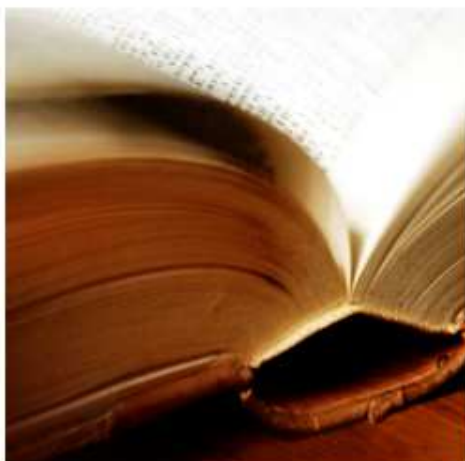
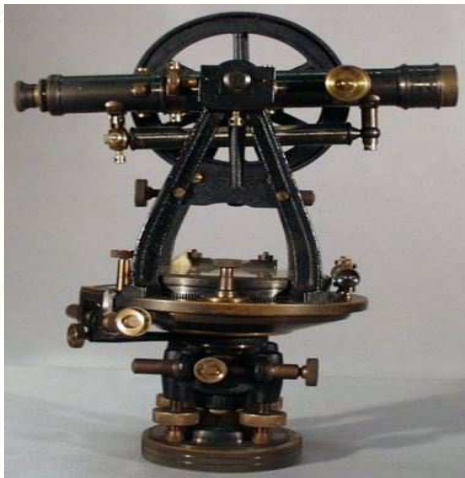


The Surveying Engineering Profession in Cyprus



CLGE GA, 20-21 March, 2015, Limassol-Cyprus

Dr. Demetris Demetriou, President of CARSE



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Cyprus: 9,000 years of history!



- Neolithic age (7000-3900BC)
- Chalcolithic age (3900-2500BC)
- Bronze age (2500-1050BC)
- Historical periods (1050BC-330AD)
- Hellenistic period (325-58BC)
- Roman period (58BC-330AD)
- Byzantine period (300-1192AD)
- Frankish period (1192-1489AD)
- Venetian period (1489-1571AD)
- Ottoman period (1571-1878AD)
- British period (1878-1960)
- The Cyprus Republic (1960-)



Military Turkish invasion July 1974
Joined EU on 1st May 2004
Joined Eurozone 1st January 2008

Cyprus demographics

- Population (Census 2011):
 - 840,407 people
 - 48.64% males
 - 51.36% females
 - Cypriots 79.40%
 - Non-Cypriots 20.60%
 - EU 53%
 - Non-EU 47%
- Republic of Cyprus 1960 (Greek- Cypriots, 77%; Turkish- Cypriots, 18%, other 5%)

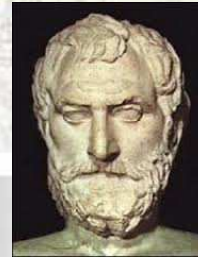


170,000 people

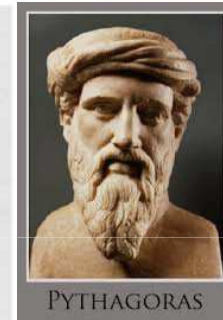


Our ancestors: «Fathers» of Geometry and Surveying

- Thales (635-543 BC)



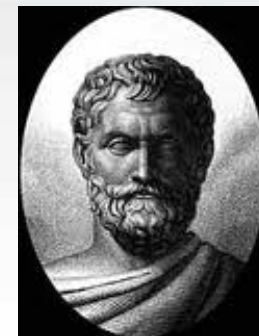
- Pythagoras (582-496 BC)



- Euclid (325-265 BC)



- Eratosthenes (276-194 BC)



Land ownership, Cadastre and Surveying in Cyprus: History!

