



Република Србија
Агенција за привредне регистре



Serbian Business
Registers Agency

Share-PSI 2.0 workshop Timișoara Workshop:
Open Data Priorities and Engagement -
Identifying data sets for publication

March 16-17, 2015

**Registers and services of SBRA
as an example of transparency and interoperability
in the public sector**

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CONTENT:

- 1. Business registration reform in Serbia (2004-2006)**
- 2. „One Stop Shop for Registration“ as a forerunner of interoperability in the Serbian public sector;**
- 3. Steps towards SBRA future:
Web services deployment, international cooperation and Open data projects**
- 4. SBRA experience: Lessons learned**



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PART 1

Business registration reform in Serbia (2004-2006)



GOALS FOR REFORMING THE REGISTRATION SYSTEM

- ▶ To simplify and accelerate the business registration procedure in Serbia
- ▶ To create a more favorable business environment for foreign investments
- ▶ To create conditions for easier business start ups in Serbia
- ▶ To upgrade state administration through a greater reliance on IT
- ▶ To establish the conditions for creating new jobs and reducing the informal economy and corruption.

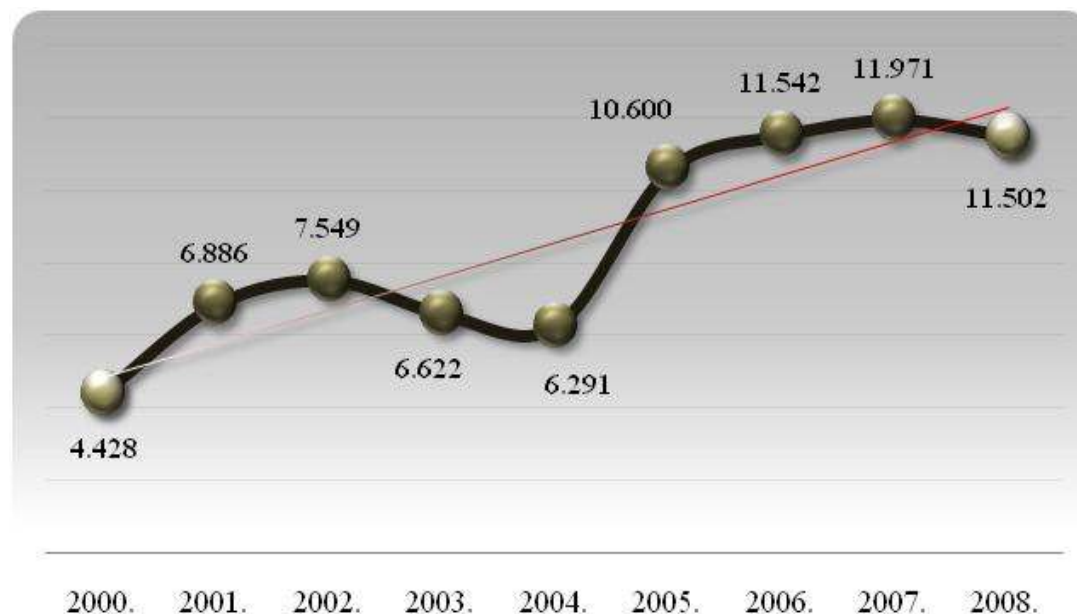
SBRA (Serbian Business Registers Agency), established in 2004, as a crucial part of the registration reform in Serbia, started its operation 3.1.2005. SBRA Information system was completed until 31.3.2006. as a result of the project funded by Swedish government and administered by the World Bank (ICB procurement method). Until 2009, SBRA operated 3 registres:

- ▶ Register of Business entities, Register of Pledges and Register of Financial leasing.



SBRA – Effects of the reform

Number of registered companies in Serbia:



- ❑ Annual number of registered companies has gone at new level after 2005 BR reform!
- ❑ These figures are still at this higher level, in spite of the crisis

Ministry of
ECONOMY AND REGIONAL

Ministry of
PUBLIC ADMINISTRATION AND

Ministry of
CULTURE

Ministry of
YOUTH AND SPORT

Ministry of FINANCE /
NATION BANK OF SERBIA



Ministry of
ECONOMY AND
REGIONAL DEVELOPMENT



Ministry of
PUBLIC ADMINISTRATION
AND LOCAL SELF-GOV



Ministry of
CULTURE



Ministry of
YOUTH AND SPORTS



Ministry of
JUSTICE



Ministry of
FINANCE
National Bank of Serbia



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REGISTERS BY NUMBER OF CLIENTS

						Register of Chambers of Commerce	100
					Register of Sports Associations	25,000	26,250
					Register of Foundations	1,000	1,050
					Register of Endowments	1,000	1,050
					Register of Restraining Orders	15,000	15,750
					Register of Public Institutions	30,000	30,000
					Register of Bankruptcy Estate	11,000	11,550
					Register of Tourism	2,000	2,500
					Register of Fin. Statements and Solvency	180,344	195,000
					Register of Regional Development	40,000	42,000
					Register of Public Media	1,000	300
					Register of Foreign Associations	200	210
					Register of Associations	47,000	49,350
Register of Pledge	63,923	Register of Pledge	63,923	Register of Pledge	63,923	Register of Pledge	67,119
Register of Financial Leasing	57,019	Register of Financial Leasing	57,019	Register of Financial Leasing	57,019	Register of Financial Leasing	59,870
Register of Business Entities	337,257	Register of Business Entities	337,257	Register of Business Entities	337,257	Register of Business Entities	354,120
September 2009	458,199	Autumn 2009	546,399	January 2010	811,743	2011	856,219



Registers operated by SBRA December, 2014



SBRA – Realized principle „All registers in one place“

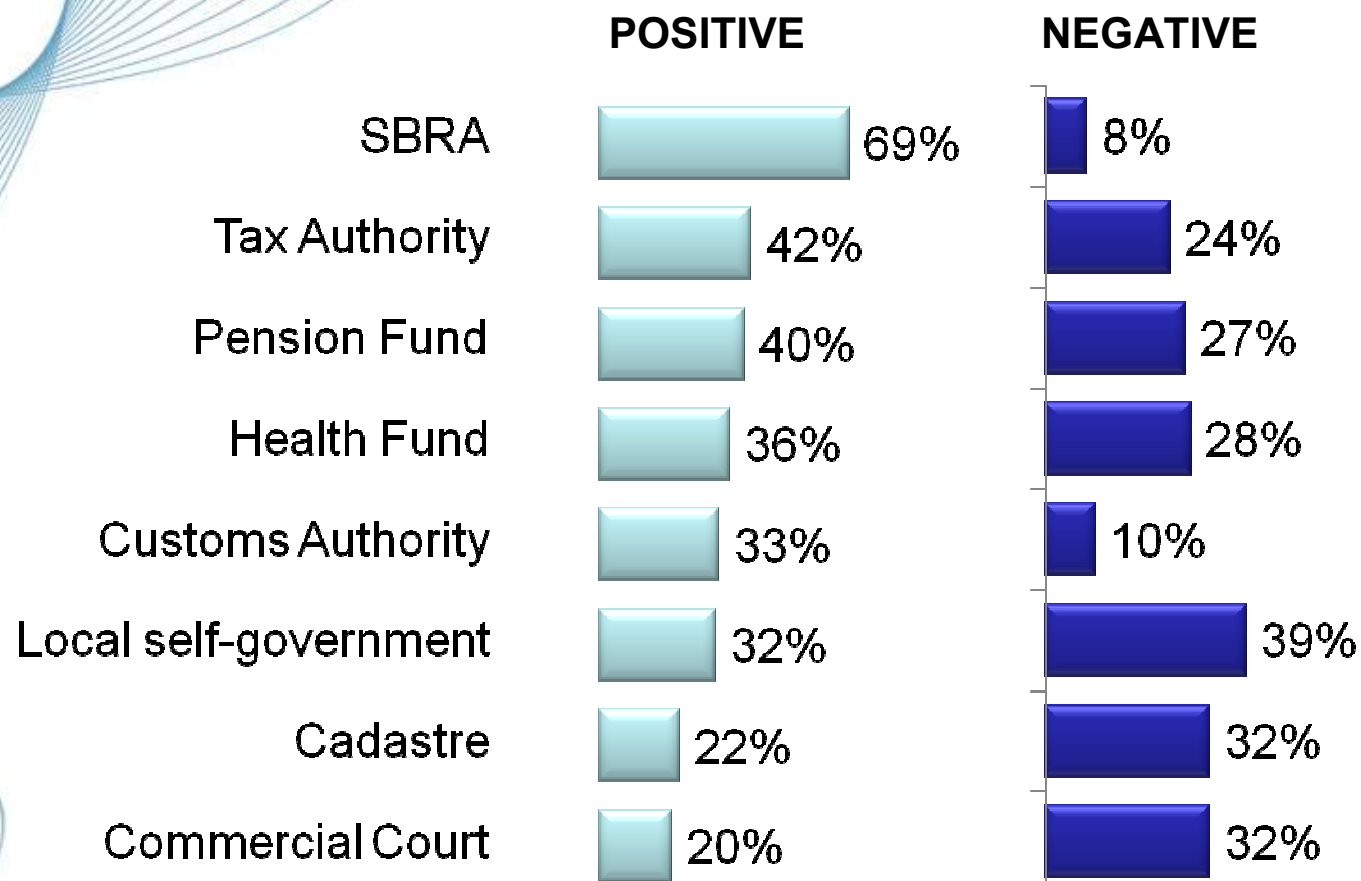


SBRA in Figures – February, 2015.

