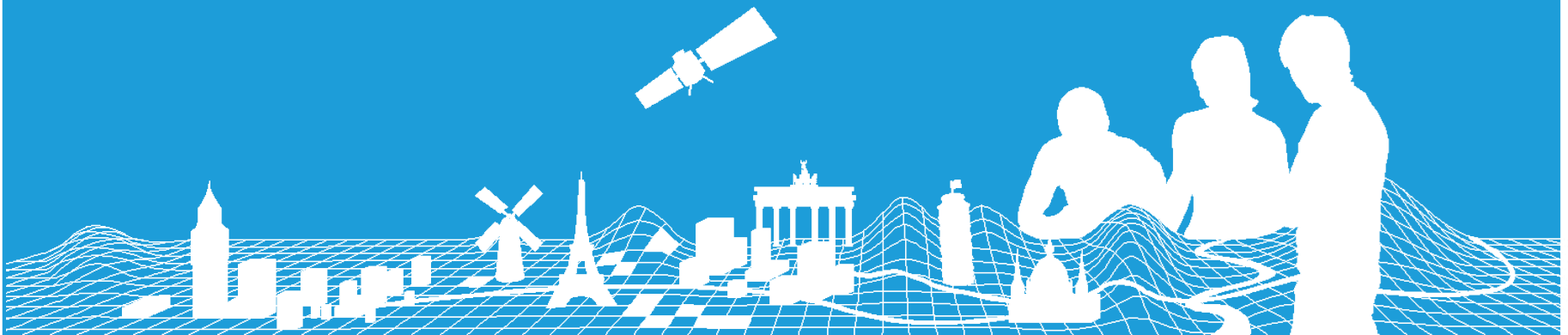


Ambitious start of the EuroGeographics Positioning KEN

Saulius Urbanas, EuroGeographics



4th June 2015



EuroGeographics – association of National Mapping and Cadastral Authorities (NMCAs)

