E-GOVERNMENT SOLUTION
GOVERNMENT GATEWAY

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Regional Solution Architect

Microsoft

Countries

- **Deployed Government Gateway**
  - **Czech Republic**
  - **Kazakhstan**
  - **Malaysia**
- **e-Government Strategies**
  - **Georgia**
  - **Vietnam**
  - **Montenegro**
  - **Cyprus**

The Requirement

- **Governments need to provide better, more efficient services to their citizens in a timely and cost-effective way**

- **Governments need to be more efficient in the way they conduct their operations and provide services**

- **Citizen/organization is in the center**

The Challenge

- **Handling ever-increasing demands and amounts of information**
- **Much of this information is still on paper or locked in back-end systems**
- **Enabling different parts of government to work together and share information**
- **"Rip and Replace" is neither a practical, nor cost effective solution**
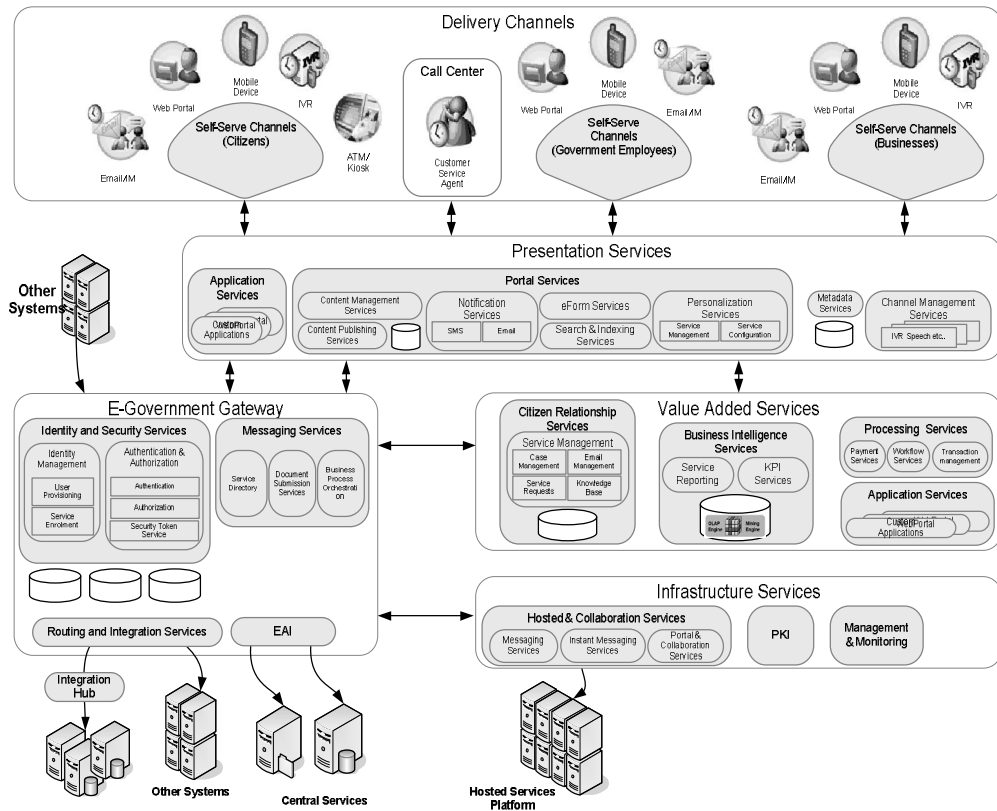
The Objectives

- **To provide the capability for a Single Personal Account, or a Single Business Account with Government**

- **To enable people to share information and transact with government in a beneficial way**

