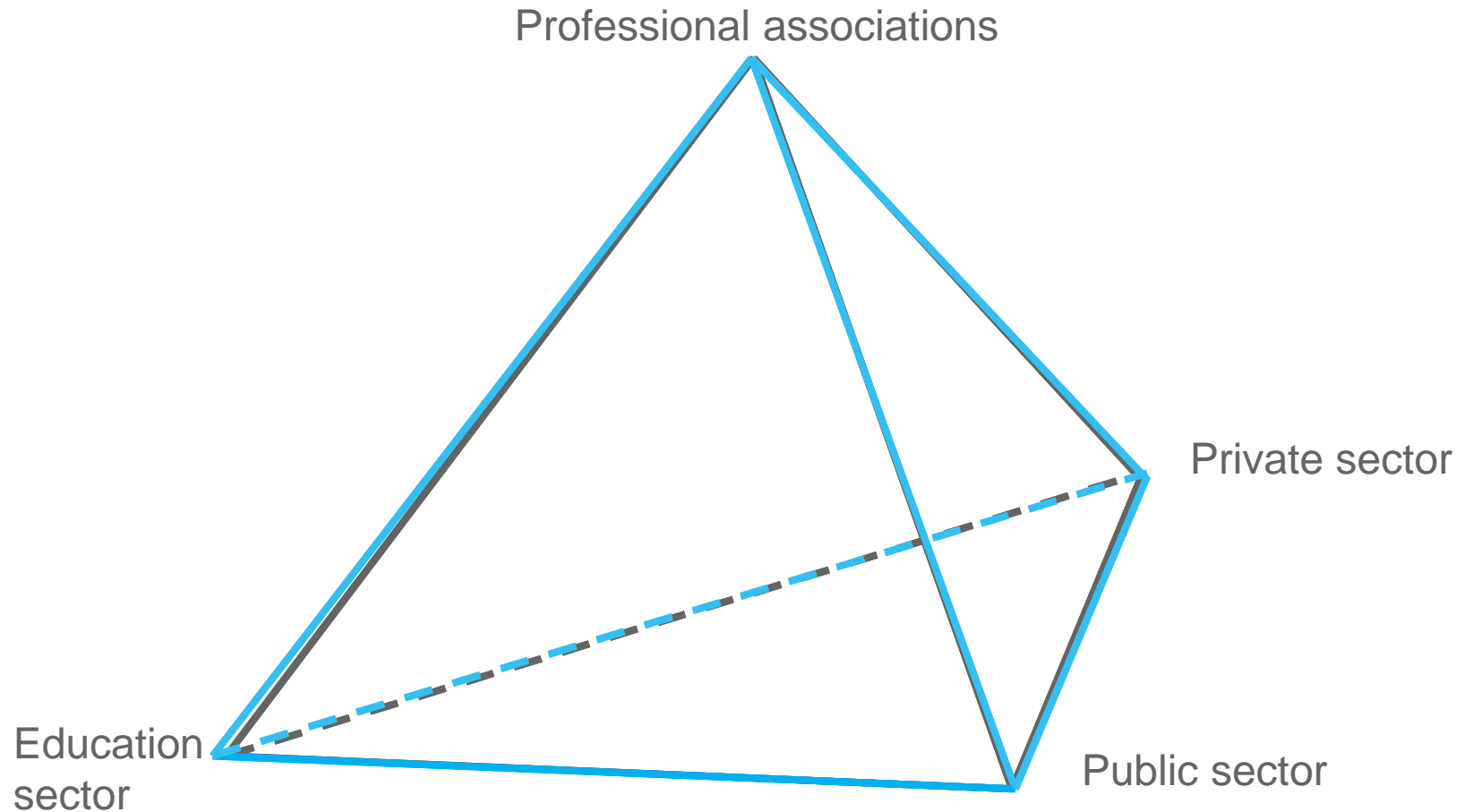


Project Partners



First results

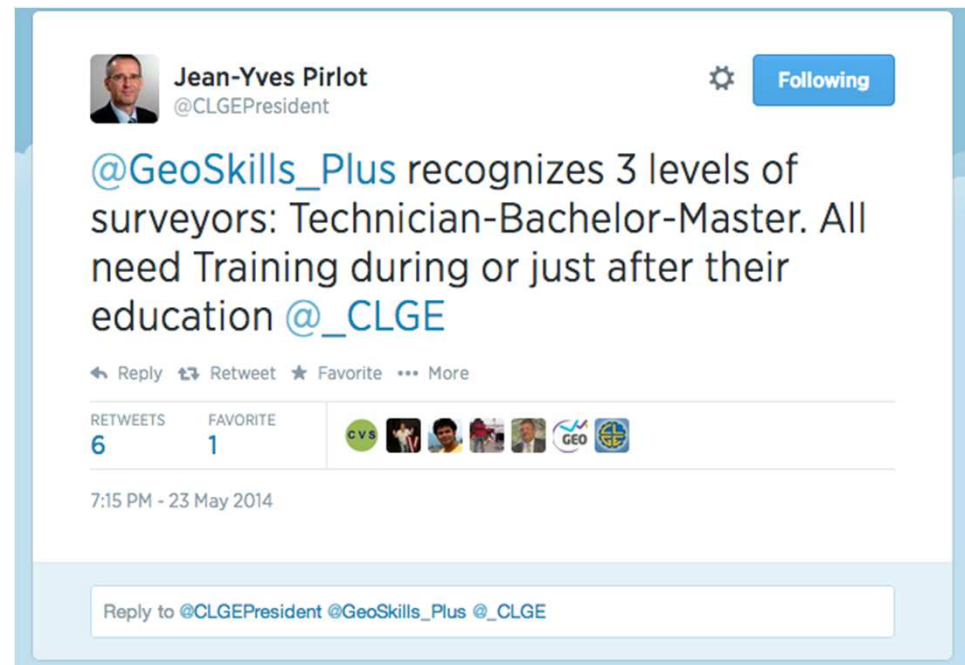
Golden Pyramid





VET - Three levels of surveying

Address the need of VET at different levels

- Technician
- Bachelor
- Master

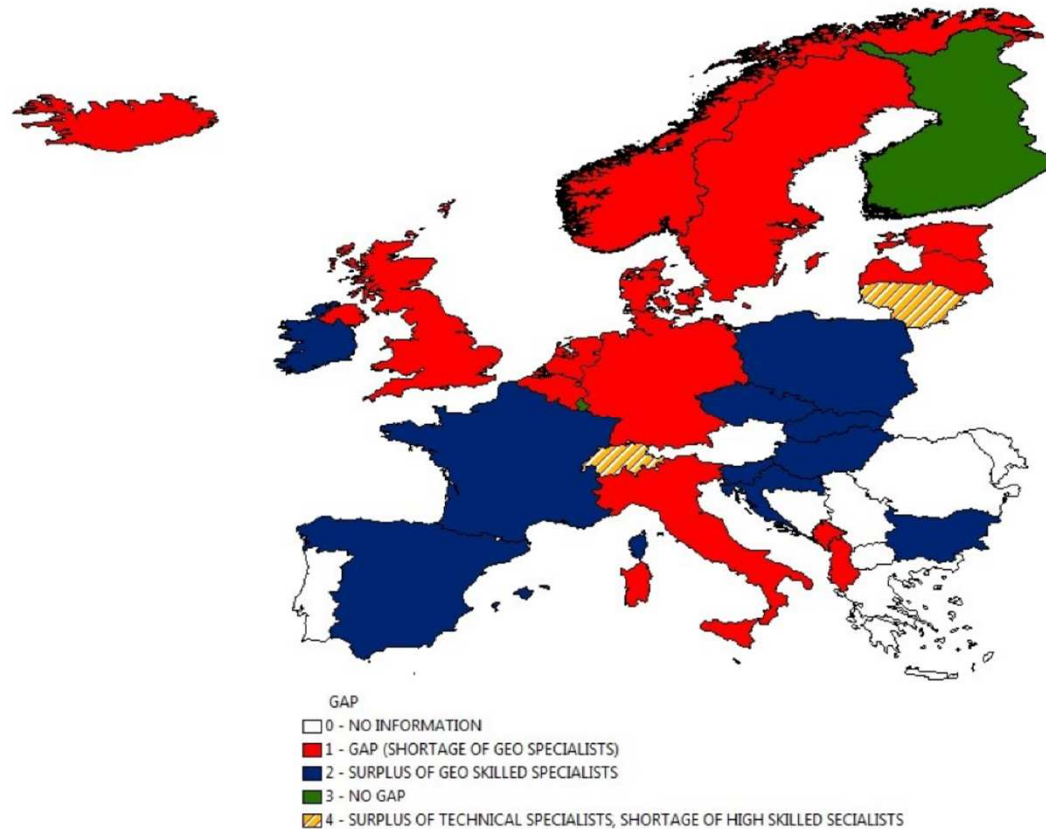


Awareness Raising

Activity	Deliverables	Type	Overview
	<p>Hands-on workshops at schools (16 years old students) about geo-related practical elements. The project is currently running:</p> <p>http://cartogis.u Gent.be/geomobiel/</p>	Mass and personal communication	<p>The Geo Mobiel project is financed by the Agency for entrepreneurship in Flanders. The partners are AGORIA (trade federation including the Belgian GEO-ICT private sector agoria.be/geo-ict/), the university of Brussels (VUB); Gent (UGent) and Leuven (KU Leuven).</p>
Geo-Olympics	<p>http://www.geo-olympiade.be/</p>	Mass communication, education	<p>Web-education tool, currently integrated in the Flemish Olympics for Natural Sciences</p>
	<ul style="list-style-type: none"> A geo-related software app development workshop A history geo-app ... <p>Nostalgeo, resulted from this event: http://www.appforeurope.eu/article/nostalgeo</p>	Education	<p>The event took place on 26th of April 2013. A 5-hour long hackathon, where apps (web or mobile) were developed with a focus on Geodata in Open Data format. The event was co-organised by Agoda, GEO ICT, Agoda, App Alliance, the Open Knowledge Foundation, Uitslag, MobileMonday Brussels, with support from different Geo-authorities.</p>
