Mandate and capacity of the SAO to conduct IT audit

Martin Hruška

Information systems for governance and public administration

There are 7 343 registered IS in the PA

110 bil. CZK (4,1 bil. EUR)
Total cost of ICT investment

25 bil. CZK (925 mil. EUR)
Total operational costs

Priorities for IT audit

Computerization of public administration and providing services to citizens

- Building and development of e-Government
- Effectiveness of electronic services providing to citizens

Source: SAO priority area 2017 to 2020

IT audit

- Ordinarily 4 audits per year focus on e-Government projects and ICT related processes regarding 3E

- The most frequent audit areas:
  › IT strategy and Enterprise architecture
  › Public procurement
  › Development and implementation
  › Operation and services
  › Data quality
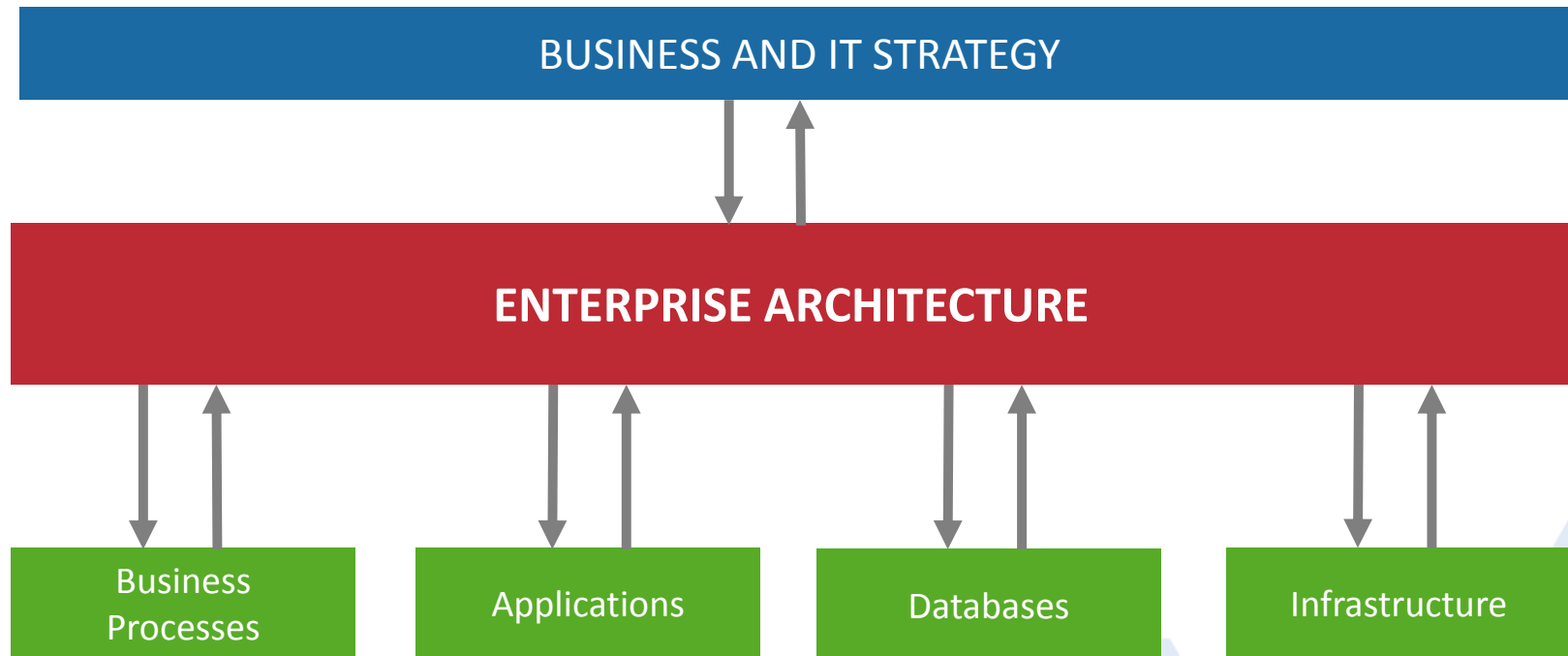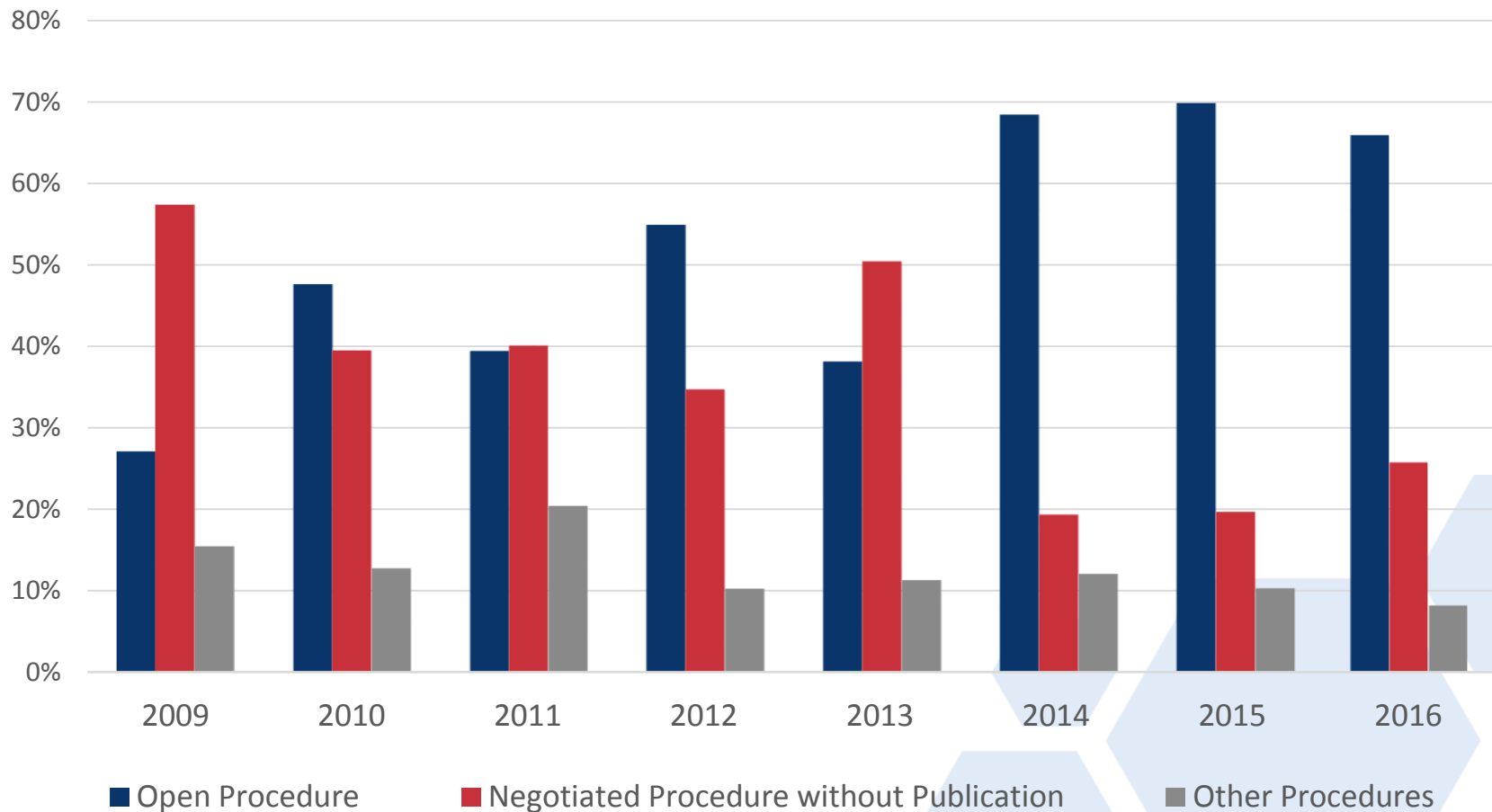
Overview of auditing areas in the past three years