- 116.394 Companies
 - 214,751 Entrepreneurs (Sole traders)
 - 24.689 Associations + 50 Foreign associations
 - 616 Foundations and endowments + 19 Representative offices of foreign F&E
 - 12.063 Sporting associations, companies and federations
 - 27 Chambers of Commerce
 - 1.389 Public media
 - 793 Travel agencies
 - 153.500 Financial statements for 2013 (about 90% submitted in electronic form)
 - 35.861 Financial leasing contracts
 - 131.861 Pledge contracts
 - 216 Bankruptcy estate
 - 202 Injunctions
 - 5.606 Bidders
-
- Over 50.000 daily visitors of the SBRA Web page www.apr.gov.rs
 - Over 400.000 users of SBRA Info center annually
 - Over 15.000.000 scanned and archived pages and over 10.000.000 archived files
 - Over 3.000.000 records taken over from commercial courts and local authorities in the SBRA archives
 - Over 20.000 meters of paper documents archived



CUSTOMERS' (251 companies) RATINGS OF STATE INSTITUTIONS RELEVANT FOR THE BUSINESS ENTERPRISES SECTOR



Source: NATIONAL ALLIANCE FOR LOCAL ECONOMIC DEVELOPMENT - NALED
Prepared by: IPSOS STRATEGIC MARKETING, 2014



Information system – Birth, survival and development

SBRA Information system development 2005-2009:

□ PHASE 1 (2005)

- Elementary hardware (few multiple-purpose Dell servers);
- Temporary software solutions for all registers, basic services.

□ PHASE 2 (2006/III-2007)

- **SBRR - World bank administered project** fully implemented (Oct.,2004–March,2006); Swedish donation cca 1.4M EUR, including ICT and 3 months SBRA operational costs; Interesting experience – included additional donations, temporary S/W solutions, etc.
- Sufficient hardware (Fujitsu-Siemens servers, EMC storage, Cisco communications);
- Stable software solutions for registers; Improved services (G2B/G2C).

□ PHASE 3 (2008-2009/Q2)

- High-quality services (G2G, G2B/G2C): “**One Stop Shop project**”, phase 1 (2009/V);
- Extended hardware and communications; Completed software solutions for registers;
- First steps of SOA-based integration: Initial IRIS module (Integrated registration input);
- Microsoft-based platform: Windows Server 2000/2003/2008, MS SQL Server 2000/2005/2008 Development platform Microsoft .Net framework, C#.



Information system – Maturity and growth

SBRA Information system development from 2009:

□ PHASE 4 (2009/Q3 – 2010)

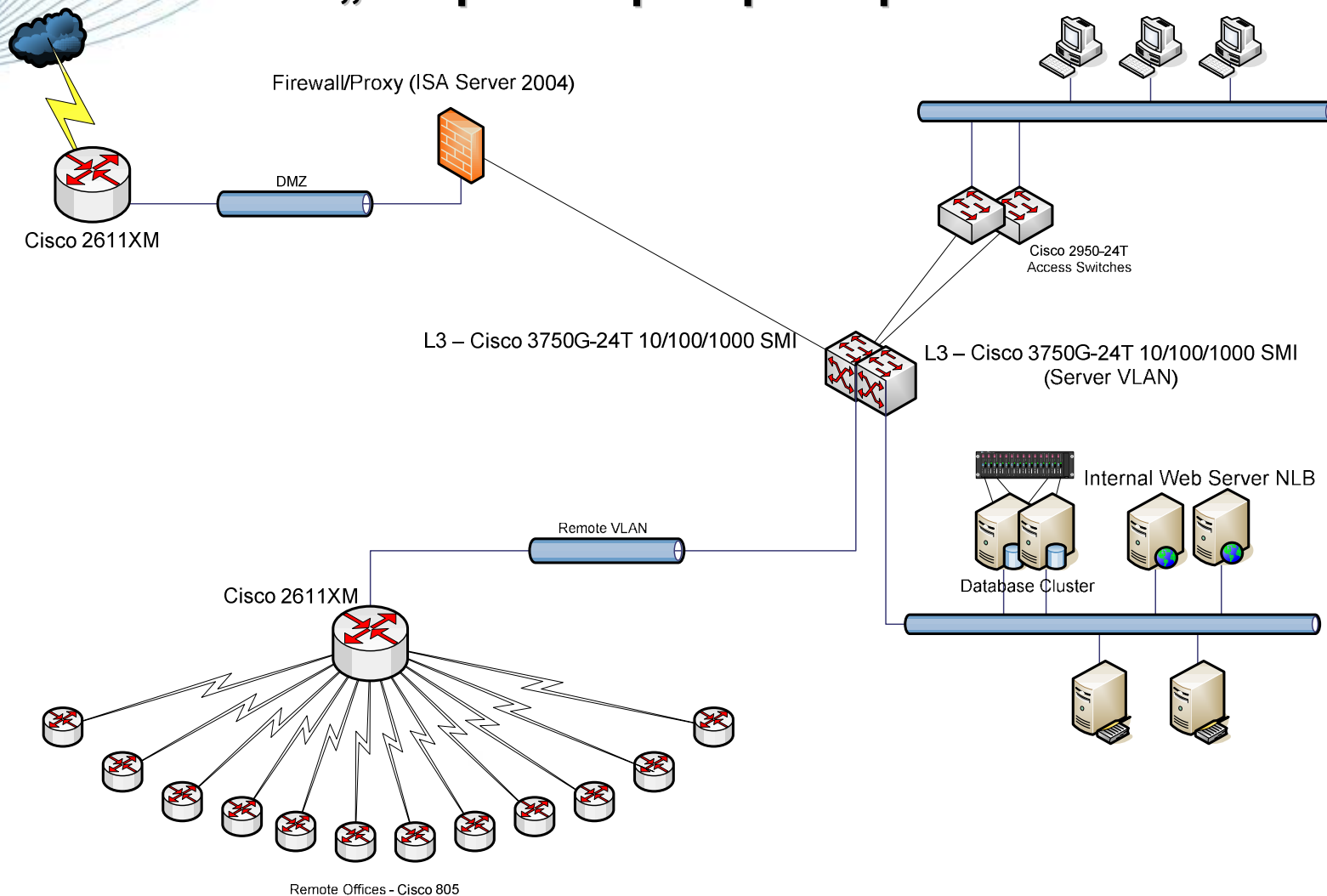
- KOICA project (donation 3.2 M\$ from R.Korea) implementation (2010/VI);
- New hardware platform (IBM), software platform (IBM) and development tools (Java), 5 new modules with improved IRIS, as a basis for the further development;
- Initial SOA architecture using **ESB – Web services** internal and external integration;
- Completed set of services using qualified electronic signatures (G2G, G2B/G2C).

□ PHASE 5 (2011-2015), based on “SBRA Development Programme”

- SBRA long-term strategy: Service development, Business process alignment, Development budget assurance; Steps towards standardisation (ITIL, methodologies);
- Hardware integration (IBM, Microsoft) – H/W, communications, security, administration;
- Software integration - SOA architecture improvement, software standardisation and consolidation (long-term target: Generic register rules, processing and software);
- Extended set of electronic services, initial value-added services (DW/BI/KM based);
- Improved international cooperation, including participation in the Open Data projects.

