ICT IN SUPPORT OF GOOD GOVERNANCE OF TENURE

Lessons Learned and Good Practices from ECA

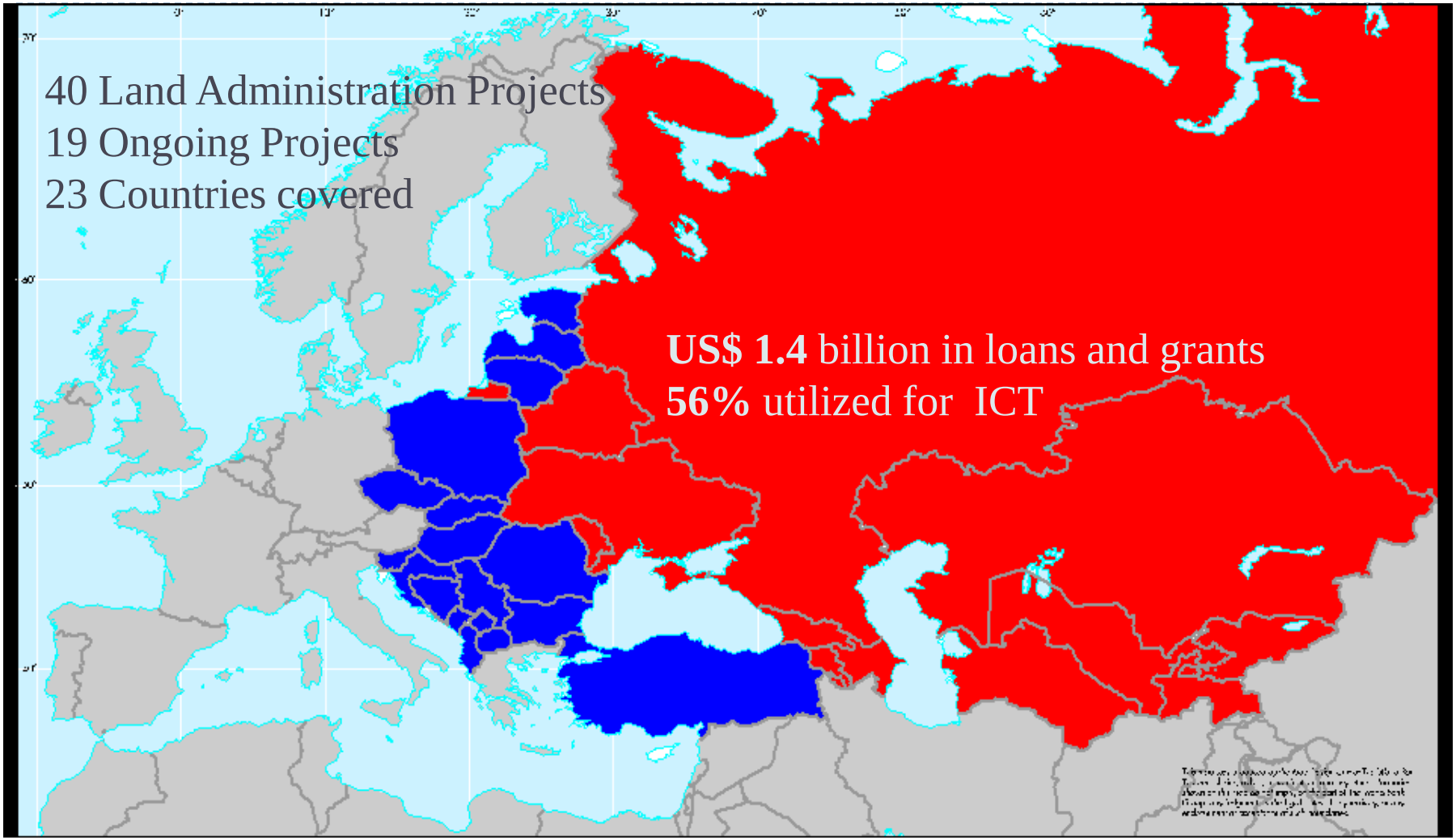
Rumyana Tonchovska, Senior Land Administration Officer – IT, FAO

