行政院及所屬各機關因公出國人員報告書

（出國類別：國際會議）

參加「2016 年地理空間世界論壇(Geospatial World Forum)國際研討會)」

目　錄

參加「2016 年地理空間世界論壇(Geospatial World Forum)國際研討會)」出國報告

壹、 會議緣起與出國目的

2016 年於荷蘭鹿特丹市舉辦的第八屆地理空間世界論壇(Geospatial World Forum; GWF) 是地理空間產業及其應用領域專業人士參與的國際性會議。該論壇是地理空間社群所建立的國際性平臺，提供來自不同國家地理空間領域專業人士一個互相學習、經驗分享、建立全球高層決策及社會網絡的機會。會議旨在分享市場豐富情報與技術發展趨勢，也分享來自各國的成功案例和其所建置的地理空間技術。

此外，地理空間世界論壇自 2011 年起，即透過該平臺頒發 Geospatial World Forum Award，以表彰在公共安全、環境、農業、交通運輸管理等領域運用地理空間技術以創新服務有卓越貢獻者。

行政院環境保護署（以下簡稱本署）為國土資訊系統之環境品質分組，國家發展委員會國土資訊系統推動小組已通過「落實智慧國土之國家地理資訊系統發展政策」，行政院「創意臺灣 ide@Taiwan2020 政策白皮書」並將智慧國土納為五大構面之一，其中新興資通訊及地理資訊技術應用發展已列為國家重要發展政策。考量歐盟國家發展資通訊及地理資訊應用，於國際間屬領先地位，本署業於 104 年底以本署環境即時通 APP 參加第八屆地理空間世界論壇舉辦「Geospatial World Forum Award」獎項，為瞭解及掌握國際間空間資訊及資通訊科技發展與應用新趨勢，並學習荷蘭發展智慧感測器及資訊平臺應用經驗，爰派報告人參與本次國際會議及參訪阿姆斯特丹智慧城市體驗實驗室，以利後續推動地理資訊系統及感測資訊平臺建置。

貳、 出國行程

日　期	工 作 內 容 概 要
5月21日(六)	啟程臺北（台北時間 22:05）
5月22日(日)	抵達阿姆斯特丹 （當地時間 09:15） 由阿姆斯特丹前往鹿特丹
5月23日(一)	於鹿特丹世界貿易中心參加 2016 年地理空間世界論壇國際研討會。第 1 天議程，包括報到、空間資訊平臺賦予工作流程與系統整合、空間內容的商業模式與智慧型定位服務的商業機會等。
5月24日(二)	於鹿特丹世界貿易中心參加 2016 年地理空間世界論壇國際研討會。第 2 天議程，包括大數據平臺的高效率空間資料存取 、智慧城市及系統整合等。
5月25日(三)	於鹿特丹世界貿易中心參加 2016 年地理空間世界論壇國際研討會。第 3 天議程，包括空間資訊與社會經濟之影響、環境與氣候變遷、感測、智慧城市及頒獎晚宴等。
5月26日(四)	於鹿特丹世界貿易中心參加 2016 年地理空間世界論壇國際研討會。第 4 天議程，包括空間資訊與社會經濟之影響、建構存取歐洲空間資料的單一架構、挖掘地球觀測資料價值等。
5月27日(五)	參訪阿姆斯特丹智慧城市體驗實驗室。
5月28日(六)	自阿姆斯特丹返臺北 （當地時間 14:15）
5月29日(日)	抵達臺北（台北時間 13:05）

參、 會議與參訪過程

一、 參加地理空間世界論壇研討會

　　2016 地理空間世界論壇國際研討會議於 2016 年 5 月 23 日至 25 日在荷蘭第二大城鹿特丹市的世界貿易中心舉行。本屆參與論壇的國家估計達 90 個以上，與會人士包含公部門、非政府組織、教育領域專家學者以及地理空間相關產業人員等，2016 年參加人數逾 1,000。本署開發之「環境即時通 APP」以「Breathe Easy & Live Better - Environment Info Push App」之創新服務，榮獲本屆地理空間應用卓越獎 (Geospatial World Excellence Awards–2016)，由本署監資處黃俊銘分析師代表領獎，議程與會議資料詳如附錄。

　　本次國際研討會議計為期 4 日，會議過程如下：

（一）5 月 23 日

　　第 1 天議程討論議題主要包括空間資訊平臺賦予工作流程與系統整合、空間內容的商業模式與智慧型定位服務的商業機會等。前者主要討論系統整合與解決方案，及如何於未來五年內扮演主導地位與趨勢，而在智慧型定位服務的商業機會（Business opportunities of Location Intelligence）的議題部分，根據國際電信聯盟（ITU）的報告指出，全球有將近一半的人口將使用網際網路，在 2015 年底則有超過 70 億支行動裝置。全球不斷增加的網際網路和行動裝置普及率，使得適地性的服務成為民眾日常生活的重要一部分。如今，定位資訊已經成為網際網路廣告商的動力，媒體、廣電和行動應用業者也經由分析消費者的上網行為，來提供在地性相關的服務和行銷決策，其商業模式已由企業對企業(Business-to-Business;B2B) 演變成企業對消費者(Business-to-Customer;B2C)。例如，大規模的新聞匯聚業者，可以透過以地理位置為基礎的輔助性預測模型，提供適合使用者的新聞內

容。目標行銷業者則運用地理位置資訊提供相關廣告給消費者，並讓廣告買主清楚地衡量目標廣告的影響。以智慧型定位服務為基礎的破壞性商業模式將延續地理空間產業新的自動化層面，機器學習、大數據分析和物聯網帶來的智慧型定位服務將成為空間地理資訊產業未來的優勢。

（二）5月24日

第 2 天議程，主要包含探討大數據應用與其平臺的高效率空間資料存取，以及智慧城市及系統整合等。在應用大數據之商業分析與智慧應用議題，主要在討論他們智慧型定位服務的重要性，企業界已經開始在他們的商業模式中採用智慧型定位服務和預測分析。智慧型定位服務可以應用於分析和決策，其地理資訊系統(Geospatial Information System;GIS)的應用範疇則包括企業資源規劃(Enterprise Resource Planning; ERP)和客戶關係管理(Customer Relation Management; CRM)提供空間有關的意見，其分析結果有助於優化其業務決策，如設立新的專賣店、經銷商、分公司、選址等，或者是分析客戶購買習慣和產出客戶有關的人口統計數據。在保險和金融服務業的應用部份，則已將智慧型定位服務應用於模擬金融風險。

（三）5月25日

第 3 天議程，包括空間資訊與社會經濟之影響、環境與氣候變遷、感測、智慧城市及頒獎晚宴等。

地理空間資訊對經濟的影響，在過去 10 年，已有來自澳洲、紐西蘭、美國、加拿大、愛爾蘭、英國、印度和其他國家等，提出地理空間資訊發展對其經濟所造成影響的評估及研究，其研究不僅突顯地理空間資訊的重要地位，同時也驗證地理空間資訊對社會和經濟所產生的積極作用，並也提供其對社會和經濟產生影響的數據。

地理空間資訊對社會和經濟所持續產生影響的程度取決於其應用發展實力、地理空間內容製作和利用數據所提解決方案

的能力。研討會中也對發展中經濟體提出建議，其可以從發展地理空間資訊的應用能力，從而進一步提高社會經濟增長的利益。會議討論並舉出實例:加拿大運用空間資訊使房地產專業人士從其使用之 GIS 技術中受益；德國官方運用統計數據結合地理資訊輔助於評估經濟增長、現狀及未來在區域發展的變化；日本的地理空間資訊局（GSI）則正運用地理空間技術來計算商業與產業的經濟價值；南非則利用價值鏈分析來確定的地理空間資訊對公共部門的影響。

環境與氣候變遷議題部分，氣候變化、平流層臭氧耗損、生物多樣性的喪失、水文系統的變遷和淡水的供應、糧食生產系統的已造成全球環境與人體健康的威脅。地球生態系統的相依性和環境對人的影響，帶給政府、企業及科學家極大的挑戰及面對複雜的環境問題，包括環境保護與恢復自然環境等。地理空間技術在面對每一環境問題發生時，其匯聚與分析能力成為因應這些挑戰的重要工具。在環境與氣候應變計畫，則應積極將地理空間技術應用在環保領域，並透過其它國家成功的案例及研究來支持政策和決策。

晚間，主辦單位為了表彰和鼓勵運用地理空間技術所提出的創新和卓越貢獻，特舉辦晚宴頒發地理空間應用卓越獎、地理資訊技術創新獎及地理空間政策執行獎等獎項予獲選團體及人士。本署開發之環境即時通 APP 榮獲地理空間應用卓越獎，由報告人代表領獎。

（四）5月26日

第 4 天議程主要參與研討的議題為利用地球觀測數據的價值，藉由波羅的海航運、林業及基礎管道管理業等案例，探索地球觀測數據的運用價值，並以下列 3 例說明其具體經濟效益:

1. 波羅的海航運業：在瑞典及芬蘭的航運業，使用衛星影像來輔助破冰船，從結冰的海面開闢直行航道來協助船舶運

輸貨物，運用衛星影像可以讓破冰船以高速的方式在海上維持航線的順暢，有效降低運輸時間及不確定性，對港務上下貨物運輸產生重大的影響，依據會中簡報顯示，每年在芬蘭和瑞典運用衛星雷達所產生的經濟價值約 2,400 萬~1 億 1,600 萬歐元間，顯示衛星影像所帶來可觀的經濟效益。

2. 瑞典森林管理業：瑞典森林局使用衛星光學影像觀察森林非法砍伐及管理私有森林，其模式對林業及生態旅遊產生積極影響，依據會中簡報顯示，瑞典運用衛星雷達所產生的經濟價值約 1,610 萬~2,160 萬歐元間。

3. 荷蘭基礎管道管理業：地層下陷在荷蘭是極為常見的問題，地表可能有數年水平差異在 1 公尺範圍，由於此因素會導致天然氣管道及輸送水管破裂，荷蘭業者運用衛星影像來偵測地表天然氣管道及輸送水管的細微動作，以使管道維護具有極大的成本效益。依據會中簡報顯示，荷蘭業者運用衛星雷達所產生的經濟價值約 1,450 萬~1,760 萬歐元間。

二、參訪智慧城市體驗實驗室

智慧城市體驗實驗室(The Smart City Experience Lab)由阿姆斯特丹智慧城市計畫所創立。在這個實驗室中，有許多包含能源、運輸和氣候等不同主題的城市解決方案，其創新顯示其城市面臨的挑戰。

阿姆斯特丹智慧城市實際是一個由民間與政府共同組成的團隊，該計畫提供一個智慧城市創新專案的平臺，透過民間組織將專案落實到民眾生活，是一個民眾可以分享創意的平臺。此行由 Freek de Bruijn 先生說明其實驗室成立之目的，在有限的實驗室空間內陳列其專案相關創意模型，極具有啟發創意之意涵。

肆、 結論與建議

一、歐盟國家致力於減少碳排放及提高能源使用效率，運用政府開放資料、大數據分析、感測網及地理空間等技術，在交通、氣候、運輸、能源等方面達到最好使用效率上，已有許多成功解決案例，後續可參考相關領域之應用。

二、目前驅動空間地理資訊發展的關鍵技術包括整合性的感測網路、跨平臺感測器、整合型之處理分析平臺及系統整合及解決方案等。本署刻正辦理感測資料蒐集、檢核及展示共用平臺之建置，建議本署未來可持續蒐集或參考前述關鍵技術應用於平臺建置。

三、氣候變遷,臭氧耗損,生物多樣性逐漸消失等對地球環境對人體健康都造成危害，地球生態系統對於環境及人類有重大影響，並給予政府,企業及科學家極為複雜的挑戰。應用地理空間技術於整合分析，已成為因應這些挑戰的重要工具。本次研討會在環境與氣候應用領域，已提出一些支持政策和決策過程的案例，可供後續參考。

四、歐盟國家積極發展智慧城市，其本質係運用即時數據的收集及智慧處理，應用於各領域，以持續支持人口成長和城市擴張。智慧城市解決方案結合了地理空間技術形成城市的核心技術平臺，可以增加速度,精度和輔助政府施政工作重點。建議本署未來可持續導入相關地理空間技術，應用於智慧環境及輔助決策應用。

五、本署首次參加地理空間世界論壇(Geospatial World Forum)國際研討會，並以「環境即時通 APP」參加應用評比，榮獲2016 年地理空間應用卓越獎。建議未來仍可持續參與地理空間技術相關研討會，以擴大多方交流與學習。

六、荷蘭阿姆斯特丹的智慧城市計畫，除了建置感測器外，也釋出對應的開放政府資料，並藉由公民參與與規劃，發揮創意，以達成共同的目標。建議本署未來地理空間應用也可持

續運用開放資料，並結合公民參與，發揮創意應用。

伍、 會議與參訪照片

圖 1 會議地點-鹿特丹世界貿易中心

圖 2 會議報到處

圖 3　頒獎典禮播放本署獲獎環境即時通 APP 簡介

圖 4　報告人代表領獎

圖 5　會議展場

圖 6　會議展場攤位

圖 7 參訪智慧城市體驗實驗室

圖 8 解說人員 Freek de Bruijng 介紹實驗室

附錄　會議資料

GEOSPATIAL WORLD FORUM

THEME WHERE'S THE MONEY?
DISRUPTIVE BUSINESS MODELS

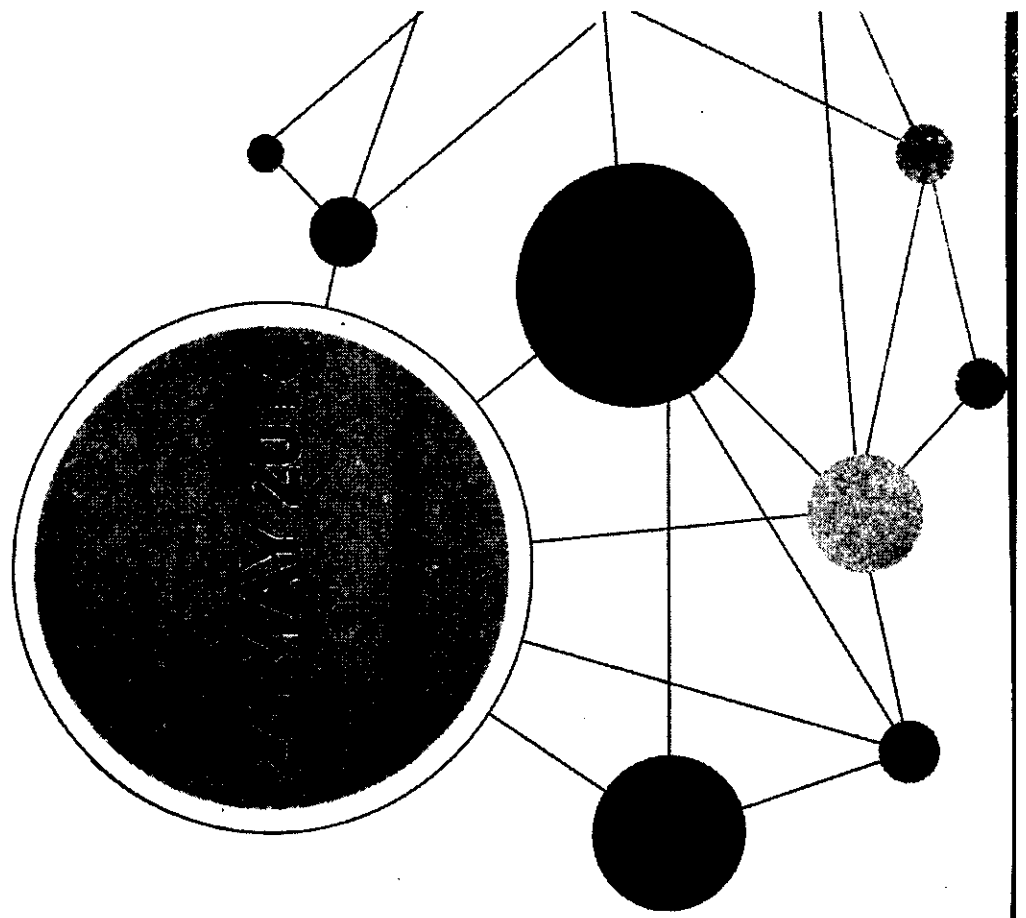23-26 MAY 2016, WORLD TRADE CENTER, ROTTERDAM, THE NETHERLANDS
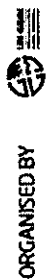
PROGRAMME GUIDE

#GWF2016

www.geospatialworldforum.org

SPECIAL PROGRAMME

OSGeo 10th Year Anniversary

| 24 MAY 2016 | 0900-1730 HRS | HALL: LLYOD'S LOBBY |

HOSTED BY OSGeo

0900-1100
- Workshop: OSGeo for INSPIRE/ INSPIRE for OSGeo
- "The INSPIRE ARE3NA Re3ference Platform"
- OSGeo projects and INSPIRE (3 projects testimonials)
- Discussion / conclusions next steps

1100-1200
- OSGeo celebrates its 10th anniversary
- OSGeo – mission and vision for the next 10 years
- OSGeo Live CD
- OSGeo for all – geo education for everybody
- Open Street map – state of the map

1200-1300
- Workshop OSGeo Europe
- Role and need of a European Local Chapter of OSGeo
- Discussion and next steps
- FOSS4G – Bonn why you should come?

1300-1500
- OSGeo Projects
- Examples how to start with OSGeo software in your organisation
- Benefits of working with open source based solutions

1500-1600
- OSGeo, what's in it for you?
- How to join, what to expect, how to help, how to benefit, why you?

1600-1730
- OSGeo Projects
- Examples how to start with OSGeo software in your organisation
- Benefits of working with open source based solutions

WORKSHOP

Towards a sustainable operational system for land cover classifications that meets varied user needs

| 24 MAY 2016 | 0900-1730 HRS | HALL: VAN OLDEBARNEVELD |

ORGANISED BY

This is a small, by-invitation workshop to brainstorm new ideas about the future of land cover dataset generation. It is a look-ahead, mostly non-technical, discussion-oriented activity where we will explore fresh ideas—and use them to identify concrete concepts to address the outlined problems.

