

EuroSDR in a nutshell

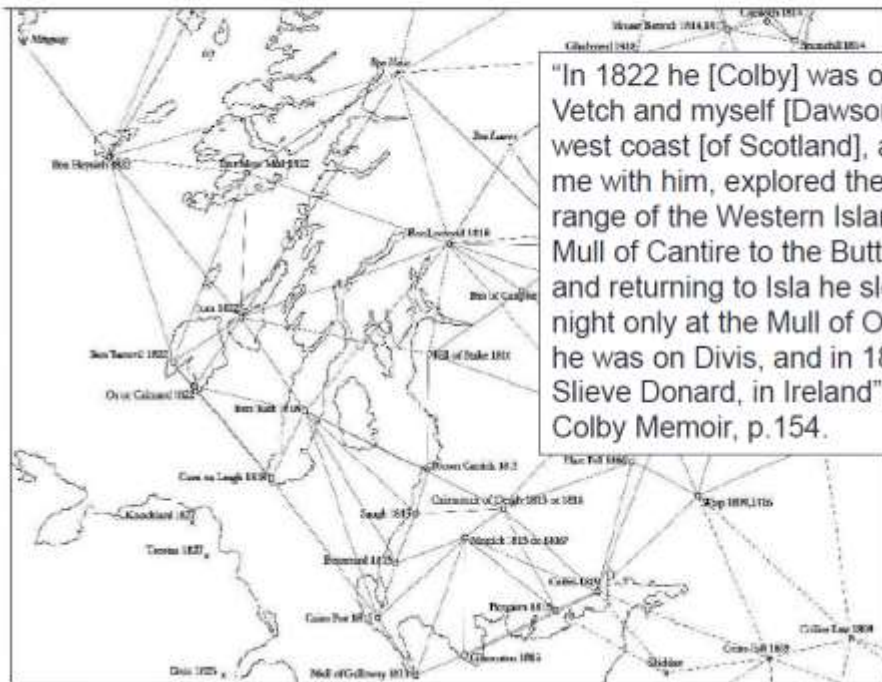
Paul Kane

Introduction

- President
- EuroSDR Operations and Activities
- Commissions
- Structure
- Boards of Delegates
- Research Activities
- Education
- Publications

Ordnance Survey Ireland

'Trigonometrical Survey of Ireland' under Colonel Colby i. Rays and triangles – the progress of the survey



"In 1822 he [Colby] was out again with Vetch and myself [Dawson] on the west coast [of Scotland], and taking me with him, explored the whole range of the Western Islands, from the Mull of Cantire to the Butt of Lewis, and returning to Isla he slept for one night only at the Mull of Oe. In 1825 he was on Divis, and in 1826 on Slieve Donard, in Ireland". In Portlock, Colby Memoir, p.154.



Ordnance Survey, six-inches-to-one-mile 'county series' of Ireland, 1829-1842. The world's first ever large-scale survey of an entire country.