- **To gain cross-industry agreement on government specific exchange of information (XML schema)**
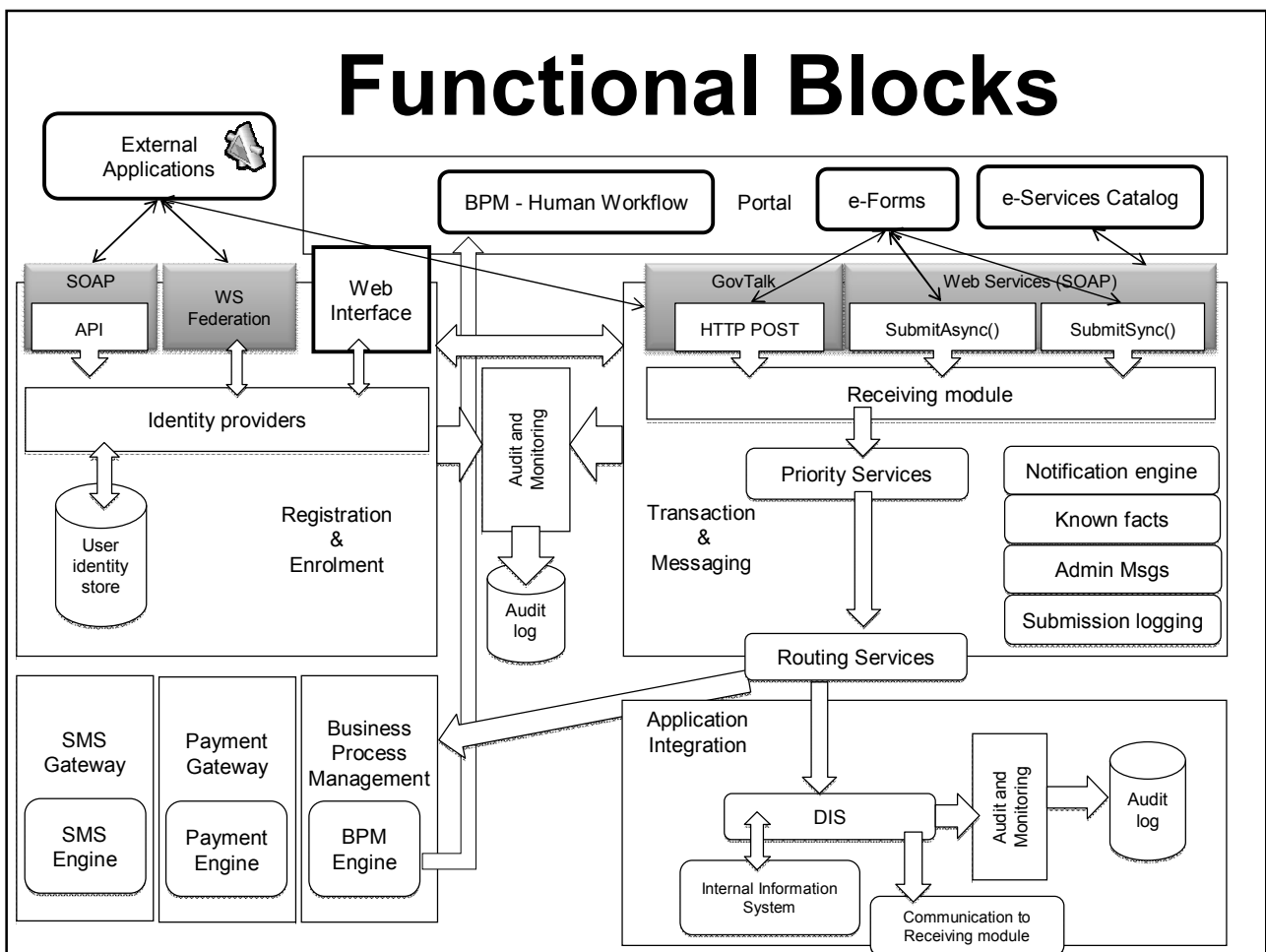
Usage scenarios

- **Citizen**
  - **Reports Income Tax to Ministry of Finance**
- **Organization**
  - **Reports VAT to MoF**
  - **Reports pension insurance to Social Security**
  - **Reports Intrastat to Customs**
- **Government**
  - **Testing facility results of driving tests to MoT**
  - **One Agency asks for data from second Agency**
  - **One Agency sends data to second Agency**

Logical Architecture

Delivery Channels

- Web Portal
- Mobile Device
- IVR
- Email/IM
- Self-Serve Channels (Citizens)
- ATM/ Kiosk
- **Call Center** — Customer Service Agent
- Web Portal
- Mobile Device
- Email/IM
- Self-Serve Channels (Government Employees)
- Email/IM
- Web Portal
- Mobile Device
- IVR
- Self-Serve Channels (Businesses)

Other Systems

Presentation Services

Application Services — Custom Portal Applications

Portal Services
- Content Management Services
- Content Publishing Services
- Notification Services — SMS, Email
- eForm Services
- Search & Indexing Services
- Personalization Services — Service Management, Service Configuration

Metadata Services

Channel Management Services — IVR Speech etc..

E-Government Gateway

Identity and Security Services
- Identity Management
- User Provisioning
- Service Enrolment
- Authentication & Authorization
  - Authentication
  - Authorization
  - Security Token Service

Messaging Services
- Service Directory
- Document Submission Services
- Business Process Orchestration

Routing and Integration Services

EAI

Value Added Services

Citizen Relationship Services
- Service Management
  - Case Management
  - Email Management
  - Service Requests
  - Knowledge Base

Business Intelligence Services
- Service Reporting
- KPI Services
- OLAP Engine
- Mining Engine

Processing Services
- Payment Services
- Workflow Services
- Transaction management

Application Services — Custom Portal Applications

Infrastructure Services

Hosted & Collaboration Services
- Messaging Services
- Instant Messaging Services
- Portal & Collaboration Services

PKI

Management & Monitoring

Integration Hub

Other Systems

Central Services

Hosted Services Platform

Functional Blocks

External Applications

BPM - Human Workflow   Portal   e-Forms   e-Services Catalog

SOAP
API

WS Federation

Web Interface

GovTalk   Web Services (SOAP)
HTTP POST   SubmitAsync()   SubmitSync()

Identity providers

Audit and Monitoring

Receiving module

User identity store

Registration & Enrolment

Audit log

Priority Services

Transaction & Messaging

Notification engine

Known facts

Admin Msgs

Submission logging

Routing Services

SMS Gateway

SMS Engine

Payment Gateway

Payment Engine

Business Process Management

BPM Engine

Application Integration

DIS

Internal Information System

Audit and Monitoring

Audit log

Communication to Receiving module

Government Gateway approach

- **Solution based on common knowledge**
- **Unified point for electronic transactions**