AGENDA

Review from Day 1 outcome

Group discussions
- Considering challenges, coordination areas, approaches, and others
- Identify and describe a system that best meets the Vision
- Groups presentations of discussions outcomes
- Discussions and wrap up

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SYMPOSIUM

Geo-Powered Smart Cities

0900-1100 hrs: Innovative Regulations and Policies for Smart Cities

MODERATOR

Rob van de Velde
Director, Geonovum, The Netherlands

SPEAKERS

Dan Palmer
Head of Market Development, BSI Group, United Kingdom
Standards for Smart Cities and Infrastructure

Andy Wilson
Business Development Director, Ordnance Survey International, United Kingdom
The best policy decisions come from spatially connected government

Wolfgang Jörg
ViennaGIS Coordinator, City of Vienna, Austria
The spirit of Open Geo Government Data and basemap.at

Marieke Fijnvandraat
Senior Manager Strategy, PwC, The Netherlands
Smart City: From vision to execution!
Towards a smart public space by integrating smart city and urban development programs

Deb Jyoti Pal
Director - Geospatial Innovative Solutions, Consilium, UAE

1100-1200 hrs: Networking Tea/Coffee break and Visit to Exhibition

1200-1300 hrs: Networking lunch

SYMPOSIUM

Geo-Powered Smart Cities

1300-1500 hrs: Urban Development for Smart Cities

MODERATOR

Alan Bristow
Director of Road Space Management, Transport for London, United Kingdom

SPEAKERS

Abdulla Mohamed Alkhaddelm
Director of Project Department, Fujairah Municipality, UAE
Geospatial initiatives by Fujairah Municipality in UAE

Steve Grant
Product Manager - Local Government, Trimble Navigation, United States
Urban Development for Smart Cities - Looking at Cities through the Lens of Geospatial Data Analytics

Christian Hoffmann
Marketing Manager Aerial, Photogrammetry and Remote Sensing Solutions, Trimble, Germany

Victor Khoo
Deputy Director, Land Survey Division, Regulatory Cluster, Singapore Land Authority, Singapore
3D national map to support Smart Nation initiative

Jan Blaauboer
Senior Sales Director Government Europe, Middle East and Africa, Bentley, The Netherlands
A smart city starts with smart design

Andrew Dingjan
Director, Australian Urban Research Infrastructure Network, Australia
Geospatial data analytics and visualisation for urban developments

1500-1600 hrs: Networking Tea/Coffee break and Visit to Exhibition

SYMPOSIUM

Geo-Powered Smart Cities

24 MAY 2016	0900-1730 HRS	HALL: LEEUWEN

1600-1730 hrs: Governance and Safety for Smart Cities

SPEAKERS

Albert Seubers
Head of Global Strategy IT in Cities, Atos International, The Netherlands
Citizen engagement in Safety, transport, traffic, social and healthcare in smart cities

Chris Zevenbergen
Professor of Flood Resilience of Urban Systems, UNESCO-IHE, The Netherlands
Flood resilience system for cities in The Netherlands

Pascal Lory
Head of Mission CNIG, French National Council for Geographic Information, France
Smart Data Surrounding Pipes: Exchanging Of "Very Large Scale Core Street Mapping" to Prevent Damages on Underground Pipelines during Pipe-Works

Ravi Chopra
Head - Geospatial Lab, Indian Institute for Human Settlements, India
Geospatial Platform for Slum Information Management and Analytics

Wei Sun
Director of International Marketing, Twenty First Century Aerospace Technology (21AT), China
Intelligent City Management - Based on Land Cover Feature Changes Detected by Satellite Imagery

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SEMINAR

Business Analytics & Location Intelligence

24 MAY 2016	0900-1730 HRS	HALL: PENN 2

0900-1100 hrs: Location Analytics for Businesses

MODERATOR

Dr. Vanessa Lawrence CB
Senior Strategic Global Geospatial Advisor to Governments and Inter-Governmental Organisations, United Kingdom

SPEAKERS

David Lapp
Sr Principal Product Manager, Oracle, United States

Jayant Sharma
Director Product Management, Oracle, United States
Spatial Visualization in Analytics Apps (on-premise, cloud, or mobile)

Tony Boobier
Insurance Leader EMEA Business Analytics, IBM, United Kingdom
Spatial Analytics in the Era of Cognitive Computing - And How Weather Data Makes A Difference

Bhoopathi Rapolu
Head of Analytics – EMEA, Cyient, United Kingdom
The Disruptive Business Models in Spatial Analytics driven by Big Data and IoT

Matt Gentile
Principal & Analytics Leader, Deloitte, United States
How Location Intelligence supports enterprise level decision making

Jacques Wessels
Chief Executive Officer, FlowCentric Technologies, South Africa

1100-1200 hrs: Networking Tea/Coffee break and Visit to Exhibition

1200-1300 hrs: Networking lunch

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SEMINAR
UAV

24 MAY 2016	0900-1500 HRS	HALL: PENN 1

0900-1100 hrs: Regulations and Collaborations

MODERATOR

Jakub Karas
Director, Czech Unmanned Aerial Alliance, Czech Republic

SPEAKERS

Andrew Charlton
Executive Director, Drone Alliance Europe, Switzerland
Rules and Regulations – A Necessary Evil?

Oliver Heinrich
Lawyer/Partner, BHO Legal, Germany
Legal situation for using drones in Germany

Michael Larsen
Head of UAS, Hans Christian Andersen Airport, Denmark
The UAV ecosystem in Denmark - new strategies and regulation for future growth

Brooke Tapsall
Managing Director, AtlasGIS, United Kingdom
Airport UAV - Open your skies

Patrick Lohman
Vice President of Partnerships, PrecisionHawk, United States
Building an Open Network of Geospatial Solutions for Aerial Data Collectors

1100-1200 hrs: Networking Tea/Coffee break and Visit to Exhibition

1200-1300 hrs: Networking lunch

SEMINAR
Business Analytics & Location Intelligence

24 MAY 2016	0900-1730 HRS	HALL: PENN 2

1300-1500 hrs: Location Analytics in Insurance & Financial Services

Jean-Pierre Krause
Chief Risk Engineering Officer, Europe, Middle East & Africa, Zurich Insurance Group, Switzerland
Geospatial data's potential to improve natural hazard risk management

Tina Thomson
P&C Business Partner, Amlin Underwriting Modelling, Amlin plc, United Kingdom
Natural catastrophe and geospatial intelligence – better Management Information for localised events

Jürgen Schimetschek
Geo Risks Manager, Munich Reinsurance Company, Germany
Geointelligence for Business Innovative Natural Hazards Assessment Network and Services

Aren Haddeler
CRM Data Mining & Optimization Vice President, Akbank, Turkey
Geographic Infrastructure and Analysis in CRM

Dennis Weinbender
Global Risk Management Department, Commerzbank, Germany
Using Geospatial Data and Machine Learning to Detect Fraud Patterns

Colin Nugteren
Chief Analytics Officer, DirectPay, The Netherlands
Location data and Credit Management

1500-1600 hrs: Networking Tea/Coffee break and Visit to Exhibition

1600-1730 hrs: Smart Data Management for Businesses

MODERATOR

Francesco Pignatelli
Programme Manager, Digital Earth and Reference Data Unit, Joint Research Centre, European Commission

SPEAKERS

Kumar Navulur
Director, Next Generation Products, DigitalGlobe, United States

Antal Guszlev
Geo Data Specialist, Booking.com, The Netherlands

Etienne Lamort De Gail
Chief Executive Officer, IMAJING, France
Why Vertical Geospatial System Integration is Key to Successful Data Strategy?