Gavin Adlington, ECA Land Program Team Leader, World Bank

With contribution from:
Federal Agency for Registration, Cadastre and Cartography, Russian Federation
National Agency for Cadastre and Land Registration, Romania
Real Estate Registration Agency, Kyrgyzstan

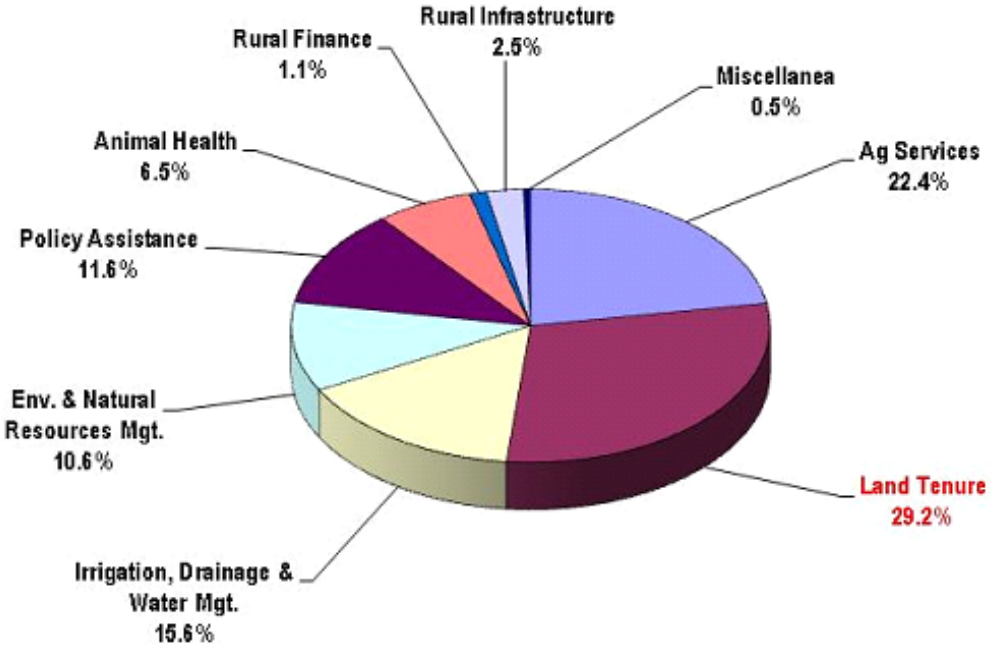
ANNUAL CONFERENCE ON LAND AND POVERTY
The World Bank - Washington DC, April 25, 2012

WORLD BANK's ECA REGION (Red=CIS)



FAO/WB COOPERATIVE PROGRAMME (CP) ECA REGION

Land Tenure is recognised as the leading example of collaboration between the FAO and the World Bank through the CP



ECA: FY10 CP Delivery by Thematic Cluster

It accounts for about **30%** of the work delivered by FAO for the World Bank's European and Central Asia (ECA) region

GOOD GOVERNANCE OF TENURE - ICT CONTRIBUTION DOING BUSSINESS STATISTICS

2005-2010 - **the most popular good practice around the world** in making it easy to register property was using an electronic database, implemented in 108 economies out of 177 surveyed.

All ECA countries have introduced IT systems for Land Administration.

2012 - 52 economies among 154 with a cadastre or survey, make their information available online.

Most of ECA countries provide information online or plan to do so in 2012.