■ **Government**

- Improved service delivery
- Reduction in cost of service delivery
- Greater awareness of services available
- Better targetting of services to those who need them

■ **Citizen/Business**

- Reduced burden of government
- Faster turnaround of benefits
- Always on service
- Seamless integration of diverse departments
- Accessible to all

Gateway logic

Organizations

Agents

Citizens

www.xyz.gov.cz

Portals

Internet

Data flow

Transactions

Government Gateway

Transaction Engine

Registration & Enrolment

Internet/ Secure Government Network

Department integration

BackEnd Systems
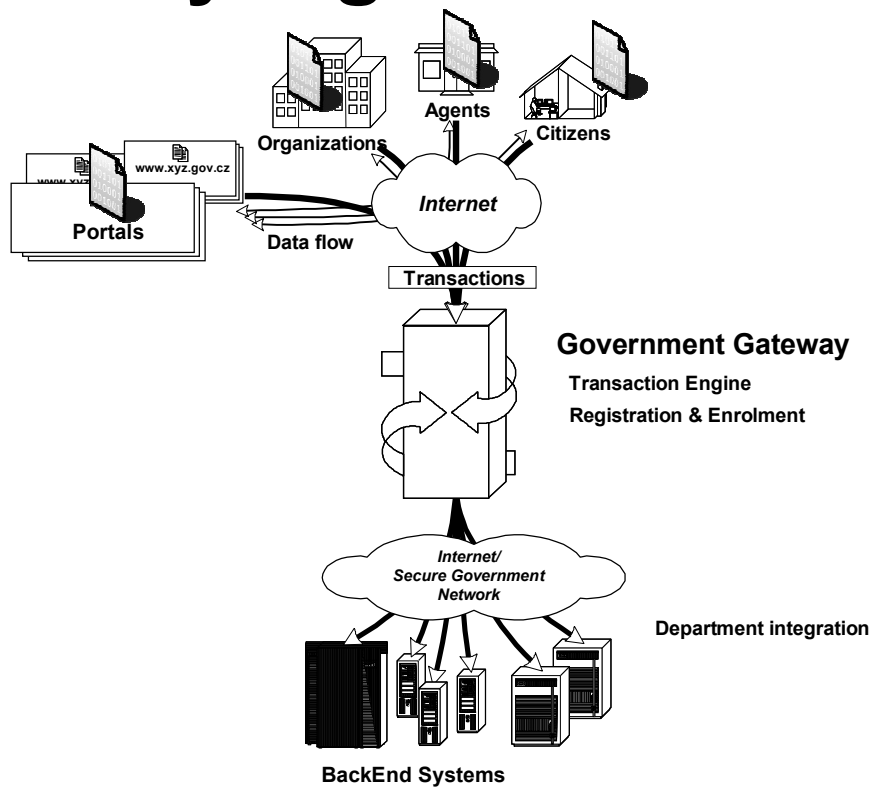
Integration – Remote Adapters

- **Each system integrates to a common standard**
- **Custom development at each node (x N)**
- **Single WAN protocol**

Hub

X A

X B

X C

X D
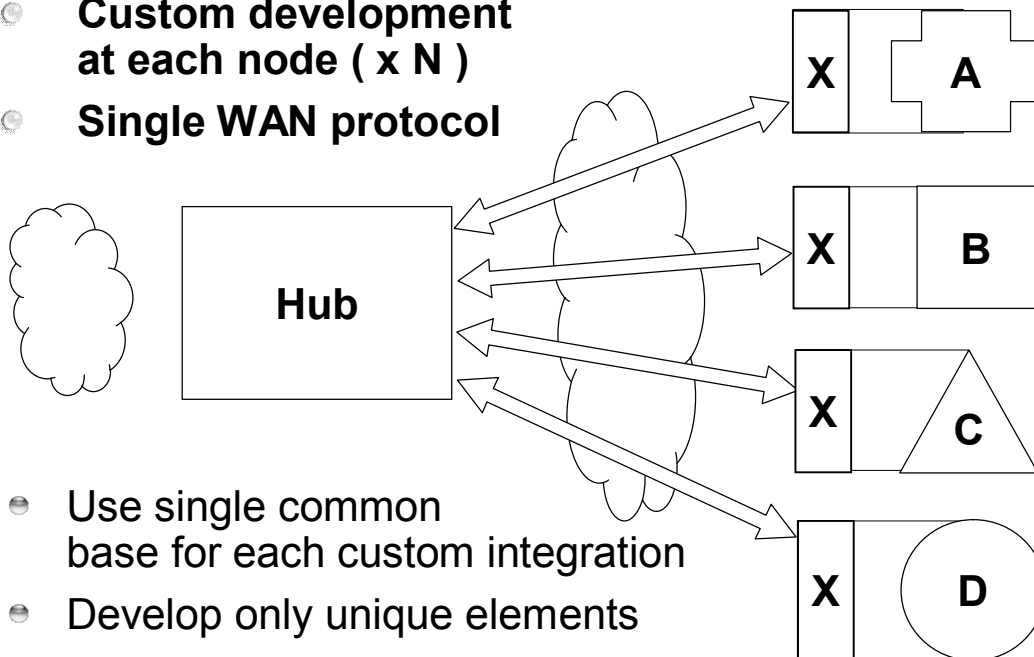
- Use single common base for each custom integration
- Develop only unique elements

