

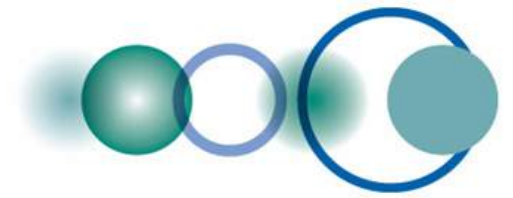
Membership of Bulgaria in GEO

Status and Perspectives

Lyubka Pashova¹, Valentin Yovev²

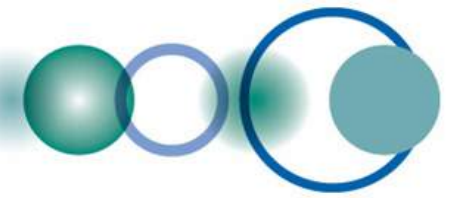
¹ National Institute of Geophysics, Geodesy and Geography - BAS

² Chamber of Graduated Surveyors



PRESENTATION OUTLINES

- **Group on Earth observation (GEO)**
- **Global Earth Observation System of Systems (GEOSS)**
- **Membership of Bulgaria in GEO**
- **Challenges, benefits and opportunities for development**



GEOSS - to meet the need for “timely, quality, long-term, global information as the basis for sound decision-making”

The vision for GEOSS: <https://www.earthobservations.org/>

“to realize a future wherein decisions and actions for the benefit of humankind are informed by coordinated, comprehensive and sustained Earth observations and information.”





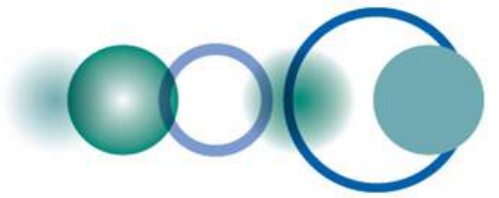
Concept of GEOSS:

- 1. INFRASTRUCTURE** - space-based, airborne and particularly in situ systems; architecture; data management; geoportals; software; tools
- 2. HUMAN RESOURCES** – experience; qualification; formal and informal developed talents
- 3. INSTITUTIONAL SYSTEMS**-network management, political commitment: to support data sharing
- 4. RESULTS** - information to support decision making

<http://www.geoportal.org/>



Relationship between Users, Earth System, Science, Technologies and GEOSS (Fig. 10.1, GEO 10-Year Plan Reference Document, 2005)




Specific for Europe challenges

- **Determination of coordination mechanisms related to GEO activities at European and national level**
- **The role of EU 'Horizon 2020' in support of GEOSS and development of the European Research Area in EO**
- **Links to GEO initiatives and Copernicus - possible synergies between GEOSS and Copernicus**
- **Development of lower and cost in-situ technological solutions building on latest developments that can be adapted to operational environments**
- **Mobilization of the European private sector to take advantage of future GEOSS-related business opportunities in an increasingly global digital economy - new opportunities and market development for Earth observation commercial sector in Europe**



Acceptance of Bulgaria as a member of GEO

- GCCA and MIP - preparation of official documents and coordination procedures
- Protocol decision №23/11.06.2014, the CM of Bulgaria to become a member of GEO and ESA
- August 25, 2014 – Formal letter from the Secretariat of GEO to the Bulgarian Government




REPUBLIC OF BULGARIA
MINISTRY OF INVESTMENT PLANNING

РЕЗ. № V-01-4368/15.04.2014

ATTN: DR. BARBARA RYAN
SECRETARIAT DIRECTOR
GEO SECRETARIAT
7, BIS AVENUE DE LA PAIX
CASE POSTALE 2300
CH-1211 GENEVA 2
SWITZERLAND

099
01/08/14



GROUP ON
EARTH OBSERVATIONS

Our Ref: 2014-129GEOIMEM

H.E. Mr Ivan Danov
Minister of Investment Planning
Ministry of Investment Planning
1000, Sofia
1 "Sabornik" str.
Republic of Bulgaria

Geneva, 25 August 2014

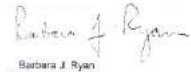
Excellency,

The Secretariat of the Group on Earth Observations (GEO) is in receipt of your communication of 15 July 2014 conveying the formal request of the Government of the Republic of Bulgaria to become a Member in GEO.

On behalf of the GEO Secretariat, it is my extreme pleasure to welcome the Republic of Bulgaria as a Member of GEO. As such, the Republic of Bulgaria may participate in GEO Plenary meetings and provide experts to the GEO Work Plan and Implementation Boards.

For your information, the 11th GEO Plenary (GEO-XI) will be meeting in Libreville, Gabon, from 13 to 14 November 2014. New GEO Members will be officially recognized at this Plenary and will be invited to make a short statement during the dedicated session.

Please accept, Excellency, the assurances of my highest consideration.


