Economic restructuring, uniting sustainable development management, innovation and high technological verification tools

- *Subtopics:*
- A. *“Single market economy society” is not a solution;*
- B. *Better efficiency – integration between programs, projects, thematic policies;*
- C. *Balanced centralized/decentralized governance*
- D. *Strategic planning& simulation& forecasting, towards saving resources , human behavior and economic prosperity;*
- *E. Permanent EO monitoring, Data mining, Data quality and harmonization*

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in cooperation with the Bulgarian- Chinese association for Business development

A.1“Single market economy society” is not a solution

- End of 2009, the global economy was tentatively emerging from the Great Recession. Today, growth is recovering across the world, but this is not the recovery we need:

  - First, the recovery is unbalanced *across* countries. Growth remains below potential in most of the advanced economies; emerging and developing economies are growing much faster—and may soon be overheated.

  - Second, the recovery is unbalanced *within* countries. Global unemployment remains at record highs, with widening income inequality adding to social strains. Look on last events in England. 400 million young people are expected to join the global labour force over the next decade, and there is a danger of a prospect of a “lost generation of young people.”

- We need reasonable governmental and international sustainable economic management and strategic support as without jobs and income security, there can be no rebound in domestic demand—and ultimately no sustainable recovery

A.2“Single market economy society” is not a solution

- **Just one example for possible intervention towards better results in one sector-tendering**:
- A serious problem is the lack of efficiency and quality when using the most popular tool of public tendering;
- The purpose of the public tender is to achieve the lowest price for adequate quality. With respect to the lowest price the things are clear. In terms of quality there is available a system - ISO, which makes no guarantees of quality. The state governments and the big/large corporations / producers to agree about:
  - establishing certain criteria;
  - encouraging and promoting good practice;
- In Bulgaria there are such a case of good practice, in a tender for purchase of automobiles was adopted a criterion, **the price of one kilometer run**; Then the winner was **not the cheapest car, but the most expensive**, because the total cost of the mileage/run was cheapest and the final user and the customers are satisfied

B. Better efficiency – integration between programs, projects, thematic policies

- We propose integration between:

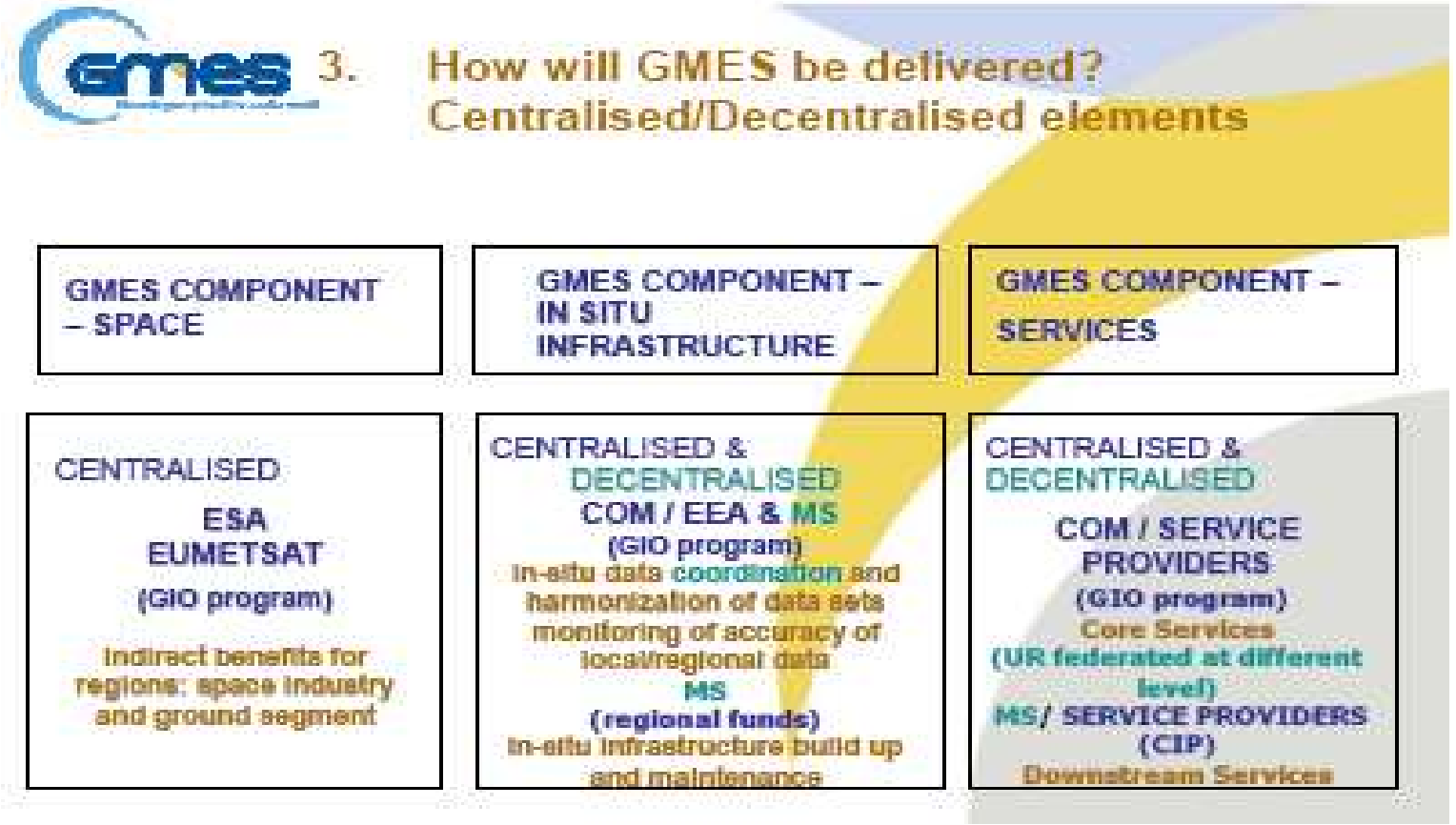
- investment programs and projects in transport – **networks** - highways/railways/airports/seaports, intermodal terminals, logistics; + **new technologies** – electromobiles, low consumption vehicles, solar powered cars, hydrogen supply from the unlimited reserves of the Black Sea;