SBRA initial system architecture (2005-2009)

„Keep it simple“ principle





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PART 2

„One Stop Shop for Registration“ as a forerunner of interoperability in the Serbian public sector



OSS PRINCIPLES – DESIRED MODEL OF BUSINESS REGISTRATION

- ▶ Introduce a single business registration form;
- ▶ Introduce a system whereby public authorities can recognise enterprises by a single identification number;
- ▶ Set up single contact points where a single registration form can be deposited;
- ▶ Ensure that government departments avoid introducing duplicated or superfluous forms and/or contact points;
- ▶ Use IT and databases as much as possible for the transmission and authentication of information submitted and/or the exchange of information between public authorities.



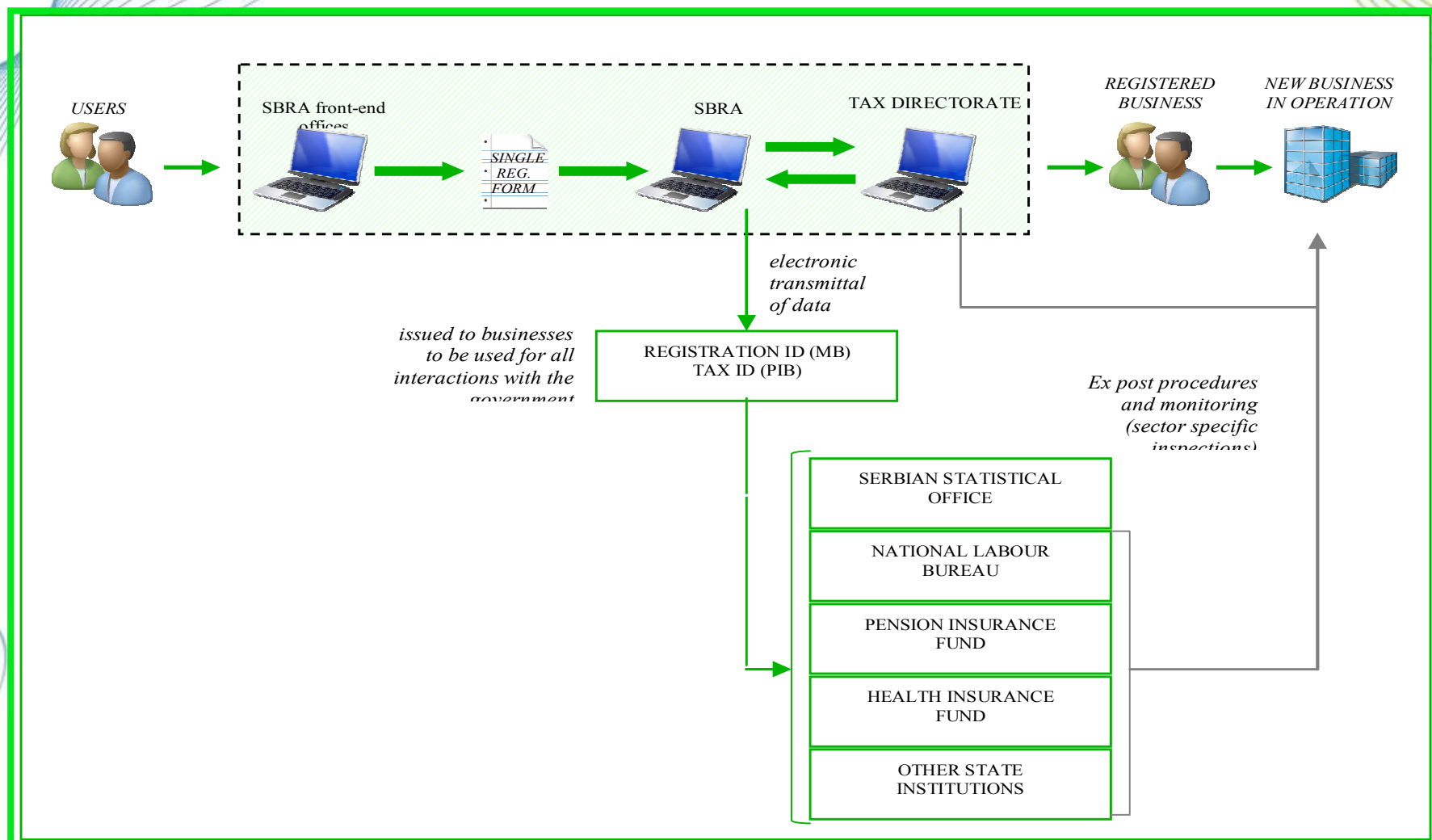
“One Stop Shop for registration” (OSS-SBRA) project

- ❑ Successful Multi-agency project, supported by Serbian Government;
Example of coordinated legal, organisational and technological efforts.
- ❑ Preparation (technical, semantical, organizational): 2006-2008 (study: IX-XII,2006)
- ❑ Phase 1: Finished May, 2009 (based on Government decision from November, 2008)
 - Partner agencies: Tax Authority (TA), Pension fund (PF), Health Fund (HF);
 - Processes partly automated (FTP data exchange, initial Web services).
- ❑ Phase 2: 2010 – 2013 (based on results of KOICA project),
 - Additional partners: National Bank of Serbia (NBS), Employment Office (EO), Statistical Office (SO), Ministry of Interior (MUP), key Public Agencies, etc.
 - Processes further automated (using Web services and ESB).
- ❑ Phase 3: 2014 – Ongoing
 - Processes fully automated - coordinated Web services on IBM ESB;
 - immediate issuance of VAT number (PIB) by Tax Authority;
 - Full participation in CROSO ([Central Registry of Compulsory Social Insurance](#)).



ONE-STOP SHOP IN SERBIA - CONCEPT

Streamlined Business Registration Model



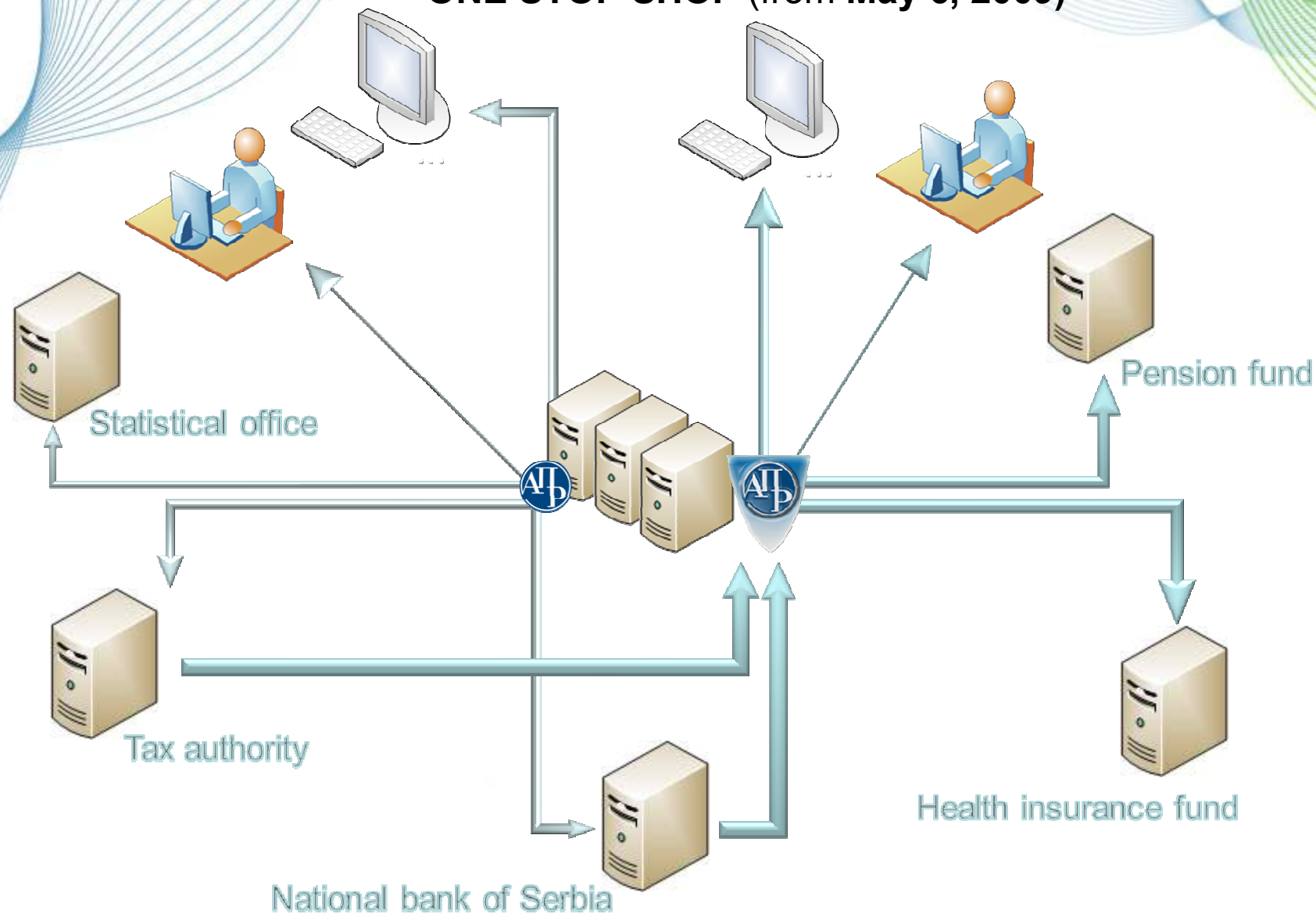


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SBRA - SINGLE ACCESS POINT ONE STOP SHOP (from May 6, 2009)