Major steps to fulfill a vision

- **First presentation of Gateway – 2001**
- **On going presentations – 2002, 2003**
- **Contract signed – July 2003**
- **Gateway implemented – September 2003**
- **Cooperation with CSSZ – 2003/2004**
  - **Internal implementation**
  - **Processes**
- **ISV conference – June 2004**
- **First ERP packages ready – August 2004**
- **Routine operations – 2005 - until now**
- **Full technology and functionality upgrade – December 2007**

Lessons learnt

- **Security**
  - **Dealing with sensitive data**
- **Legislation**
  - **Written form**
  - **Attachments – originals?**
  - **Digital signature**
  - **Electronic data exchange**
- **Coordination**
- **ISV support – business counts**

Czech Social Security Administration

- **First service**
- **One year preparation**
  - **Internal processes**
  - **Internal training**
  - **New parts of information system**
- **Marketing campaign**
- **Related projects**
  - **BizTalk implementation**
  - **New integration infrastructure**
- **Other services**
- **ISV training**
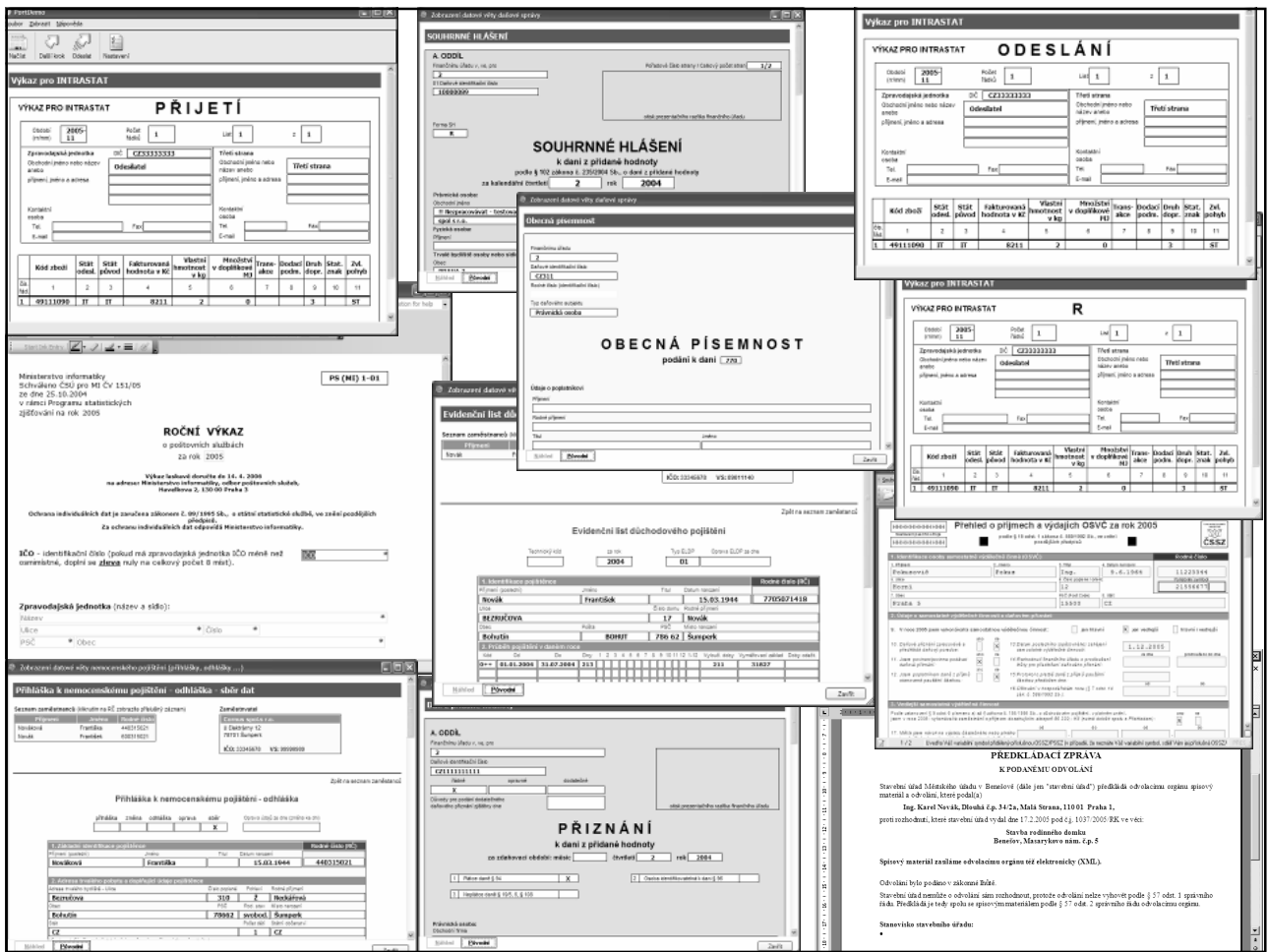
Solution that never sleeps