- programs and projects in risk and security management – natural and anthropogenic hazards, maritime surveillance, combining space and in-situ generated data, Earth observation;

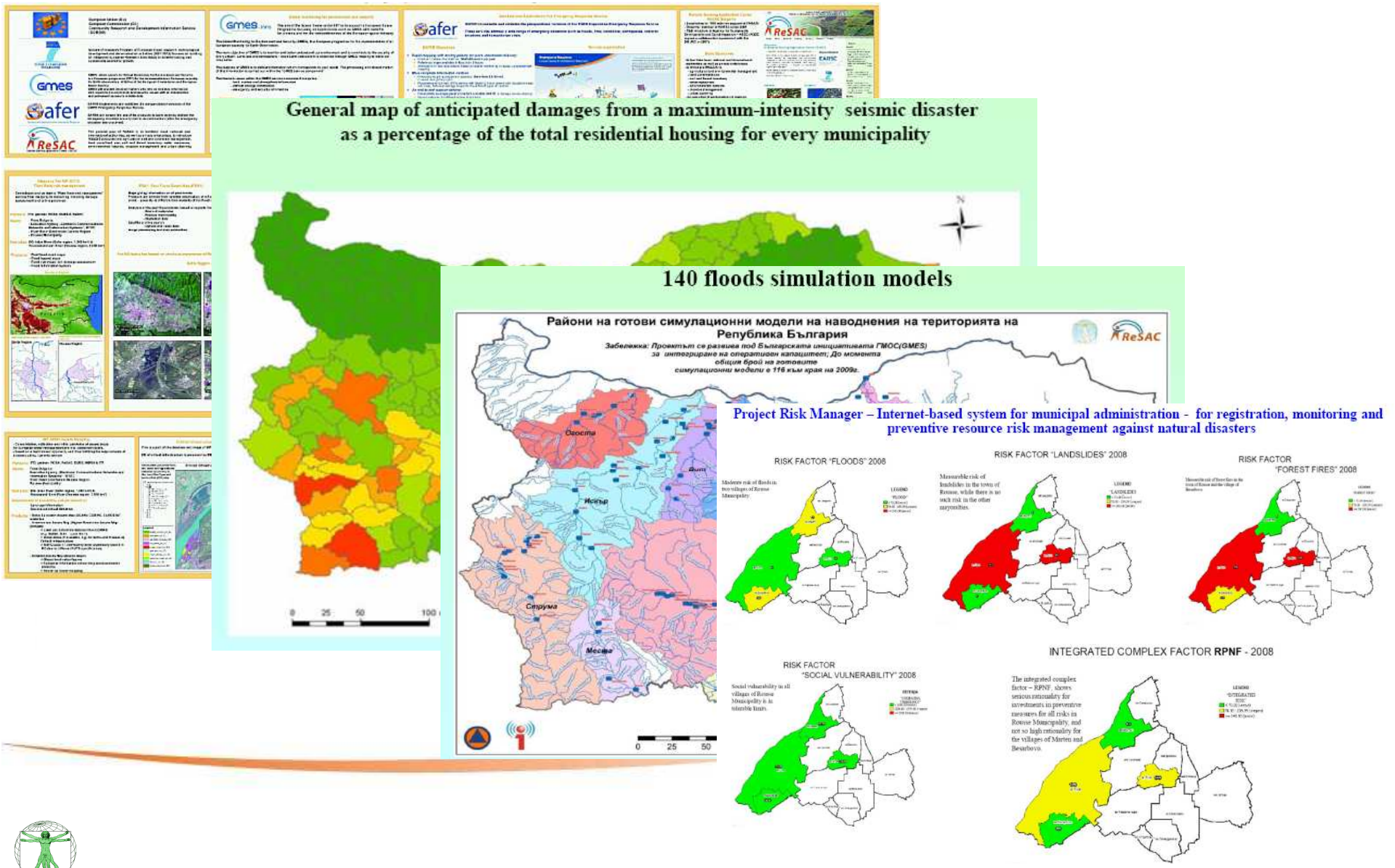
- Planning, forecast and prognosis -thematic strategies/policies assessment, forecasts, preliminary simulations and modeling, data quality assessment, data mining, permanent monitoring;

