ZPIZ – Pension and Invalidity Insurance
Institute of Slovenia

IBM SolutionsConnect 2013

Dan pametnijih rješenja

Pametnim podacima do pametnih odluka

On the way to the dematerialized business processes

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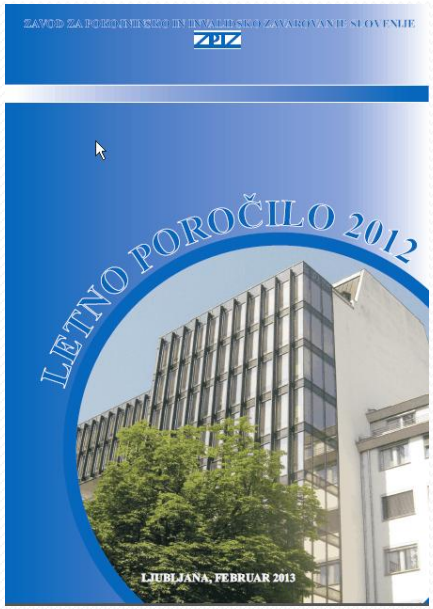
Chief Information Officer

Agenda

- Introduction
- Renovation of ICT system as a key challenge
- Key building blocks of dematerialization
- Status of renovation

ZPIZ at a glance

- Sole provider of obligatory Pension and Invalidity Insurance in Slovenia
- 857 employees (31.12.2012)
- 398.000 claims & services per year (2012)
- Insured persons: ca. 855.000 (2012)
- Beneficiaries of pensions & benefits: ca. 585.000 (2012)
- Expenditures (pensions): ca. 4,4 bn. € (2012)
- Largest national public fund after the national budget



Key Challenges before the ICT renovation

- Entirely legacy environment (zVSE, CICS, PL/1, VSAM)
- 1000+ CICS transactions, 4000+ batches, oldest applications 40 Y+
- Limited connectivity, lack of flexibility and functionalities, data quality and semantics issues
- Continuity of service challenge due to retirements
- Decision for total renovation of ICT
- 2009–joined ZPIZ to prepare and execute the ICT renovation program
- Formation of new team with motivated and skilled experts in leading roles

Renovation of ICT system as a key challenge

- ZPIZ - “a document factory”
- Documents on paper / MF
- 17 km (shelf length) of paper archive
- Renovation of ICT: a way to business processes dematerialization
  - What is dematerialization of business processes?
  - Dematerialized processes are faster, more efficient, more economical
  - Requirements for dematerialization
- ICT Strategy 2012-2016
- Key steps towards dematerialization of business processes

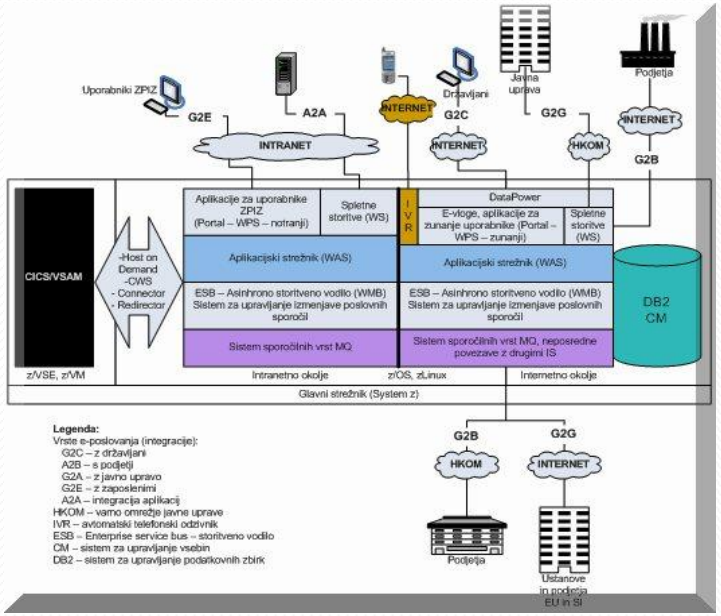

Strateški načrt prenove in razvoja sistema informacijsko-komunikacijske tehnologije (IkT) Zavoda za pokojninsko in invalidsko zavarovanje Slovenije za obdobje 2012-2016

Številka: 050-79-02600/2011
Datum: 17.11.2011
Različica: 1.1

Strategija IkT ZPIZ 2012-2016 Stran 1 od 61

1. E-business and e-services

- High connectivity & integrabillity one of main goals of the Renovation of ICT
- Comprehensive e-business system with main target groups
- Policy of secure e-business based on PKI
- E-ZPIZ (e-business and e-services for citizens)
  - Portal e-services (PKI), eClaims…
  - Integrated IVR channel
  - Handwritten digital signatures
- BiZPIZ (e-business with organizations)
  - Integrations through WS
  - Integrations through messaging systems
  - Portal e-services



