Open ICT e-Government Architecture as an Interoperability Framework

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Introduction

- Open voluntary group "Communication Framework" established by Czech Republic Ministry of Informatics
- Interoperability within public administration

Results of analysis

- e-government and e-government back office
 - Political, legal and organizational level vs. ICT
 - E-government vs. e-government back-office
- Distribution of competence
 - Thousands of procedures
 - Thousands of institutions and organizational unit with more or less independent management (central, regional, local government)
- Dynamics of opinion-forming and demands
 - Own practical experience with ICT changes opinion and demand
 - Experience of others changes opinion and demand
- ICT development
 - ICT has own short lifecycle
 - Long term ICT development is not predicable
 - Government of one state has minimal influence on global ICT development

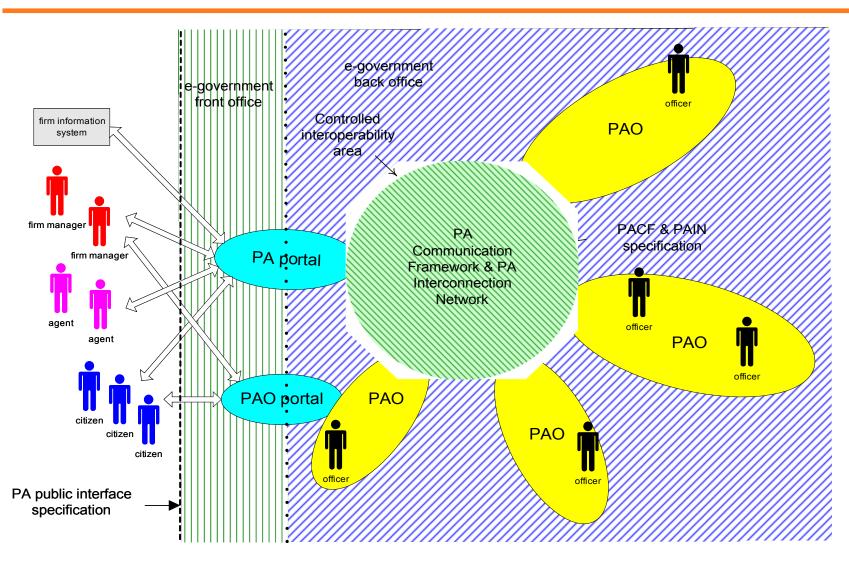
Results of analysis

- Management methodology
 - Centralized design
 - Standard-based design
 - e-government system can not be one centrally managed and centrally funded project
 - Combination of standard-based and centralised management of single ICT systems should be used
- Open international standards use
 - Developing of separate government standards has no sense
 - Systematic use of selected open international standards is the right way
 - Internet community is great source of know-how in interoperability
- Value of using the results of detailed analysis
 - Detailed analysis contain historical state of affairs
 - Detailed analysis cannot remove risk of indefiniteness from egovernment

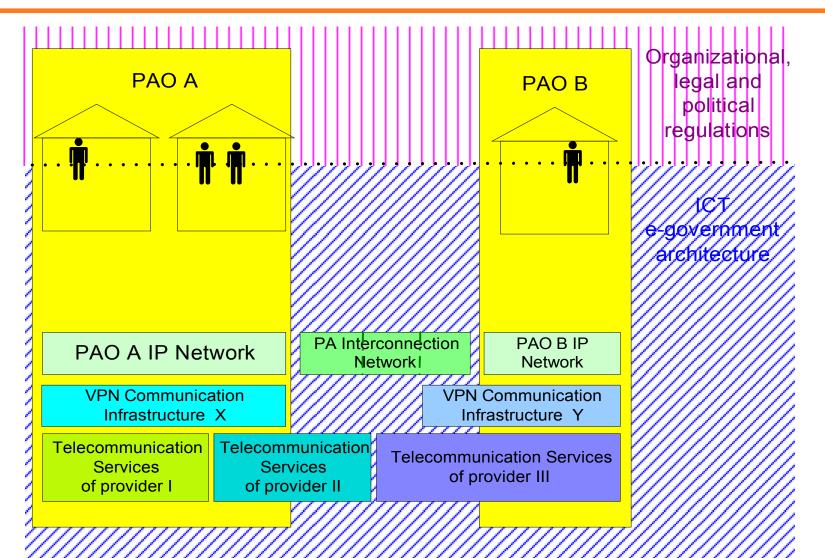
Architecture requirements

- Respect and support the distribution of competences between PAOs
- Enable full electronic support of PA agendas
- Support different communication channels between the PA and citizens in different locations
- Support flexibility
- Support effective information-security management
- Support technology-neutrality
- Support scalability for great numbers of instances
- Support management of all processes linked with ICT lifecycle

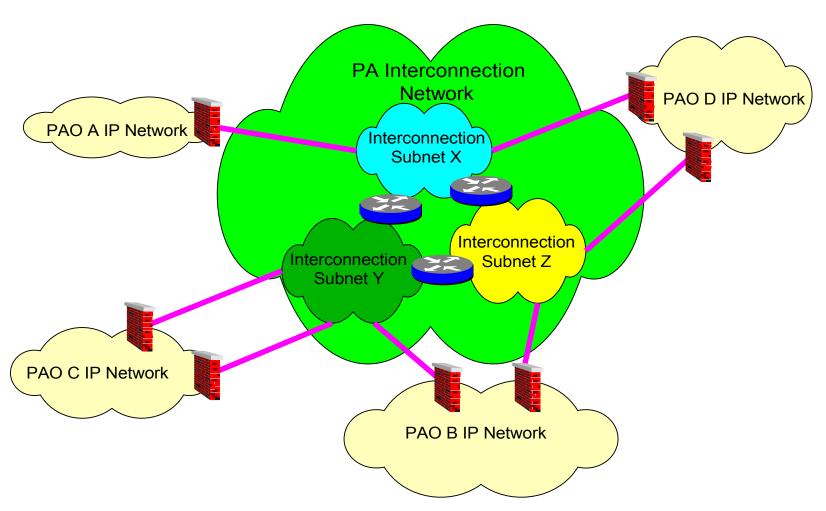
Description of architecture - organization