One month trafic

Document submission

1. Data collection

Portal or appli

2. XML preparation

<XML>

3. Digital signature + encryption

Government Gateway

4. GovTalk envelope check …

… sending to appropriate department

Back end systems ⇨ MoT | MoI | Customs | MoF
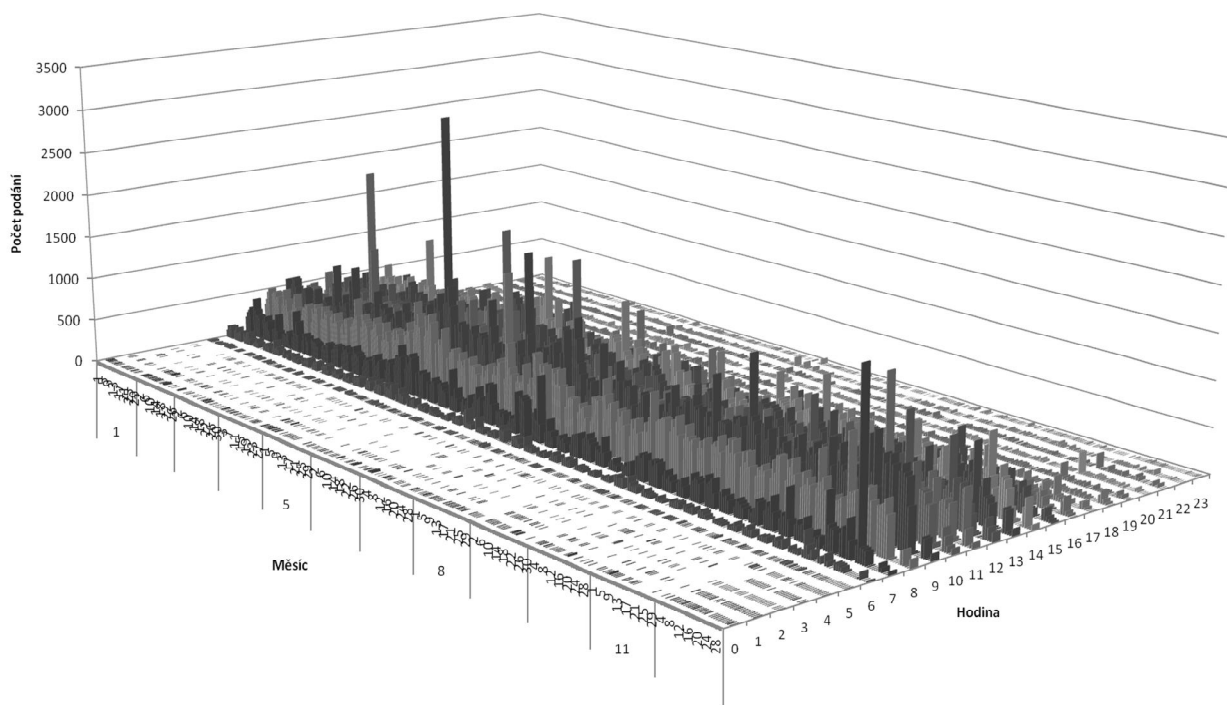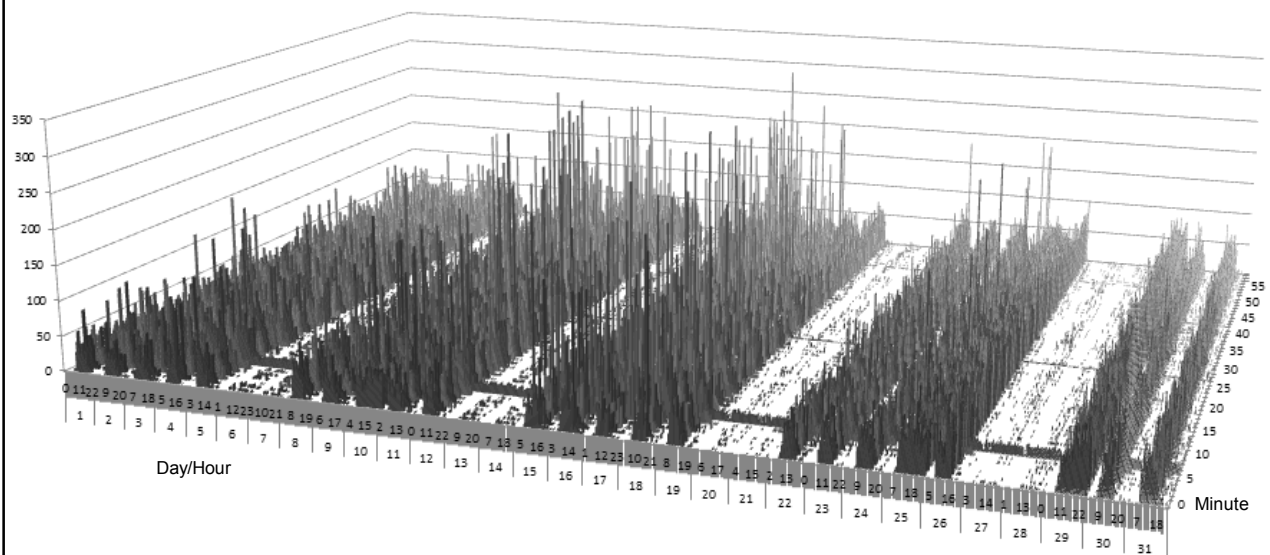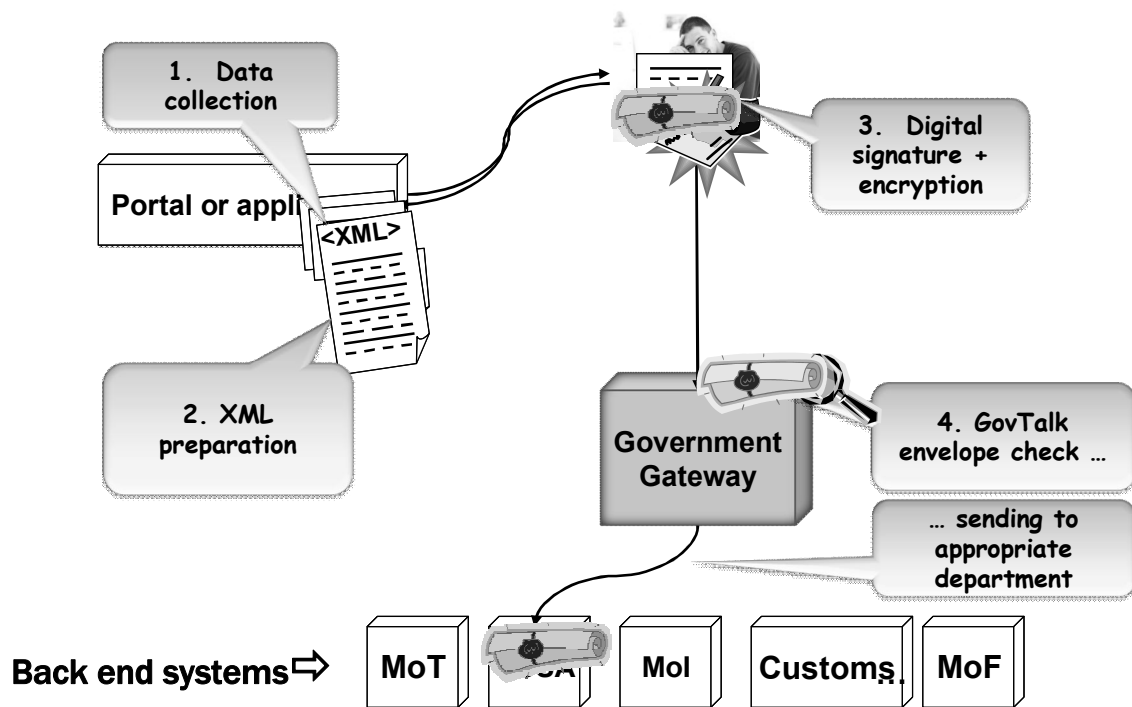
CSSA forms in numbers I.
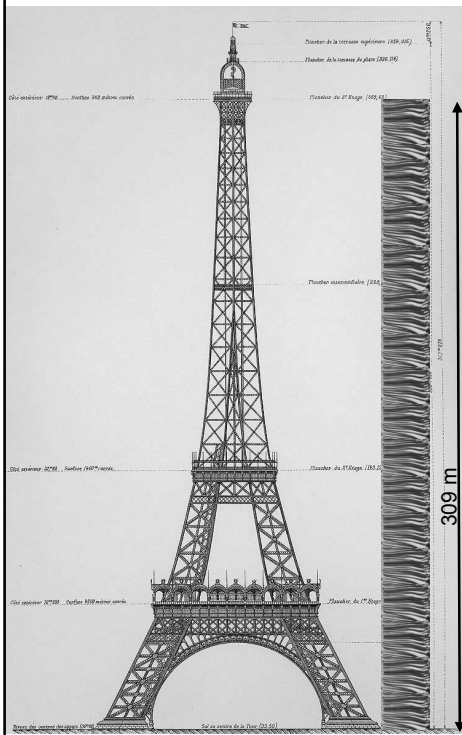
Accepted 1 937 000 pension forms