Niels Bourgonjen
Business Manager Location Intelligence, Geodan, The Netherlands
Cloud-based Location Intelligence as the gateway to competitiveness

SESSION

Geo-Enabled Water Industry

24 MAY 2016	0900-1100 HRS	HALL: GOUDRIAAN 1

MODERATOR AND LEAD SPEAKER

Arjen Frentz
Committee on Drinking Water, European Federation of National Drinking Water and Waste Water Associations
(EUREAU), The Netherlands
EU-legislation: Geospatial planning and the water sector in Europe

SPEAKERS

Slavco Velickov
Industry Sales Director, Europe, Bentley Systems, The Netherlands
Improving efficiency of water utilities: practical examples

Philip Briscoe
Marketing Director, Rezatec, United Kingdom
Using Earth Observation to map, measure and monitor peatland for South West Water in the UK

Rob Eijsink
Steering Committee Secretary Soil and Infrastructure, Association of Drinking Water Companies (VEWIN),
The Netherlands
Drinking water supply and the forthcoming Dutch approach of planning underground activities

Melanie Abuel
Asset Information Management Systems Manager, Manila Water Company, Philippines
The Value of Systems Integration through an Enterprise Asset Management System in a Water Utility GIS

Anne Barendregt
Operations Manager, Vitens Evides International, The Netherlands
GIS for asset registration – Case studies from African water utilities

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SEMINAR

UAV

24 MAY 2016	0900-1500 HRS	HALL: PENN 1

1300-1500 hrs: Technology and Practices

MODERATOR

Andrew Charlton
Executive Director, Drone Alliance Europe, Switzerland

SPEAKERS

Feye de Zwart
Chief Executive Officer, Dutch Drone Company, The Netherlands

Willem-Jan Boer
Business Developer, Dutch Drone Company, The Netherlands

Philipp Amon
Manager ULS Operations, RIEGL Laser Measurement Systems GmbH, Austria
World's first UAV-based profiler for laser hydrography

Jakub Karas
Director, Czech Unmanned Aerial Alliance, Czech Republic
Modeling Prague Castle with UAS

Harm Bartholomeus
Assistant Professor, Wageningen University, The Netherlands
Investigating Tropical Forests with Unmanned Aerial Vehicles

Victor Hugo Montiel Rojas
Geoprocessing Unit Manager, ITAIPU BINACIONAL, Paraguay
Forecasting Damage in Flood Areas with UAV

Ariel C. Blanco
Associate Professor, University of the Philippines, Philippines
Comparative Assessment of Unmanned Aerial System (UAS) Outputs and LiDAR Data

SESSION

System Integration

| 24 MAY 2016 | 0900-1100 HRS | HALL: GOUDRIAAN 2 |

MODERATOR

Janusz Dygaszewicz
Director, Central Statistical Office, Poland

SPAEKERS

Leif Granholm
Senior Vice President, BIM Ambassador - Structures Division, Trimble, Finland

Janusz Dygaszewicz
Director, Central Statistical Office, Poland
Point based statistical framework - a foundation for high quality spatial statistics

Thorsten Reitz
Founder/CEO, wetransform GmbH, Germany
Democratizing INSPIRE: INSPIRE as a Service

Pekka Latvala
Research Scientist, Finnish Geospatial Research Institute, National Land Survey, Finland
Using the Data Exchange Layer of the Finnish National Architecture for Digital Services for Transporting WFS and WMS Queries

Veneta Ivanova
Project Manager, Fraunhofer IGD, Germany
Cloud-based open solutions for public administrations

Mihai Ionita
GIS Specialist, TeamNet, Romania
Integrated Digital Platform for collaborative work regarding the delineation of the protected areas in Romania, including Natura 2000 sites

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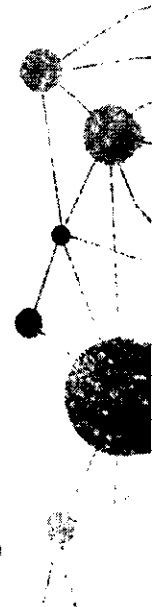
WORKSHOP

High-Performance Spatial Data Processing on Big Data Platforms

| 24 MAY 2016 | 0900-1030 HRS | HALL: INSIDE EXHIBITION (PRESENTATION AREA 1) |

This interactive workshop will take attendees through the basics of using Oracle Big Data Spatial and Graph on the Hadoop platform. After an overview of the solution architecture and typical process flows participants have the opportunity to either follow a number of practical demos or even try out samples on their own Laptops using a pre-built virtual environment.

FACILITATORS

Hans Viehmann
Product Manager EMEA, Oracle, Germany

Albert Godfrind
Spatial Solutions Architect, Oracle, France

WORKSHOP

## Introduction to Hexagon Smart M.Apps

| 24 MAY 2016 | 0900-1030 HRS | HALL: INSIDE EXHIBITION (PRESENTATION AREA 2) |

This workshop introduces M.App Portfolio, a powerful new ecosystem to create and run Hexagon Smart M.Apps. Participants will learn the basics of M.App Studio, an interactive web framework for designing and building Hexagon Smart M.Apps; how to use M.App Chest, a Cloud-based application to store and manage big geospatial data and easily distribute with web services; and the procedures to place an App into M.App Exchange, the Cloud-based marketplace where individuals and organizations can experience, purchase and use Hexagon Smart M.Apps.

FACILITATOR

João Pedro Fernandes
EMEA Presales Manager, Hexagon Geospatial, Portugal

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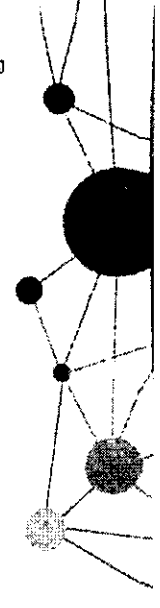
WORKSHOP

Geospatial Policies and Legal Issues

| 24 MAY 2016 | 1300-1730 HRS | HALL: GOUDRIAAN 2 |

HOSTED BY

1300-1500 hrs: Geospatial Policies and Legal Issues – Part 1

MODERATOR

Dr. Ingo Baumann
Partner, BHO Legal, Germany

SPEAKERS

Noud Hooymans
Head of Department of Policy on Geo-information, Directorate for Spatial Development, Ministry of Infrastructure and the Environment, The Netherlands
Open Data in the Netherlands: from policy to implementation to new policy

Gerhard Delfers
Partner, BHO Legal, Germany
Open geospatial data – selected legal issues

Peter Lelihn
Director, Business Development and Commercialization, Data 61|CSIRO, Australia
Industry participation in the development of a structured framework for open data quality and availability in Australia

1500-1600 hrs: Networking Tea/Coffee break and Visit to Exhibition

1600-1730 hrs: Geospatial Policies and Legal Issues – Part 2

Andreas Veispak
Space Data for Societal Challenges and Growth, DG Internal Market, Industry, Entrepreneurship and SMEs,
European Commission
Maximising the socio-economic potential of EO data: what can the public sector do?

Clare Hadley
Policy & Engagement Manager, Ordnance Survey, United Kingdom
Open is not enough

Michael Bültmann
Managing Director, HERE Deutschland, Germany
Open data - economic relevance and reality - views from a location intelligence provider

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WORKSHOP

UN-GGIM: Europe

| 24 MAY 2016 | 1300-1730 HRS | HALL: GOUDRIAAN 1 |

The purpose of the workshop is to find out about UN-GGIM: Europe and the work it is focusing on, to engage with the Regional Committee, and to discover how geospatial information can be used to inform, understand and address key global challenges.

FACILITATOR

Carol Agius
UN-GGIM: Europe Administrator, Eurogeographics, Belgium

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WORKSHOP

What's Hot and What's Not in the Geospatial Marketspace of the USA – how to make money there?

| 24 MAY 2016 | 1300-1430 HRS | HALL: INSIDE EXHIBITION (PRESENTATION AREA 2) |

This workshop will provide a complete end-to-end account of what open source data and other data is available for the technical considerations of the USA-based marketplace government and commercial and will close with the background on how companies are able to thrive (or not) in this complicated market.

FACILITATOR

Dr. Lorraine Tighe
Marketing Director, Strategic Geospatial Solutions, United States

SESSION

Web GIS & Data Management

| 24 MAY 2016 | 1600-1730 HRS | HALL: PENN 1 |

MODERATOR AND LEAD SPEAKER

Dennis B. Batangan
Research Associate and Program Director, Institute of Philippine Culture, Ateneo De Manila University, Philippines
Electronic Medical Records (EMRs) as Data Inputs to Geospatial Mapping of Fever Patterns in Rural Health Units in the Philippines

SPEAKERS

Sumbangan Baja
Professor, Hasanuddin University, Indonesia
SUFIC-WilKom: A GIS-Based User Friendly System for Land Suitability Assessment of Foodcrops in South Sulawesi, Indonesia

Tae Wook Kang
Senior Researcher, Korea Institute Construction Technology, South Korea
BIM Perspective Definition Metadata for integrating Facility Management Data

Fred Wekesa
Geomaticist I, Kenya Electricity Generating Company, Kenya
GIS in Geothermal Resource Management - A Case Study of Olkaria Geothermal Project

INDIA BUSINESS SUMMIT

| 24 MAY 2016 | 1600-1800 HRS | HALL: VAN DER VEEKEN |

Hosted by Association of Geospatial Industries and Geospatial Media & Communications
Followed by Networking reception at 1800-1930 hrs

WORKSHOP

Benefits and key-features of the European Global Navigation Satellite System (E-GNSS) for the Geospatial World

| 24 MAY 2016 | 1300-1730 HRS | HALL: INSIDE EXHIBITION (PRESENTATION AREA 1) |

1300-1500 hrs: Part 1

Reinhard Blasi/GSA
Welcome and Official Opening of the Workshop

Alina Hriscu/GSA
Galileo - Status, developments and benefits for the geospatial users

Hans Dufourmont / EEA
Copernicus land service: hot spot monitoring with Very High Resolution (VHR) satellite imagery

Aitor Alvarez Rodriguez / GSA
European GNSS Service Centre - the unique interface with Galileo users

Pedro Pintor / ESSP
EGNOS for mapping - Guideline and best practise for your EGNOS receiver

Maurice Barbieri / President CLGE
Galileo and the strategic vision of the European Surveying Professionals