2010, 2011 and 2012 - 6 countries in ECA each year are among the first top 10 economies, worldwide, where it is easiest to register property. *Rankings are the average of the economy's rankings on the* ***procedures, time and cost*** *to register property.*

ECA IT IMPLEMENTATION APPROACHES

Group 1: Locally developed systems mainly by state owned enterprises	***Russia, Turkey*** *(Bank's support is part of much wider Government programme)*
Group 2: Big International Tenders	***Azerbaijan, Bulgaria, Croatia, Kazakhstan, Romania, Serbia, Ukraine***
Group 3: Smaller contracts, mainly local contractors used or in house development	***Albania, Armenia, Bosnia and Herzegovina, Estonia, Georgia, Kosovo, Kyrgyzstan, Latvia, Macedonia, Moldova, Montenegro, Slovenia.***

CASE STUDIES

CASE STUDIES

COUNTRIES	STRUCTURE
RUSSIAN FEDERATION *Federal Agency for Registration, Cadastre and Cartography* **ROMANIA** *National Agency for Cadastre and Land Registration* **KYRGYZSTAN** *Real Estate Registration Agency*	1. The World Bank financed projects 2. ICT Strategy 3. IT System (s) 4. Institutional Capacity to Manage ICT 5. Key Challenges 6. Lessons Learned 7. ICT Contribution to Governance of Tenure

RUSSIAN FEDERATION

CASE STUDY: RUSSIAN FEDERATION

Federal Agency for Registration, Cadastre and Cartography

WB Financing	4 projects, over 19 years period, 248,2 MUSD loan 60% of the funds allocated to the ICT
ICT Strategy 2010-2012 **IT System (s)**	**Phase 1:** establishment of central database; WEB portal; e-signature and e-services; one-stop shop. Completed; **Phase 2:** linking land cadastre and registration databases; creation of unified database; digital archive. Completed in 29 Subjects RF out of 83; **Phase 3:** integration with buildings databases; unified infrastructure; development of performance monitoring system and NSDI.
Institutional Capacity	2000 IT employees, out of which 20 at the Central office. Videoconferences and e-learning modules available for training, management and coordination

CASE STUDY: RUSSIAN FEDERATION

Federal Agency for Registration, Cadastre and Cartography

Key Challenges	▸3 government IT systems to be integrated; ▸Old/incompliant technologies, lack of infrastructure for e-services; ▸Data quality issues; ▸Secrecy of cartography data
Lessons Learned	▸High level Government support is important; ▸ICT Strategy adoption is necessary; ▸Modular approach is a key success factor; ▸Clear management and reporting mechanism is important; ▸Users support - Well functioning Help-desk is important.
ICT and Governance of Tenure	▸Number of steps reduced: sales from 6 to 2, mortgages - 1 step. ▸Improved transparency and reduced corruption: e-services at national level - 22%; electronically signed extracts online; fees, requirements, and time published; standard forms available online; ▸Provides information to 50 Government and Municipal institutions and receive information from 14 institutions; ▸GENDER and AGE sensitive data could be generated

ROMANIA

CASE STUDY: ROMANIA

National Agency for Cadastre and Land Registration

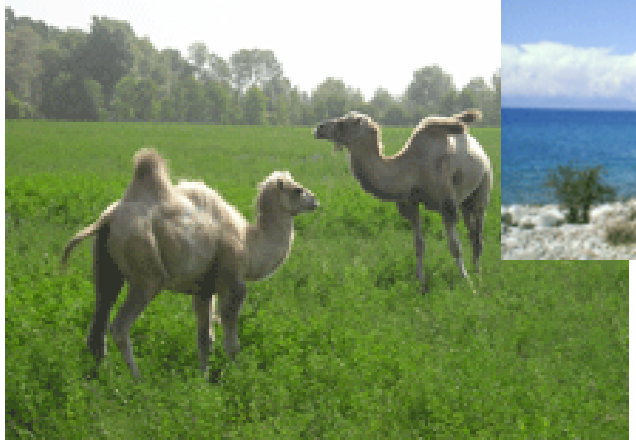
WB Financing	2 projects, over 16 years, 80,6 MUSD loans 30% of the funds allocated to the ICT
ICT Strategy 2005-2017 **IT System (s)**	**Phase 1:** Orthophoto nation wide; network infrastructure; HW supplied; eTerra system piloted in 6 of 42 counties; Register for citizen requests. Completed. **Phase 2:** eTerra roll out; Billing system implementation. Completed **Phase 3:** Online services; e-signature; Document management system; upload missing personal IDs (around 7.5 million); Interoperability with local authorities, e-Conveyance, e-Terra version 3.
Institutional Capacity	59 IT employees, out of which 8 at the Central office; Training methods: both classic and e-learning; procedural training prior to the IT training.

