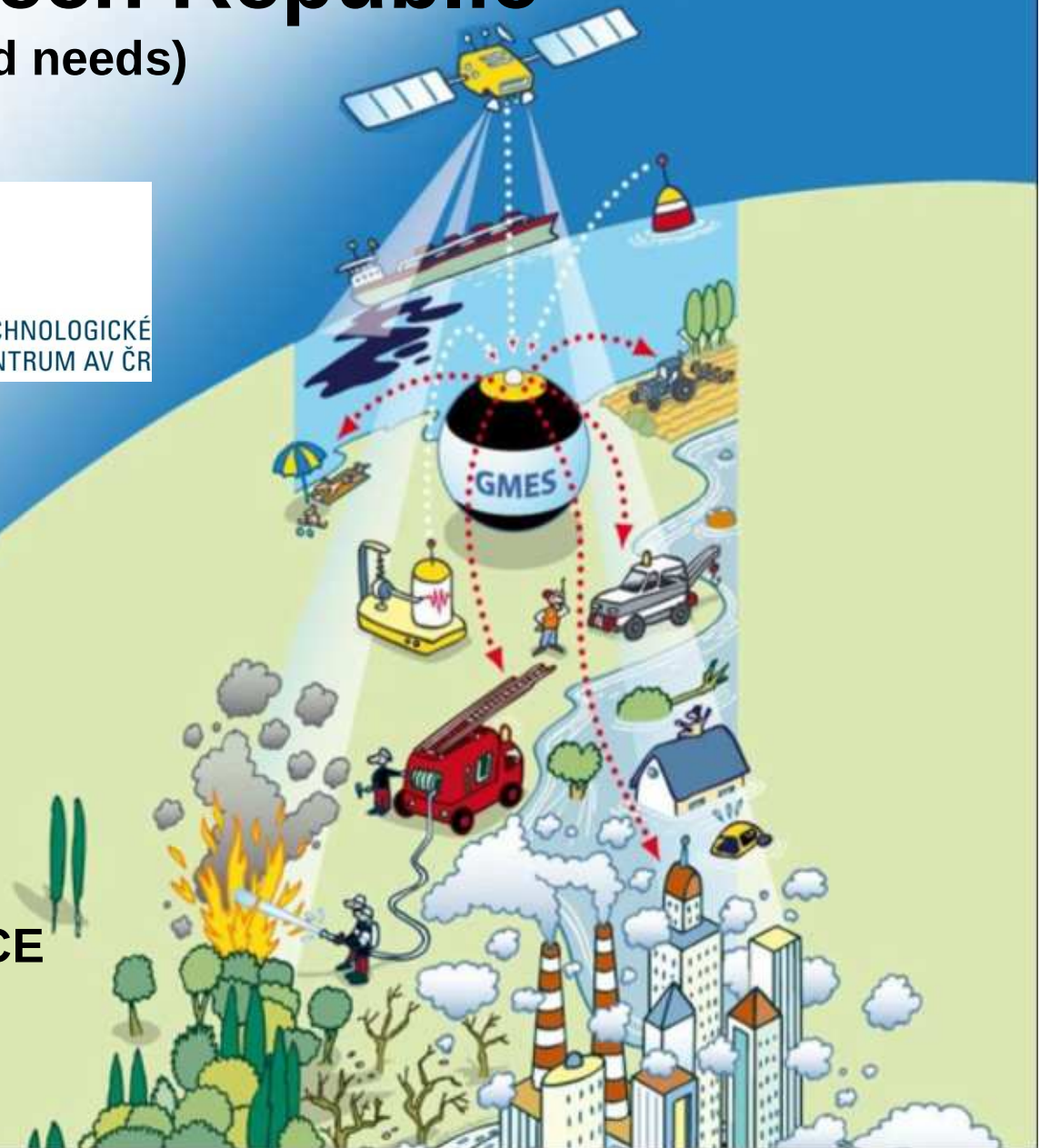


GMES in the Czech Republic

(organisation, capacities and needs)



Ondřej Mirovský
GMES coordinator, NCP SPACE
Technological Centre AS CR
Czech space office



Structure of the presentation

- + Introduction
- + GMES in Czech R. (2006 – 2010)
- + Organisation of GMES in Czech R.
- + Czech potential and needs in GMES



GMES
v České republice



Technology Centre of AS CR

National Information Centre for European Research:

- + synergy of NCPs across all FP7 thematic priorities & programs
- + representation of CZ
- + support of project preparation
- + partnering events - brokerage
- + on-line database of partner searches



<http://www.fp7.cz/>

<http://www.tc.cz/>



GMES
v České republice



Czech Space Office (CSO)

- + information and advisory centre for the space actions including international cooperation
- + contact point for communication with ESA, works on involvement of Czech organizations in ESA programmes
- + Contact point for GALILEO
- + „National GMES office



<http://www.czechspace.cz>



GMES
v České republice



Natural description



- + 33% of forests ↑,
- + 54% agricultural land ↓ (75 % arable land ↓)
- + European water-shed (mother land of some European rivers)
- + structural land use changes, rapid urban development, rapid growth of built-up areas