Laura van de Vyvere / M3 Systems Belgium
Winner of CLGE Young Surveyors Prize. Innovative use of Galileo's four frequencies to improve positioning in harsh ionospheric conditions

Bo Jonsson / Swedish Cartographic Society, BNB consulting
Benefits of Galileo for Swedish surveyors: strategy and status of implementation in the Swedish GNSS user community

| 1500-1600 hrs | Networking tea/coffee break and Visit to exhibition |

1600-1730 hrs: Part 2

Dr. Stratos Stylianidis / Geoimaging
LBS Augmented reality assistive system for utilities through Galileo and EGNOS

Pere Molina / Geonumerics
mapKITE: leveraging Galileo ES AltBOC, unmanned aircraft for 3D mobile mapping of corridors

TBC
EGNOS and Galileo benefits for ESRI services and solutions

Round table and conclusions

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POSTER PRESENTATIONS

24-25 MAY 2016	0900-1730 HRS	HALL: INSIDE EXHIBITION HALL

Asma Belaroussi
PhD Student, École normale supérieure de Kouba, Algeria
Geographic information integration in data warehouses

Ismat M. Elhassan
Professor, King Saud University, Saudi Arabia
Geometric Aspects of DEM from Stereo Satellite Imageries

Keltoum Benlaharche
PhD Student, École nationale supérieure d'Informatique (ESI), Algeria
A Spatial Competency Location System Based Ontology

Lalu Saheb
Post Graduate Student, Birla Institute of Technology and Science, Pilani, India
Strategic Facility Location and Management using ArcGIS

Lam Kuok-Choy
Lecturer, Universiti Kebangsaan Malaysia, Malaysia
The analysis of rainfall variability and response of oil palm phenology in tropical climate using MODIS vegetation index

Mustapha Hajji
Senior scientist, National Office of Electricity and Drinking Water (ONEE), Morocco
Using GIS and the RUSLE2 Model to create an index of potential soil erosion at the large basin scale and discussing the implications for water planning and land management in Morocco

Rafik Amara
PhD Student, École normale supérieure de Kouba, Algeria
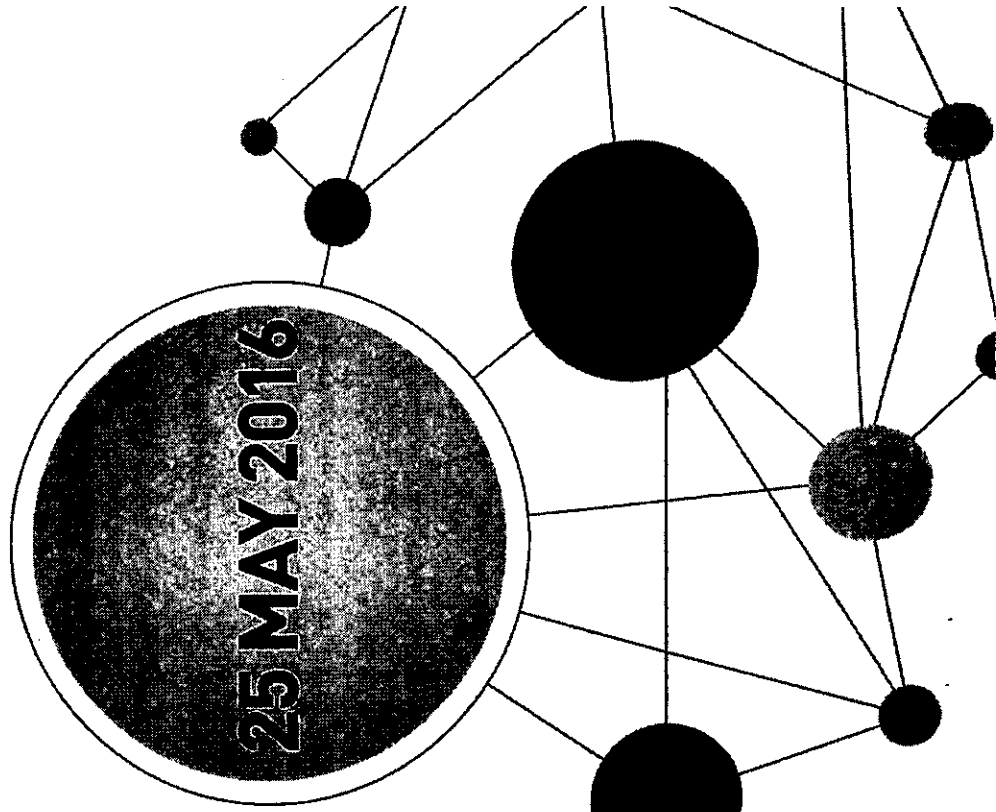*Online GIS for simulation of air traffic based on radar data*

Sujay Chokshi
Visiting Faculty, Cept University, India
A reflection on innovative approaches to improve social and physical development aspects using GIS technology in a Smart Village: Punsari (India)

Theofilos Papadopoulos
Student, Technological Educational Institution of Central Macedonia, Greece
An HTML tool for exploiting geospatial web services

Youcef Beskri
PhD Student, École normale supérieure de Kouba, Algeria
Automated vector conversion of drainage network

SYMPOSIUM

Impact of Geospatial Information on Society and Economy

| 25 MAY 2016 | 0900-1730 HRS | HALL: VAN OLDEBARNEVELD |

1300 - 1500 hrs: Role of Geospatial Information in attaining Economic Growth

CHAIRPERSON

Dr. Shailesh Nayak
Distinguished Professor, Ministry of Earth Sciences, Government of India

SPEAKERS

Bengt Kjellson
Director General, Swedish National Land Survey, Sweden
Drivers for change

Susanne Schnorr-Baecker
Head of Unit Regional Statistics, Indicator Systems, Federal Statistical Office, Germany
Geospatial Data for Measuring Economic Growth - What Can We Learn From Official Statistics

Priyadi Kardono
Head of Geospatial Information, Geospatial Information Agency, Indonesia
Role of One Map Policy to support the National Economic Growth

Geoff Sawyer
Secretary General, European Association of Remote Sensing Companies, Belgium
Exploiting the Value of EO Imagery

1500 - 1600 hrs: Networking Tea/Coffee Break and Visit to Exhibition

1600 - 1730 hrs: Role of Geospatial Information in attaining Economic Growth

Steve Brandwood
Executive Director of Engagement, GeoPlace, United Kingdom
Benefits of standardised core geographic reference data in the UK

Denise McKenzie
Executive Director, Communications and Outreach OGC United Kingdom

Damascene Munyangaju
Deputy Registrar of Land Titles, Rwanda Natural Resources Authority, Rwanda
Impact of Security of Tenure on land dispute resolution and sustainable economic growth

Michael Tischler
Director - National Geospatial Program, US Geological Survey, United States
U.S. National Geospatial Program

Alessandra Tassa
Remote Sensing Specialist, European Space Agency, Italy
Benefits expected from copernicus sentinel's data

SYMPOSIUM

Impact of Geospatial Information on Society and Economy

| 25 MAY 2016 | 0900-1730 HRS | HALL: VAN OLDEBARNEVELD |

SYMPOSIUM SPONSOR **⊕ Trimble.**

0900 - 0930 hrs: Opening Session

INTRODUCTORY ADDRESS

Megha Datta
Industry Manager - NGIO, Geospatial Media and Communications, India
Role of Geospatial Information on Society and Economy

KEYNOTE ADDRESS

Matt Delano
Business Area Director - Land Administration Solutions, Trimble, United States

0930 - 1100 hrs: Geospatial impacting Society and Economy: Consultants perspective

David Jevons
Partner, Oxera, United Kingdom
Quantifying the benefits of Geo services to consumers and businesses

Bagrat Bayburtian
Deloitte Advisory Director, Deloitte Transactions and Business Analytics, United States

Ed Kennedy
Senior Associate, Hickling Arthurs Low, Canada
Location, Location, Location? How Geospatial Information is Benefitting Canada's Economy

Dr. Zaffar Sadiq Mohamed-Ghouse
Director - NSW Business Development, Research & International Relations, CRC for Spatial Information, Australia
Experience of Australia and New Zealand's work on Economic Benefit on Value of Spatial Information

1100-1200 hrs: Networking Tea/Coffee Break and Visit to Exhibition

1200-1300 hrs: Networking Lunch

SYMPOSIUM

Geo-Powered Smart Cities

| 25 MAY 2016 | 0900-1500 HRS | HALL: LEEUWEN |

1300-1500 hrs: Mobility for Smart Cities

Alan Bristow
Director of Road Space Management, Transport for London, United Kingdom
Smart transportation system at TfL

Julie Alexander*
Director, Urban Development, Siemens Global Centre of Competence for Cities, United Kingdom

Ralph Klerkx
Program Manager, Smart Cities Program Sustainable Urban Accessibility and Mobility, TNO, The Netherlands
Sustainable Urban Accessibility and Mobility

Semida Silveira
Professor in Energy Systems Planning, Head of Energy and Climate Studies (ECS), KTH Royal Institute of Technology, Sweden
Improving urban mobility in Stockholm