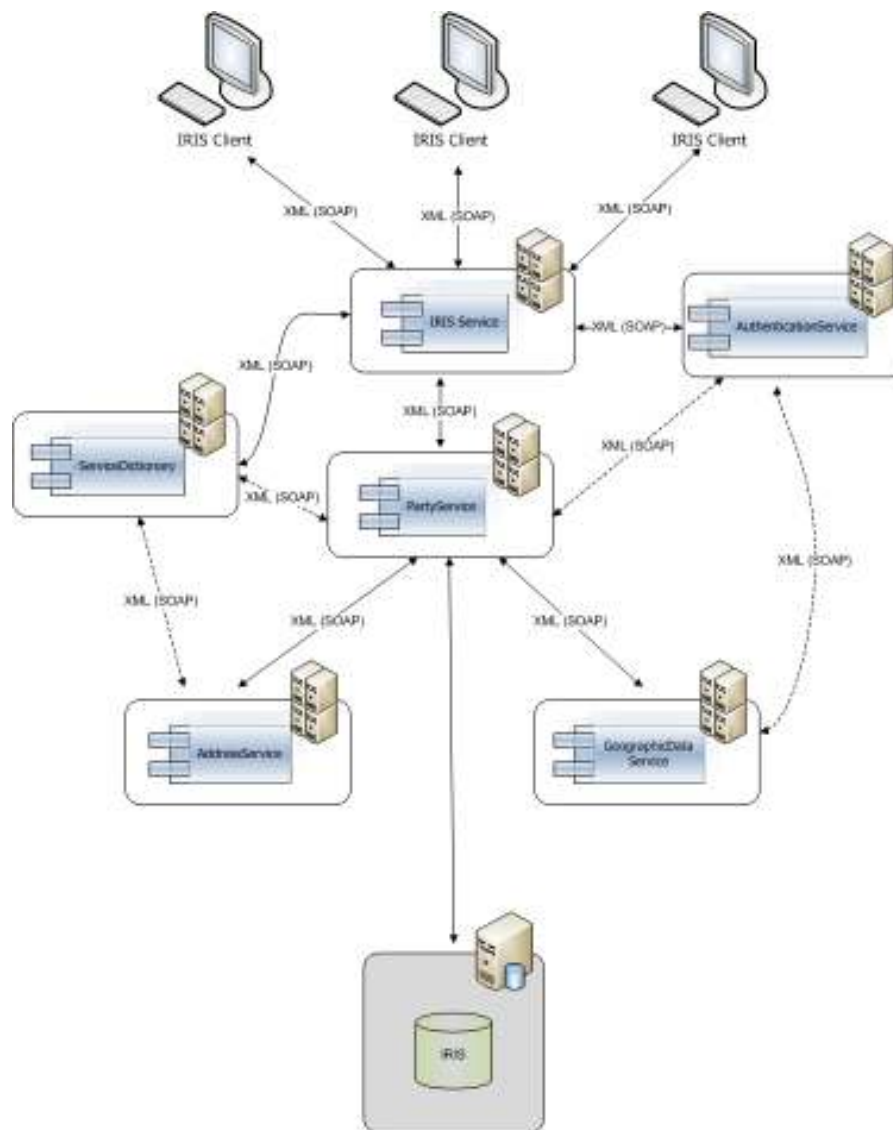


KOICA project components

- “SBRA Business process improvement project”, including new hardware and software; negotiated from 2008, implemented 2009-2010, donation 3.2 M\$ from R.Korea;
- Platform established until 2009/VI; All components developed and installed until 2010/VI.
- **ONE STOP SHOP** for registration (OSS), Phase 2
 - Full automation of processes between SBRA and partner agencies, standardised WS;
- **INTEGRATED REGISTERS (IR)**
 - Improved **IRIS module** (integrated register input) – very important part of the system; Integrated archive operation and Integrated expedition activities to follow.
- **ELECTRONIC ARCHIVE (EA)**
 - DMS (IBM FileNet) for unified storage and maintenance of electronic documents, both scanned images and documents produced by SBRA registers; Strong search engine.
- **FDI PORTAL** (future FDI Register)
 - Collects and publishes relevant Foreign Direct Investment data from multiple sources;
- **INFORMATION HUB PORTAL (IHP)**
 - SBRA Portal for G2B/G2C electronic services, using qualified electronic signatures; Includes authentication, submission, payments, delivery, notification, etc.

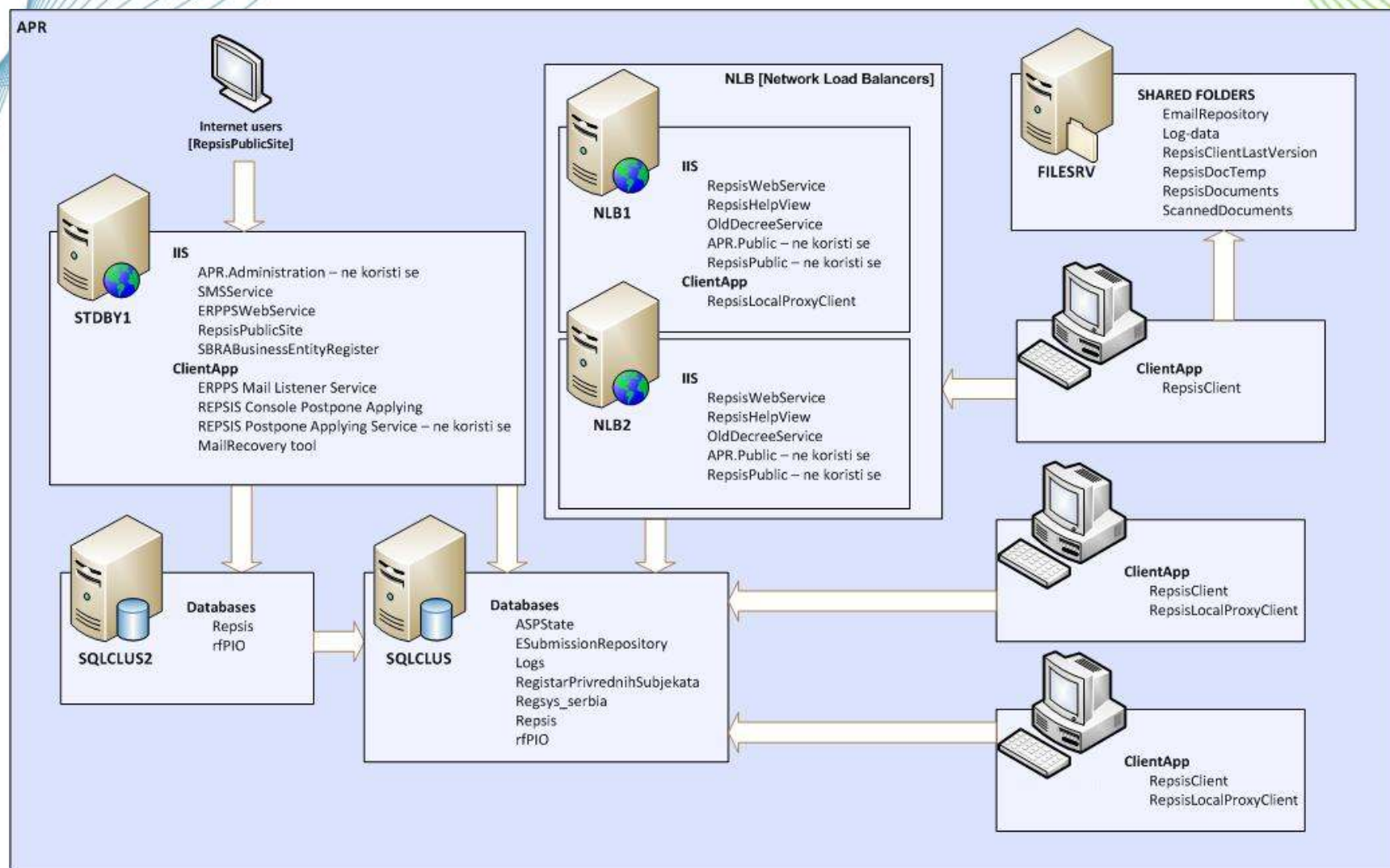
IRIS – Integrated Receiving IS

Existing part of SOA – software subsystem architecture:



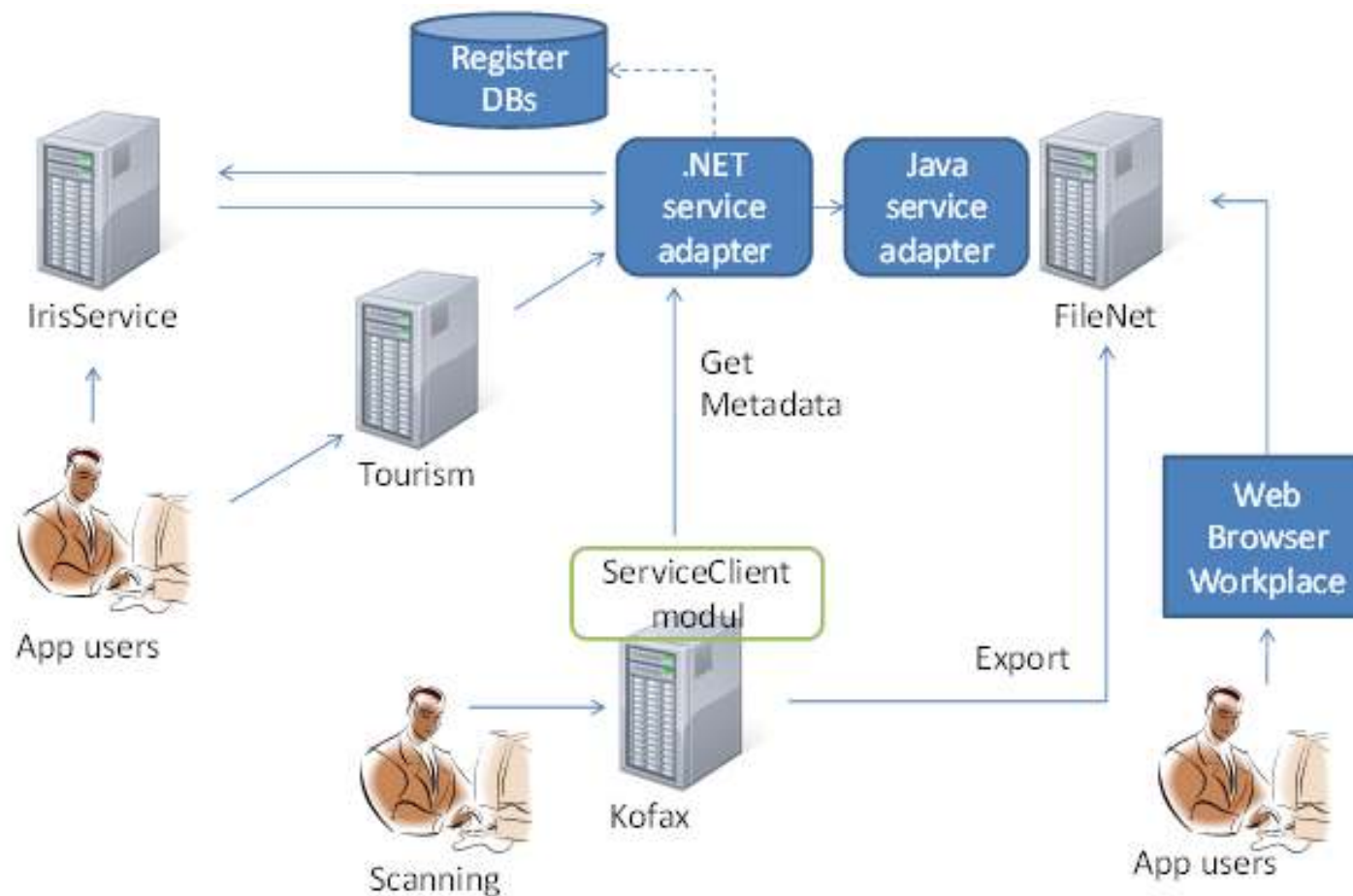
REPSIS – Register of business entities

Central software subsystem of SBRA IS – software elements deployment:





SBRA – KOICA eArchive Pilot implementation





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Business process of registration after implementation of eArchive



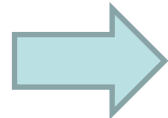
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5