CASE STUDY: ROMANIA

National Agency for Cadastre and Land Registration

Key Challenges	▸Staff availability - IT implementation in parallel with the daily work; ▸Unclear legal framework and working procedures; ▸Lack of expertise and experience in management of complex IT System ▸Data quality issues
Lessons Learned	▸Allocate properly skilled human resources; ▸Do not combine hardware and software development in one tender; ▸Plan long - term TA to support the management of IT system implementation ▸Use simpler, phase based approach.
ICT and Governance of Tenure	▸30 % reduction of number of steps; ▸Improved transparency and reduced opportunities for corruption: on line applications tracking; requirements, fees and time published on the Web; ▸Increased staff productivity: from 3,5 in 2009 to 6,3 in 2011 (Number of applications/staff/day). ▸GENDER and AGE sensitive data could be generated: 1.68 million Females owning properties; 1.85 million Males owning properties. For 7,5 million records no information is available about gender (project planed for 2012).

KYRGYZ REPUBLIC



CASE STUDY: KYRGYZSTAN

Real Estate Registration Agency

WB Financing	2 projects, over 12 years, 17,5 MUSD loans and grant 25% of the funds allocated to the ICT
ICT Strategy 2000-2015 **IT System (s)**	**Phase 1:** Automation Registration System (ARS). Completed; **Phase 2:** Central database; loading data from all local offices; Sales Data Bas; GIS-applications testing; **Phase 3:** Data replication; Data provision to Tax and Statistical Authorities; Services provision to external users; digital archive. Completed; **Phase 4:** Financial System integration with ARS; Final goal is Integrated Centralized Information System.
Institutional Capacity	No IT unit established. No IT staff appointed. 9 IT consultants hired. Plans for transition to Single enterprise with permanent ICT Division.

CASE STUDY: KYRGYZSTAN

Real Estate Registration Agency

Key Challenges	▸Insufficient communication infrastructure in the regions; ▸Lack of qualified IT employees; ▸No sufficient knowledge and skills to use, modify and further develop GIS Open Source application; ▸Data quality issues.
Lessons Learned	▸BPR is important. Do not automate the paper system; ▸HW/software platform should be based on the locally available technology and existing communication infrastructure; ▸Step-by-step approach for software development proved to be successful; ▸Implementation of centralized IT system contributed to data quality improvement.
ICT and Governance of Tenure	▸Time for issuing extracts reduced to 2 days and electronically available on the WEB. Time for registering secondary transactions (sales, mortgage) - 2 days. ▸Improved transparency and reduced corruption: e-services available; information provision to TAX and Statistical office; sales data base available; fees, requirements, and time for responses published; ▸GENDER and AGE sensitive data could be generated

KEY CHALLENGES
&
LESSONS LERNED

IT SYSTEMS DESIGN & IMPLAMNETATION KEY CHALLENGES

- Complex institutional arrangements, lots of stakeholders involved;
- Underestimation of complexity of the system by all parties involved;
- Unclear, weak User and System Requirements, unrealistic expectations;
- Lack of experience in managing big IT systems. Weak quality assurance and quality control. Underestimation of training needs. Limited funds for TA and quality control;
- Staff unavailability to support the system implementation;
- Different old systems in use, not documented and are using different data structures, issues with intellectual property rights;
- Data quality, lack of common standards and data definitions, non harmonized data between the cadastre and registration services;
- Major institutional changes and legal reforms going in parallel with the SW implementation, which required multiple changes in the User Requirements;
- Complex procurement procedures, lack of experience;

IT SYSTEMS MAINTENANCE KEY CHALLENGES

- Lack of capacity within the administration to maintain complex systems and databases. Uncompetitive salaries in the public sector in comparison with the private sector – difficult to keep employ qualified IT staff with Governmental salaries;

- Lack of capacity to keep the data updated and support the data harmonization process after the project completion;

- Limited private sector involvement;

- Continuing to keep both paper and digital data, which requires double efforts and long processing time.