Sreeja Arunkumar
Expert, Robert Bosch Engineering and Business Solutions Private Limited (RBEI), India
Geo-enabled solutions for improving urban road infrastructure management

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SYMPOSIUM

Geo-Powered Smart Cities

| 25 MAY 2016 | 0900-1500 HRS | HALL: LEEUWEN |

0900-1100 hrs: Innovations for Smart Cities

MODERATOR

Mark Reichardt
Chief Executive Officer, OGC, United States

SPEAKERS

Joris Goos
GIS Manager, City of Rotterdam, The Netherlands
Geo Information management 2025: GIS, BIM, 3D, Big Linked Open data and more from hypes to solutions

Carsten Roensdorf
Head of Advisory Services, Ordnance Survey, UAE
3D, BIM and IoT: scaling from buildings to (smart) cities

Michel Grothe
Consultant, Geonovum, The Netherlands
Smart Emission

Katalin Gallyas
Founder/CEO, Civic Tech Amsterdam, The Netherlands
CityOS.io

Ruben Rajagopalan
Innovation Lead - Smart Public Spaces, Philips Research, The Netherlands
Empowering cities with Connected Lighting

Wouter Brokx
Director, Imagem, The Netherlands
The Map of the Future

1100-1200 hrs: Networking Tea/Coffee break and Visit to exhibition

1200-1300 hrs: Networking lunch

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SEMINAR

Environment & Climate Change

| 25 MAY 2016 | 0900-1730 HRS | HALL: MEES AUDITORIUM |

STRATEGIC PARTNER

0900-1100 hrs: Geospatial Contribution in Environmental Policies

MODERATOR AND LEAD SPEAKER

Hugo De Groot
Policy Officer, Governance, Information & Reporting Unit, DG Environment, European Commission

SPEAKERS

Stefan Jensen
Head of SEIS and spatial data infrastructure (SDI), European Environment Agency, Denmark
Copernicus supporting European environmental agenda

Raymond Sluiter
Geo-ICT Specialist, Royal Netherlands Meteorological Institute, The Netherlands
The challenges of Big (geo-)Data for policy making

Richard Carne
Chief Digital Officer and Head of Digital IT, Met Office, United Kingdom
Geospatial software to meet the challenges of Meteorological modelling

Francesco Pignatelli
Programme Manager, Digital Earth and Reference Data Unit, European Commission, Joint Research Centre
Location-based integrated data approach to support energy efficiency policies

1100-1200 hrs: Networking Tea/Coffee break and Visit to exhibition

1200-1300 hrs: Networking lunch

1300-1500 hrs: Environmental Monitoring Application

Dave Benson
Regional Sales Director, DigitalGlobe, United Kingdom
Addressing Key Challenges in Environment with Space Technology

Rui Reis
Researcher, Directorate General for Territorial Development, Portugal
Development of a pilot application to monitor land cover changes over time and to characterize the territory

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SEMINAR

Environment & Climate Change

| 25 MAY 2016 | 0900-1730 HRS | HALL: MEES AUDITORIUM |

Reind van Oist
Business Developer, 2CoolMonkeys, The Netherlands
Measuring air pollution via smartphone app: Sarida postmen case study

Tatiana Delgado
Professor, Higher Polytechnic Institute Jose Antonio Echeverria, Cuba
An emergent Geospatial Digital Ecosystem based on IoT for environmental monitoring

Barry Fradkin
Senior Analyst, GeoAdaptive LLC, United States
Assessing the Impacts of Drought on Populations in Sub-Saharan Africa using Open-Geo-spatial Data

Xueming Li
Professor | Vice President, Liaoning Normal University, China

Shenzhen Tian
Doctoral Candidate, School of Urban and Environmental Sciences, Liaoning Normal University, China
Initial evolution of provincial-level environmental risks from the perspective of human settlements

1500-1600 hrs: Networking Tea/Coffee break and Visit to exhibition

MODERATOR

Mark Noort
Director, HCP International, The Netherlands

1600-1730 hrs: Climate Change

KEYNOTE SPEAKER

Dr. Shailesh Nayak
Distinguished Professor, Ministry of Earth Sciences, Government of India
Towards building Climate Services

SPEAKERS

Agata Walczak*
Programme Officer, Climate Parliament, United Kingdom

Tian Kuay Lim
Deputy Director (Climate Studies), National Environment Agency, Singapore
Climate Change Information System for Urban Heat Island Effect for Urban Planning - A Singapore Case Study

Patrick de Groot
General Manager, Imagem, The Netherlands
Analyse Green Spaces in The Netherlands

Rainer Malmberg
Key Account Manager – Geoinformatic, Geodata, iABG, Germany
Monitoring urbanization in Latin American Metropolitan Areas in order to evaluate potential urban risk areas

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SEMINAR

Sensors

| 25 MAY 2016 | 0900-1730 HRS | HALL: PENN 1 |

1300-1500 hrs: Operations and processing

Bram Van Loindersele
Co-Founder, MEET HET, Belgium
User case: Mobile mapping port infrastructure in a marina

Chen Jun
Professor/President of ISPRS, National Geomatics Centre, China
GlobeLand30

Andy Hanna
Vice President Sales and Business Development, Astro Digital, United States
The force awakens – the emergence of APIs and platforms for remote sensing

Francesco Nex
Assistant Professor, University of Twente, The Netherlands
Oblique imagery

Sarah Jane D. Samalburo
Chief Science Research Specialist - Data Processing Component, Department Of Science And Technology/UP DREAM-Phil LiDAR 1 Program, Philippines
The Utilization of Very High Resolution (VHR) Satellite Imageries and LiDAR Derived Datasets for Rapid Damage Assessment: Response and Rehabilitation for Typhoon Haiyan, Philippines' Experience

1500-1600 hrs: Networking Tea/Coffee break and Visit to exhibition

1600-1730 hrs: Business and Policy

Gunter Schreier
Deputy Director - Business Development & Copernicus, German Aerospace Center (DLR), Germany
Copernicus – Opportunities and Challenges in Europe's eyes on Earth

Iosub Cristian
Head of GPS and Mobile Mapping, GAUSS, Romania
The value of employing mobile light detection and ranging (LIDAR) technology to enhance airport and airfield knowledge

Marco van der Kooij
Chief Technical Officer, MacDonald Dettwiler and Associates (MDA), Canada
A Business Case for Archived SAR Data

Michel Rademaker
Deputy Director Market and Operations, The Hague Centre for Strategic Studies, The Netherlands
'Earth Observation on the Map' Report: Earth Observation landed

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SEMINAR

Sensors

| 25 MAY 2016 | 0900-1730 HRS | HALL: PENN 1 |

HOSTED BY **isprs**

0900-1100 hrs: New sensors and platforms

MODERATOR

Ian Dowman
Emeritus Professor, University College London, United Kingdom

SPEAKERS

Luca Perletta
Manager, Sales Engineering, DigitalGlobe, United Kingdom
Sub 50cm - the new VHR Standard

Fabrizio Pirondini
Chief Executive Officer, Deimos Imaging, Spain
UrtheCast Constellation: The world's first fully-integrated Optical and SAR commercial constellation of EO satellites

Benoît Larouche
Advanced Systems, Space Flight Laboratory, Canada
High Performance Multi-Spectral Observation and Real-Time Video Sighting Enabled by NEMO-HD

Simone Placidi
Business Development Manager, MetaSensing, The Netherlands
Insights into new developments of advanced airborne SAR sensors for Earth Observation

Randy Rhoads
Geospatial Industry Manager, Harris, United States
Geiger-mode APD LiDAR - The next evolution in airborne LiDAR Data

Owen Hawkins
Operations Director, Earth-i, United Kingdom
Orbits, Clouds and Other Customers Capacity or Availability – what matters more?

1100-1200 hrs: Networking Tea/Coffee break and Visit to exhibition
1200-1300 hrs: Networking lunch

SPECIAL PROGRAMME

Young Professionals Forum

25 MAY 2016   0900-1730 HRS   HALL: INSIDE EXHIBITION (PRESENTATION AREA 1)

1300-1500 hrs: Innovation & Entrepreneurship

MODERATOR

PROF. JOSEF STROBL
Chair, Department of Geomatics, University of Salzburg, Austria

Listen to new generation thesis projects and talks from young entrepreneurs for a glimpse at geospatial industry's future skills and technologies.

1600-1730 hrs: Job Opportunities Pitch – We Want You!

MODERATOR

Peter van Oosterom
Professor of GIS Technology, Faculty of Architecture and the Built Environment, TU Delft, The Netherlands

Companies with open positions and internships opportunities to take the stage for a 10 minutes pitch in front of the prospective employees.

SPECIAL PROGRAMME

Young Professionals Forum

25 MAY 2016   0900-1730 HRS   HALL: INSIDE EXHIBITION (PRESENTATION AREA 1)

0900-1100 hrs: Geospatial Industry: What are the Options?