E-business, achievements

- Key integrations implemented
- Received fully legally valid e-documents: >3 m/year
- Send fully legally valid e-documents : >3,5 m/year
- Planned for 2013: more than 12m

Preglednica IV.18: e-poslovanje Zavoda z organizacijami (izbor storitev), 2011–2012

e-poslovanje z organizacijami	2011	2012
Prejeti M4 (paketi obrazcev)	93.200	97.573
Prejeti M4 (obrazci)	1.437.670	1.563.570
Poslani M4-odgovor	123.265	96.930
Prejeti M1-M3 od ZZZS	279.981	640.650
Prejeti M1-M3 prek E-VEM	54.855	117.144
Vpogledi v eCRP	29.593	31.605
Prejete spremembe stanj oseb iz CRP	103.533	567.930
Poslana nakazila SEPA na UJP (11. in 12. 2012)	-	1.205.639
Število posredovanih odgovorov eSOCIALA	20.485	2.245.617
Elektronske upravne zadeve (zahteve za podatke iz matičnih registrov)	17.881	23.595

E-business, main infrastructure

- Data Power (IBM Websphere Data Power)
- Portal servers (IBM Websphere Portal server)
- Application servers (IBM Websphere Application server)
- RDBMS systems (DB2,…)
- ESB:
  - Message flows systems (IBM Websphere Message Broker)
  - Message queue systems (IBM Websphere MQ)
- IVR system (integrated with WS - Abraxas)
- PKI components for enhanced e-business security and legal validity
- Handwritten digital signature capture & integration system
- CWS (CICS Web Services – integration with legacy system)

2. Document system

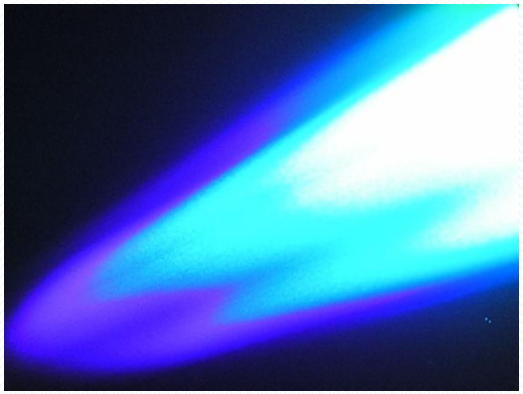
- IBM CMoD was introduced in 2012 as main business documents repository
- Documents are stored (physical: paper, MF), digital (DB or FS)
- Conversion into long term archiving compliant format (PDF/A, XML)
- Required security elements (secure e-signature, time stamp…)
- CMoD is being populated with more than 100 mln. Documents
- Digitalization of customers files is planned for autumn
- Estimated volume: 300 mln in 2-3 years, 20-30 mln yearly increase
- Effects: higher availability of documents, lower costs of manipulation and archiving
- Omission of the microfilming

Document system, main infrastructure

- IBM Content manager on demand (CMoD)
- Custom interfaces and services for access
- System for security elements management (e-archive)
- IBM Web content manager (WCM)
- IBM Content manager (CM)

E-archive

- Current: MF, paper
- Increasing volume of originally e-documents
- Study in 2011 → decision for e-archive
- Project (pending)
  - Security elements management system
  - Organizational and IT procedures
  - Accreditation according to law (procedures, SW, HW)



3. Business process management system (BPM)

- Implementation of BPM in 2011
- IBM BPM (before Lombardi), IBM Blueworks live
- Key business applications
- Applications are flexible and compliant to business processes and requirements
- Higher agility (especially in the analysis and design phase)
- Focus on the business processes
- Improved user participations
- Faster development (generated UI – coaches, flexible process logic)
- Higher awareness of the importance of BPM
- Development of the key business applications (projects pending)

4. Portals

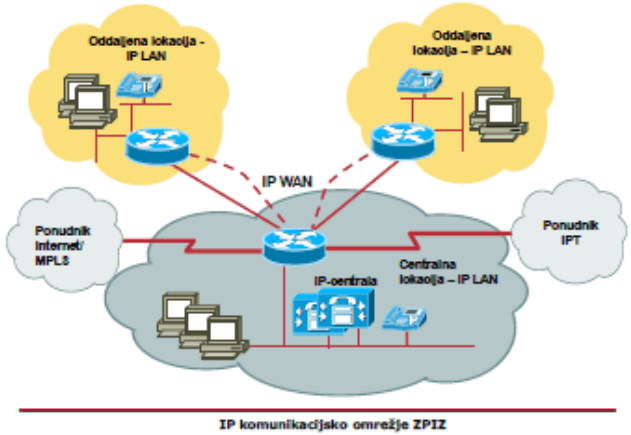
- Integration on the level of user interactions, SEP
- Portal for external users (citizen, business partners), e-services, e-content (awarded with award for best government website in 2010)
- Intranet portal for employees (main integration point and access to all relevant applications and contents)

