Slovenian Governmental Cloud

Mag. Jurij Bertok (Dr. Alenka Žužek Nemec)
IT and e-Service Directorate
Ministry of the Interior, Slovenia
Ministry of the Interior

*IT and e-Service Directorate*

(soon to be under Ministry of Public Administration)

Responsible for:

State informatics
Slovenian infrastructure in numbers

- Private state network – HKOM: 1995 local networks on 1100 locations
- Data Centre: more than 100 systems, 88 data bases (Ministry of Labour, Family, Social Affairs and Equal Opportunities, Ministry of the Interior, Ministry of Justice, Ministry for Agriculture and the Environment, Ministry of Education, Science and Sport, Ministry of Foreign Affairs, Ministry of Economic Development and Technology, etc., Government Communication Office, Health Inspectorate, Surveying and Mapping Authority, Statistical Office, Customs Administration, Supreme Court, …)
- e-Government portal: 75 web applications
- 256 websites - 56 institutions
- 58 Administrative Units
- E-mail: 35,000 users
- Digital certificates for public servants, citizens and companies: 130,000 (SIGOV-CA, SIGEN-CA)
- Time stamps: 800,000 / month
- Government Single Contact Centre
Best practice examples

Some best practice examples with international awards

**E-VEM (One stop shop for Businesses)**
- The United Nations Public Service Award UNPSA 2009 (Improving the delivery of services, 1st place Europe & North America)
- “Good practice label” in the “European eGovernment Awards 2009”

**IPP/ITDL system (E-democracy)**
- The United Nations Public Service Award UNPSA 2012 (Fostering participation in public policy-making decisions through innovative mechanisms, 2nd place Europe & North America)

**Electronic data gathering for e-Social Security**
- The United Nations Public Service Award UNPSA 2013 (Promoting Whole-of-the-government approaches in the Information Age, 1st place Europe & North America)
BUT....

Challenges

Reduced staff

Increasing workload

More compliance

Better governance

Provide attractive and trendy tools

Mobility

Pressure on budget!!

Deliver public value

Better IT alignment with business

CLASS Conference 2014
Current situation

- Poor governance of informatics in public administration
- Resources (applications, data, technology) are dispersed, duplicated and non-consistent
- A number of instances of similar system developments
- Solutions among different public institutions are not interoperable
- Inefficient budget spending due to lack of common strategy, objectives and unique architecture
What's in place?

A state network HKOM and several hundred e-services, dispersed through many datacenters.
Current situation

**Tax legislation**
- Personal Data Protection Act
- e-Signature Act
- Administrative Procedure Act

**Internal affairs**
- Various legislation areas

**Infrastructure & spatial legislation**
- Various legislation areas

**Common legislature areas**
- Specific legislative areas

**Legislation**
- "Requirements" layer
- "SaaS" layer
- "Iaas" layer

**Disperse e-services**

**Disperse data centres**

**HKOM net layer**

**Geospatial data centre**

**Education data centre**

**Central gov data centre**

**Education data centre**

**HKOM net layer**

**Tax Data centre**

**eHealth data centre**

**Various legislation areas**

CloudAssisted Services
Budget cut over the years
Increasing demand for application support

No. Appl.

- 2006
- 2009
- 2012
- Present
How to achieve modern, agile and more efficient public administration?
Common policies
Shared services
Reusable modules
Shared infrastructure
An example: Authentication system
New project “QUANTUM LEAP”

Main drivers:

• Response to the public administration modernization efficiency & effectiveness and good governance
• Rapid technological development
• Economic challenges: do more and better with less resources
Ultimate goal of “QUANTUM LEAP”

- Centralization of state informatics in a way to lower the expenditure for informatics
- Providing the modern services required and enhancing development
- Consolidate public sector informatics
“QUANTUM LEAP”

Key improvements:

- Establishment of private cloud of public administration
- Centralization of resources and development of core unit of knowledge and expertise
- “Quick win” - solutions delivered quickly with visible improvements and immediate benefit
- Supporting projects with clear ROI and rigorous supervision
IZHODIŠČA NADALJNEGA RAZVOJA RAČUNALNIŠTVANJA V OBLAKU V JAVNI UPRAVI RS

Dolgoročni program »Računalništvo v oblaku kot gorivo za napredek« pomeni sodelovanje javne uprave, zasebnega sektorja ter raziskovalne sfere za inovativne rešitve s ciljem modernizacije in racionalizacije državne uprave ter vzpostavitev platforme za nova delovna mesta in zaščita investicij EU sredstev na področju IKT

Not yet adopted!
Vision and goals

Clear vision for different goals:

• Increased innovation opportunities for service providers, including SMEs and public administrations, evidenced through implementations of advanced cloud infrastructures and services.

• Promotion of the reuse of open data and open service solutions in cloud environments, in particular published by public administrations.

• Reaching the high level of standardization by setting up secure Reference Architecture for Cloud Computing along the development the appropriate Reference Development Environment with priority on security.
The Cloud Enabled Government

Logični okvir platforme računalništva v oblaku, EU sredstva za digitalna delovna mesta

K-r-O
Komercialni ponudnik računalniške infrastrukture v oblaku
IaaS PaaS SaaS

Uporabniki:
Slo, EU, svet

Javno naročilo
D-r-O
Državni (lastni) računalniški oblik (razvoj, test, produkcija)
IaaS PaaS SaaS
Poslovne aplikacije državne uprave
Neposredni proračunski uporabniki (ministrtva, vladne službe, organi v sestavi...)

JZP
H-r-O
Hibridni (nadzor države) računalniški oblik (razvoj, test, produkcija)
IaaS PaaS SaaS
Poslovne aplikacije javnega sektora (podpora v informativni, HRM, dokumentni sistem)
Posredni proračunski uporabniki (občine, agencije, zavodi...)

JZP
I-r-O
Inovativna razvojna platforma v računalniškem oblaku (razvoj, test)
IaaS PaaS SaaS
Vložki v RRI (razvoj, raziskave in inovacije)
Samoinicativni razvoj aplikacij "pre-commercial", nadzor pod investicijami in rešitvami

Start-up, mladi, brezposleni, male in srednje firme (razvoj)

Odpri podatki, Portal NIO
Supporting Shared Services

Common Services – HRM, BI, Data Storage…

Citizen-centric services

Secure Infrastructure Services

Shared Processes (Health Care, Tax and Benefits…)

Business-centric services

Source: 2011 Accenture
Public sector Cloud – Hybrid Cloud (H-r-O)

Government provided:
- Standards
- Accreditation of Cloud solutions

Private sector provided SaaS solutions for public sector

ESB& process engine Integration backbone

Central e-signing, timestamping, e-delivery
Evropski sklad za regionalni razvoj: 14 mio EUR

Predvidene potrebne zmogljivosti:
• 328 procesnih jeder
• 10.240 GB RAM
• 594 TB diskovnega prostora
Project “Cloud for Europe”

Public sector cloud use as a collaboration between public authorities and industry through pre-commercial procurement
Making it happen!
Thank You

Dr. Alenka Žužek Nemec
IT and e-Service Directorate
Ministry of Public Administration

alenka.zuzek@gov.si