LESSONS LEARNED
What We Could do Better?

- **Start with ICT Strategy development: WHAT, HOW, WHO and WHEN;**
- **Plan small 6-8 months project for BPR (BPR), which finishes with 1-2 prototypes. Use the results to define User Requirements;**
- **Define system integrator, include supply of licenses as part of the software development** *(in case of not pre-defined technical platform);*
- **Plan sufficient funds for PM, CM and independent QA/QC;**
- **Supply hardware separately from the software development;**
- **Establish clear management and reporting mechanism;**
- **Plan sufficient users' involvement;**
- **Use national and international standards;**
- **Work on data quality improvement;**
- **Keep short the period of using two parallel IT systems and maintaining both paper and digital records;**
- **IT Systems sustainability is an issue in many countries and measures have to be planed from the beginning and implemented as top priority.**

GOOD PRACTICES FROM ECA

ICT Strategies Developed: Albania, Bulgaria, Bosnia and Herzegovina, Croatia, Kosovo, Kyrgyzstan, Macedonia, Russia, Serbia, Under development in Montenegro, planed in Ukraine;

Strong IT Management and QA Mechanism Established: Albania, Bulgaria, Croatia, Kyrgyzstan, Russia, Serbia, Ukraine.

Users Involvement: Croatia, Kyrgyzstan, Russia have established strong Business Processes WGs;

System Operation and Maintenance Support: Russia, Croatia, Bulgaria

Users Support: Russia is an excellent example - well functioning Help Desk (in English and Russian), Multifunctional Centers for Government and Municipal services

Step-by-Step Approach: Macedonia, Moldova, Montenegro, Kyrgyzstan, Russia, Moldova;

BUILDING A HOUSE
&
BUILDING AN IT SYSTEM

Building a House

Step 1: Preparation

Conceptual Design; Detailed Architectural Design and Bill of Quantities; Selection of Project Manager

Step 2: Tendering & Contracting

- Construction
- Supervision of construction

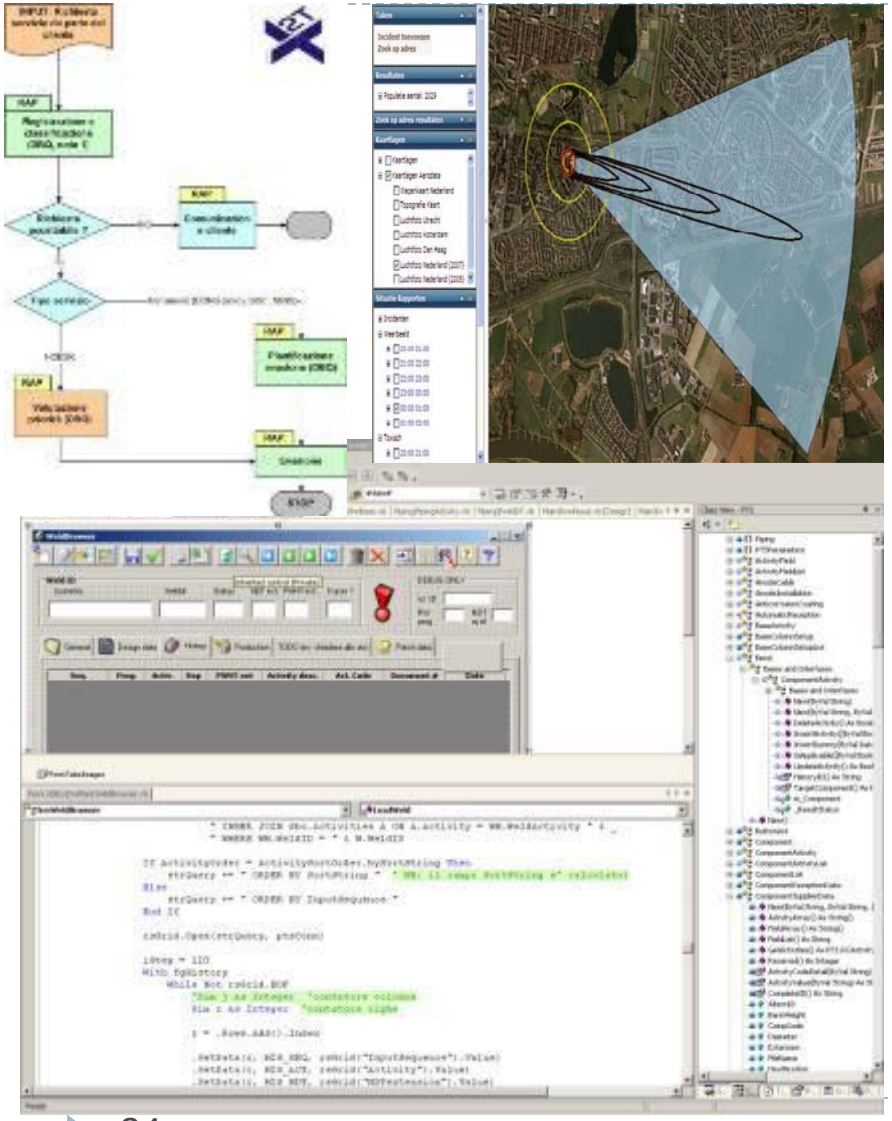
Step 3: Building Construction and Supervision