MODERATOR

Hendrik Westerbeek
President, SAGEO, The Netherlands

SPEAKERS

Ron Bisio
Vice President, Geospatial, Trimble, United States
Perspective from major global geospatial company + Trimble's Young Surveyors programme

Alf Overmars
Director - Management Organisation & HRM, Kadaster, The Netherlands
Changing roles of national mapping agencies and the capacity requirement

Arnout van Raaij
GIS Consultant, BAM Infraconsult, The Netherlands
Latest geo-technology deployed in construction industry – how graduates should prepare

Robbie Schingler
Co-Founder, Planet Labs, United States
Planet Labs journey towards becoming the largest EO satellites constellation operator

Felix van Veldhoven
Junior Consultant, Geodan, The Netherlands
Preparing for your first job- do's and donts

1100-1200 hrs: Tea/Coffee Break and Visit to Exhibition
1200-1300 hrs: Lunch Break

SEMINAR

Public Safety & Emergency Response

| 25 MAY 2016 | 0900-1500 HRS | HALL: PENN 2 |

1300–1500 hrs: Emergency Response

Dan Pauli
Chief Executive Officer, PSMA Australia
Geoscape - Capturing Australia's Built Environment for Emergency Modelling and Management

Glyn Arthur
VP Business Development, Luciad, Belgium
Using Predictive Analytics for Emergency Response

Thomas Loser
CAD Application Engineer, ASTRID, Belgium
Astrid Geoportal

Gianluca Luraschi
Application Engineer, European Maritime Safety Agency (EMSA), Portugal
Use of geospatial and earth observation in maritime emergency response

Erika Paasche
Account Executive, Planet Labs, Germany
Planet's Mission: Always-on imagery – a step towards improved safety and emergency response capabilities

Fabrizio Pirondini
CEO, Deimos Imaging, Spain
DEIMOS-2 very-high resolution monitoring of 2015 Ebro River floods

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SEMINAR

Public Safety & Emergency Response

| 25 MAY 2016 | 0900-1500 HRS | HALL: PENN 2 |

0900-1100 hrs: Preparedness, Prediction

MODERATOR AND LEAD SPEAKER

K. Harald Drager
President, The International Emergency Management Society, Norway
Prepare for Tomorrow TODAY!

SPEAKERS

Johan van Schaaik
Advisor and Information Manager, National Police of The Netherlands
Cross-border Cooperation supported by Spatial Data

Rozinah Anas
Program Director – MERS999, Telekom Malaysia
Telekom Malaysia's Initiative in Public Safety and Disaster Management: The Malaysian Experience

Rob van der Mei
Head of Logistics team and Industrial Liaison Officer, CWI, The Netherlands
Stokhos Emergency Mathematics software – predicting future demands of ambulance

Juan Sancho
Senior Researcher, Internet of Everything Lab, ATOS Research & Innovation, Spain
Context-Aware Predictive Analysis for Pro-Active Traffic Management

Fabio Volpe
Head of Geospatial Content Innovation, e-GEOS, Italy
RADAR & Optical data for fast response services and operational platforms

1100–1200 hrs: Networking Tea/Coffee break and Visit to exhibition

1200–1300 hrs: Networking lunch

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SESSION

Open Data

| 25 MAY 2016 | 0900-1100 HRS | HALL: GOUDRIAAN 1 |

MODERATOR AND LEAD SPEAKER

Mark de Vries
Adviser, Geonovum, The Netherlands
Open data low: Untangling the legal labyrinth

SPEAKERS

Isabella Tonioli
Advisor GIS - Department of Geo-Information, Municipality of The Hague, The Netherlands
Open data and the City of The Hague

Marleen Van Damme
Coordinator of DOV and MercatorNet, The Environment, Nature and Energy Department in Flanders, Belgium
Enhance your Spatial Web Services with Analytics - Case LNE

Maarten Storm
Geo Information Specialist, Alterra, Wageningen UR, The Netherlands

Richard Witmer
Product Manager Topography and Imagery, Dutch Kadaster, The Netherlands
Auditing the quality of the Key Register Topography in the Netherlands

Keiran Millard
Standards Consultant, BSI Group (British Standards Institution), United Kingdom
Standards and Business Models for sustainable growth in the Data Market

Jedrzej Czarnota
Research Analyst, Trilateral Research, United Kingdom
ENERGIC-OD: Business model opportunities in the open data space

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WORKSHOP

CENTRIC Project: An innovative step for geoinformation in Romania

| 25 MAY 2016 | 0900-1030 HRS | HALL: INSIDE EXHIBITION HALL (PRESENTATION AREA 2) |

SPEAKERS

Diana Trascu
Quality and Risk Manager, National Agency for Cadastre and Land Registration, Romania
The CENTRIC project Centre for ExcelleNce in TerRItorial management and Cadastre

Athina Trakas
Services Director for Europe, Russia, Central Asia and Africa, Open Geospatial Consortium (OGC), Germany
CENTRIC and the OGC - opportunities for cooperation

Fabio Remondino
Senior Researcher, Bruno Kessler Foundation, Italy
Technologies for 3D mapping and cadaster

Jantien Stoter
Professor - 3D Geoinformation, Faculty of Architecture and The Built Environment, TU Delft, The Netherlands
Towards a 3D Spatial Data Infrastructure in the Netherlands with a specific focus on 3D cadastre

Q&A session

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WORKSHOP

Building dynamic, data driven maps with CartoDB

| 25 MAY 2016 | 0900-1030 HRS | HALL: VAN DER VEEKEN |

The workshop will guide you through map-publishing in the Editor GUI, and expand on this for additional customization via the open libraries and APIs. Participants will review geo-spatial data formatting, SQL querying, styling with CartoCSS, and the mechanics of map integration with CartoJS

FACILITATOR

Ernesto Martínez Becerra
Client Success Engineer, CartoDB, Spain

SEMINAR

Spatial Analytics: Cloud, Big Data & Machine Learning

| 25 MAY 2016 | 1300-1730 HRS | HALL: INSIDE EXHIBITION (PRESENTATION AREA 2) |

1600-1730 hrs: Spatial Intelligence & Machine Learning

Søren Aage Nørmølle
Partner, LE34, Denmark
Savings through Geo-Monitoring

Peter Leihn
Director, Business Development and Commercialisation, Data61, Australia
Spatial Predictive Analytics: Extracting Insight and Maximising Impact

Adam Iwaniak
Chief Executive Officer, Wrocław Institute of Spatial Information and Artificial Intelligence, Poland
Linking GIS and Semantic Web with Semantic Components

Erwin Goor
Project Manager, VITO, Belgium
Mission Exploitation Platform PROBA-V

Damien Palvadeau
Sales Director, Business Geographic, France

Jérôme Payet
Sales Engineer, Business Geographic, France
Energy use and consumption in Europe - the power of GIS analytics

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SEMINAR

Spatial Analytics: Cloud, Big Data & Machine Learning

| 25 MAY 2016 | 1300-1730 HRS | HALL: INSIDE EXHIBITION (PRESENTATION AREA 2) |

MODERATOR

Dr. Zaffar Sadiq Mohamed-Ghouse
Director - NSW Business Development, Research & International Relations, CRC for Spatial Information, Australia

1300-1500 hrs: Big Data Analytics

SPEAKERS

Iain MacInnes
Senior Regional Sales Manager Europe, DigitalGlobe, United Kingdom
Life Beyond the Pixel: Turning Big Data into Relevant Data

Levente Klein
Research Staff Member, IBM TJ Watson Research Center, United States
Mining Open Source Geospatial Data

Frank Suykens
Chief Technology Officer, Luciad, Belgium
Accelerating Insight through Geospatial Visual Analytics

Dr. Lorraine Tighe
Marketing Director, Strategic Geospatial Solutions, United States
Big Data - No Problem: Big Analysis in a Secure Environment -Problem - A US based Economic Analysis

Han Wammes
Business Development Manager, 1Spatial, United Kingdom
Data get big ... but get smart

Andreas Abecker
Head of Innovation Management, Disy Informationssysteme GmbH, Germany
Toward an Architecture for Processing Spatial Big Data

1500-1600 hrs: Networking Tea/Coffee break and Visit to exhibition

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WORKSHOP

Geospatial Infrastructure and Standards for Autonomous Vehicles

By invitation only

| 25 MAY 2016 | 1330-1700 HRS | HALL: VAN WALSUM |

HOSTED BY   GEONOVUM

This discussion-oriented workshop will explore the relationship between self-driving car and geo-information. It will explore the framework of (geo) data-infrastructure and determine what is needed to support the transition to the self-driving car.

FACILITATORS

Anamika Das
Director – Commercial Research & Policy Advocacy, Geospatial Media and Communications, India

Rob van de Velde
Director, Geonovum, The Netherlands

WORKSHOP

Technical Challenges in Implementation of Selected Policies Seen from a GeoICT Perspective

| 25 MAY 2016 | 1300-1500 HRS | HALL: GOUDRIAAN 1 |

This workshop shall present the EUROGI policy position papers on Big Data, Linked Data and Internet of Things; facilitate discussion about the papers in the topic areas; and identify how best to promote the policy proposals set out in the papers.