Scanning process

6



Kofax

Store document and it's metadata
to appropriate folder

11



FileNet

Query for barcode meta

Document metadata

10

8

9

Document Management
Service

IrisService

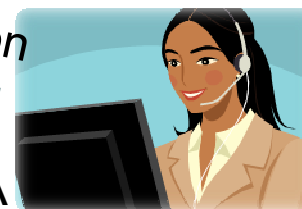
Create / update folder

4

Saves petition

2

SBRA



Petition

1

Receipt

3

Party



www.apr.gov.rs

Upon receive documents are sent to scan



SBRA Software Architecture Initial state

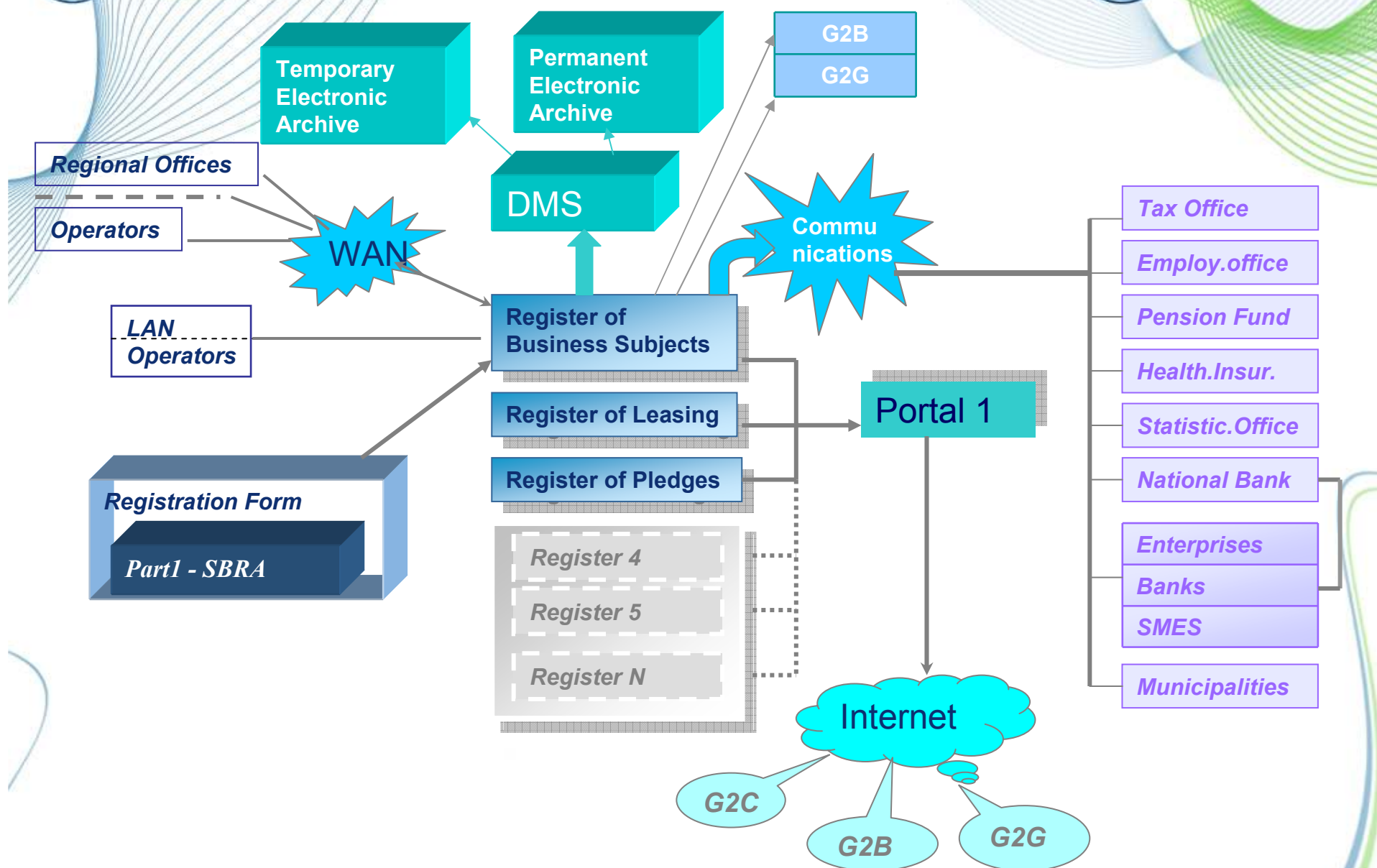
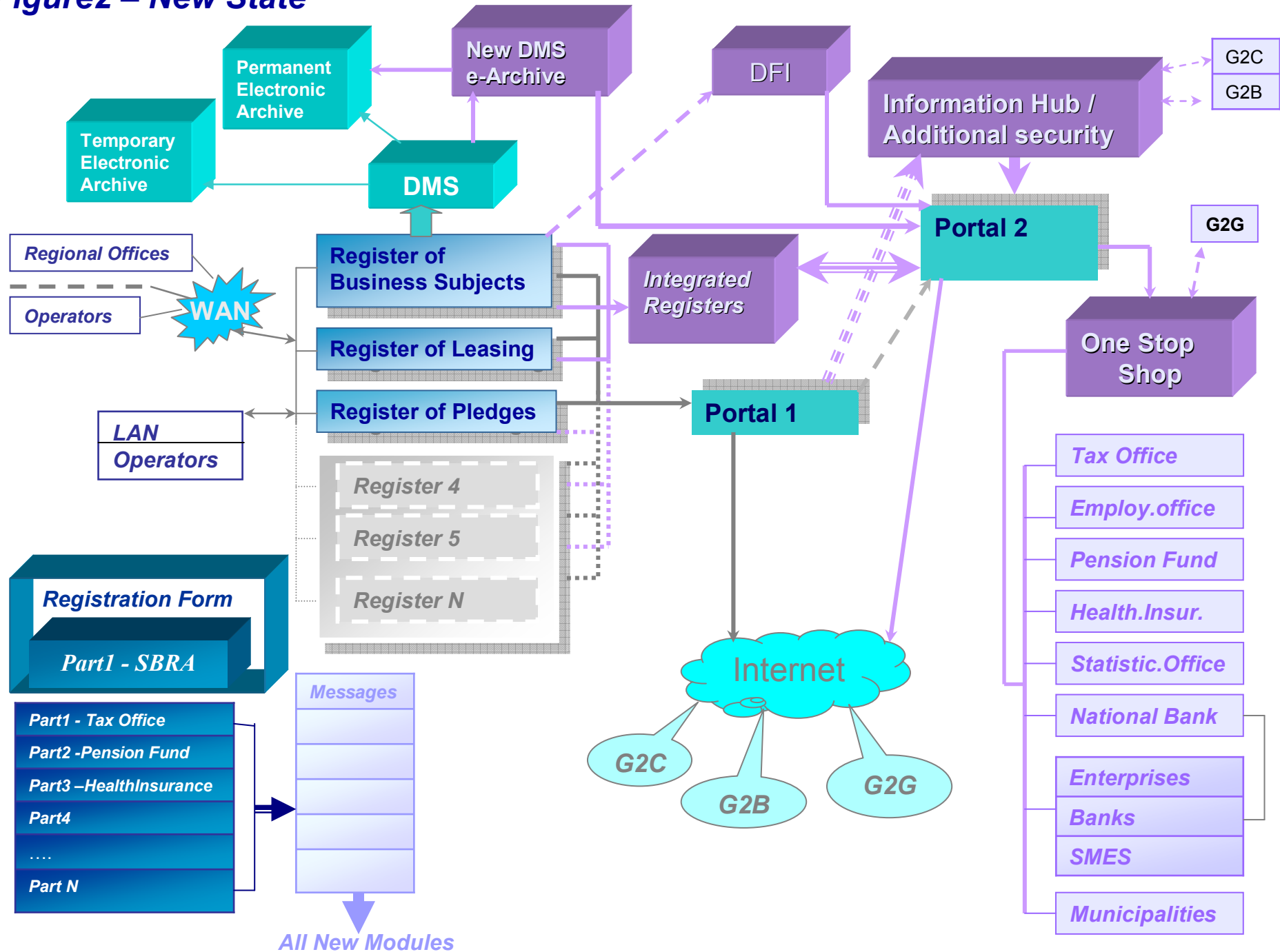


Figure2 – New State





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PART 3

**Steps towards SBRA future:
Web services deployment,
international cooperation and
Open data projects**



Status of e-Government in Serbia – Strategy, Laws and Implementation

- “e-Government Development Strategy” and “Action Plan” from 2010 – modern, based on EU and regional SEE documents and initiatives;
- “Law on electronic signature” (December, 2004), bylaws completed mid-2008;
- “Law on electronic document” (2009); Law on electronic archive still missing!;
- Certificate Authorities: 1 (2008), 2 (2009), 3 (2010); 4 (2011), 5 (2014);
- Qualified electronic certificates: Expected growth in 2011-2012 not happened, significantly improved in 2013-2014, but penetration is not sufficient;
- Electronic payments: Limited possibility to pay in local currency (Dinars/RSD), although electronic banking and credit cards are widely adopted;
- Electronic services in public sector:
Fully functional „e-Government portal“ exists from 2010, but still not enough widely used services on it; Significant improvement, based on new laws, happened in 2014, with further acceleration expected in 2015-2016.



SBRA Information System Development Plans

a) Infrastructure:

- Integration of the system (IBM-MS), including full redundancy and improved security; As soon as possible achieving “No single point of failure” principle and set up complete “Disaster recovery site”; Assurance of redundant, scalable broadband links;
- Improved availability and resilience of the system and services, based on strict procedures, permanent training and full documentation;
- Standardization of the system elements and architecture (virtualization, outsourcing).

b) Software:

- Further improve, standardize and integrate existing Registration software modules;
- Streamlined, efficient development of the Software for new SBRA registers;
- **Complete SOA-based Information system:** Make proper balance of Platform software, Commercial solutions and Custom development, including usage of Open Source solutions and development tools, as well as Cloud computing solutions;

c) Services:

- Continually improved, DW/BI based Value-added services for all types of customers/ partners (G2G, G2B, G2C);
- Work on establishment of Unique Identifying Number for companies;
- “Universal Web Service” as a highly available data delivery channel;
- Establish and maintain SBRA as a Model for e-Government services in Serbia and SEE region, as well as a model of self-sufficient, sustainable public agency;
- Improved international engagement (EBR, ECRF), standardisation (XBRL).



G2B, G2C Services of SBRA: SBRA Portal - towards full electronic registration

- SBRA Information system is “e-Services ready” almost from the beginning;
- Unfortunately, due to improper legislation (mandatory paper with signature and stamp), and lack of electronic certificates and payments, implementation of e-Services in Serbia was long postponed.
- **Existing electronic services for businesses and citizens are available on the current SBRA web site: www.apr.gov.rs**
 - Internet Search on entity status, widely used, with complete data for one entity, available for free;
 - Complete information services, including highly usable models for all important documents;
 - All Forms available online (PDF format : fillable, printable, downloadable, some could be submitted;
 - Current status of the submission (case), issuance of “extract from the Register” (“semi-electronic”), etc.
- **SBRA “Services portal”, to be available in stages 2014-2016:**
 - Electronic issuance of the “extract from the register”, for companies and entrepreneurs, and others;
 - Registration of entrepreneurs - complete proces, including issuance of digitally signed Resolution;
 - Ordering and sending Financial reports and other “value-added data delivery services”;(all services are planned to be available on SBRA services portal and on national e-Government portal)
 - As electronic payment services in local currency (Dinars/RSD) are in final testing phase, all other SBRA services non-dependable on external partners could be published in 2015;
 - Full electronic registration of new companies (one of 20 EU benchmark services) is ready in SBRA, but depends on external partners (use of electronic signatures in Courts for Articles of Association).