Step 4: Inspection

Step 5: Final Acceptance

Step 6: Maintenance

Building an IT Systems



Step 1: Preparation:

- User and System Requirements. Business Processes Re-engineering;
- System Architecture;
- Selection of development approach;

Step 2: Tendering & Contracting

Step 3: Development, implementation and Supervision

- Development and implementation
- Supervision

Step 4: Quality Audit

Step 5: Final Acceptance

Step 6: Maintenance

NEW REQUESTS
&
FUTURE CHALLENGES

New Requests and Future Challenges

New Requests	Future challenges
▸Support to Governance of Tenure: e-services and e-commerce; ▸Building NSDI and meeting the requirements of the INSPIRE Directive	▸Coordination and cooperation among all key players at all levels; ▸Collaboration with the private sector; ▸Institutional and human capacity to implement the NSDI; ▸Infrastructure capacity; ▸Establishment of national standards for digital data; ▸Data quality; ▸Digital data availability; ▸Secrecy of the coordinate systems in some countries.

ONGOING INITIATIVES

ONGOING INITIATIVES

There are some promising initiatives underway that is expected to make a positive impact:

- **Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests (VGs).** FAO is leading a global initiative for development and adoption of the VGs. 96 countries plus EU participated in the inter-governmental negotiations in March 2012; final adoption by the CFS planed for May 11, 2012. *http://www.fao.org/nr/tenure/voluntary-guidelines;*
- **Land Governance Indicators Framework (LGAF) -** identifying and monitoring good practice in the land sector. There is a potential to introduce best practice through the use of LGAF;
- **Formation of an Open Source Community for Cadastral and Registration IT System.** FAO is supporting development of an Open Source based system and formation of open source community.
- **Spatial Data Infrastructure (SDI) -** reduces duplication of efforts and costs related to geographic information, makes geographic data more accessible to the public, increases benefits of using available data, establishes key partnerships with states, counties, cities, academia and the private sector to increase data availability.

THANK YOU!

You can contact us for more details:

***FAO of the UN**: Rumyana.Tonchovska@fao.org*

***World Bank:** gadlingtom@worldbank.org,*

***RosRegister, Russian Federation:** sapych@gmail.com, 00_akinshin@rosreestr.ru, ek.2200@yandex.ru, avalakon@mail.ru*

***ANCPI, Romania:** victor.grigorescu@ancpi.ro*

***GosRegister, Kyrgyzstan:** bakytbek@yandex.ru*