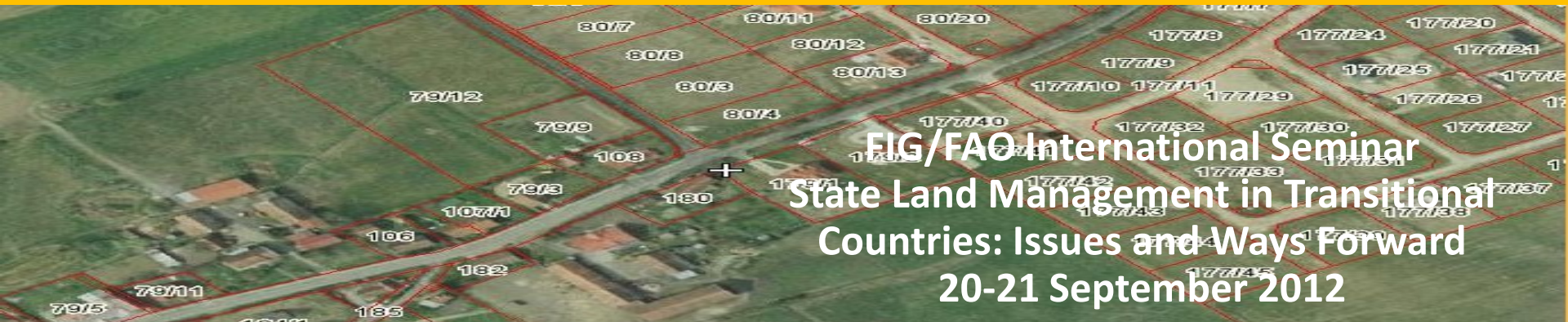


University of Warmia and Mazury in Olsztyn
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THE EVOLVING ROLE OF THE CADASTRE IN THE LAND ADMINISTRATION SYSTEM IN POLAND

Authors: Agnieszka Dawidowicz, Ryszard Źróbek



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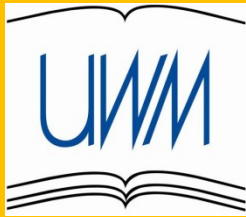
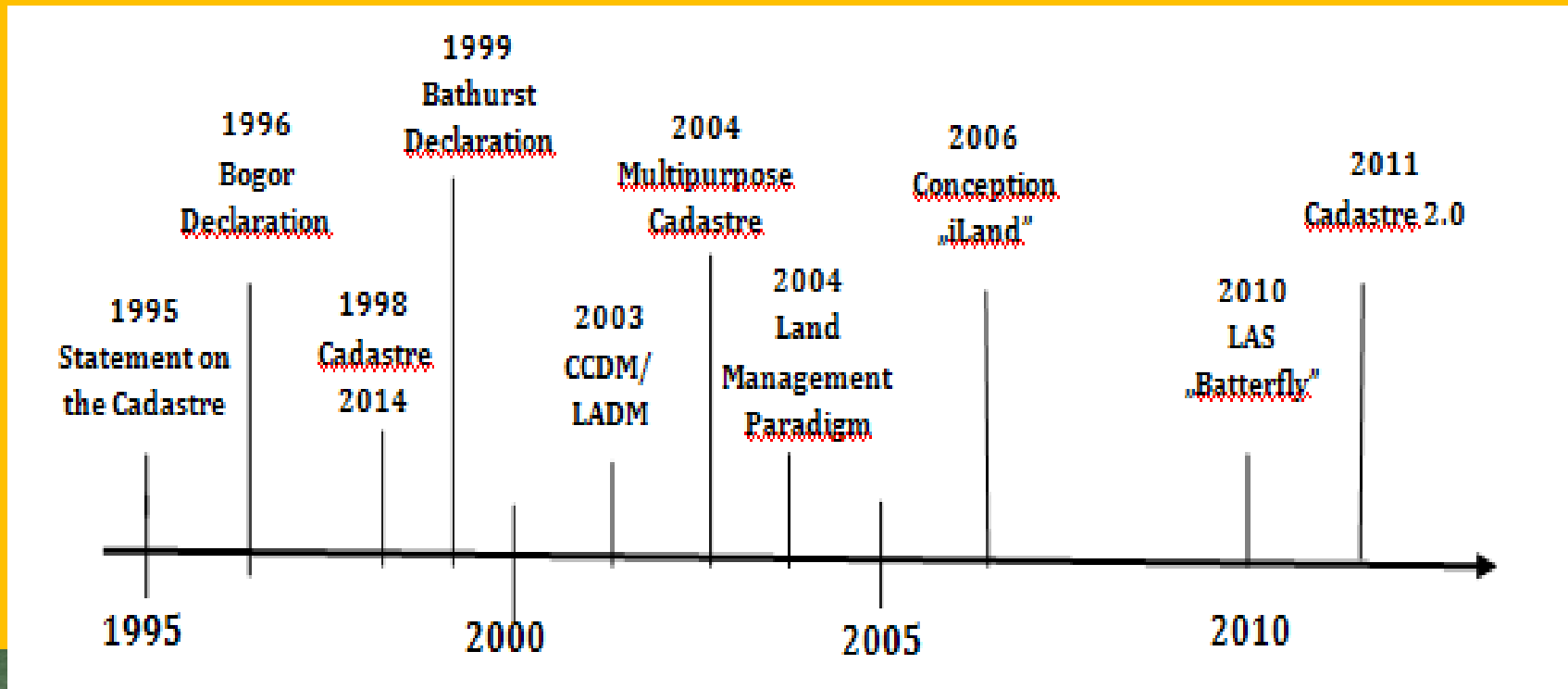
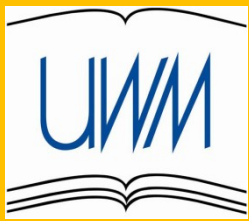