C. Balanced centralized/decentralized governance and technological ethical approach – " real time response";

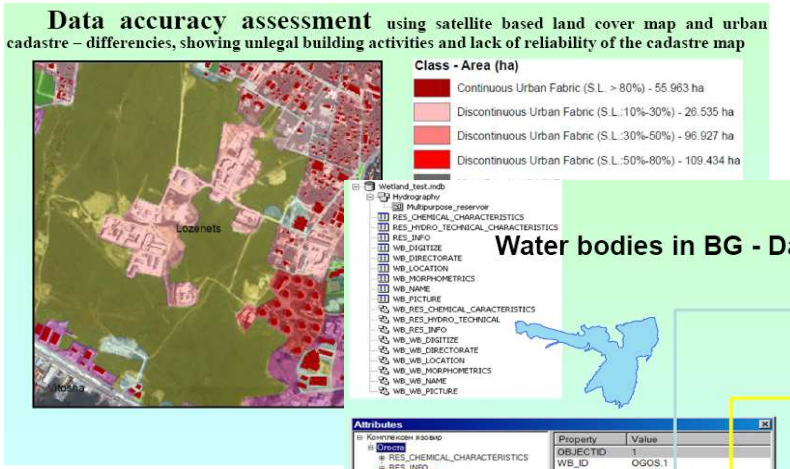
The new approach in the European GMES programs based on centralized and decentralized governance and user oriented " real time response" is shown as good example for flexible management and user oriented policy;

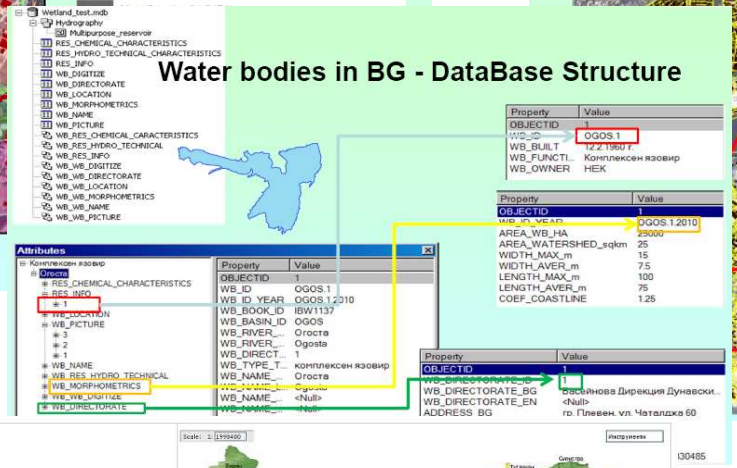


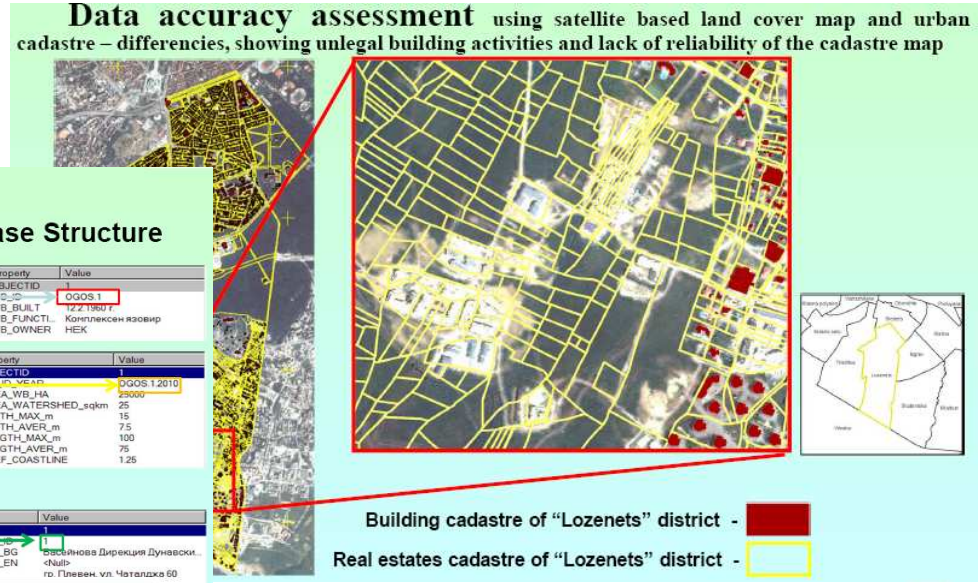
D. Planning, forecast and prognosis - Strategic planning& simulation& forecasting, towards saving resources,human behavior and economic prosperity