“Data delivery” Services of SBRA – new focus

- **G2G services** - Data delivery to other governmental institutions (more than 50 regular partners in public sector, including key ministries and agencies):
 - Standard data delivery: Broad range of pre-defined data categories, delivered by Web Service, FTP, E-mail or CD/DVD;
 - Special requests: Customised sets of data and/or statistical analysis
 - Web service PLWS for continual download of registered data (no fees);
- **G2B/G2C services** - Data delivery to businesses and citizens:
 - Standard data delivery: Range of pre-defined data categories, delivered by Web Service, FTP, E-mail or CD/DVD; Minimal fee (0.1-0.3 USD) per record;
 - Special requests: Customised sets of data, on request; Data analysis (limited complexity);
 - Free initial analysis service (selection of records, E-mail proforma invoice); Low price, Quick delivery, Online support, Contact center support;
 - Web service PLWS for private sector (with fees);
 - Important source of SBRA revenue (6%-7%), fast annual growth expected.



SBRA development team – Major achievements (1)

□ WEB SERVICE FOR COMMERCIAL BANKS AND OTHER USERS

- ▶ Service of daily export of data for all commercial banks, required by the Law;
- ▶ Complex, 2-step “Web service” for preparation and “on demand” exchange of data;
- ▶ In the 1. step user is requesting information for all the changes in SBRA database during the selected period, up to 30 days;
- ▶ In the 2. step user receives complete changed data for the selected set of entities;
- ▶ Mandatory daily use for all 30 Serbian banks, but actually works as 24/7 service;
- ▶ Full cooperation with National Bank of Serbia and Association of Serbian Banks;
- ▶ Accelerated adoption in enterprise sector (Telekom Serbia, Public enterprises, etc) and government (Ministries and Agencies).



SBRA development team – Major achievements (2)

❑ APPLICATION SUBSYSTEM FOR THE REGISTER OF REGIONAL DEVELOPMENT MEASURES AND INCENTIVES

- ▶ Complex application subsystem developed without external support;
- ▶ Started in 2011, substantially improved in 2012, operation streamlined 2013/2014;
- ▶ "Raw data" about individual payments collected from 15 sources in public sector;
- ▶ Data could be entered for single incentive (using Web application), or as a group (using appropriate XML-based interface);
- ▶ "Internal interface" - "cross-availability" of the entered data for the involved institutions;
- ▶ "Public interface" - Interactive map of Serbia with the regions and municipalities.

„Map of the Register RDMI“ available at: <http://pretraga2.apr.gov.rs/APRMapePodsticaja/>



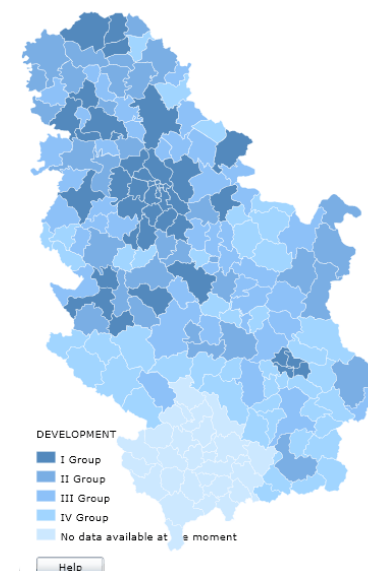
Register of Regional Development Measurements and Incentives

- result of our own software development: <http://pretraga2.apr.gov.rs/APRMapePodsticaja/> /

MEASURES AND INCENTIVES:

- **MEASURES** are established by the Government
- **INCENTIVES** concern:
 - regional development projects
 - improving sectors of the economy
 - increasing competitiveness
 - developing cities and municipalities
 - improving environmental protection
 - development of insufficiently developed regions
 - SME and entrepreneurship development
 - increasing employment
 - improving infrastructure

the intended use of the incentives is defined in the Classification of the purposes of the incentives



REGIONAL DEVELOPMENT FUNDING SOURCES:

- Republic of Serbia Budget
- Autonomous Province of Vojvodina Budget
- Development Fund of the Republic of Serbia
- City of Belgrade Budget
- Local Government Budget
- EU Instruments of Pre-Accession Assistance (IPA)
- International grants, development support
- IFI development loans
- Donations, contributions and gifts
- Other sources

RECIPIENTS OF INCENTIVES:

- businesses,
- local government, regional agencies, regional associations
- institutions
- associations
- clusters and business incubators
- the types of recipients are defined in the Classification of the types of recipients of incentives



Register of Regional Development Measurements and Incentives Content and Sources

- SBRA REGISTERS AND RECORDS (Business entities (all); Financial statements of business entities; Bankruptcy estate; Citizens' associations; Sport associations; Tourism; Financial leasing; Pledges of movable assets and rights; Injunctions; Real estate leasing);
- RECORDS OF THE STATISTICAL OFFICE OF SERBIA,
- RECORDS ON INCENTIVE of 11 participating institutions
 - Ministry of Economy and Regional Development (MoERD)
 - Ministry for the National Investment Plan (today within MoERD)
 - Ministry of Finance (Treasury Administration)
 - Ministry of Infrastructure
 - SIEPA - Serbian Investment and Export Promotion Agency
 - Serbia's European Union Integration Office
 - AOFI - Export Credit and Insurance Agency
 - National Employment Service
 - National Agency for Regional Development
 - Development Fund of the Republic of Serbia
 - Ministry of Agriculture (Administration for Agrarian Payments)
 - Other records and registers
- The number of participants does not have to be limited



Register of Regional Development Measurements and Incentives Advantages

ADVANTAGES OF THIS SYSTEM:

- Immediate insight into the real situation on the ground;
- Real time access to the data of the institutions' network;
- The possibility of designing state incentives tailored to the real needs of the statistical territorial units;
- The possibility of monitoring (supervising) the implementation of state incentives programmes and the overall development of the regions;
- The Possibility for the possibility for local communities to connect through the web service and showcase their potential advantages to foreign investors;
- To gain wide public and local community support.

☐ ORIGINAL AND VERY RARE MODEL

☐ USED AS A SOURCE FOR THE „OPEN DATA“ PROJECTS



SBRA international cooperation

SBRA is a respected member of:

- ECRF (*European Commerce Registers' Forum*) <http://www.ecrforum.org/>
- Presiding register 2007/2008; SBRA Director is currently Member of the Board of ECRF;
- EBR (*European Business Register*) <http://www.ebr.org/>
- CRF (*Corporate Registers Forum*)
- IACA (*International Association of Commercial Administrators*)

SBRA is also closely cooperating with:

- World Bank Group, IFC, FAO
- Source of data for WB reports „Doing Business“, „Getting Credit-Legal Rights Survey“, etc.
- OECD, Office of the EU in Serbia
- Regional registers (Macedonia, Croatia, Bosnia and Herzegovina, Slovenia, etc)
- Other registers on bilateral basis (Norway, Sweden, Ireland, Russia, etc)



SBRA participation in EU „Open data“ projects

SBRA participation in EU projects resulted from the successful long-term cooperation with „Mihajlo Pipin“ Institute (IMP), Belgrade and included:

- **LOD2 FP7-ICT project** - Creating Knowledge out of Interlinked Data

<http://lod2.eu/Welcome.html>

SBRA participated in this project, (2013 - 2014) as an IMP partner, mainly as a source of the „Linked data“ that will be published on Serbian CKAN data portal <http://rs.ckan.net/> , <http://rs.ckan.net/group/apr>

The source of data was SBRA „**Register of regional Development Measures and Incentives**“.

- **GeoKnow FP7-ICT project** - Making the Web an Exploratory for Geospatial Knowledge

<http://geoknow.eu/Welcome.html> / - the same data from SBRA is used.

- **PePSI project proposal (2014)** – „Horizon 2020“, **H2020-INSO-2014** Call

SBRA was a member of consortium that prepared the proposal in 2014, and also is currently involved in the preparation of new proposal for current 2015 Horizon 2020 call.

SBRA is here not only the source of data (similar to the data included in LOD2/GeoKnow project, maybe slightly extended) for one use-case (Regional development monitor), but is planned to be a partner who is in charge of the Software tools testing.

- **Share-PSI 2.0 participation**

Starting with Timisoara workshop, March 16-17, 2015.