Ireland

Geodetic Infrastructure



7 Zero Order Points

27 FBM

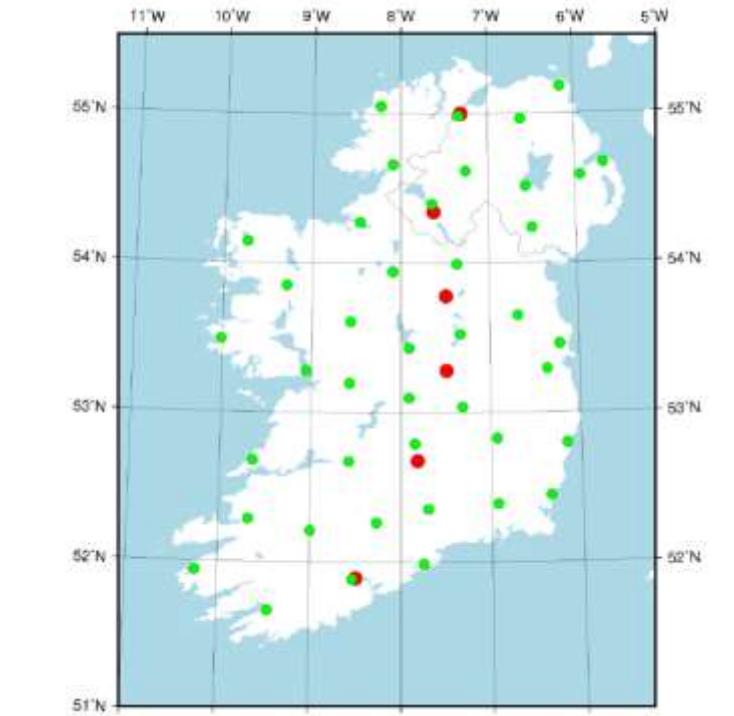
26 GNSS stations

2 EPN stations.

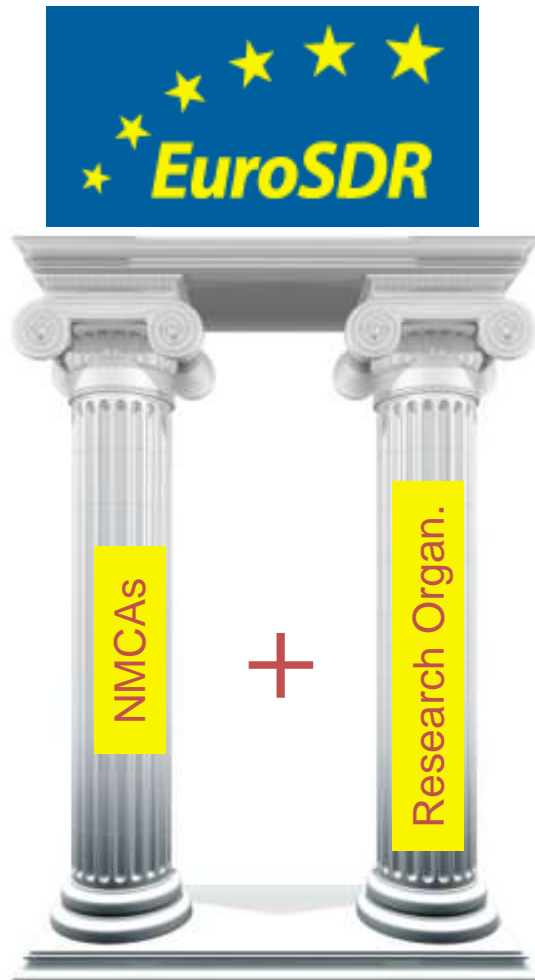


Absolute Gravity

42 Proposed Absolute Gravity Stations



EuroSDR – European Spatial Data Research



- Non-profit organization since 1953
- Provides a pan-European network
- Brings together NMCAs and academia
- Purposes
 - jointly perform applied research
 - secure timely, research-based knowledge
 - provide educational activities ensuring the dissemination of the research-based knowledge gained
- Keep NMCAs updated on technology developments
- 20 member countries
- Members are NMCAs & Research / Academic institutes

Operations and activities

- Technical Commissions
- Board of Delegates meetings
- Workshops
- Research projects
- Publications and info dissemination
- Educational activities