E. Permanent EO monitoring, Data mining, Data quality and harmonization







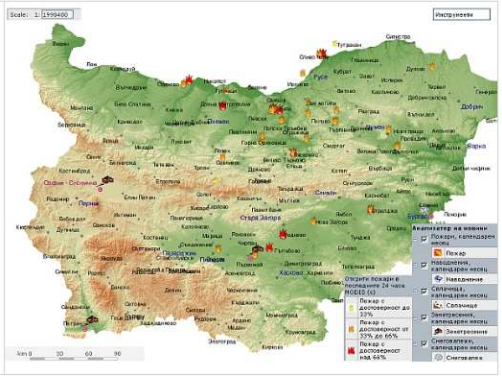
ENTER

to

Web-GIS representation of daily information for disasters and accidents in Bulgaria - Riskwatch

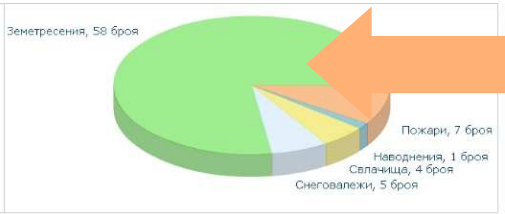
Available only in Bulgarian language!

The webpage is subject to continuous renewal and improvement



EFAS (IES - JRC) **RISKWATCH** (BSDI) **EFFIS** (IES - JRC)

Stastistical Analysis Services for „Riskwatch"



Possible programs and projects for cooperation with CHINA – proposal for frame agreement with ASDE, ECOZONE INC, in cooperation with the Bulgarian- Chinese association for Business development and other Bulgarian partners

Some ideas for collaboration:

1. **Sustainable Land use management** , based on a basic SDI layer for data harmonization and land cover monitoring – from local to global and vice-versa; Pilot cases – PlovdivLovetch/Burgas – Bulgaria and Changchun – China;

2. **Trans European transport corridors**, Intermodal concept&Logistics - Danube-Black Sea link Ruse-Burgas; Link to Lovetch – automobile industry – Bulgarian-Chinese partnership;

3. **RURSE-Regional Unit for Integrated risk and Security Management for South East Europe** – element of European-Mediterranean network, target – a pilot realization of the Global Earth Observation System of Systems (GEOSS);

4. Integration between 2 and 3 – **Science and Technological parks** – Science-technopark "Lozenez-Lozen", near Sofia - towards a network of science/technoparks;

1. Sustainable Land use management , based on a basic SDI for data harmonization and land cover monitoring – from local to global and vice-versa;

Globecover and Bulgarian Reference Land Cover Layer

ADMINISTRATIVE LEVEL	VERY HIGH RESOLUTION	HIGH RESOLUTION	MEDIUM RESOLUTION	GLOBAL SCALE RESOLUTION
LOCAL	1 M (URBAN) 2.5 M	5 - 10 M	20 - 40 M	0.2 - 1 KM
DISTRICT/ NATIONAL	1 M (URBAN) 2.5 M	5 - 10 M	20 - 40 M	0.2 - 1 KM
REGIONAL (EU)	1 M (URBAN) 2.5 M	5 - 10 M	20 - 40 M	0.2 - 1 KM
CONTINENTAL	1 M (URBAN) 2.5 M	5 - 10 M	20 - 40 M	0.2 - 1 KM
GLOBAL	1 M (URBAN) 2.5 M	5 - 10 M	20 - 40 M	0.2 - 1 KM

NO/VERY LOW IMPORTANCE	LOW IMPORTANCE	HIGH IMPORTANCE	VERY HIGH IMPORTANCE

Elaboration of a land cover dataset for the whole Bulgaria, based on the classification methodology LCCS of FAO/UN, as a first step for the creation of a national reference database - in accordance with the European program for Global Monitoring Environment and Security and the Global Earth Observing System of Systems (GMES – GEOSS).

The elaboration of this land cover dataset, aims to support the harmonization of various thematic data at scale of 1:25 000 – 1: 50 000, available in the country. The land cover dataset will be used in agreement with and for implementation of the Directive 2/2007/EC, Directive 60/2007/EC and other directives and programs of the European Union. It includes up-to-date information of the basic land over types, enriched with elevation and slope data (from SRTM v3, obtained by DG JRC) – thus, creating a suitable bundle product for planning and management of the territory.