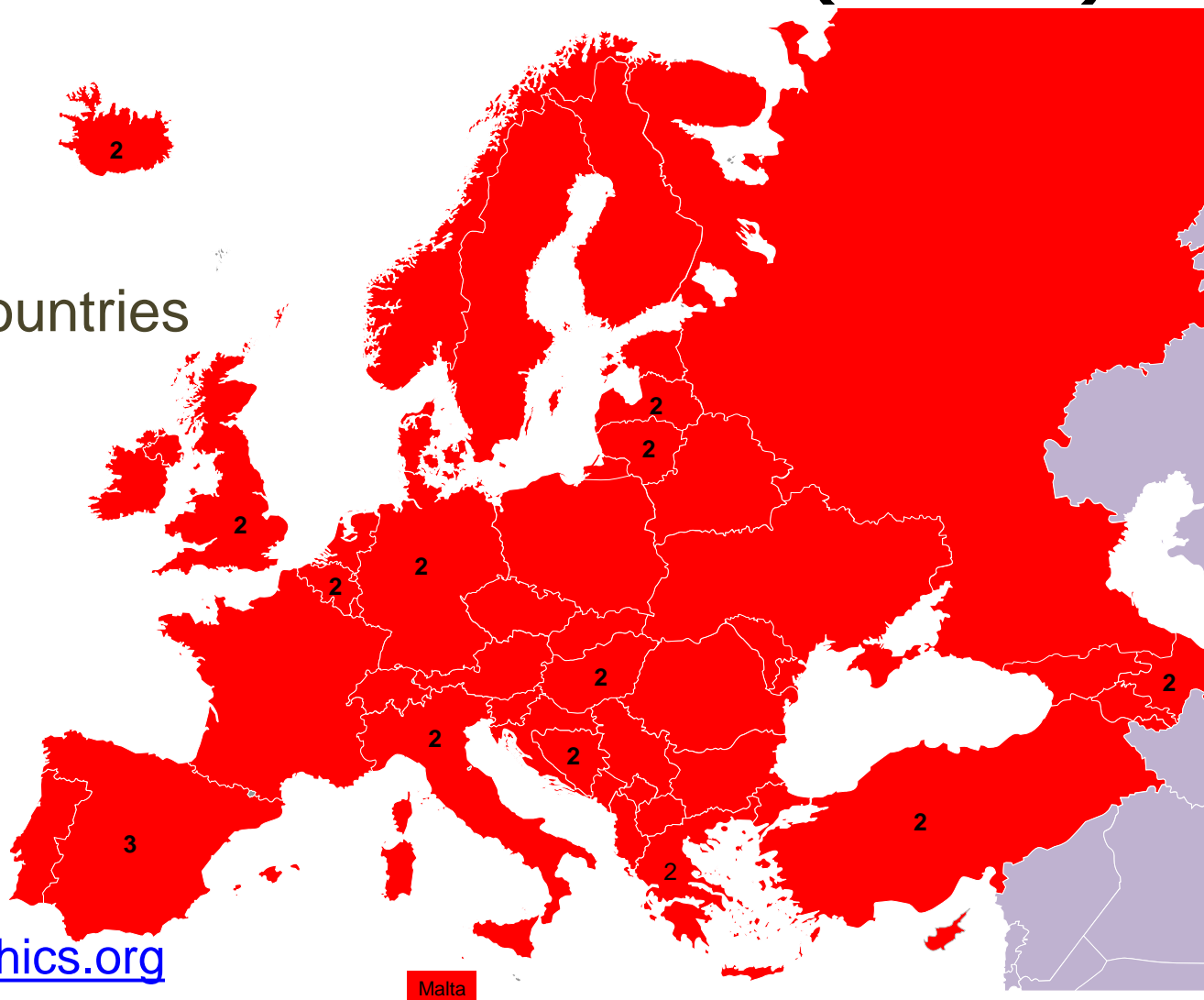
61 members

46 European countries

-  Full membership
-  Out of scope

Rue du Nord 76
Noordstraat 76
1000 Brussels
Belgium

www.eurogeographics.org

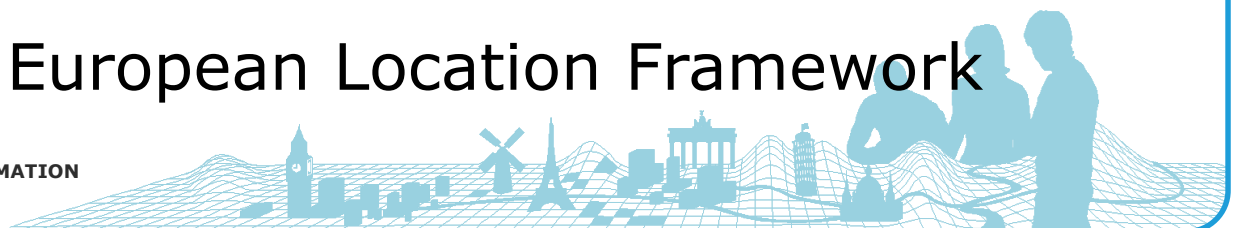


Our vision

- a European society which makes decisions informed by our members' accurate, authoritative and quality-assured land and geo-information data, services and expertise

Our mission

1. Provide the voice of our members
2. Develop the network of members
3. Facilitate access to members' data and expertise
4. Grow our network of members
5. Ensure that the Association continues to develop its role and has a sustainable future
6. Develop the European Location Framework





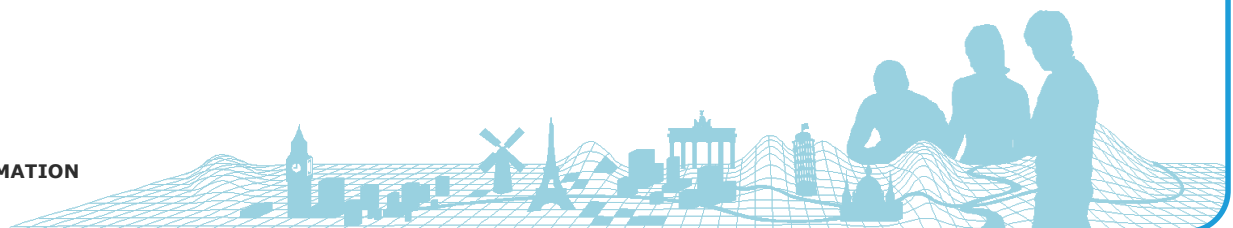
ELF - the authoritative geo-information framework for Europe

Mick Cory – the new Executive Director



EuroGeographics Knowledge Exchange Networks

- INSPIRE KEN
- Quality KEN
- Policy KEN
- Business Interoperability KEN
- State Boundaries of Europe KEN
- Copernicus KEN
- **Positioning KEN**



Topics of PosKEN strategy

- provide a networking platform for experts,
- establish the European Positioning System,
- coordinate GNSS service and policies developments,
- create standards, guidelines and recommendations,
- harmonize the position of GNSS network operators and users,
- advertise the use of ETRS89 in Europe



Collaborative bodies

- **CLGE** – representing users of permanent GNSS networks for precise positioning, especially surveyors, a large group of users of GNSS precision applications,
- **EUPOS** – representing DGNSS service providers of RTK networks which densify the continental network,
- **EUREF** – representing scientific community, especially concerning reference frames and operating a continental GNSS network as densification of the global network of the International GNSS Service (IGS) and forms a terrestrial continental interoperable infrastructure for different applications,
- **EuroGeographics** – representing national policy makers, namely NMCA's