FIG Initiatives and solutions related to the cadastral systems development



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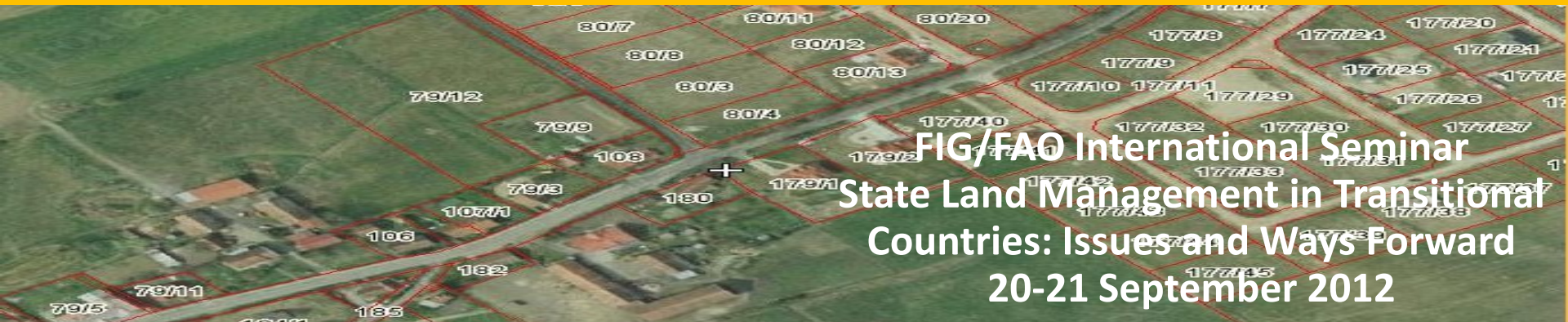


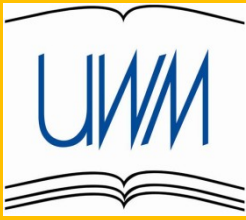
CURRENT LEGISLATION REGULATING THE CADASTRE

Relevant Law:

- **GEODESY AND CARTOGRAPHY ACT – 17 May 1989**
- **Regulation of Regional Development and Construction Minister on the real estate cadastre – 29 March 2001**
- **Law of 14 February 2003 on the Land Register Book content transmission to register structures carried out in a computer,**
- **Regulation of the Justice Minister of 20 September 2003 on the establishment and operation of land registers in a computer system,**
- **Regulation of the Justice Minister of 26 September 2003 amending Regulation of mortgages register and documents collections**
- **SPATIAL INFORMATION INFRASTRUCTURE ACT – 4 March 2010**

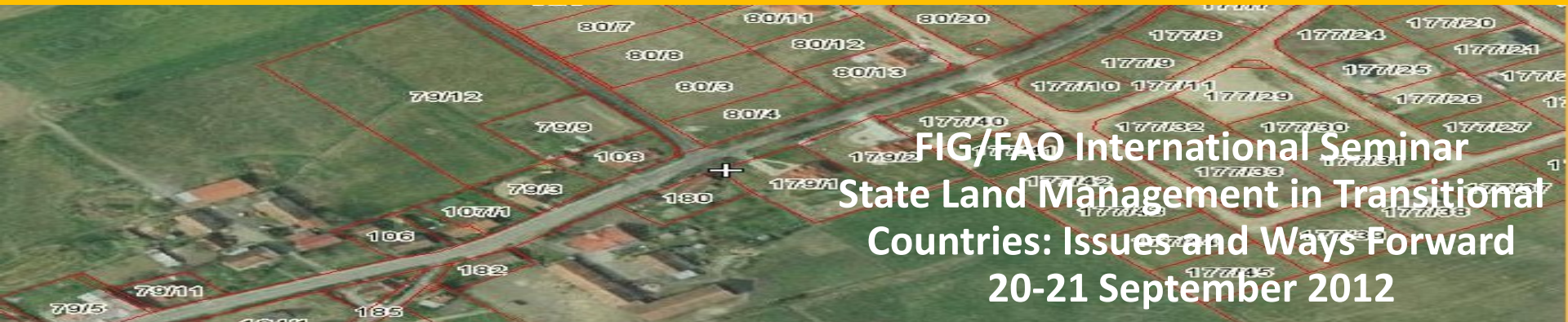
We look forward to the new regulation on cadastre and Integrated Real Estate Information System (ZSIN) !!!



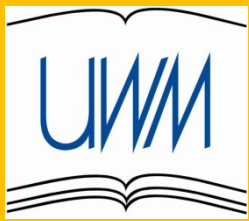


COMPUTERIZATION OF THE CARTOGRAPHICAL CADASTRE PART

- 1990 – the beginning of works
- 2010 – there is covered by numerical cadastral maps:
 - urban areas – 98%
 - rural areas – 61%