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PART 4

SBRA experience: Lessons learned



SBRA Current development status and development plans - Summary

□ New and upgraded registers in 2014/2015

- Completely redesigned software for Register of financial statements and solvency
- Register of „disqualified persons“ (with proposed regional extension)
- Register of public institutions
- Other announced registers

□ Development of electronic services and business processes

- New, multi-functional SBRA Services Portal planned for Q2/2015
- Widespread deployment of SBRA Web services in public and private sector in 2015
- Improvement of all aspects of Data governance, with emphasis on Data quality
- Further implementation of standards and best practices (ITIL, ISO 27000, ISO 9000)
- IT - Business alignment, including coordinated planning and risk management.



Lesson 1: Future SBRA business strategy - Principles of sustainability

- ❑ At the beginning, self-financing of SBRA was assured by:
 - 3-month financing of all operational costs from the Swedish donation;
 - Sufficient fees for the SBRA services, set by law;
 - Low costs: Simplified registration process, skillful SBRA staff.

- ❑ Until now, self-financing of SBRA kept by:
 - Continually improved business processes and people productivity (fees not changed first 5 years, while cumulative inflation was >40%).

- ❑ In the future, self-financing of SBRA will be based on:
 - Further improvement of business processes, including standardisation (ISO 9001);
 - Improvement of Information system, based on SOA and virtualisation, as well as implementation ITIL and agile methodologies;
 - Improvement of services, based on the combined data from SBRA registers; Income from “value added services” expected to grow from <10% of total SBRA revenue in 2014, to 15-20% in 2016-2017.



Lesson 2: ISSUES RESOLVED DURING THE SBRR PROJECT

Project: Serbia Business Registration Reform (SBRR), 2004 - 2006

- *Grant No.:* TF052718
 - *IFB Title:* Supply and Installation of the new Serbian Business Registration System software and hardware
 - *IFB Number:* SAM-SBRR-ICB-001-SSB-05-TF052718
 - *Date of issue:* May 18th, 2005.
 - *Date of completion:* March 31th, 2006.
-
- ▶ Selection of the experienced international consultant, able to adapt to the local circumstances is crucial (technical skills are not the key point);
 - ▶ World Bank project should be managed carefully from the very beginning:
Wrong selection of "ICB procurement method for goods" almost killed the project!
 - ▶ Consider realistically the timeframe for each phase of the project;
 - ▶ Close and proactive cooperation with the World Bank staff;
Local World Bank Office in Belgrade helped a lot, especially at critical points.



Lesson 3: ISSUES RESOLVED DURING THE OSS PROJECT

- ▶ Technical solutions specified in detail after resolution of the related interoperability issues, including harmonization of the database format and content, as well as business processes.
- ▶ Initial Risk Analysis has shown that the main OSS challenge will be the relationship with the Tax Authority Directorate, especially regarding issuing of the Tax Identification Number (PIB), so special attention was given to it.
- ▶ It was clear that strong political support from all involved parties is required for the success of the project, so it was assured (not easy!).

Conclusion:

- ▶ For e-Government projects like OSS, technical solutions are not an issue !
“The Devil” is somewhere else: in the data, in the processes and in the political support!



Lesson 4: External factors – “Minimal legal background”

- **Importance of the „minimal legal background“ for the success of interoperability projects – case of national registers**
 - Development of national registers and its interoperability – basic approach;
 - Lack or incompleteness of the basic national registers in Serbia:
 - Non existing Register of citizens, Register of addresses (streets), etc;
 - Land register still incomplete and non-consistent, etc.
- **PM capacity and coordination of the projects in government/public sector**
 - Critical “success factor”, especially for “One-stop shop” projects;
- **Aspects of interoperability**
 - Include and properly combine all interoperability levels:
Technical, Semantic, Organizational and Legal;
 - Case Studies:
 - **SBRA “One-stop shop for registration”** project (2006-2009);
 - **Central Registry of Compulsory Social Insurance – CROSO** (current).



Lesson 5: Internal factors – Optimization of outsourcing services

- **Developing internal IT department**
 - Strategy and Planning: Positioning ICT function properly, including new role of CIO;
 - Staffing: How to attract and retain skilled IT staff in public sector?
- **Using outsourcing services**
 - How to assure long-term cooperation with IT partners?
 - Public procurement issues:
Software development as a specific subject of the service procurement;
 - Keeping the balance between the capacity of the internal IT department and outsourcing partners.

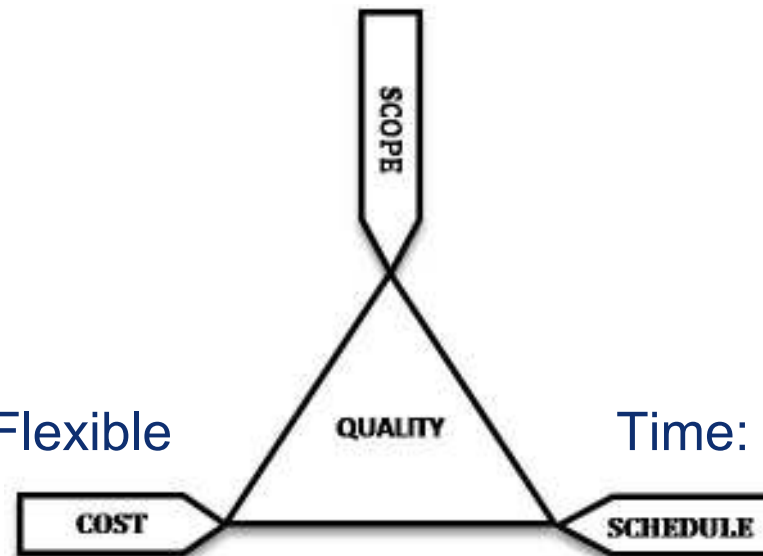
Lesson 6: PM is a Key to success

SBRA/Public sector Project constraints

Scope: Most flexible

Resources: Flexible

Time: Least flexible



Sufficient institutional capacity for PM is important at all levels:

- ❖ Agency / Ministry level
- ❖ Sectorial level
- ❖ National (Government) level – very hard to achieve in developing countries!



Challenges and solutions – Lessons learned, summary

❑ GENERAL

- ▶ Technology is just a tool to achieve strategic and tactical business goals;
But all business goals should be set considering the opportunities given by the latest technologies.

❑ SECTOR SPECIFIC

- ▶ **Public sector is something really special!**

❑ TECHNOLOGY SPECIFIC

- ▶ Technology is not simple, but not a major issue, especially in Public sector projects;
Care about business-ICT alignment, organisation, people and training, etc.

❑ INTEROPERABILITY „BY DESIGN“ – at all levels

- ▶ Again, technology is not the key – XML-based Web Services as a standard, universal solution; Semantic and operational IOP are critical in the Public sector.

❑ Project/Program/Portfolio Management (PM)

- ▶ (PM) Methodology implemented - key to success!
But how to assure stable PM and technology skills in the Public sector?



Conclusion: IT-Business Alignment is necessary

- Business of Registration is extremely and unexpectedly complex in many aspects, including:
 - from the point of view of Business Analysis;
 - from the point of view of Software Design, Development, Implementation and Maintenance;
 - for the organization of the efficient day-to-day operations, staffing;
 - for the ability to fulfill expectations of the Government and Public;
 - for the definition of the sustainable Business Model, etc.
- Thus, the only way to make successful registration system assumes extraordinary dependance and cooperation of IT and registers, especially:
 - for the definition of the **strategy** for the development of register operations, services and supporting software;
 - for the mutual definition of the **fully agreed requirements for the software**, for each module or subsystem version/deployment;
 - for the **commonly understood** principles of business reporting and software functionality and usability assessment, etc.



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SBRA's DEVELOPMENT CONCEPT

e-BUSINESS

INTEGRATION OF THE
PROCEDURES

CENTRAL ARCHIVES

CUSTOMER-ORIENTED
SYSTEM

CURRENT BUSINESS
REGISTRATION
SYSTEM OF THE
SBRA



THE LAW ON THE PROCEDURE OF
REGISTRATION WITH THE SBRA

SERVICE-ORIENTED ARCHITECTURE
(SOA)

ARCHIVE AND DOCUMENT
MANAGEMENT SYSTEMS



COMPLIANCE WITH
EU ADMINISTRATION
STANDARDS

OPERATION

DEVELOPMENT
FOCUS

GOAL



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Serbian Business
Registers Agency

Share-PSI 2.0 workshop Timișoara Workshop: Open Data Priorities and Engagement - Identifying data sets for publication

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Thank you for your attention!

Comments and questions?

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