FACILITATOR

Simon Vrecar
Secretary General, European Umbrella Organisation for Geographic Information (EUROGI)

WORKSHOP

Defining the data quality for our processes in a structured way

| 25 MAY 2016 | 1300-1430 HRS | HALL: VAN DER VEEKEN |

This workshop will show how to determine product characteristics and quality characteristics of the dataset needed for your task in a structured way. Knowing these characteristics, one can better select suitable datasets, being aware of shortcomings which might affect the result and the decisions made based on this result.

FACILITATOR

Maarten Storm
Geo-information Specialist and Quality Coordinator, Alterra, Wageningen UR, The Netherlands

WORKSHOP

New Innovations at the Dutch Geo Portal PDOK

| 25 MAY 2016 | 1600-1730 HRS | HALL: PENN 2 |

This workshop shall demonstrate the new innovations and developments of the Dutch National SDI called PDOK. These are developed recently or still under construction but are open source, so of benefit for the SDI community.

FACILITATOR

Dorus Kruse
Senior Project Manager, Kadaster, The Netherlands

WORKSHOP

Societal Challenges in Implementation of Selected Policies Seen from a GeoICT Perspective

| 25 MAY 2016 | 1600-1730 HRS | HALL: GOUDRIAAN 1 |

This workshop shall present the EUROGI policy position papers on Open Data, SME Promotion, and Sustainable Urban and Regional Development; facilitate discussion about the papers in the topic areas; and identify how best to promote the policy proposals set out in the papers.

FACILITATOR

Simon Vrecar
Secretary General, European Umbrella Organisation for Geographic Information (EUROGI)

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SESSION

3D & Augmented Reality

| 25 MAY 2016 | 1600-1730 HRS | HALL: LEEUWEN |

MODERATOR AND LEAD SPEAKER

Jane Hermans van Ree
Advisor / Project manager, Municipality of Rotterdam, The Netherlands
Rotterdam 3D City Model ready for the next level

SPEAKERS

Doug Brent
VP of Technology Innovation, Trimble, United States

Ted Lamboo
Senior Vice President Reality Modeling, Bentley Systems, The Netherlands
Reality Modeling and Continuous Surveying for Advancing Intelligent Infrastructure

Michal Koutek
Researcher, Royal Netherlands Meteorological Institute, The Netherlands
Meteo-visualization in VR: From a Lab into a Weather Room

Håkan Engman
Chief Executive Officer, Agency9, Sweden
Opportunities with national and global 3D data in internet applications

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WORKSHOP

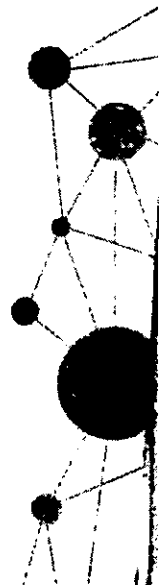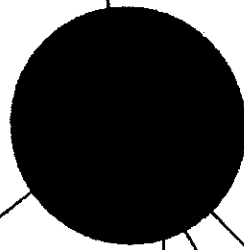## Assure the Quality of Spatial Web Services
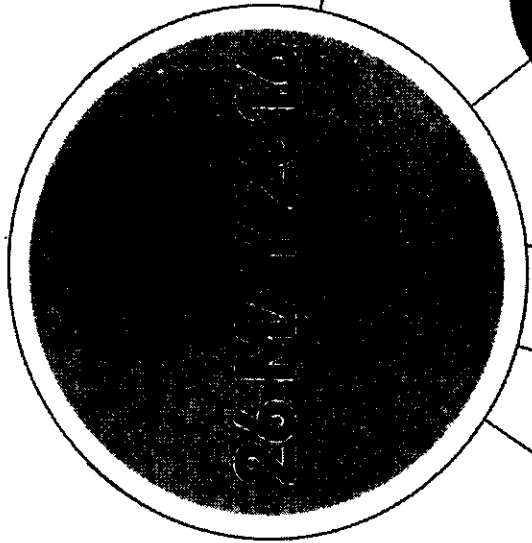
| 25 MAY 2016 | 1600-1730 HRS | HALL: VAN DER VEEKEN |

The workshop will demonstrate analysing spatial web services and collecting the key Quality of Service metrics using Spatineo Monitor service. The participants will learn how to keep track of service availability and performance, as well as verify their capacity in handling a lot of simultaneous users.

FACILITATOR

Sampo Savolainen
Managing Director, Spatineo, Finland

SYMPOSIUM

Impact of Geospatial Information on Society and Economy

| 26 MAY 2016 | 0900-1530 HRS | HALL: VAN OLDEBARNEVELD |

1300 – 1400 hrs: Lunch Break

1400 – 1530 hrs: Role of Geospatial Information in attaining Sustainable Development Goals

Ahamad Zakaria
Director of Surveying and Mapping, Department of Survey and Mapping (JUPEM), Malaysia
The Usage of JUPEM's Geospatial Data in Land Development

Yasushi Shimoyama
Principal Researcher for New Survey Technology, Geospatial Information Authority, Japan
Impact of Geospatial Information Authority of Japan (GSI) data on Japanese Society

Derek Clarke
Chief Director: NGI, Department of Rural Development and Land Reform, South Africa
Using Value Chain Analysis to Determine the Impact of Geospatial Information in the Public Sector

Hoang Ngoc Lam
Deputy Director General, Department of Survey and Mapping, Vietnam
The Contribution of Department of Survey and Mapping of Vietnam in Social-Economic Development and Coping with Climate Change

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SYMPOSIUM

Impact of Geospatial Information on Society and Economy

| 26 MAY 2016 | 0900-1530 HRS | HALL: VAN OLDEBARNEVELD |

SYMPOSIUM SPONSOR **Trimble**

0900 – 1100 hrs: Role of Geospatial Information in attaining Sustainable Development Goals

SPEAKERS

Kumar Navulur
President, DigitalGlobe Foundation, United States
Leveraging Earth Observation data for monitoring SDGs

Greg Scott
Inter-Regional Advisor, UN-GGIM Secretariat, United States
Implementing the Sustainable Development Goals with Geospatial Information

Prof. Bruce Banoeng-Yakubo
Chief Director, Ministry of Lands and Natural Resources, Ghana

Barbara Ryan
Secretariat Director, GEO, Switzerland

1100 – 1130 hrs: Networking Tea/Coffee Break

1130 – 1300 hrs: Role of Geospatial Information in attaining Sustainable Development Goals

Ivan DeLoatch
Executive Director, Federal Geographic Data Committee, United States
Geographic Place-Based Services for Socio-Economic Sustainability

Ingrid Vanden Berghe
Director General, National Geographic Institute, Belgium
A new role for national mapping and cadastral agencies

Simon Hodson
Executive Director, CODATA, France
CODATA Report for GEO on the Value of Open Data Sharing

Moschos Voglatzis
Director of Forest Mapping & Natural Environment, National Cadastre & Mapping Agency, Greece
Geospatial Data & Information in Support of Sustainable Development: The Role of National Mapping Agencies

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WORKSHOP

Building unified architecture for accessing geospatial data in Europe: ENERGIC-OD

26 MAY 2016	0900-1030 HRS	HALL: PENN 1

The workshop shall identify IT and business opportunities that can be exploited by firms of all sizes throughout Europe in the wake of ENERGIC-OD (European NEtwork for Redistributing Geospatial Information to user Communities - Open Data) project funded by European Commission.

FACILITATOR

Jedrzej Czarnota
Research Analyst, Trilateral Research, United Kingdom

WORKSHOP

CityGML in Practice -- Using 3DCityDB on Oracle for City Modelling

26 MAY 2016	1130-1300 HRS	HALL: PENN 1

This workshop will cover various aspects of 3D city modeling from model creation to visualization to data maintenance as well as the practical use of the resulting models. All project examples are based on 3DCityDB, an open source data model implementing the CityGML standard.

FACILITATORS

Stephan Plabst
Consultant, M.O.S.S. Computer Grafik Systeme, Germany

Lutz Ross
Chief Executive Officer, virtualcitySYSTEMS, Germany

Hans Viehmann
Product Manager EMEA, Oracle, Germany

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WORKSHOP

Exploiting the value in EO data

26 MAY 2016	0900-1300 HRS	HALL: PENN 2

0900-1100 hrs: Part 1

SPEAKERS

Thibaud Delourme
DG-GROW, European Commission
The socio-economic benefits of Copernicus

Alessandra Tassa
Remote Sensing Specialist, European Space Agency, Italy
Presentation of the Copernicus economic value study

Geoff Sawyer
Secretary General, European Association of Remote Sensing Companies, Belgium

Marc de Vries
Partner, The Green Land, The Netherlands
Introduction on the CEVS methodology

Jarkko Toivola
Head of Winter Navigation Unit, Finnish Transport Agency, Finland
Winter navigation in Finland

1100-1130 hrs: Networking Tea/Coffee break

1130-1300 hrs: Part 2

Erik Willen
Forest Research Institute, Sweden
Forest management in Sweden

Ivo Visser
Risk Analyst, Stedin, The Netherlands

Jos Maccabiani
Director Professional Services, SkyGeo, The Netherlands
Infrastructure monitoring in NL

Conclusion and Global discussion

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