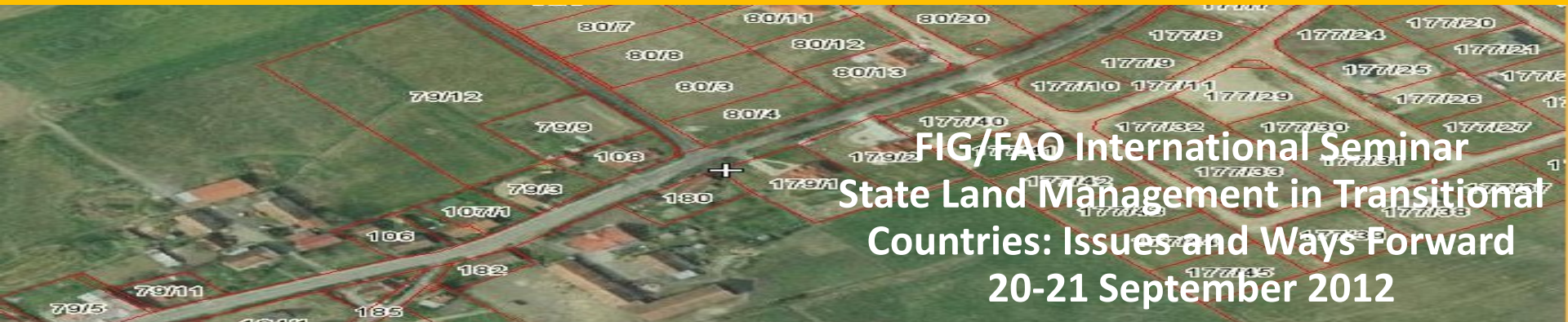


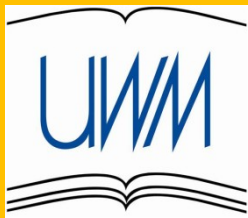
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MODERNIZATION OF BUILDINGS AND PREMISES DATABASES

- 1990 – the beginning of works
- 2010 – database of buildings:
 - urban areas 85%
 - rural areas 37%
- database of premises:
 - urban areas 82%
 - rural areas 35%



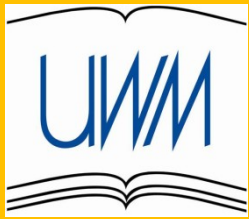


IMPLEMENTATION-CONCEPT PROJECTS

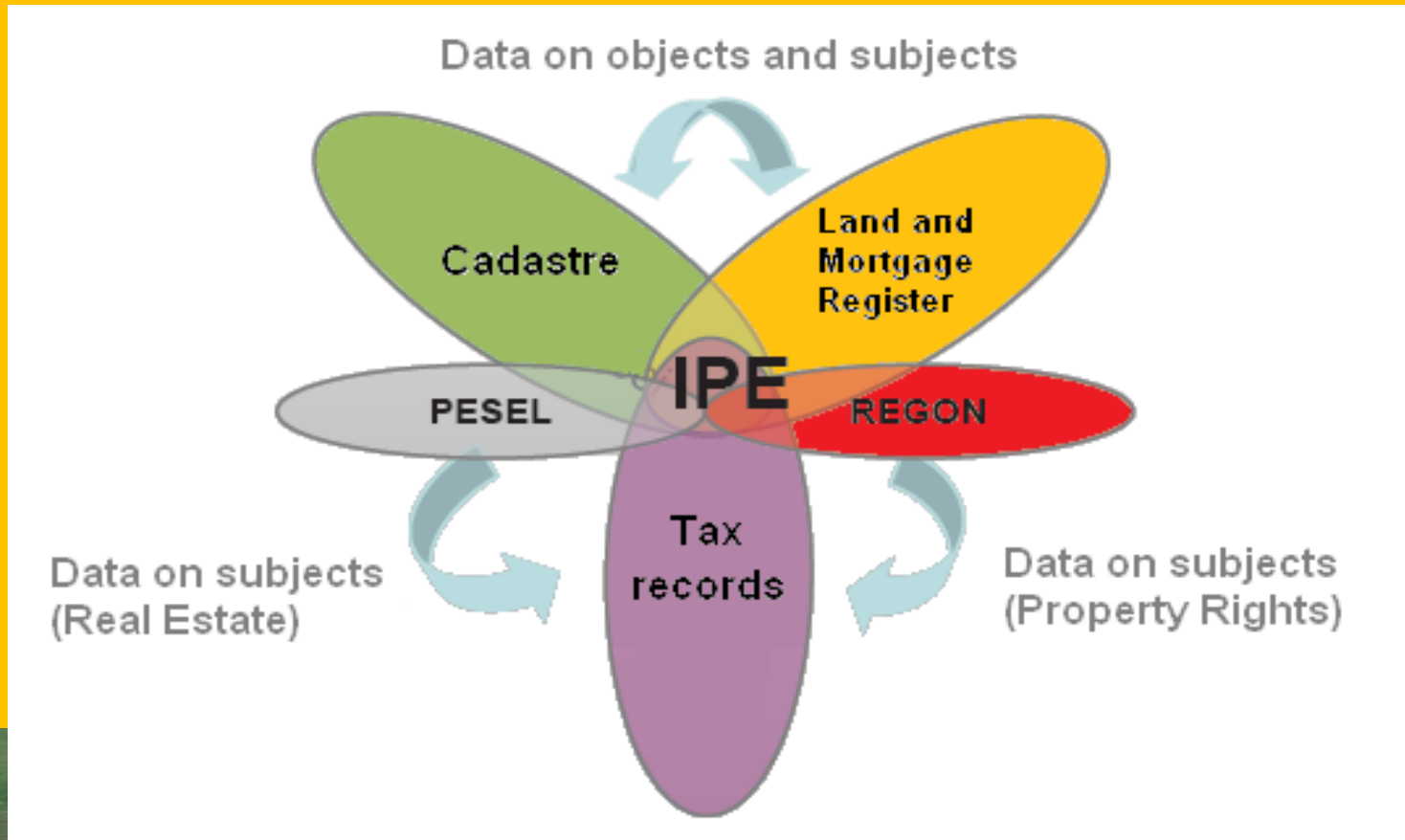
- **PHARE 2000 and 2001**, "Building an Integrated Cadastral System (ZSK)" – Integrating Electronic Platform (IPE), (implemented in pilot district units - lack of automation tasks),
- **PHARE 2003 Program** – "Vectorisation of cadastral maps in Poland" (results are not satisfactory!),
- **MATRA I Project** "Cadastral Information Flow in Poland" (implemented with financial support from the Dutch government),
- **MATRA II Project** "Construction of the cadastral database model in Poland" (The concept project only of regional (Voivodship) database connect with district units!),
- **MATRA III Project** "Support for development of the central cadastral database in Mazowsze Voivodship" (is working only in the Mazovia region),
- **KASKADA Project** "Development of technological methods of the National Cadastral System" (implemented in 3 local pilot district units).