ICT infrastructure

- Complex infrastructure implemented during the ICT Renovation program:
  - Upgrades of IBM system z (main server)
  - Numerous environments and MW implemented
  - Implementation of zLinux (on zVM) platform
  - Implementation of VMware on x86 private cloud for VDI and non critical servers
  - Migration from zOS to zLinux (pending)
  - Successive omission of zVM/zVSE (after implementation of new applications)
  - Continuation of consolidation
  - TCO and benchmark (zOS, zLinux, Linux on VMware (x86))
  - Business continuity study, DRC implementation activities

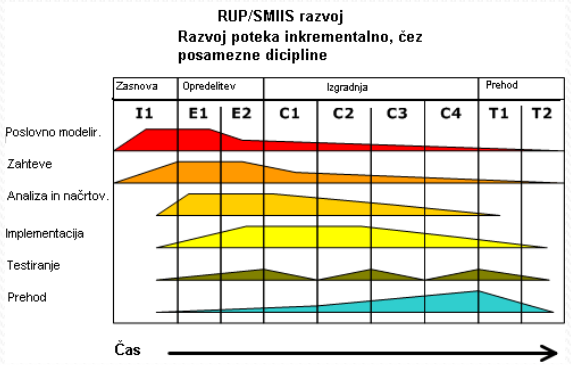
Communications, user equipment

- Implementation of IP MPLS network
- IP telephony
- Convergence (mobile, fix)
- Implementation of VMware based private cloud, VDI
- Mobile services, BYOD



Competences, methodologies

- Prerequisites for development of new IS:
  - New development team
  - Implementation of dev. methodology(SMIIS/RUP)
  - Implementation of dev. environments, libs, images



- Application development
  - Rational tools, eclipse
  - SOA
  - Java, EGL
  - Portal applications, BPM applications, WAS, Broker, DB2

IT Governance

- RAFT (Projects, issues, tasks management)
  - Project, task management
  - Issues management
  - Document management
  - Service desk management
  - All tasks in the IT department included

- Monitoring system implementation/upgrade (2012)
  - Matrix of resources and services
  - Implementation of IBM Tivoli monitoring
  - Introduction of internal SLAs planned

- Implementation of Enterprise Architecture (EA)
  - RSA (IBM Rational System Architect)
  - TOGAF model
  - Implementation based on resources/services matrix

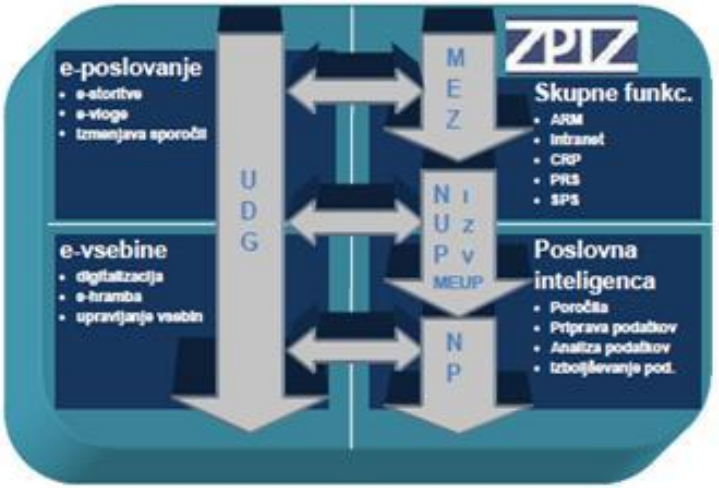
ICT Renovation Status

Completed tasks:

- ICT infrastructure, Communications
- Authorization, Audit trail system
- E-business, E-services system
- Document management system
- Registries
- Business intelligence
- E-Archive (part)
- New key applications (part)
- …

Plans until 2016:

- Completion of pending development projects
- Completion of development of remaining key apps
- Omission of legacy system
- Infrastructure:
  - Completion of final infrastructure
  - E-archiving (completion)
  - Business continuity
  - …



Thank you!

Questions?

- **Contact us freelly, we support exchange of ideas!**
- **Send us your feedback**

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