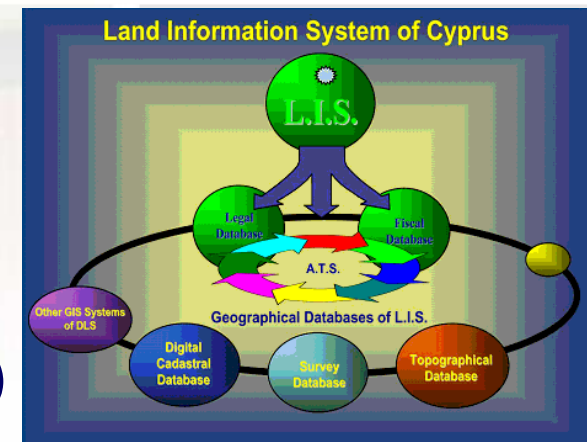
- 1400 BC it had been arisen the idea of individual ownership in Cyprus by the Greek settles
- 500 B.C, the “idalio” inscription excavated at Dali village can be described as a title to land, indicating the development of private ownership in ancient Cyprus
- 1850 AD, Ottoman Land Code introduced, land grouped and registered in five categories hence private rights spread, rights of possession were registered and land inheritance and transfer via sale were possible



Land ownership, Cadastre and Surveying in Cyprus: History!



- 1858, The Department of Lands and Surveys (LSD) of Cyprus started its operations
- 1909 to 1929 a general survey covered the whole Cyprus carried out by British (the basic geodetic and cartographic infrastructure built)
- 1946, Immovable Property Law
- 1969, Land Consolidation legislation
- 1999, Land Information System (LSD)



What is Rural and Surveying Engineering?



- **Surveying Engineering**
 - Studies and application of: Geodesy, Surveying, Cartography, Photogrammetry, Cadastre, Remote Sensing, Land Administration, GIS...
- **Rural Planning and Engineering**
 - Studies and application of : Transport planning, Road design, Hydraulic engineering, Urban and Rural Planning, small concrete construction works, Project Management
- Technical University of Athens
- Aristotle University of Thessaloniki
- BSc programme, Geomatic Engineering and Planning, Swiss Federal Institute of Technology in Zurich (ETHZ).

Rural and Surveying Engineering: History!

- Recognised in Greece in 1930.
- Technical University of Athens
 - 1917
- Aristotle University of Thessaloniki
 - 1963
- 5 year studies
- Cyprus University of Technology
 - 2007
 - Department of Civil Engineering and Geomatics
 - BSc degree (4 years) in Surveying and Geoinformation Engineering



Rural and Surveying Engineering Studies

90% graduated from TUA and AUTH

- **Technical University of Athens**
 - Surveying Engineering
 - Geography and Regional Planning
 - Infrastructure Projects and Rural Development
- **Aristotle University of Thessaloniki**
 - Geodesy and Surveying Engineering
 - Cadastre, Photogrammetry and Cartography
 - Transport and Hydraulic Engineering



Cyprus Association of Rural and Surveying Engineering

- Established in 1979
- ~ 180 members
- ~ 30% Public Sector
 - Land and Surveys Dept.
 - Land Consolidation Dept.
 - Housing and Urban Planning Dept.
 - Water Development Dept.
 - Public Works Dept.
 - Cyprus Agricultural Payment Organization
 - Electricity Authority



Cyprus Association of Rural and Surveying Engineering



- ~ 25% Freelance RSE
- ~ 45% Private sector staff or other...
- Dramatic increase of graduates due to the establishment of CUT
- From 1979-2013 180 members
- From 2013-2018 ~> 300 members

Memberships

- FIG-International Federation of Surveyors)



International Federation of Surveyors
Fédération Internationale des Géomètres
Internationale Vereinigung der Vermessungsingenieure

- CLGE



The Council of European Geodetic Surveyors
Comité de Liaison des Géomètres Européens