2. Trans European transport corridors, Intermodal concept, Logistics - Case Danube-Black Sea link Ruse-Varna – Development and realization of a Intermodal Terminal/Logistic Complex in the port of Burgas, including new container terminal

Preliminary Data- Intermodal terminal-Burgas

Capacity – 500 000 containers/per year; possibility for enlargement;

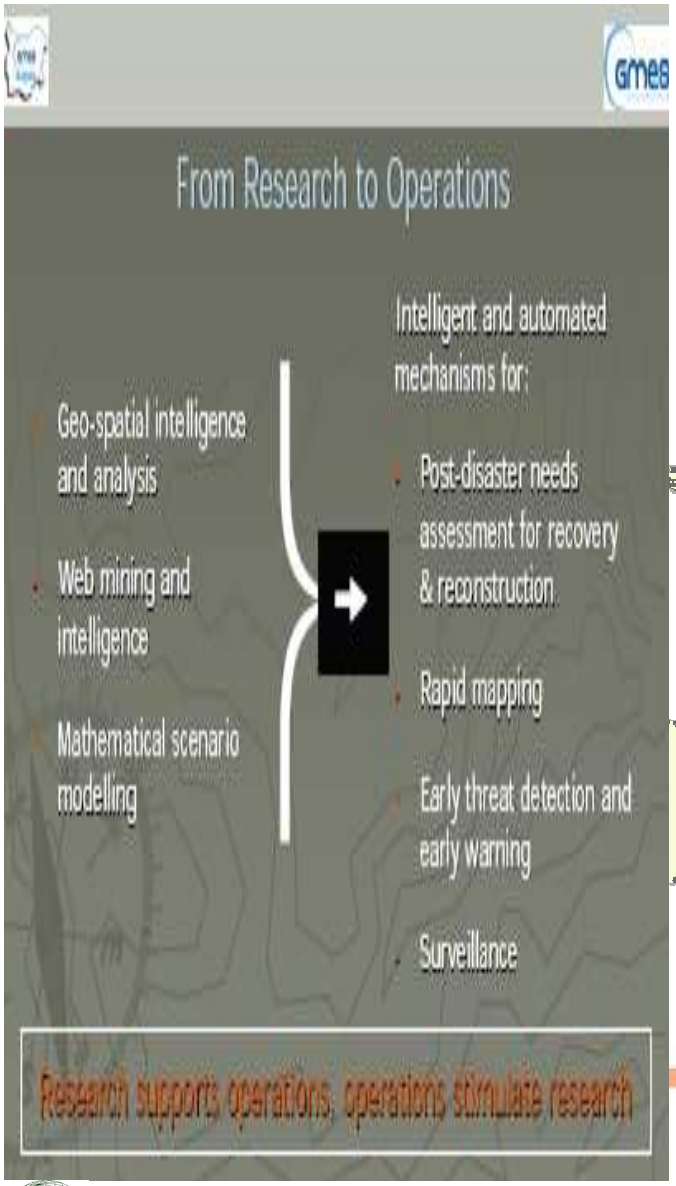
Time schedule – 5 years for realization and start of exploitation;

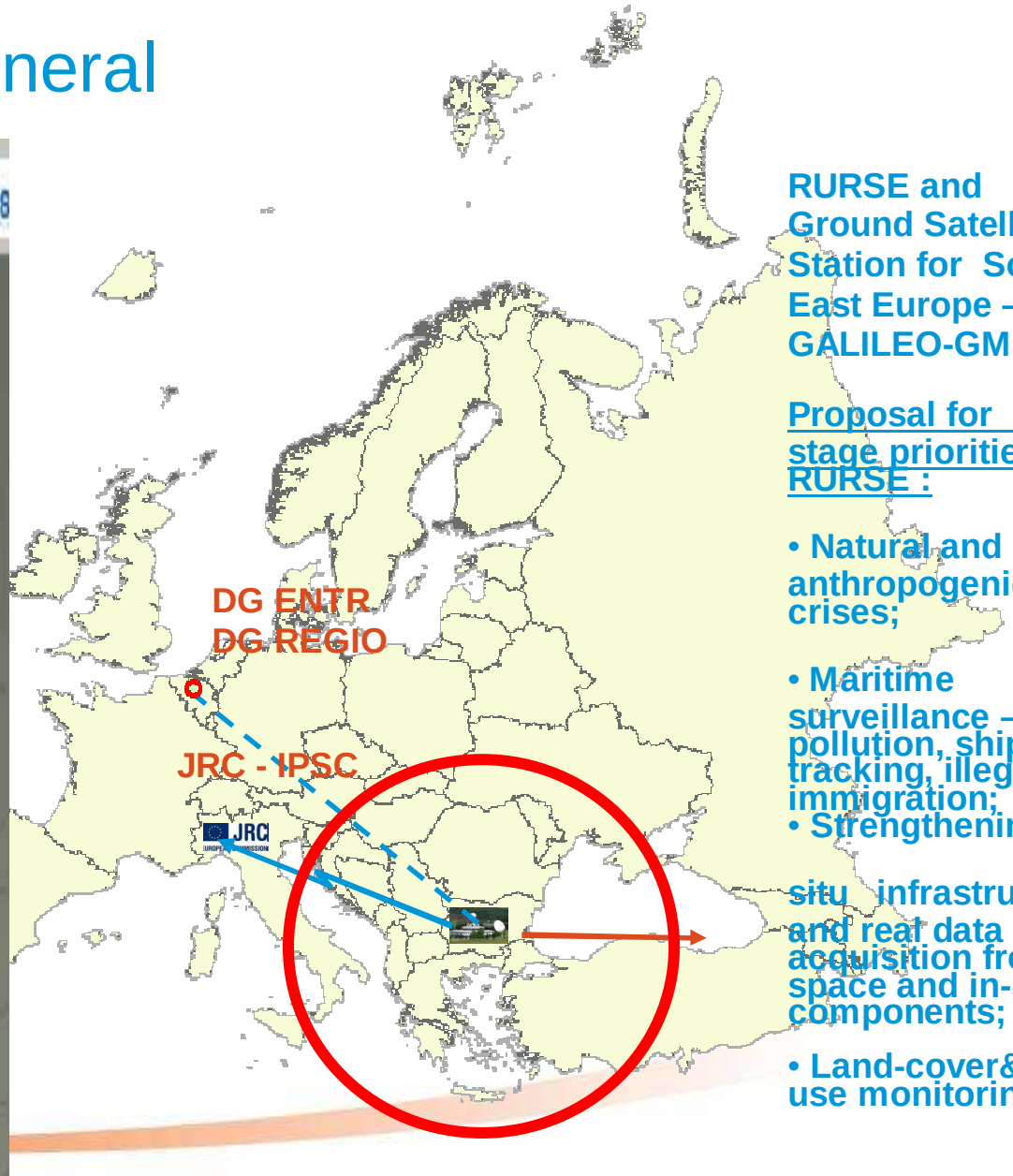
Estimated 450 working places;