	<p>Awards for the AM/FM-GIS Belux and FLAGIS projects:</p> <p>http://www.amfmgis-belux.be/ and http://www.flagis.be/</p>	Education, personal communication	<p>On 28 May, the first edition of GeoSpatial Awards held at the Palais des Colonies of Ixelles. The wards aims to reward innovative GIS implementations, usefulness of spatial data acquisition as well as efficient partnerships to improve the "taking geospatial conscience" in a region or an industry.</p>

			<p>information between all stakeholders in the areas of manufacturing automatic card (AM: Automated Mapping), management of inputs (FM: Facility and GIS to encourage users to introduce these techniques in administrations and businesses.</p>
<p>Special day at the GeoExpo 2013</p> 	A seminar for students	Personal communication, education	<p>A special open day for secondary schools students. More is available here: http://www.geoexpo.be/welcome.php</p>
<p>Cartoon about the Land Surveyor</p>	A cartoon, integrated in the Magazine of Surveyors	Mass communication	
<p>Joint intersectoral meeting</p> 	IT students PXL acquainted with geo-ICT sector Flanders	Personal communication	<p>An event in PHL Congress met private and government organizations from the geo-ICT sector with students from the College for applied informatics PXL. During roundtable discussions professionals suggested innovative geo-ICT functionalities. The students were introduced to the registration of localization data (using satellites, aerial photography or mobile mapping) and services based on geographic information and positioning (as geomarketing). There have been also an emphasis on the development of smartphone applications for workstation use by e.g. fire brigade and the town of Hasselt: Digitaalboek.</p>