PosKEN meeting in Warsaw, 14th Oct 2014



Major findings / actions (1)

- Agreed to draft the Memorandum of Understanding between CLGE, EUPOS, EUREF and EG
- Assess the interest among the EG, EUREF and EUPOS members to join RTCM together and harmonize the positions
- Elaborate the results of EUPOS and CLGE surveys
 - plans and new developments in GNSS aug. services,
 - models of GNSS network operations in NMCAs,
 - demands and developments concerning standardization of GNSS network quality, availability and integrity information



Major findings / actions (2)

- Approach GSA/ESA in order to discuss the possibility of exploiting Galileo CS for providing EU PPP correction service in cooperation with EG
- Join EPOS WG4 in order to discuss the development of GNSS stations meta-data portal
- Contribute to EUREF symposium
- Organise the next annual meeting in autumn 2015



PosKEN basecamp

The screenshot shows the PosKEN basecamp web application. The browser address bar displays <https://basecamp.com/1917326/projects/6757300>. The page title is "EuroGeographics PosKEN members".

EuroGeographics PosKEN members ☆

[Invite more people](#) [Catch up](#)
35 people on this project on recent changes

[9 Discussions](#) [16 Files](#) [Events](#) Add the first: [To-do list](#) [Text document](#)

Latest project updates

- Apr 22** You deleted an event: [EUREF Symposium 2015](#)
- Apr 22** You moved the event over: [EUREF Symposium , Leipzig, Germany, SU](#)
- Apr 22** You changed who gets emails about an event: [EUREF Symposium , Leipzig, Germany, SU](#)

[See all updates](#)

Discussions [Watch a quick video about Discussions](#)

	Saulius U. UNGGIM questionnaire on GGRF - Excellent! Thank you very much, Pierre! Regards	Mar 27	3
	Andras F. Sitelog format updates - Dear Colleagues, Sorry for my late reply. Arthur has already sended the link about the topic of IGS-XML exchange format:	Feb 27	15
	Artur O. RTCM involvement by members - Dear Colleagues, following our autumn meeting I would like to ask you to fill in the survey prepared below by	Jan 26	
	Carine B. Guidelines and standards by members - Dear Colleagues, For those of you who are not familiar with the EUREF Permanent Network, you can find	Jan 22	1