Transport Links – sea port, railway network, highway network, international airport;

Link to the Danube-Main-Rhine river transport system - TransEuropean corridor 7;

3.1. “RURSE” - general



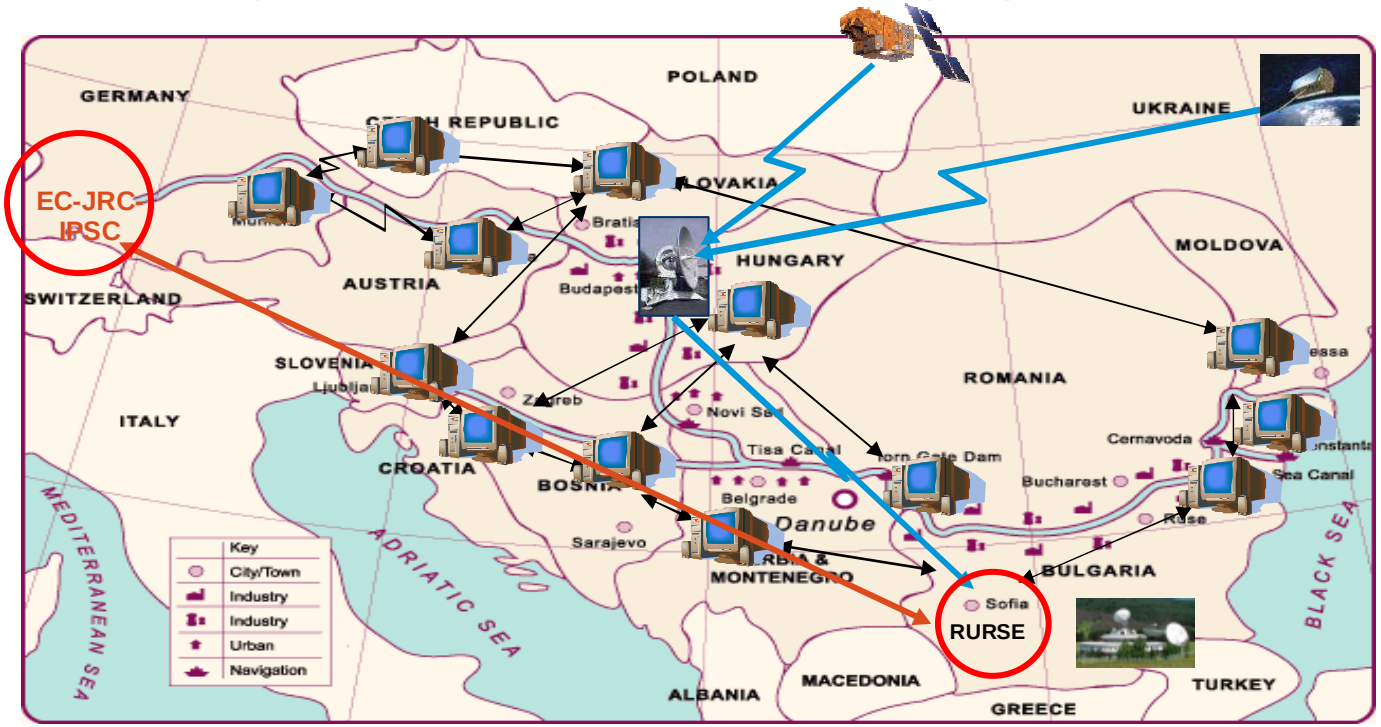


RURSE and Ground Satellite Station for South East Europe – GALILEO-GMES

<u>Proposal for first stage priorities of RURSE :</u>

- **Natural and anthropogenic crises;**
- **Maritime surveillance – water pollution, ship tracking, illegal immigration;**
- **Strengthening in-situ infrastructure and real data acquisition from space and in-situ components;**
- **Land-cover&land use monitoring;**