Small steps forward - only the local dimension!!!

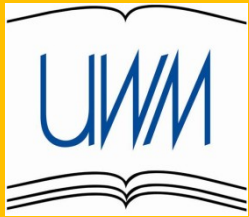
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Integrating Electronic Platform (IPE)

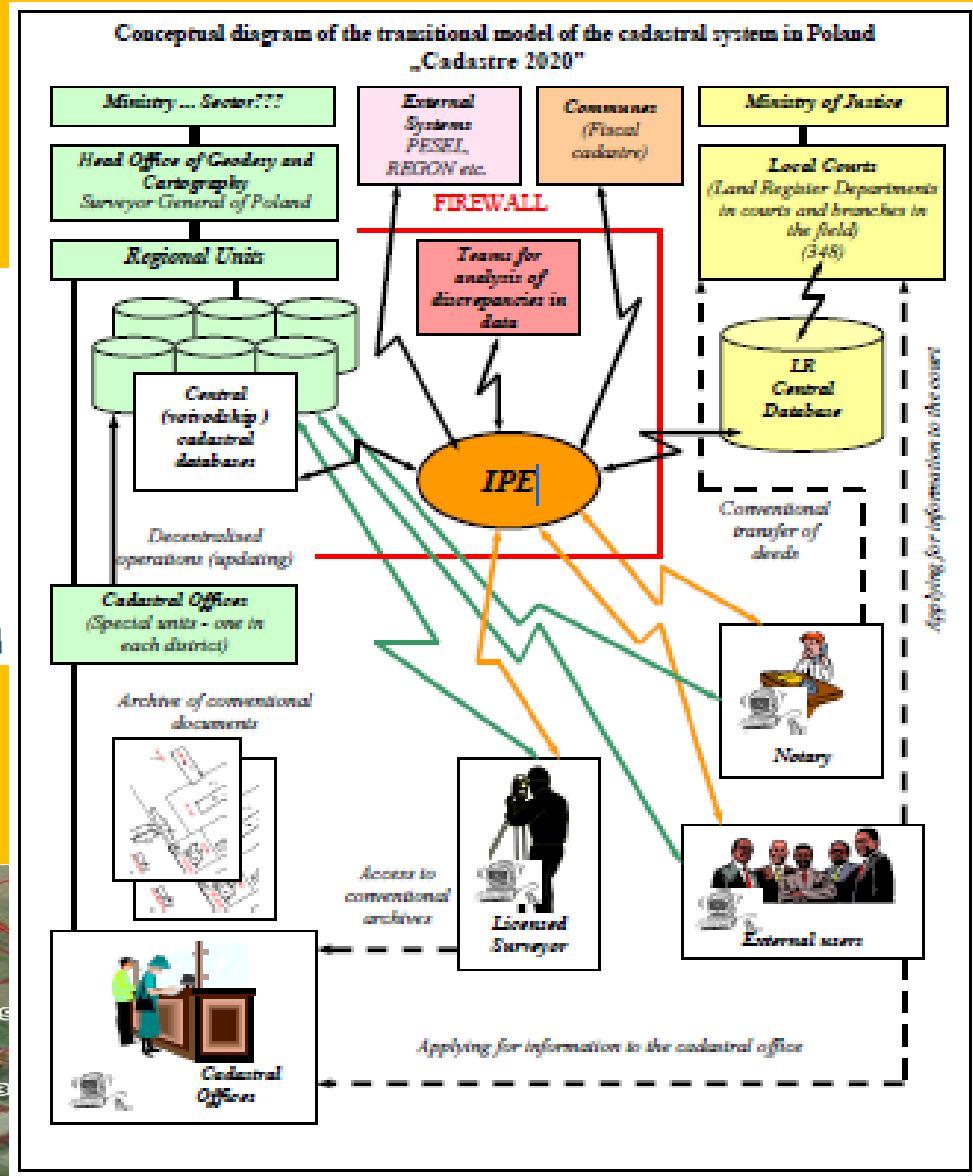


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CADASTRE 2020 FOR POLAND

THE FOUNDATION FOR THE CONSTRUCTION OF ZSIN



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Seminar
transitional
Forward



Geoportal.gov.pl Project – National Infrastructure for Spatial Information

Geoportal

maps.geoportal.gov.pl/webclient/

Często odwiedzane Pierwsze kroki Aktualności Bezpłatna usługa poc... Dostosuj łączza Windows Media Windows

GLÓWNY URZĄD GEODEZJI I KARTOGRAFII

geoportal.gov.pl

Mapa Metadane

Zawartość mapy

Warstwy Źródła danych

- Państwowy Rejestr Nazw Geograficznych
- Państwowy Rejestr Granic
- Dane ewidencyjne (KIIP)
- Dane o charakterze katastralnym
- Rzeźba terenu (cieniowana)
- Rzeźba terenu (hipsometria)
- Mapa topograficzna (BDO)
- Mapa topograficzna (VMAPL2)
- Baza Danych Obiektów Topograficznych
- Ortofotomapa satelitarna
- Ortofotomapa
- Skany map topograficznych