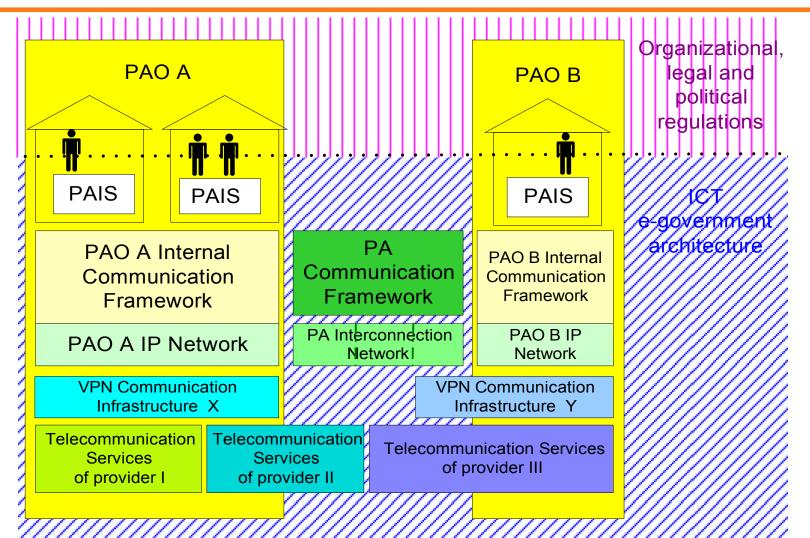
Description of architecture - technology



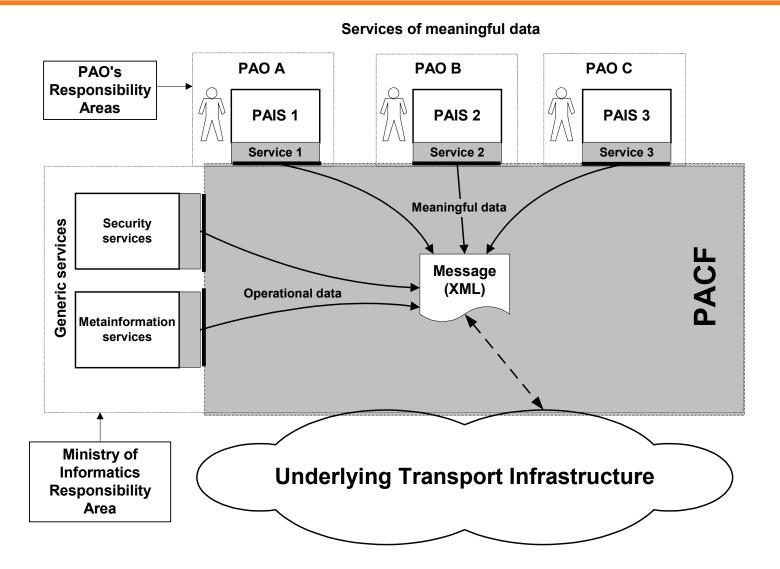
PA Interconnection Network



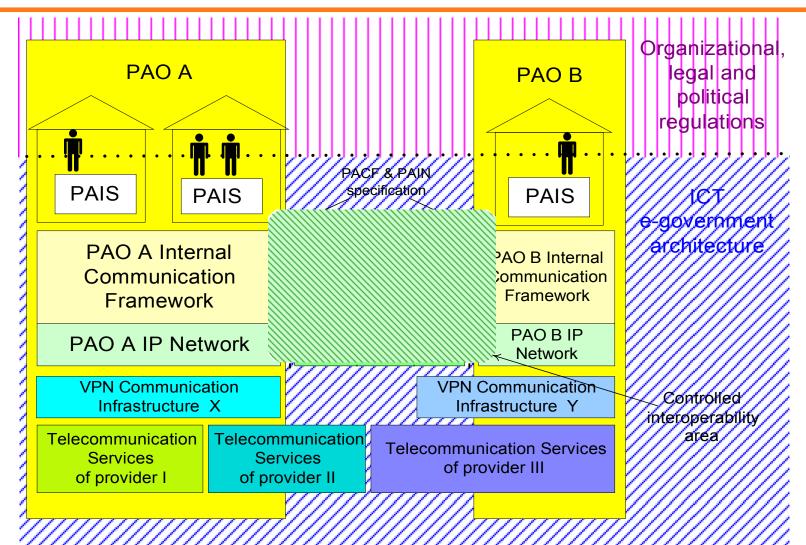
Description of architecture - technology



PA Communication Framework



Description of architecture - technology



Evolution management

- ArchitectureHigh-level fixed abstract model
- Specification

Detail description of the interface with controlled lifecycle

- Selection of international open standards on the interface
- Additional rules and limits (how to use the standard)
- Testing of interoperability
- Operational data description and rules for generic services
- Rules supporting management of implementation process
- Implementation

Particular ICT projects. Specification is used as additional:

- Project requirements
- Approval procedure

Conclusions

- Compatible implementations exist
- No systematic interoperability support
- Architecture exists
- Innovation step zero was started first specification based on successful compatible implementations

- Thank you for your attention
- Questions?