State to 20.6. 2005

309 m

Weight 5 811 kg of paper

CSSA forms in numbers II.

704 m
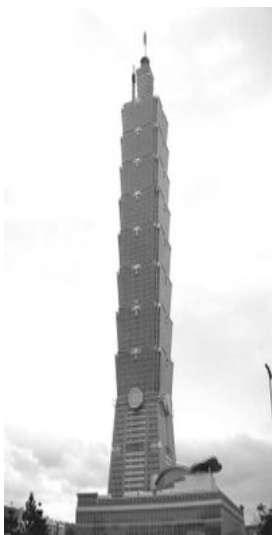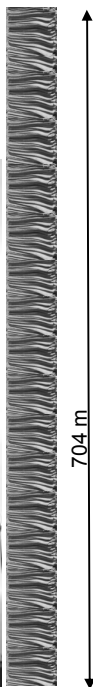
Taipei 101 – 508 m

○ **Accepted 4 400 000 pension + healthcare insurance forms**

○ **State to 31.8. 2005**

Weight 13 200 kg of paper

CSSA forms in numbers III.

Accepted 11 000 000 pension + healthcare insurance forms

State to 31.8. 2006
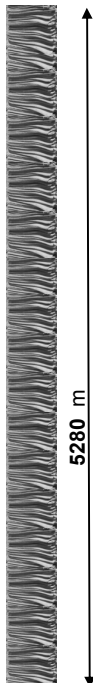
CSSA has saved cca 5 000 000 $ for scanning and handling

1760 m

Taipei 101 – 508 m

Weight 33 000 kg of paper

CSSA forms in numbers IV.
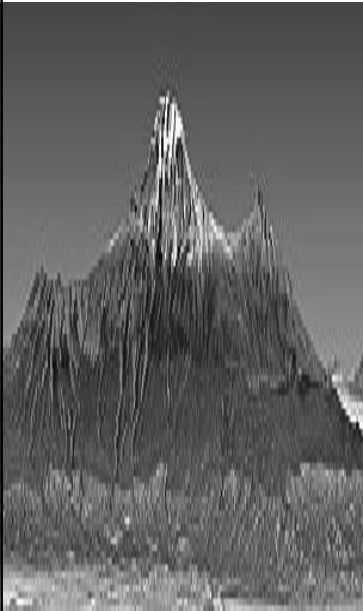
Kilimanjaro– 4600 m

5280 m

- **Handled 33 000 000 pension + healthcare insurance forms**

  State to 31.12. 2007

- **It includes all electronic forms transfered through Government Gateway but refused (15%) by CSSA due to errors inside of forms**

Weight 99 000 kg of paper

Daily operations

- **Hot-Line – 24x7 – 4 trained operators**
- **Technical support – 24x7 – 4 technicians**
- **Project manager**
- **Regularly meetings**
- **SharePoint site**
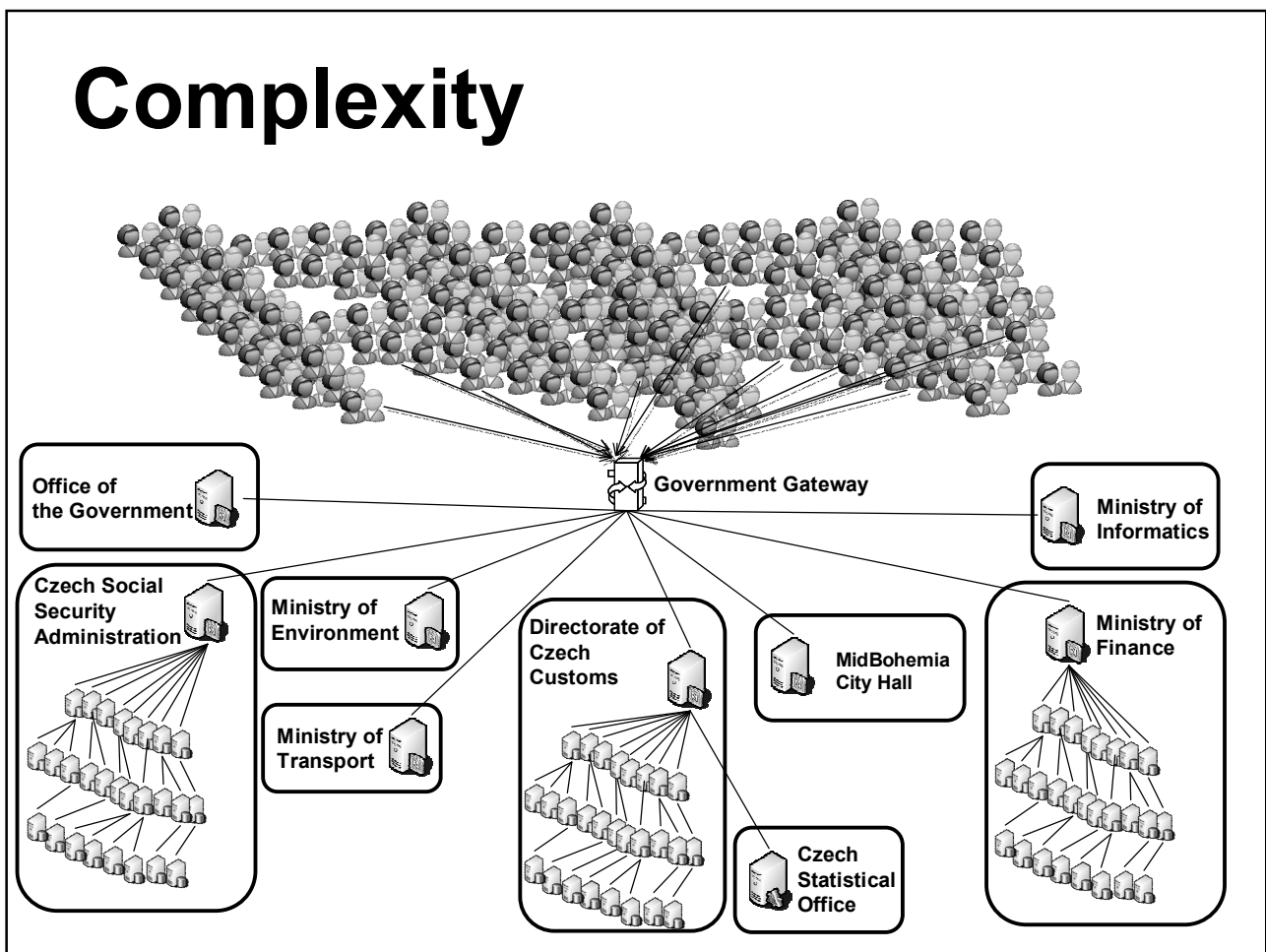- **Help Desk application**
- **Daily usage reports**