Environmental highlights

- high dependence on fossil fuels (vs. **CC issues**)
- low efficiency of industry – twice higher than EU average in CO₂ emissions/GDP
- growing sectoral changes (knowledge economy or car manufacturing...), structural and regional disparities,
- growing impact of transport, increasing air pollution (NO_x, PM, dust)
- changes in agriculture
- growing impact of security risks (floods...)
- urban development ... *is it similar in EU 12 ?*

➡ ... **we need GMES**



GMES
v České republice



GMES in the Czech Republic 2006 - 2010

- actively since 2006 (GAC, first activities towards users)
- coordination committee for GEO/GEOSS/GMES established (2006)
- In 2007 first GMES projects in CR (1st SPACE call – GEOLAND)
- FP7 SPACE support from 2008
- closer cooperation with ministries (ministry for education and ministry of environment)
- 2009 governmental resolution on GEO/GEOSS/GMES - way open towards national GMES secretariat
- 2009 – Czech presidency of the EU



GMES
v České republice



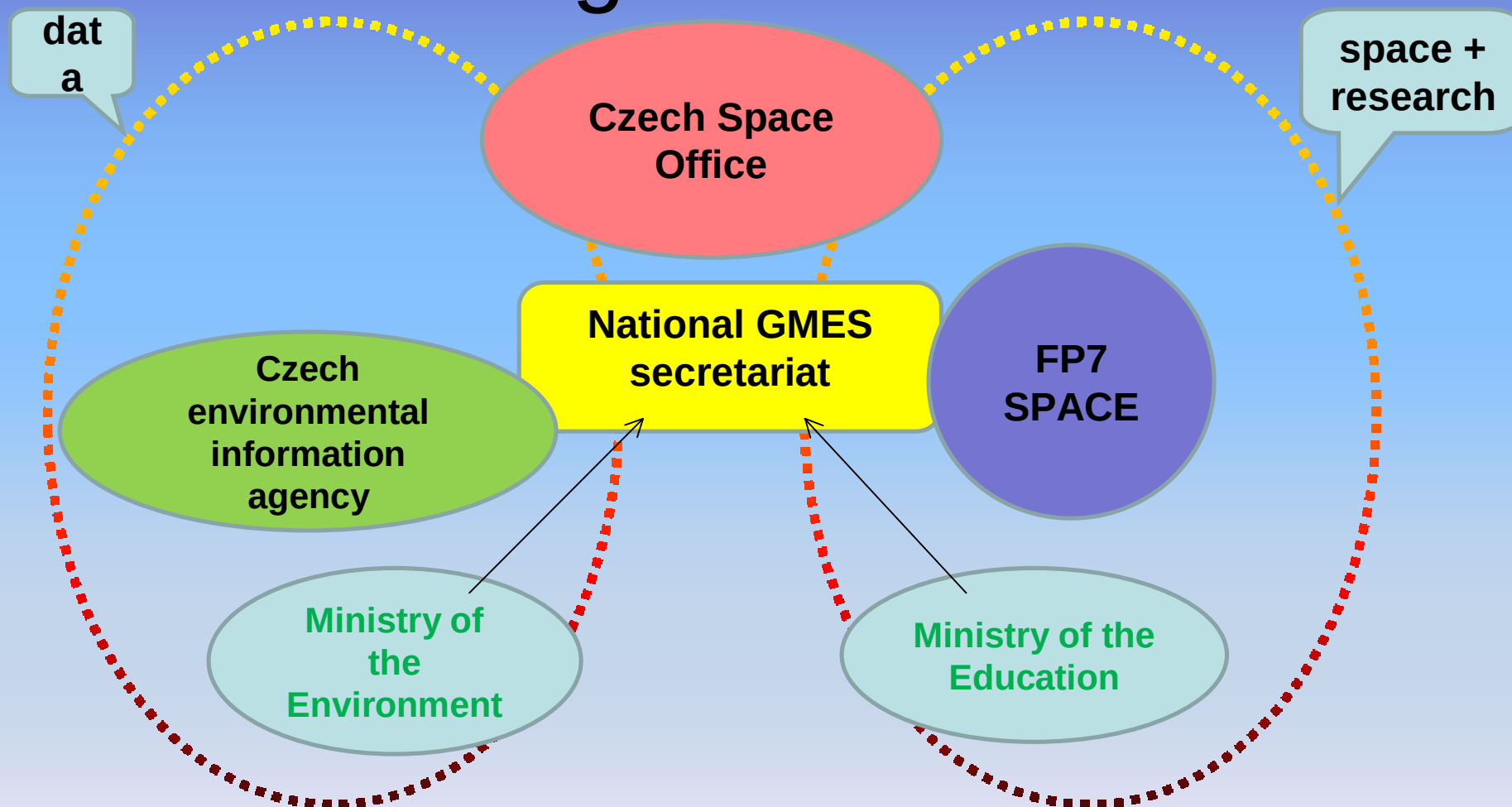


- support for wider recognition of GMES in CR
- GMES event within „**TOWARDS eENVIRONMENT**“ conference
 - GMES
 - INSPIRE
 - Shared Environmental Information System (SEIS)
- support for more synergies of SEIS, INSPIRE, GMES activities