- EGOS



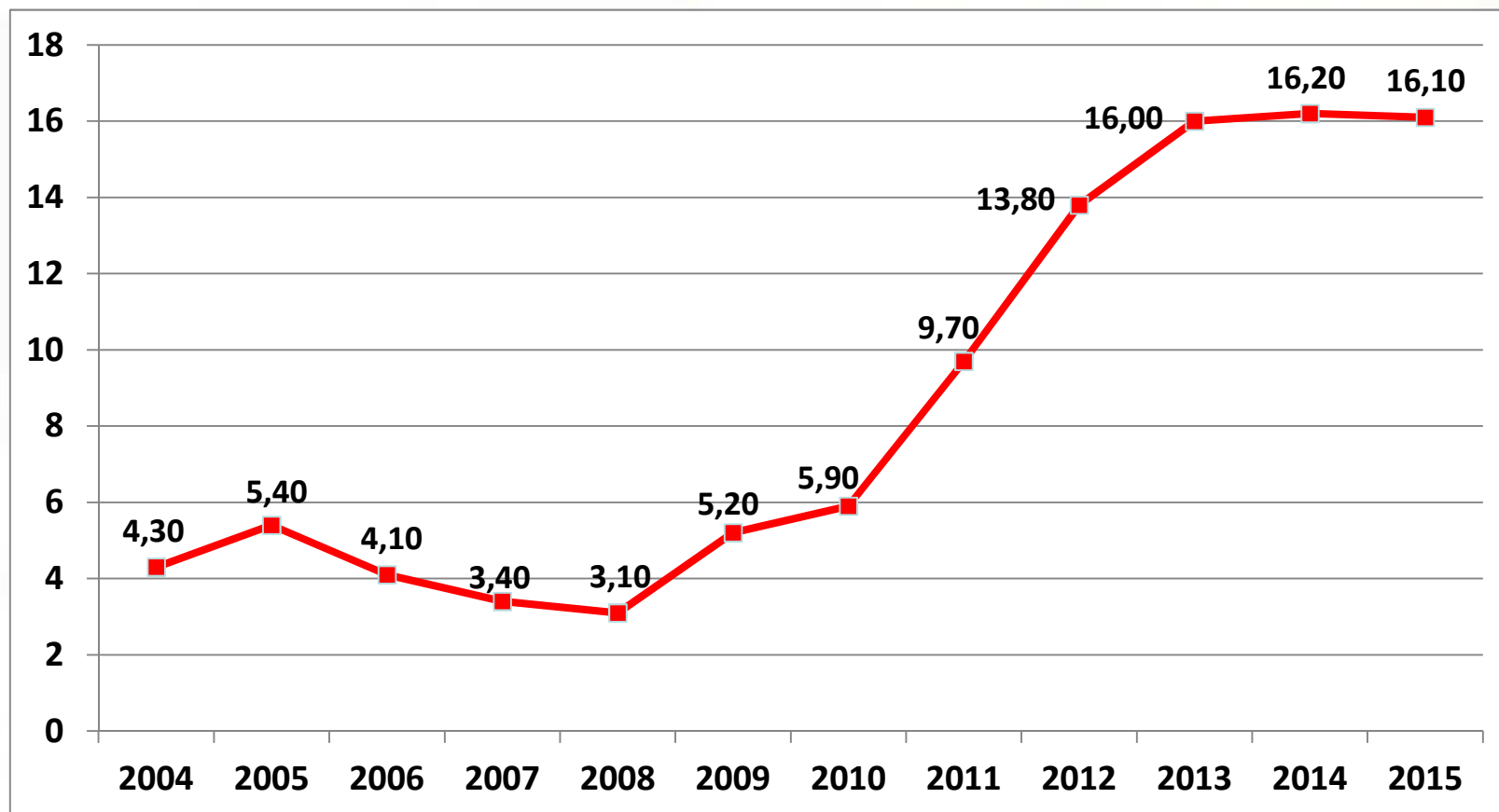
Professional Rights



- The Cyprus Scientific and Technical Chamber (1990)
 - 10 engineering or planning subjects including **Rural and Surveying Engineering**
- The Streets and Buildings Regulation (Amendment) Law (2000)
 - Urban planning studies, land subdivision, urban road design, hydraulic eng., land development
- Cadastral Surveying Law (2005)
 - Part of Cadastral surveying open in the private sector
 - Registered Cadastral Surveyor (1 year practice)

Unemployment in Cyprus (%)