3.2“RURSE” and other systems - integration between RURSE and Danube flood management information network (DF)



Regional Receiving & Archiving Centre (DF)

National Monitoring Centre -

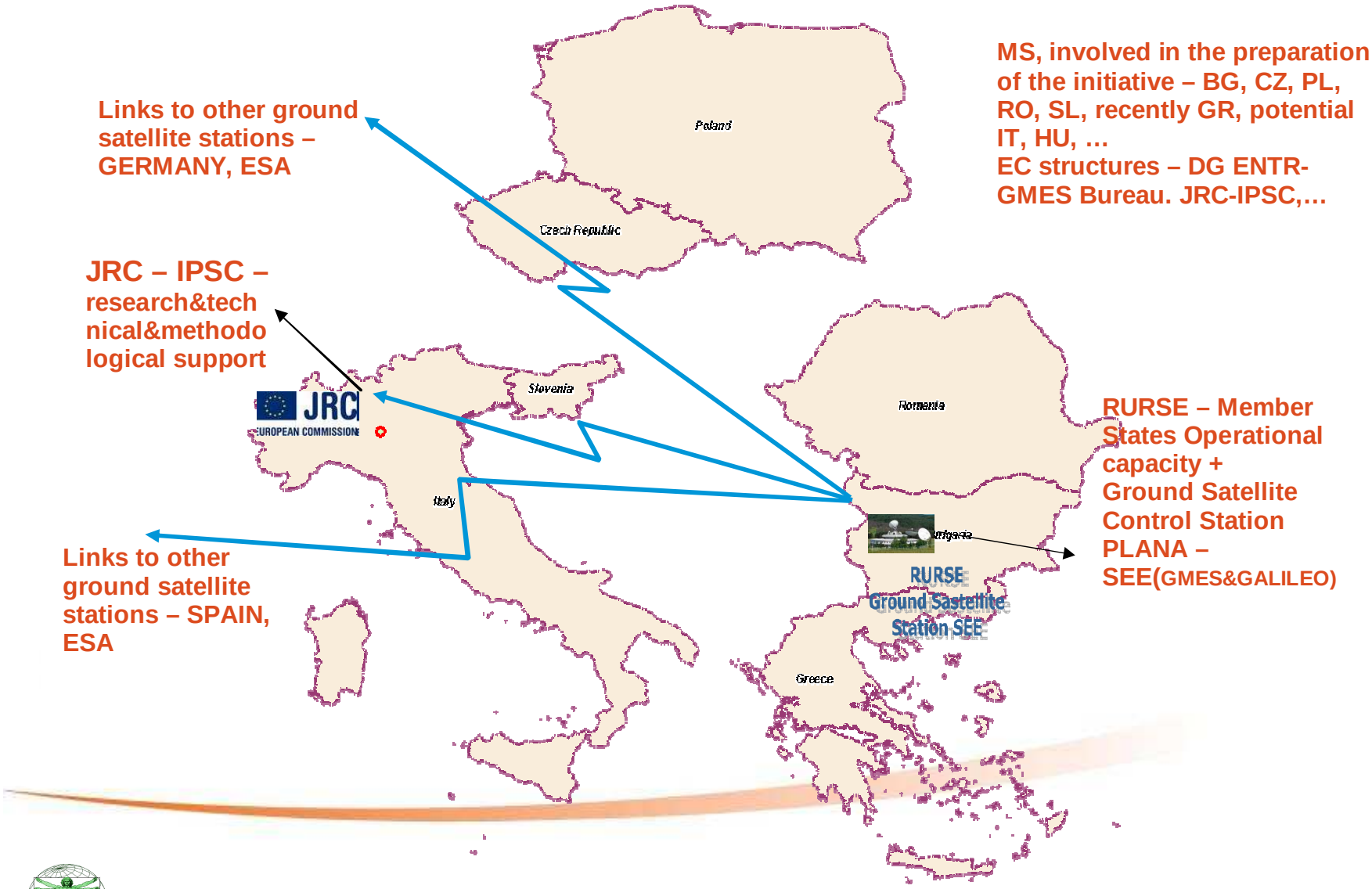
RURSE

Regional Center for Integrated Risk and Security Management for SEE – Sofia,BG – RURSE