Gap Analysis based on perception



Gap Analysis: mismatches

- Imbalance of the **number of students** and demand of the labour market
- Discrepancy between expectations of job market (employers) and student's **professional abilities** (qualification, knowledge, practical skills etc.), (lack of motivation for life learning)
- Variance between the **fast technological development** and delayed improvement of study curriculums
- Dissonance between narrow geo-specialized study programmes and **multi-disciplinary needs** of market
- Inadequacy between locally educated students and **internationally** widening market (internationalization of the geo-market)
- Analysis of the gap with the Analytical Hierarchy Process (Saaty)

Beyond Limits

Recommendations Beyond Limits

- New Cadastral dimensions requires different skills
 - Surveyors are architects of transformation and brokers of the transition process
 - Discuss the new dimensions in the pyramid
 - Analyse the gap, apply awareness raising
 - Develop of adapt (new) curricula & Life long learning
- Societal reinvention a transformation of society
 - Young skilled potential
- New semantics and languages and a new framework of understanding
 - Change is the new normal
- Europe as platform
 - Cross border skills exchange

Events



- **Workshop 3 + Partner Meeting 3: Vilnius, Lithuania 6-7 May 2015**
- **Joint Event (Final conference): Brussels, Belgium End August / Begin September 2015**



Paula Dijkstra – Project Manager

www.geoskillsplus.com
paula.dijkstra@kadaster.nl