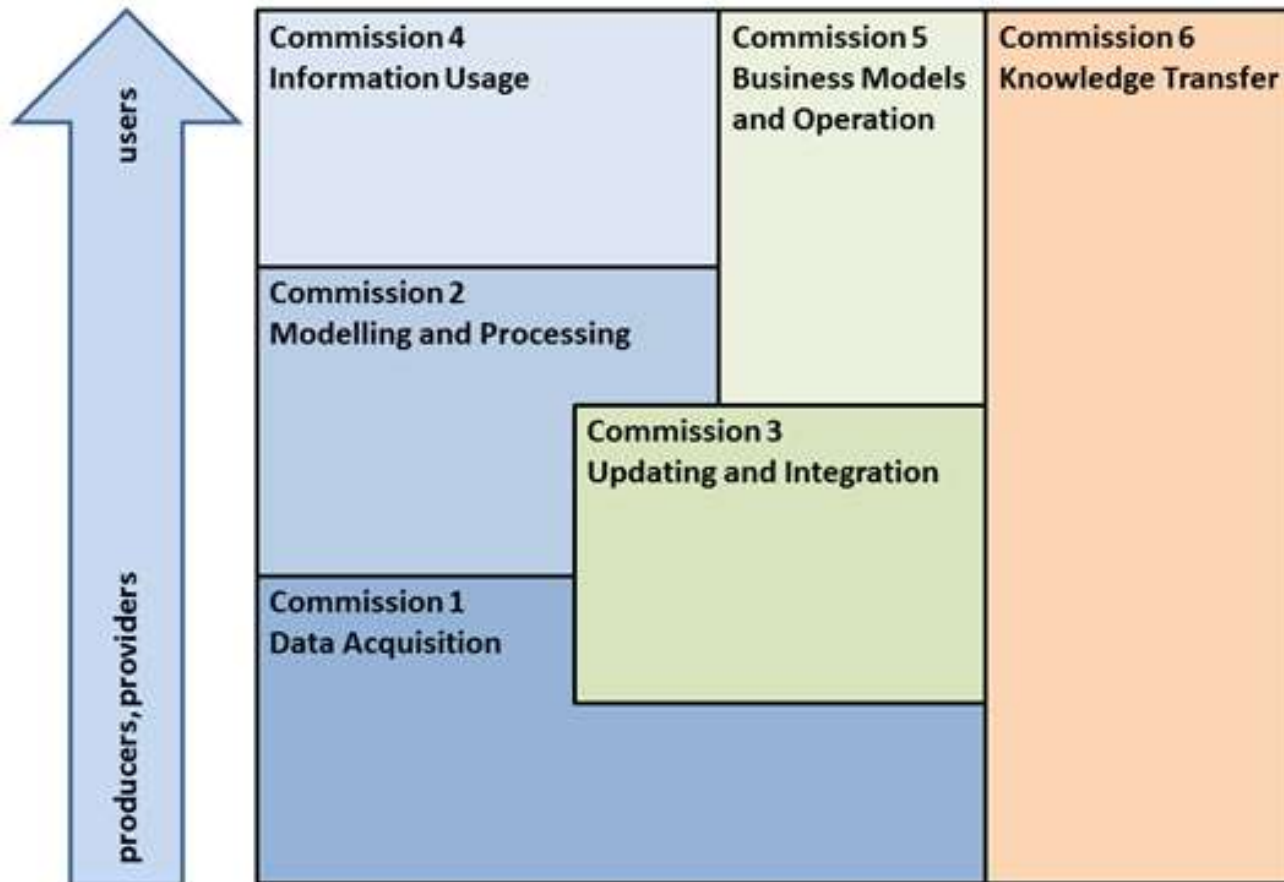


Six technical commissions



- Data Acquisition – Jon Mills (UK)
- Modelling and Processing – Norbert Haala(DE)
- Updating and Integration - Jon Arne Trollvik (NO)
- Information Usage – Bénédicte Bucher (FR)
- Business Models and Operations – Joep Crompvoets (BE)
- Knowledge Transfer – Markéta Potůčková (CZ)

Commission Structure



The EuroSDR Commissions serve as a catalyst between the research projects and the EuroSDR network.

Commissions organize / run activities and events based on NMCAs inputs / needs.

The Commissions give a report on the relevant activities at every Board of Delegates meeting.