Szukaj danych (metadane) +

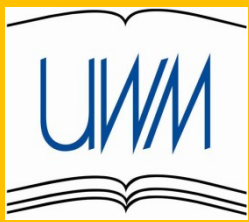
Szukaj obiektów geograficznych +

Ustawienia +

KATASTER ORTO RASTER TO

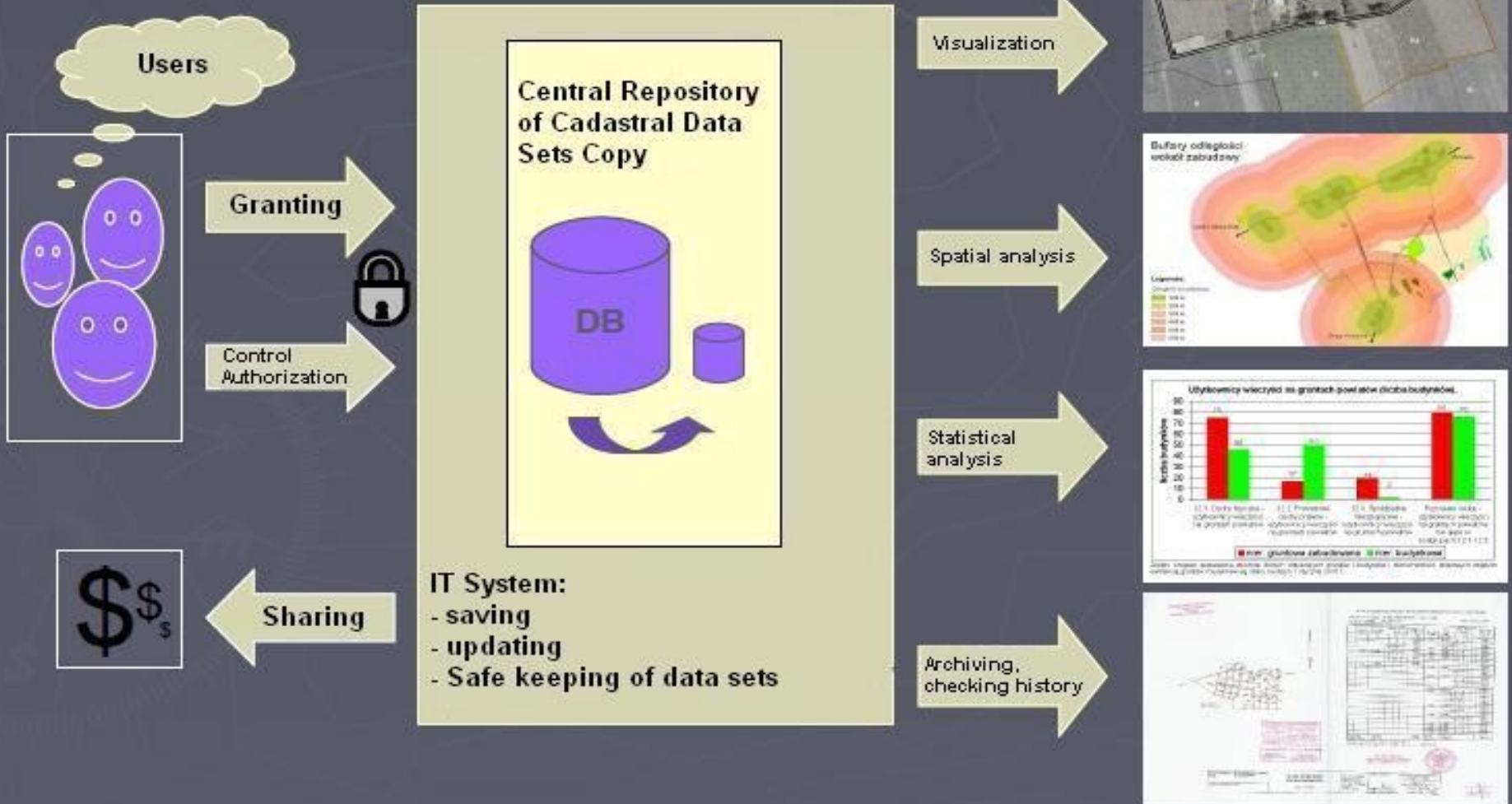
60/97 61/8 61/7 143/12 149/15 39/6 449 27/1 60/27 151 149/4 36/2 29/4 29/5 60/26 61/4 149/6 149/3 150 29/4 29/5 60/7 60/10 64/5 61/13 38/1 31/1 60/17 60/10 64/5 61/12 31/2 24/4 65/4 64/4 61/12 31/2 24/4 65/7 65/6 64/3 Tomaszkowo 96/1 73 22/7 21 60/72 60/73 65/5 65/2 74 100/2 22/4 22/6 60/40 60/38 60/17 75 100/3 105/1 104/4 22/5 60/44 60/43 72/1 77/4 97/1 108/3 104/12 60/44 60/43 77/5 90 91/1 111/2 110/2 108/5

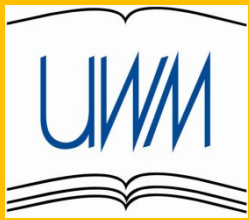
X: 651426.05 Y: 593167.7
N: 53°43'9.32" E: 20°24'44.34"



Integrated Real Estate Information System (ZSIN)

FUNCTIONAL ARCHITECTURE OF ZSIN



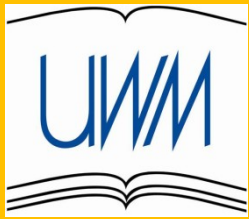


ASSUMPTIONS OF ZSIN

The ZSIN will be based on the following assumptions:

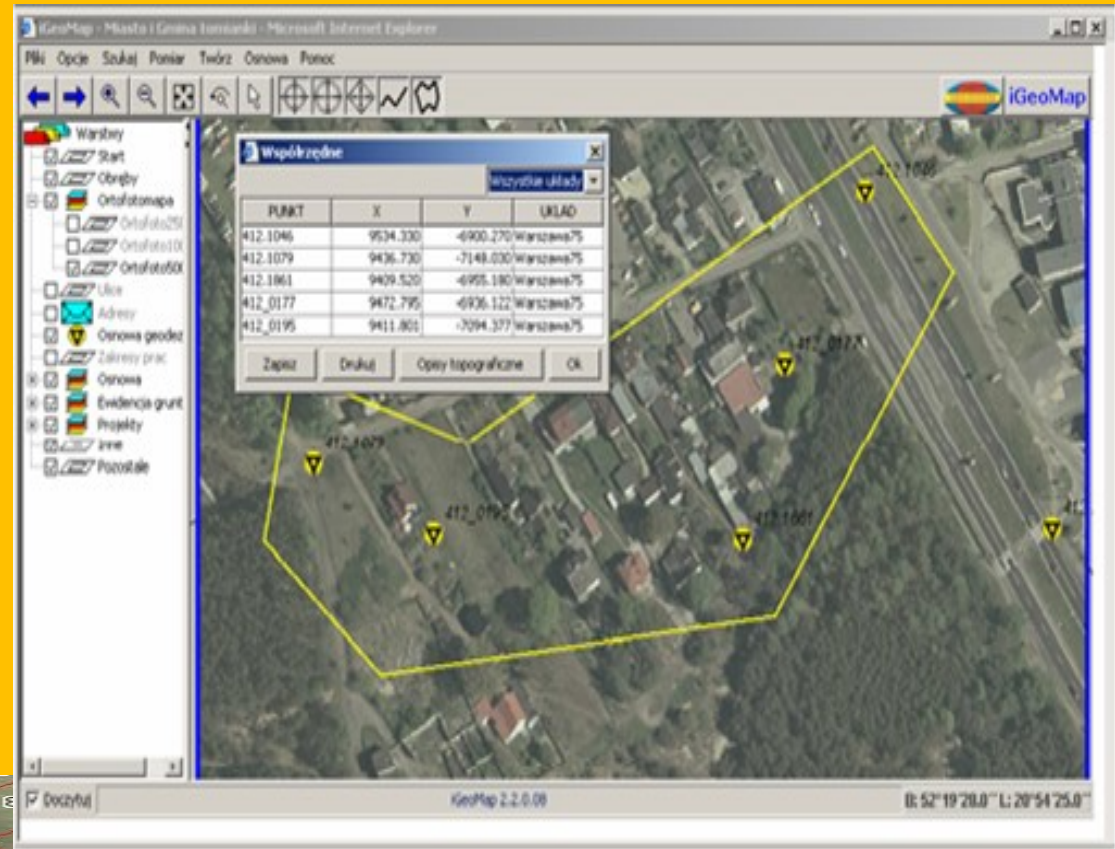
- exchange of data between the real estate cadastre and other public records in electronic form,
- the software enabling automatically generate notifications of changes to the cadastre, the automatic generation of data update,
- access to cadastral data users will take place over the Internet,
- procedures for data conversion and cadastral database updates will be

WE LOOK FORWARD TO THE IMPLEMENTATION!!!

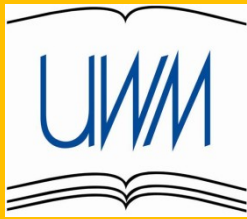


GIS WEB SERVICES

ePODGIK -
administrative
service for the
electronic handling
of cadastral systems



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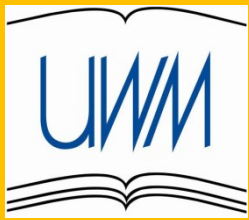


GIS WEB SERVICES



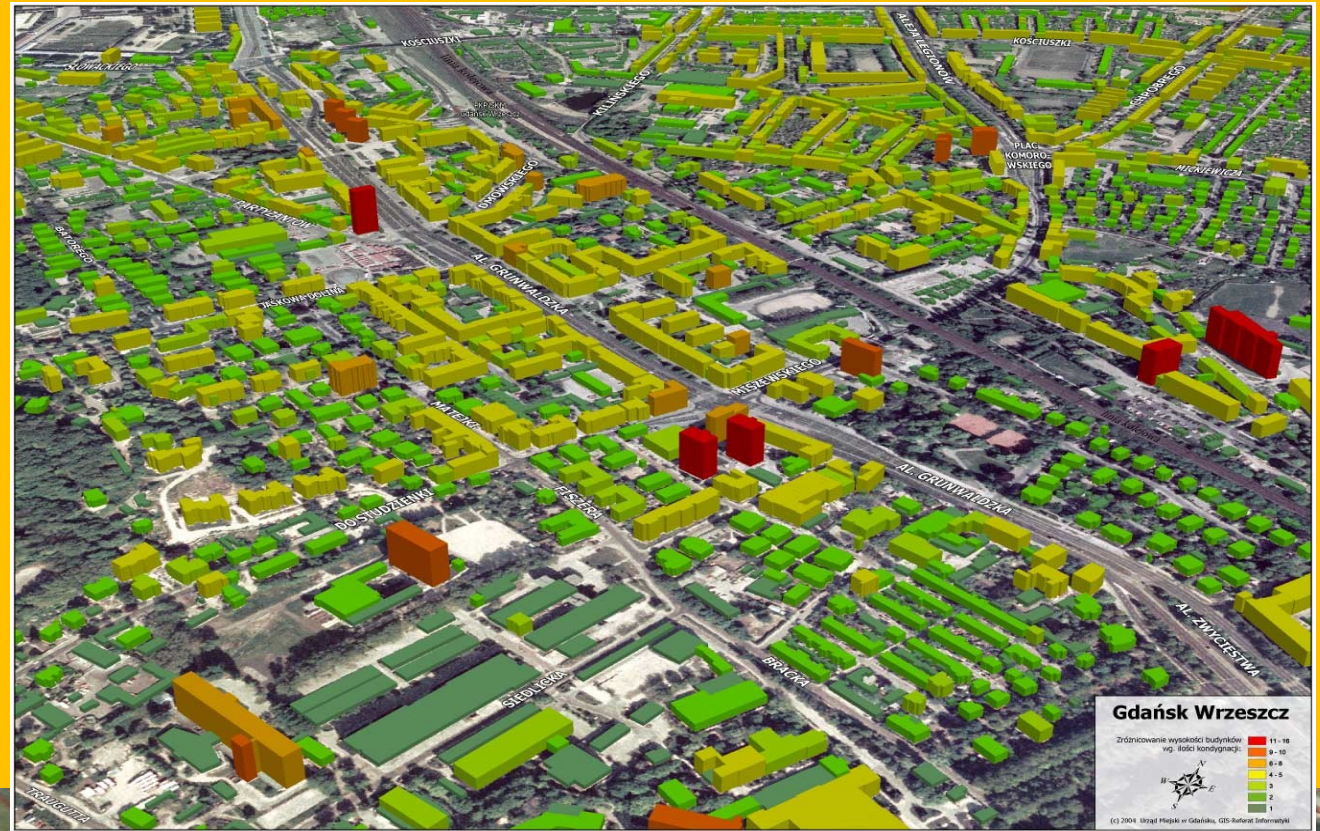
- ✓ IGeoMap system (designed for raster and vector spatial data publishing) – **17 implementations in 384 districts**
- ✓ eGmina system with iMPA module (to keep official address register) – **320 implementations in 2485 municipalities**