Barbara J. Ryan
Secretariat Director

GEO Secretariat | 7, bis, Avenue de la Paix • Case postale 2300 • CH-1211 Genève 2 • Switzerland
Tel: +41 (0) 22 730 8183 • Fax: +41 (0) 22 730 8120 • info@geos.org • www.earthobservations.org

• Bulgaria became **the 92th Member State** of GEO in 2014 at the XI Plenary Session,



Recognition of New Members

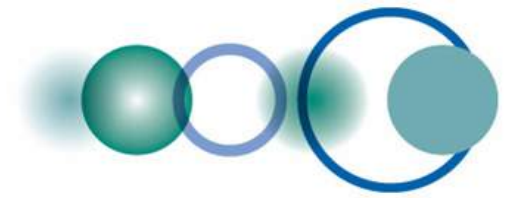
- The Republic of Senegal – 20 May 2014;
- The Republic of Bulgaria – 15 July 2014;
- The Republic of Seychelles – 21 July 2014;
- The Republic of Armenia – 26 August 2014; and
- The Republic of Poland – 5 November 2014.

Total Members: **94 countries + the European Commission.**

Statement on behalf of the country
http://www.earthobservations.org/documents/geo_xi/geoxi_bulgaria_statement.pdf



After the XI-th Plenary Session of GEO in Geneva - new programming period 2016-2025, and the strategic plan for GEOSS



GEO at 2017

104 member states/incl. EC/

106 participated organisations

10 organisations and 2 states as observers

Number of Members (2017)

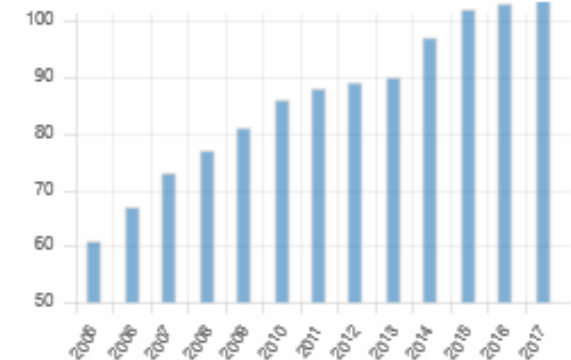
Africa:	27
Americas:	16
Asia/Oceania:	20
C.I.S.:	7
Europe:	34

Total:	104
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GEO Member's Map



Number of Members by year



Contributions to the GEO Work Plan

UNDER DEVELOPMENT



Membership of Bulgaria in GEO

after the XIth Plenary Session, November 2014

- ▶ Preparing lists of BG interested GEO/GEOSS/EO stakeholders and WGs by topics
- ▶ Planning a meeting of all interested stakeholders for establishing a National GEO Committee and host organisation
- ▶ Arranging personal meetings and seeking assistance from various state organizations
- ▶ Writing a letter to the prime minister about national GEO engagements and activities
- ▶ Discussing the issue with two parliamentary committees of the 43-th National Assembly
- ▶ Writing a letter to the Minister of economy about national GEO engagements and activities



РЕПУБЛИКА БЪЛГАРИЯ
Министър на икономиката

Изх. № 92-00-740
Дата 20.08.2016

ДО:
Г-ЖА РУМЯНА БЪЧВАРОВА
Заместник министър-председател и
Министър на Вътрешните работи

Г-ЖА ЛИЛЯНА ПАВЛОВА
Министър на регионалното развитие и благоустройство

Г-ЖА ИВЕЛИНА ВАСИЛЕВА
Министър на околната среда и водите

Към № 92-00-740/14.07.2016 г.

ОТНОСНО: Членство на Република България в работна група за наблюдение на Земята - Group on Earth Observation (GEO), организацията.

азие чрез „координирани, цялостни и информация“. Организацията предоставя на и свободен достъп до масиви от данни,

у ползите от членството на България в тази сътрудничество с различни национални и мават с наблюдения на Земята; разработване и; на бизнес модели, които дават възможност да развиват и поддържат инфраструктура за зне на данни и информация от различни те на устойчиви и информирани решения Членството в GEO не изисква членски внос и вноски или други такси за членуването си в

В представената информация от инж. Валентин Йовев и доц. д-р инж. Любка Пашова се повдига въпроса за липсата на водеща институция, която да бъде двигател на инициативата и чрез която да се реализира прякото и пълноценно участие в организационния живот на GEO.

Във връзка с гореизложеното, Ви уведомявам, че предвид функциите на Министерство на икономиката да координира дейностите в областта на космическата политика, се ангажираме да подпомогнем институционално участието на България в GEO.

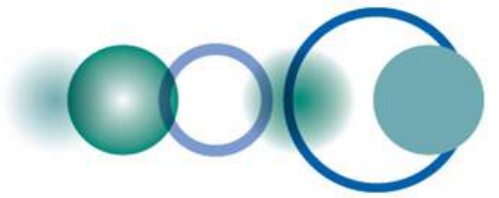
В допълнение, Ви информираме, че предвид областта на действие на инициативата, засягаща широкоспектърни въпроси, при необходимост ще се борещаме към Вас за експертни становища, позиции и мнения.