Building ISV community

- **Independent Software Vendors are critical for success**
- **Shared information**
- **They need support**
- **Community web**

Independent Software vendors

A&K computers	Elanor	IVASOFT	NeTa systems	SoftStudio
A.S.E.I.	ELISOFT	J.K.R.	NJK UNICOS	Softwarová a inf. Sp.
AKTIS	EN-Nástroje	JAGA software	NUGGET SW	SOHAW software
Alan Čermák	EPaS	Jana Jančurová	NZ Servis	SOHAW software Louny
ALFA Projekt	EPOS	JB Soft	OKD	STORMWARE
ALIS	EVEREST	Jiří Baláš SW	Oksystem	Stormware
Altec, a.s.	Faplikovaných vě	Jiří Hora Software	ORAX	SUNRISE
Altus Development	Flux sro	Jiří Hůla	Organizační kancelář	SW HORY
Alva Computer	GAMMA Studio	Jiří Jurka	Organizační kanc. PHA	SWM
AP&P Consulting	Gilmon Data,	KASTNER software	ORTEX	TAXAN
APL Expert	GORDIC	KELOC CS	P & I Personalistika	TechnoCentrum
APROBA	HAiDA	KOMAR Martin Koran	Pavel Hruška	Tichý & spol.
Baiers Advice	Halbrštát Pavel	KOMIX	Pavel Jaroš – SUMMUS	TILL CONSULT
BM Servis	HA-SOFT	Kooperativa	Pavera Martin	TK Soft
BMI System Czech	Helpsoft	Kvasar sro	PC HELP	TRIADA
BNSOFT GORDIC	HSF	KVINTA	PC System	TriPeM Info
C.A.C.	I.F.T. PROGRES	LCS	Petr a Jitka Schusterovi	Třinecké železárny
CÍGLER SOFTWARE	IDS	LCS International	ProSoft	UEP
Complete Data Systéme	IDS Scheer ČR	LCS Softprofes	PROSPEKS-IT	UNIS - Brumov
Computer Laboratory	IIS Tábor	LEVEL firm, v.o.s.	Přibík Petr	Valet MT
Control	IND	LJ Software	PVS	Valmont
Cornus	Info Office	LOGIS	R2 SOFTWARE	VEMA
CSH	INFOS 2001	LORGA	Redlich Daniel	Vision Praha
Vysoké učení technické	Ing. Antonín Pavelka	LOVATO	Regionální finanční odbor	Vladimír Pazour
Česká rafinérská	Ing. Jiří Šrahulek	Luyten CZ	RTS	Vlastimil Fryč
ČMZRB	Ing. Karel Pavlík	M.C.Software	Rudolf Kuzník	VM-SOFT
ČZ	Ing. Karel Pavlík	MAGION systém	SAP ČR	VOSA software
DAPOS	Ing. Lumír Hedbávný	Masarykova univerzita v Brně	SBS	V-servis holding.
DELTAX Systems	Ing. Petr Jaroslav	MAP	Severočské doly	WEBCOM
DTG	Ing. Petr Sup	Milevský Software	Severomoravská energetika	Webia
E- racion	Ing. Rippel Milan	MilSoft	Shaw Software	YMIR
Ekon. a inf. systémy	Integrodat software	Mirodata	SIS	Zbirovia
EKO-SOFT	ISIT	M-line	Smsoft	ZZNet
Ekosoft (C) net	ITS	MRP - Informatics	SOFT-PC	.

Complexity

Office of the Government

Government Gateway

Ministry of Informatics

Czech Social Security Administration

Ministry of Environment

Directorate of Czech Customs

MidBohemia City Hall

Ministry of Finance

Ministry of Transport

Czech Statistical Office

Gateway Summary

- **Gateway accelerates the ability of Government to deliver services electronically**
- **Gateway is powerful, secure and reliable**
- **R&E provides national-scale authentication and authorization services**
- **TxE is fast, secure, reliable, once-only delivery of messages to Service owners**
- **DIS simplifies the job of service providers in communicating with the Gateway**

QUESTIONS

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