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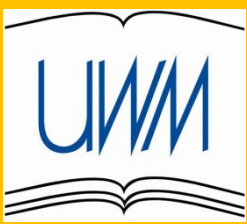


NUMERICAL MODELS OF THE AREA

Numerical models of large urban area developed (there are not integrated with the cadastral database)



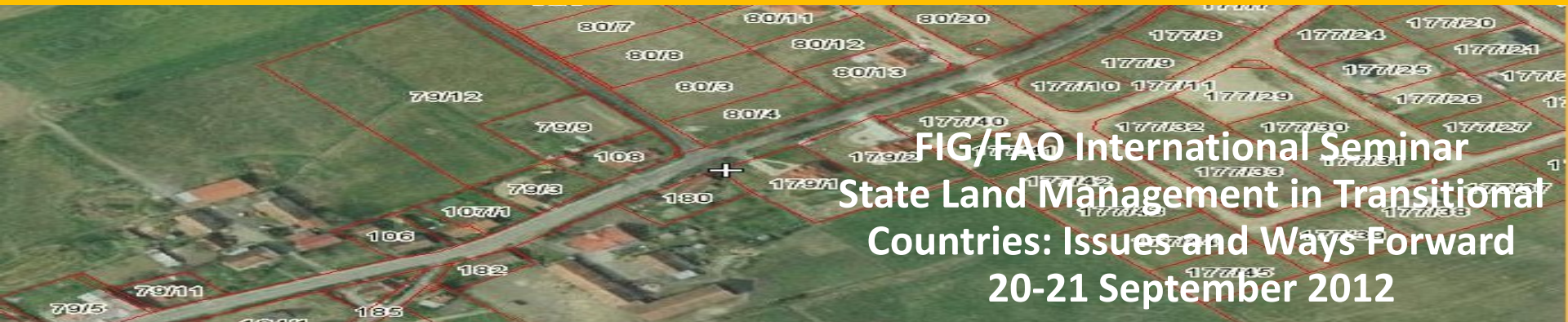
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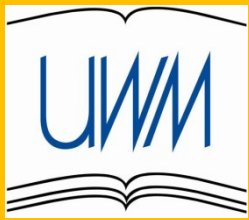
PLANS FOR THE FUTURE

- creating integrated service portals to enable access to the metadata and cadastral data in the created national infrastructure for spatial information (**works and is supplemented!**),
- realization of the cadastre tasks as administration tasks performed under its structures, including the importance of cadastral information timeliness and accuracy (**Cadastre is managed by the state administration**),
- forecasting, modeling, and respond to the new needs of users (for example, registration of property rights, taking into account the position above or below the surface of the earth - the so-called 3D cadastre) – (**currently in the dreams areas!**),
- optimization of the duration and cost of real estate registration procedures (**there are no automated updates, and high costs of maintenance staff**),
- development and implementation of indicators to ensure monitoring of the cadastre operation together with obtaining feedback (**there are no indicators**).