Приложение: Съгласие

С уважение,

БОЖИДАР ЛУКАРОВ
Министър на икономиката





Challenges for Bulgaria

- ▶ Adoption of BG strategy for scientific research and roadmap for research infrastructure that include GEO, GEOSS and EO activities
- ▶ Elaboration of national regulations governing the provision and use of EO to all interested parties
- ▶ Increasing awareness and interest of stakeholders in GEO activities - promotion and capacity building /<http://www.geocab.org/>
- ▶ Changing the funding mechanism by NSF/ NIF and encouraging a public-private partnership
- ▶ Strengthening of the mechanism of public control over state institutions which coordinate European funding programs related GEO activities
- ▶ Inclusion in curriculums of BG universities of GEO, GEOSS and EO topics
- ▶ Web portals (in the local language) for active promotion, e.g. by using all the media



Bulgaria

Search Results Number of results: **15174**

Filters

KEYWORD FORMAT SOURCE

PROTOCOL ORGANISATION

Resource preview not available

Geothermal Update for Bulgaria (2000-2005)
(Organization: United States Geoscience Information Network Metadata Catalog)
Geothermal development in Bulgaria has not marked a significant progress in last five years. It has been a time of testing and completing the new legislation concerning thermal waters and geothermal energy use. During this period the Government paid more

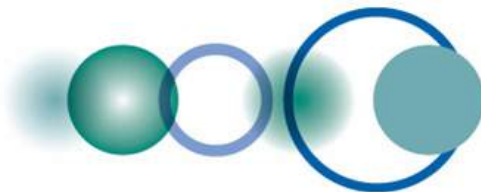
Start date: 1900-01-01

Urban Atlas - Bulgaria - Burgas (Бургас)
(Organization: European Environment Agency)
The Urban Atlas is providing pan-European comparable land use and land cover data for Large Urban Zones with more

Visible 1-10 of 15174 next

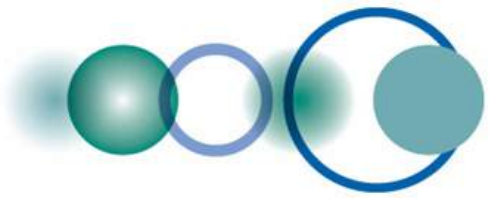
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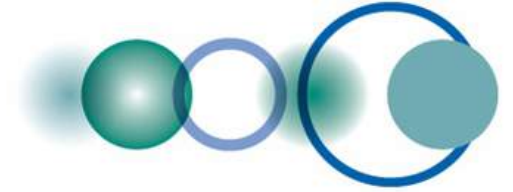
Benefits and opportunities to Bulgaria

- Strengthening networking and partnerships
- Starting and include regional or global initiatives (eg. GEOBON, GEOGLAM etc.).
- INSPIRE Directive the EU - <https://gis.armf.bg>
- Providing access to large datasets
- Expanding user base
- Developing and maintaining human capacity
- Increase visibility and high-level support
- Releasing funding for activities
- Scheme through financial contributions for the establishing of GEOSS
- Program "Horizon 2020" of the EC and ESA



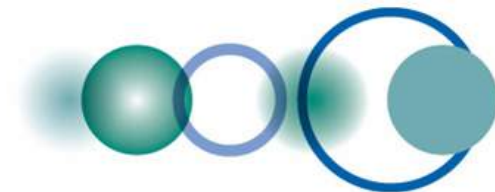
PERSPECTIVES

- **GEO and GEOSS support policies for economic growth and sustainable development of society in a changing environment**
- **Potential for creating innovative products and services**
- **Expanding policies / practices of free access to data and information**
- **Expanding the commitments of decision makers, incl. and the private sector**
- **Strengthening the links between policy / State obligations as a member of the EU**
- **National, regional and international cooperation**



**NOAA Administrator Dr. Kathryn Sullivan discusses the importance of sharing earth observation data, and GEO's special role - November 13, 2014
XI-th Plenary Session of GEO in Geneva, Switzerland**

- ▶ <https://www.youtube.com/watch?v=idE9Xma-C6Y>



Thank you for your attention!

For additional information:

- ▶ <https://www.earthobservations.org>
- ▶ Л. Пашова, В. Йовев: България като член на GEO. Възможности, ползи и перспективи от участието ни в Групата за наблюдения на Земята, Списание 8, м. октомври 2015 г., <http://www.spisanie8.bg/>
- ▶ Интервю в сп. Геомедия с д-р Барбара Райън, Директор на GEO: **ВСЕКИ ИМА ПРАВО НА ДОСТЪП ДО ИНФОРМАЦИЯ**, м. ноември 2015 г., <http://www.geomedia.bg/>