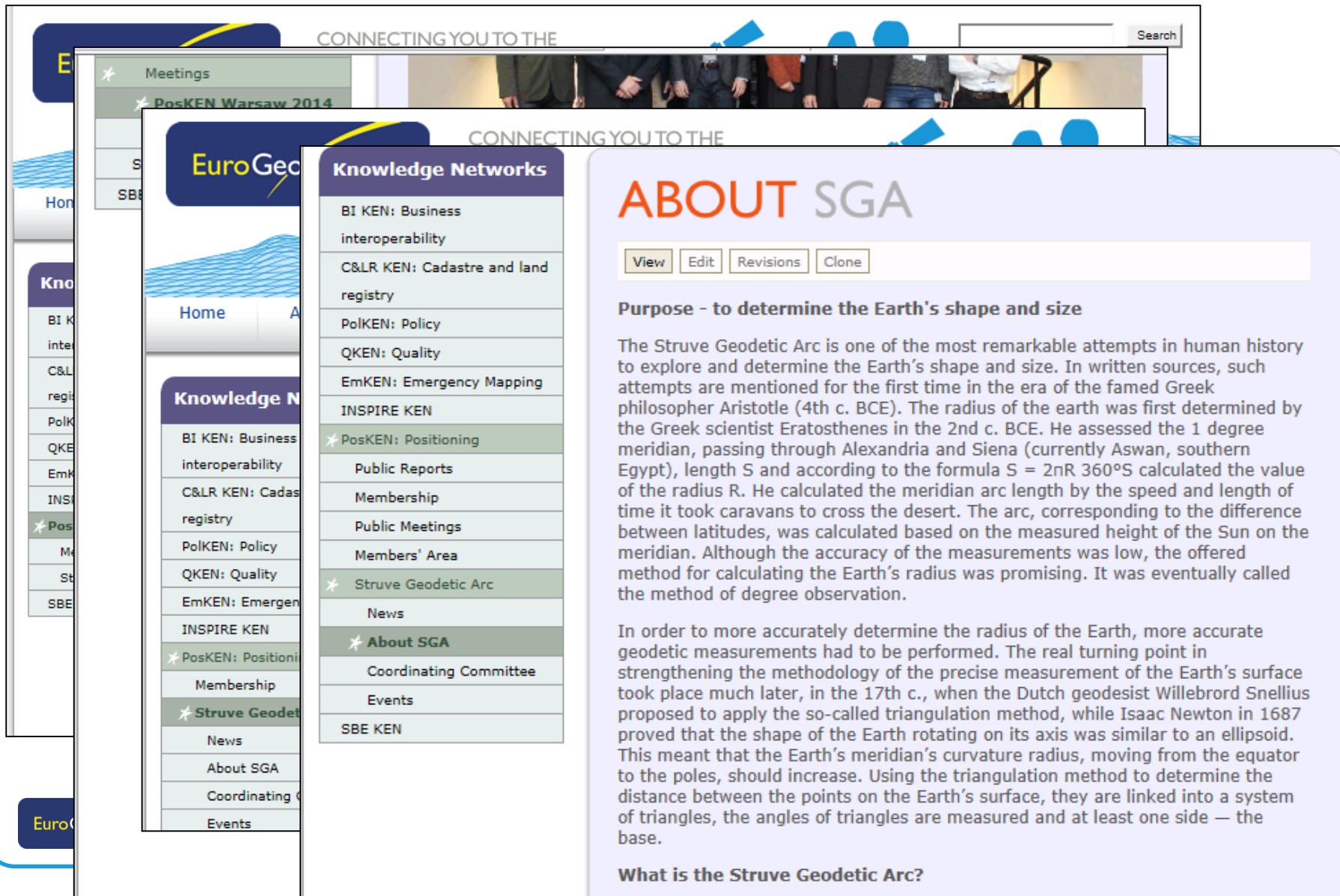
Upcoming Events

- June 3**
 - [EUREF Symposium , Leipzig, Germany, SU](#) (until June 5)
- June 4**
 - [EUREF Symposium , Leipzig, Germany, SU](#) (until June 5)

[All upcoming events...](#)

The Windows taskbar at the bottom shows the Start button, several application icons (including Chrome, Firefox, and Word), and system tray icons for network, volume, and battery. The system clock shows 00:25 on 2015.05.06.

PosKEN pages in EG website



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Meetings

PosKEN Warsaw 2014

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Knowledge Networks

- BI KEN: Business interoperability
- C&LR KEN: Cadastre and land registry
- PolKEN: Policy
- QKEN: Quality
- EmKEN: Emergency Mapping
- INSPIRE KEN
- ★ PosKEN: Positioning
 - Public Reports
 - Membership
 - Public Meetings
 - Members' Area
 - ★ Struve Geodetic Arc
 - News
 - ★ About SGA
 - Coordinating Committee
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Purpose - to determine the Earth's shape and size

The Struve Geodetic Arc is one of the most remarkable attempts in human history to explore and determine the Earth's shape and size. In written sources, such attempts are mentioned for the first time in the era of the famed Greek philosopher Aristotle (4th c. BCE). The radius of the earth was first determined by the Greek scientist Eratosthenes in the 2nd c. BCE. He assessed the 1 degree meridian, passing through Alexandria and Siena (currently Aswan, southern Egypt), length S and according to the formula $S = 2\pi R \frac{360^\circ S}{360^\circ}$ calculated the value of the radius R . He calculated the meridian arc length by the speed and length of time it took caravans to cross the desert. The arc, corresponding to the difference between latitudes, was calculated based on the measured height of the Sun on the meridian. Although the accuracy of the measurements was low, the offered method for calculating the Earth's radius was promising. It was eventually called the method of degree observation.

In order to more accurately determine the radius of the Earth, more accurate geodetic measurements had to be performed. The real turning point in strengthening the methodology of the precise measurement of the Earth's surface took place much later, in the 17th c., when the Dutch geodesist Willebrord Snellius proposed to apply the so-called triangulation method, while Isaac Newton in 1687 proved that the shape of the Earth rotating on its axis was similar to an ellipsoid. This meant that the Earth's meridian's curvature radius, moving from the equator to the poles, should increase. Using the triangulation method to determine the distance between the points on the Earth's surface, they are linked into a system of triangles, the angles of triangles are measured and at least one side — the base.

What is the Struve Geodetic Arc?

Ambitious start vs pragmatic life

- Issues
 - Avoid duplication with other organisations and initiatives
 - Find the right balance engaging experts from NMCA's and community
- Benefits / opportunities
 - Implementation of sustainable RTCM services
 - Metadata of national permanent stations
 - Regional/panE coverage of positioning service
 - Open forum for dialogue, share best practice



Coordinating Committee

- Chair – **vacancy!**
 - Artur Oruba resigned...
- Coordinating Committee:
 - Bruno Garayt, France
 - Marijan Marijanovic, Croatia
 - Jean-Yves Pirlot, Belgium
 - Peter Wiklund, Sweden
 - Saulius Urbanas, EuroGeographics





It is all about networking!



saulius.urbanas@eurogeographics.org



Thank you!