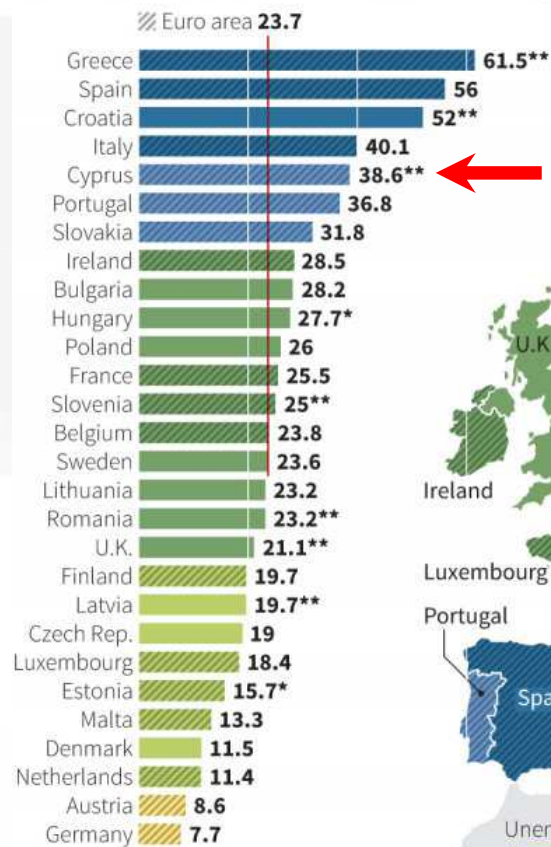
“The golden 20 year period for Surveyors: 1990-2010”



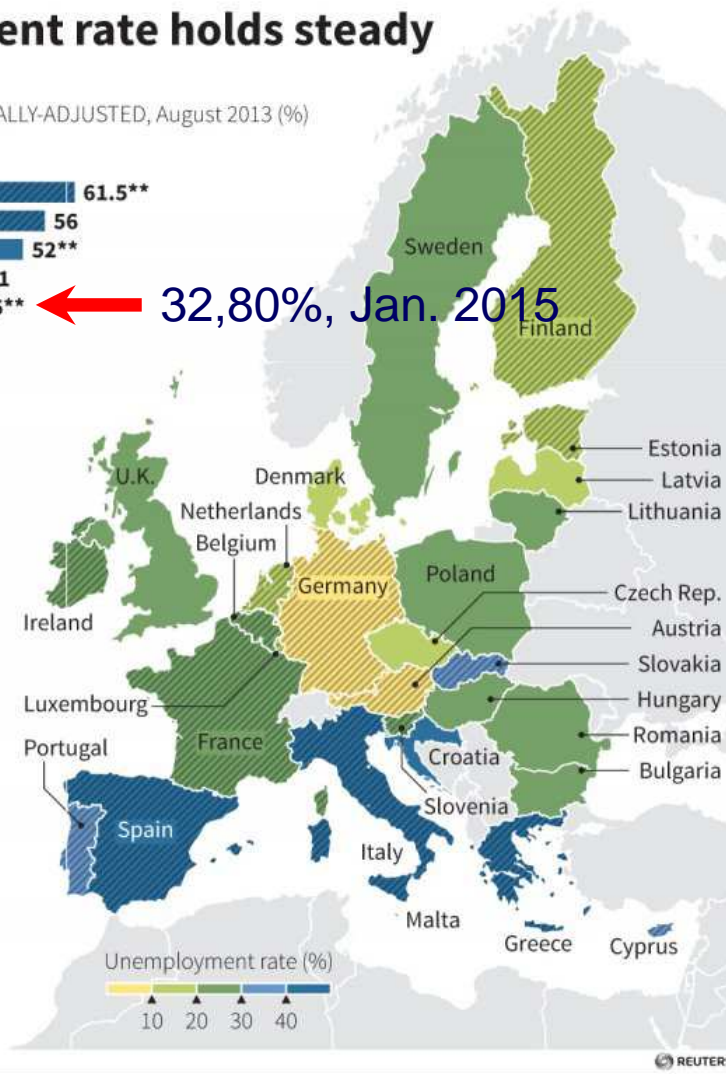
Youth unemployment in EU

Youth unemployment rate holds steady

UNEMPLOYMENT RATE — SEASONALLY-ADJUSTED, August 2013 (%)