WHEN

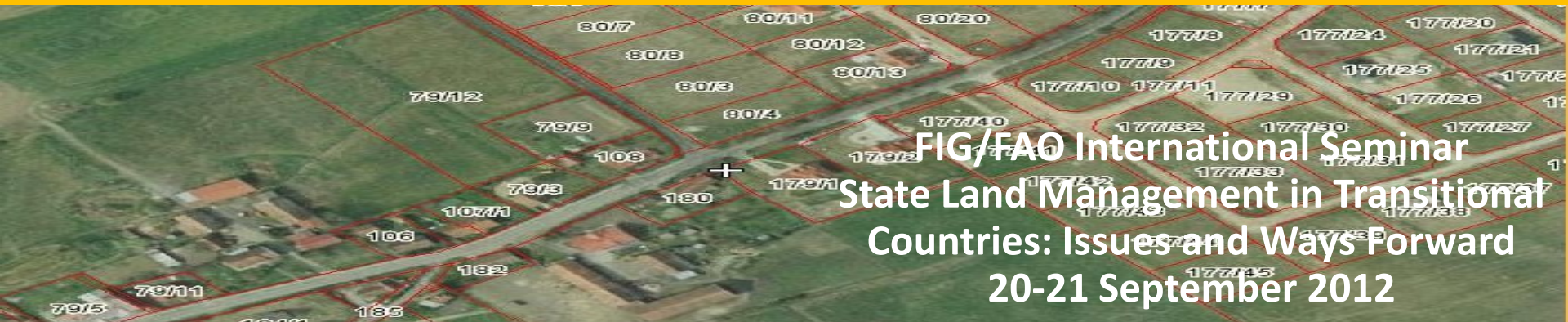


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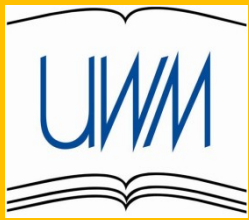


CONCLUSIONS

1. Assumptions of Integrated Real Estate Information System – ZSIN (future land administration system), built in Poland, based on solutions developed by the FIG in 1989 - Cadastre 2014 (there is progressively modernization of the system).
2. The potential for real estate cadastre is evolving in the direction of FIG paradigm - iLand in LAS.
3. The model of reality being in the construction, based on European standards ISO, is in line with the guidelines of the Economic Commission for Europe [UN-ECE 1996] on Land Administration, under which Poland has been granted PHARE funds for the construction of the Integrated Cadastral System (ZSK).

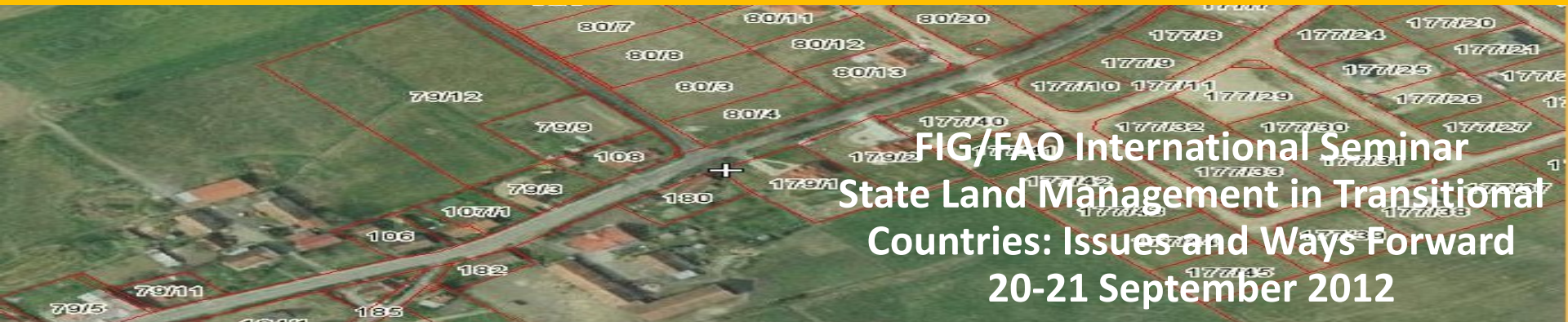


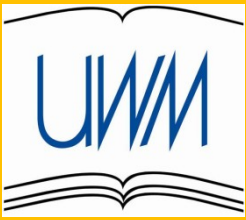
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CONCLUSIONS

4. Plans to modernize Polish real estate cadastre coincide with FIG plans for the cadastre development towards meeting the Millennium Development Goals.
5. An incomplete database of buildings and premises, and not fully modernized cadastral maps to vector maps make it impossible to take decisive steps to create a uniform system of spatial data and property rights.
6. The Polish government should focus on action and the necessary funds to modernize real estate cadastre, as well as standardizing and harmonizing data from real estate records to quickly run ZSIN. The government should limit the financing of new cadastral concepts and IT solutions that have already reached a sufficient level of maturity for use.

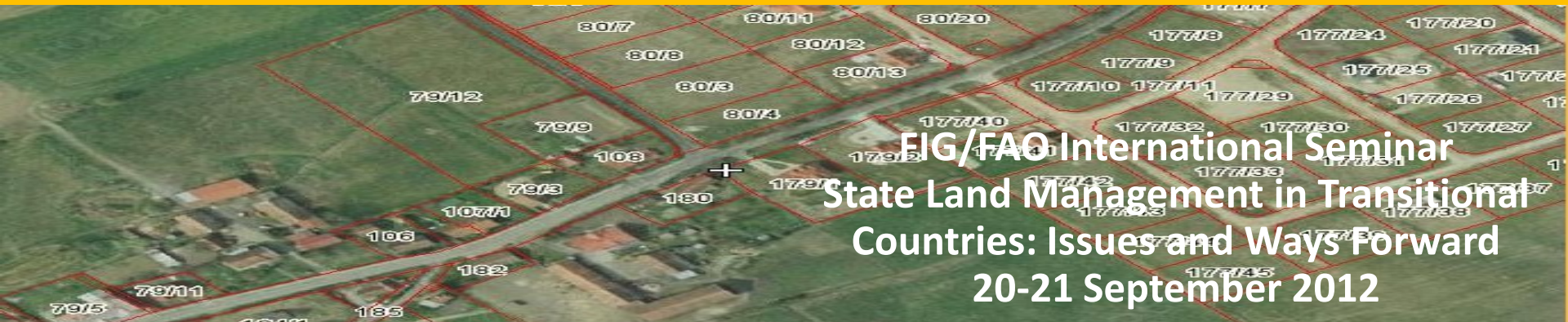




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