Board of Delegates meetings

- Meet twice per year in the member countries
- Reports from research activities (Commissions)
- Keynote presentations
- Breakout sessions and focussed discussions – sharing best practise



Workshops



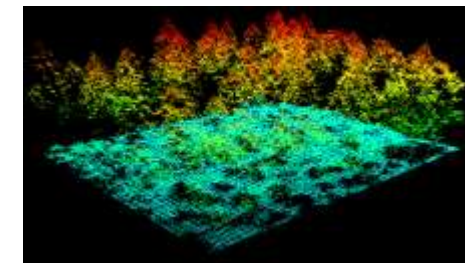
- Dialogue-based events on state-of-the-art topics
- Presentations by experts in the field
- Small, focussed groups (usually < 50 participants)
- May result in identification of research topics
- Planning and dissemination of information on research activities
- Documentation and information is available for members
- Short term approach (< 6 months from idea to realisation)

Research activities

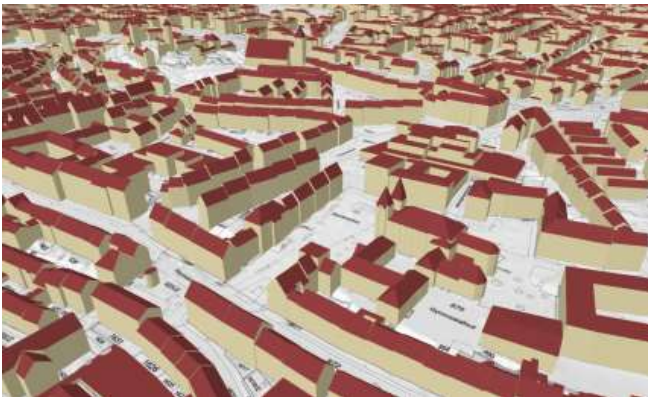
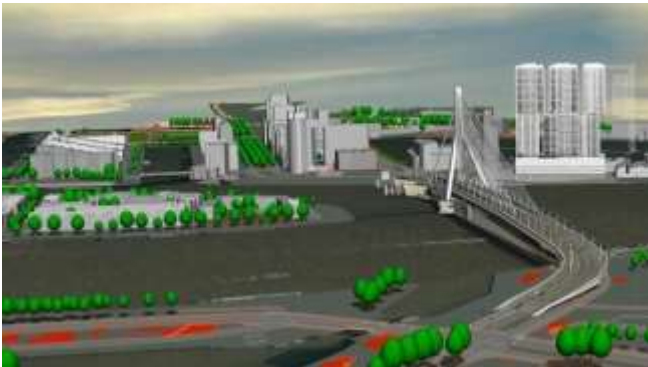
- Applied research (1-3 years) carried out through projects and workshops
- Real-world problem of members (NMCAAs)
- Securing timely, research-based knowledge
- Knowledge transfer through active participation
- Experiments using data acquired/provided by participants
- Research activities are to be executed by EuroSDR alone or in collaboration with other organizations and companies.
- Publication of results in official EuroSDR book series

Research – Example of research projects

- UAVs/Remotely Piloted Airborne Systems (RPAS) – sensors and data acquisitions, potential for NMCAs
- Oblique imagery – changing the production pipeline
- GeoBIM
- Single Photon LiDAR (SPL)
- Updating national databases project with crowdsourcing
- Archiving - long term preservation of digital Geographic Information
- Economic value of 3D (geo)data
- Integration of Laser Scanning and Photogrammetry
- Dense Image Matching
- Linked data
- Camera calibration
- Sentinel



3D Special Interest Group (3D-SIG)



Addressing current issues of NMAs

- 3D data models
- capturing 3D objects
- producing 3D objects
- updating of 3D objects
- consistency of 3D data
- benefits of 3D data

Educational activities

- EuroSDR Educational Service (EduServ):
 - four two-weeks courses in the field of GeoInformation (GI)
 - 1 day introductory course and 2 weeks or e-learning course
 - past topics: oblique imagery, land-use land-cover, mapping with high-resolution satellite imagery, standards in the geofield, forestry mapping, Open Spatial Data Infrastructures, etc.
 - 17th edition will take place at ICCG, Barcelona, Spain
- Course on-demand
 - short course on basic Photogrammetry
 - Target Group: staff of NMCAs, public authorities and other organisations dealing with photogrammetric production, PhD and Master students seeking an introductory course in photogrammetry.