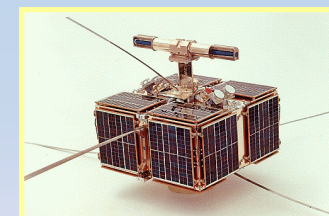
http://www.e-envi2009.org/Summary_GMES_session.pdf

Recent organisation of GMES



What we bring in GMES (space activities)

- In Interkosmos programme from 1967 to 1990
- Czech astronaut Vladimír Remek (1978)
- Magion (from 1978) + Mimosa satellites (2003)
- 1996 – Cooperation agreement with ESA
- 2000 – PRODEX programme member, first projects with ESA
- 2004 – PECS member (Plan for European Cooperating States)
- 2005 – 11 projects under PECS programme



GMES
v České republice



Finances



- 2008 – 18th ESA full member state
- From 2010 full member of EUMETSAT

National Contribution to	€ million, 2009
ESA programmes	6.9
EUMETSAT	0.9
Other (MPO, MD, Univ, CAS, etc.)*	6.75
Total	14.95

Budget allocated to	€ million, 2009
Telecommunications	2.93
Navigation	4.57
Earth observation (incl. EUMETSAT)	2.97
Space science	2.43
Generic technologies	2.36
Management	0.34
Total	14.95



GMES
v České republice



What we bring in – data/services

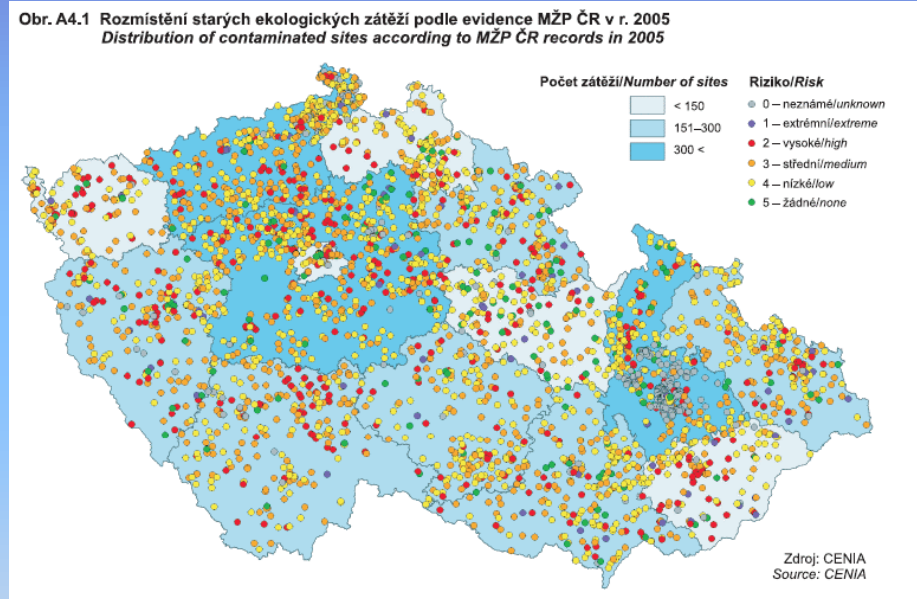
- **expert knowledge** and long-term data on the environment, **long-term changes** in our nature (land use/land cover)
- atmosphere monitoring, **meteorology**
- wide network of **water management data**
- **strong field of possible service providers for GMES**
- research capacities
- **CORINE land cover (CENIA)**
- **expertise in specific topics** (contaminated sites, forest monitoring...)



GMES
v České republice



Brownfields, contaminated sites



- satellite / aerial images to analyse toxic risks on the surface (multitemporal, hyperspektral, visual)
- semi automatic processing

GMES geoportal



- <http://geoportal.cenia.cz>
- following to the governmental resolution in 2009, national GMES secretariat will **coordinate provision of satellite data** for public institutions (make system more efficient)
- **GMES geoportal is now being prepared** (coordination of INSPIRE, SEIS and GMES data)
- Czech Environmental Information Agency hosting GMES geoportal



GMES
v České republice



What we need from GMES?

- reliable and fast land monitoring system
 - forest quality monitoring, agro-environmental measures, water management, monitoring in protected areas,
- better air quality monitoring and alert systems, **urban areas!!!**
- risk prevention systems – floods, forest fires, landslides
- **reliable data** for public decisions **on all levels**



GMES
v České republice



Czech GMES priorities?

- higher activity in FP7 SPACE needed – to get more involved in GMES projects
- better cooperation of public institutions and authorities
- cooperation with regional partners (CEE, EU 12) or „problem specific“ partners (contamination)
- more synergies between GMES, SEIS and INSPIRE
- share our expertise with Europe ...



GMES
v České republice



A satellite with a large blue rectangular solar panel array and a long boom with a circular instrument at the end, is shown in orbit above the Earth. The Earth's surface shows green landmasses and dark blue oceans, with the white curvature of the atmosphere visible at the top. The text "Thank you for your attention..." is overlaid in white.

Thank you for your attention...

mirovsky@czechspace.cz