Ground Satellite Station – Plana, Bulgaria -RURSE

- **Proposal for integration - The Regional Unit/Center for Integrated Risk and Security Management for South East Europe (RURSE) and its Ground Control Satellite Station – direct link to real time space data for MS from South East Europe and Danube Region . The integration between RURSE and DF (DF is proposed by a large European consortium) will provided better and real time harmonization and assessment of both space and in-situ data and information**
- **The RURSE Data Center and the RURSE Ground Satellite Station (based in Bulgaria/Sofia-for SEE) may work in cooperation with the Regional Receiving and Archive Centre for DF (based in Hungary- for the Danube region); Their results will be in favour of the EC structures, the National Monitoring Centres and National operational capacity structures. The cooperation may be open for integrated solutions under the Danube Strategy, GMES and GALILEO.**

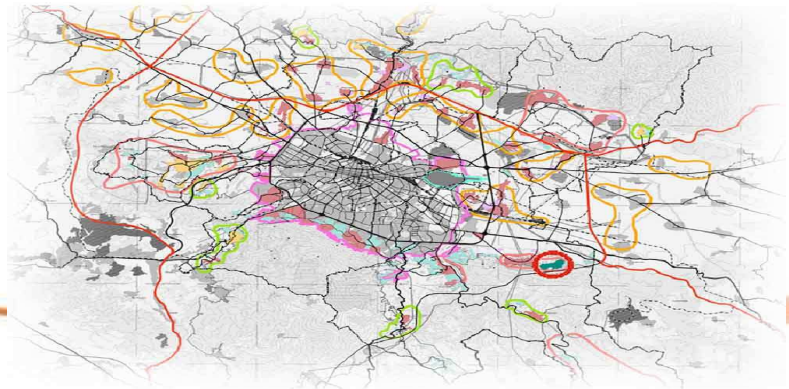
3.3. Partners in the RURSE initiative



3.4. “RURSE”-GMES-GALILEO-GNSS. through the integration of PLANA satellite ground station

4. Science and technological parks – Science-technopark “Lozenez-Lozen”, near Sofia - towards a network of science/technoparks

SOFIA Master plan - project
Окологрaдски район - Територии за перспективно развитие
Разработка ОП"Софпроект - ОГП"



Pilot project - Technopark Lozen"
Proposal - Sofia Municipality & ASDE

- **JOINT INITIATIVE BETWEEN THE SOFIA UNIVERSITY "ST. KIMENT OHRIDSKI "AND AGENCY FOR SUSTAINABLE DEVELOPMENT AND EUROINTEGRATION-ECOREGIONS**
- Preliminary remarks:
- 1. The proposal is prepared in 2008. by an expert team of ASDE, in cooperation with representatives of the Sofia University "St. Kliment Ohridski "- Faculty of Chemistry, Faculty of Mathematics and Informatics , Faculty of Physics, Faculty of Biology
- 2. The proposal is updated in 2010. and is included in the program of the Joint Intergovernmental Committee Bulgaria-Baden-Wuerttemberg. Is submitted to the Ministry of Economy and Energy;
- 3.The new priorities in European Strategy 2020, The Danube strategy, and European programs such as Global Monitoring for Environment and Security (GMES), GALILEO, Directive 60/2007/EO about risk management of floods, Directive 02/2007 / EC - INSPIRE and others are taken into consideration.: The initiators consider carefuly with recent changes to the Operational Programme "Competitiveness" - Ministry of Economy and Energy, Bulgaria;
- 4. University Research Park - Technopark - "Lozenets" is situated on the area of 12.5 ha of Sofia University. and is divided into three sections
- 5. Priority areas for development of the new technology, information and technical solutions:
- New materials, nanotechnologies and nanomaterials;
- Information and communication technologies;
- Ecology and environmental protection, including risk management;
- Biotechnology;
- 6. After the realization of the university science park - Lozenets will proceed with building a real technology park in the suburbs of Sofia - Technopark "Lozen" which is developed as an idea in 1998-2001. and is planned in the structural design of the Ecozone "Sofia-East" General development plan of Sofia and package of some strategic projects of District Sofia.. Area 30 ha.

Final remarks

The situation requires both economical, expert and political efforts and discussions. If the decision have to come from politician it will take time for a complex of reforms not accepted commonly. If the markets have to generate the correct answers probably that will drive to cheap assets which can stimulate the investments and enterprises. Our proposal is to facilitate and promote the cooperation uniting governmental, NGO,s and business efforts.

We do hope the Public – Private Partnership will take place in joint activity between the local government, ASDE/ECOZONE Inc and the Bulgarian- Chinese association for Business development, as well as the coordination with the Bulgarian-Chinese Trade Chamber. Support from responsible governmental structures will be forseen. There are preliminary discussions for establishment of direct relations between the city of Changchung and the cities of Plovdiv and/or Burgas.

The proposed topics for joint cooperation and joint activities are based on national, European and global priority programs, projects and initiatives, in the frame of the European 2020 strategy – building a society based on knowledge;

THANK YOU FOR YOUR ATTENTION!

Kristian Milenov – ASDE

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- ***More information on: http://bsdi.asde-bg.org/; www.asde-bg.org; www.gmes-bg.org ; www.resac-bg.org***