← 32,80%, Jan. 2015



* July ** June

Source: Eurostat

W. Foo, 02/10/2013

Prospects of our profession

- Many factors impact on the surveying market

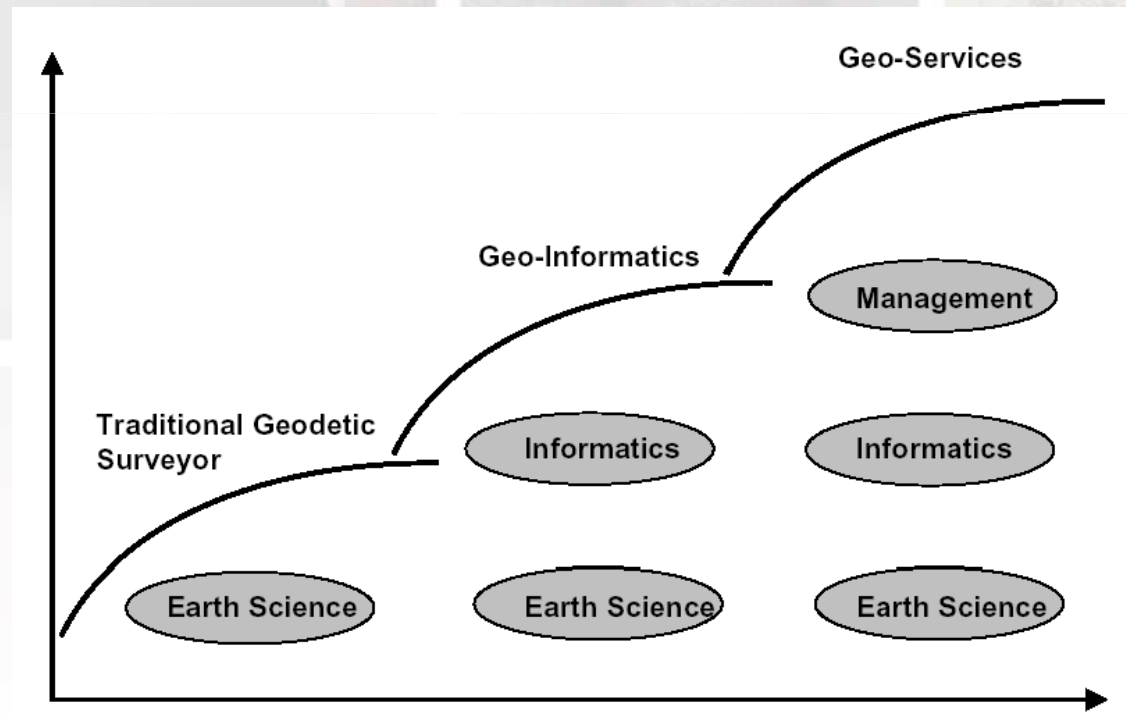


Prendergast, 2006



How we respond to these new challenges?

- Meet the needs of modern societies
- Expanding our role from the traditional model to Geo-management



How do we enhance our role?

- Educational

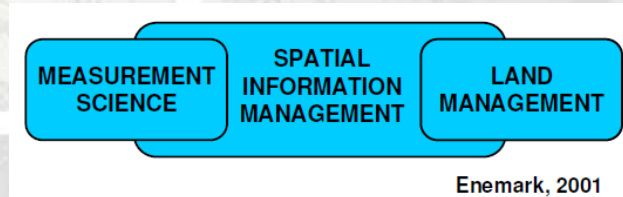
- Modern curricula for next generations
- Life long learning opportunities
- Length of academic programmes

- Professional

- Multi-disciplinary teams
- Trend for less professional regulation
- Ethical principles and codes

- Institutional

- Re-consider existing structures and “empires”
- Public private partnerships
- Research and innovation



Thank you very much for your attention!