Publication and information dissemination

The screenshot shows the EuroSDR website with a navigation bar (Home, Commission, Research, Education, Workshops, Publications) and a sidebar with 'LATEST NEWS' and 'IN THE PICTURE' sections. The main content area features an update on project international benchmarking and a final program for the 55th Photogrammetric Week in Stuttgart.

www.eurosd.net

The cover features the EuroSDR logo and the title 'Assessing the Economic Value of 3D Geo-Information'. The authors listed are Andrew Cooke, Paul Krafft, Tina Svasek, Cathryn Kelly Burns, Johanna Frödenberg, Gunnar Lyzell, Andre Simulato, Paul Kraw, Kerin Brady, Peter Wotzjak, Maria Pia Eric Bayers, Risto Sives, Jarkko Tuokko, Martijn Bijsterveld, Richard Wimmer, and Iratxe Casal. It is identified as Official Publication N° 68.

Official
publication series

EDUCATION

EduServ 13

The 2015 series of e-learning courses from EuroSDR will begin with a **pre-course seminar**, hosted by the Federal Office of Metrology and Surveying (BEM) in Vienna, Austria, **from 9th to 10th March 2015**. During the seminar, background material of four e-learning courses will be presented by the tutors, participants will meet the tutors and fellow participants, and the learning platform - Moodle - will be demonstrated. Local organizer of the pre-course seminar is Michael Franzen, head of the Surveying Service Division, BEM.

The seminar will be followed by four **distance e-learning courses**, designed for knowledge transfer from the research to the production domain (see details below). EduServ courses are designed so that they can be followed over the Internet from any location, thereby allowing participants to update their knowledge with minimum disruption. Courses require about **thirty hours of online study** and are completed over a period of **two weeks** during spring 2015.

The fee for attending the pre-course seminar is 100 €. This fee will be deducted from the course fee in case of later subscription to the e-learning courses.

Fees:

- 600 € for pre-course seminar + 1 or 2 courses
- 700 € for pre-course seminar + 3 or 4 courses
- 100 € for pre-course seminar only

You can register for the e-learning courses until the **20th of February 2015**.

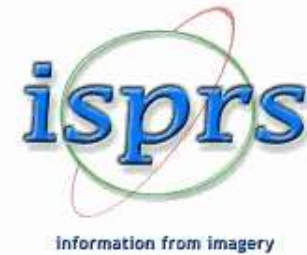
A limited number of scholarships will be available to fully cover the course fee and to partially support the travel costs to the pre-course seminar (up to € 500). The scholarships are intended to Ph.D./Master students and other applicants with no or very limited financial support from their university or public institution.

In order to proceed with the application

- Register to [EduServ 13](#)
- Fill in the [application form](#) that includes a motivation letter, information about professional experience and calculation of travel costs. It is recommended to support the application with a reference letter. Both documents shall be submitted to curator@eurosd.net by not later than on 30th January 2015.

Distance e-learning course
(EduServ)

EuroSDR network



EuroSDR has much to offer...

- Functioning **network** linking NMCA's with research institutes and private sector
- Modern relevant **applied research programme**
- Ability to propose, undertake and disseminate **timely research and benchmarking projects**
- Hosting and co-hosting **focussed workshops**
- Publication of project and workshop **results** in professional standard **publication series**
- **Guidelines** and best practices
- **Educational Service (EduServ)**

More information?

<http://www.euroedr.net>

<https://twitter.com/euroedr>