IT Audit Area (ITAA)	2014	2015	2016	Total
IT strategy and Enterprise architecture	4	8	2	**14**
Public procurement	3	4	1	**8**
Development and implementation	2	3	3	**8**
Operation and services	3	3	2	**8**
Data quality	2	2	1	**5**
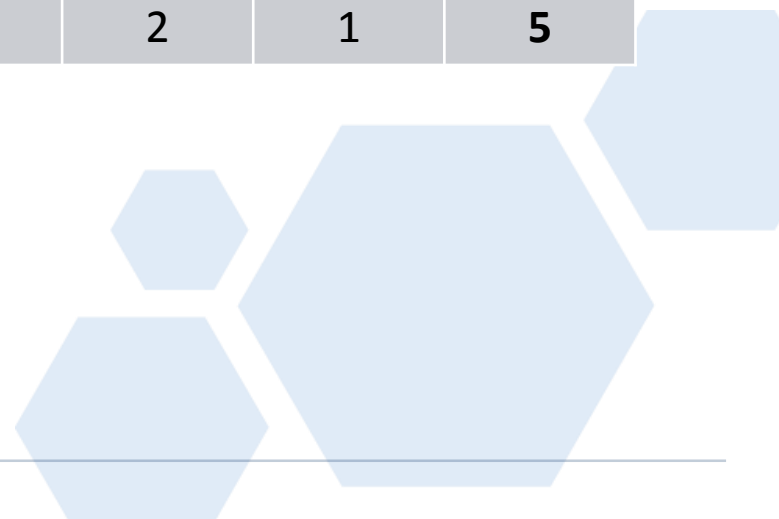
ITAA: Strategy and architecture

BUSINESS AND IT STRATEGY

ENTERPRISE ARCHITECTURE

| Business Processes | Applications | Databases | Infrastructure |

ITAA: Public procurement

ITAA: Development and implementation

ITAA: Operation and services

SLA LIFECYCLE
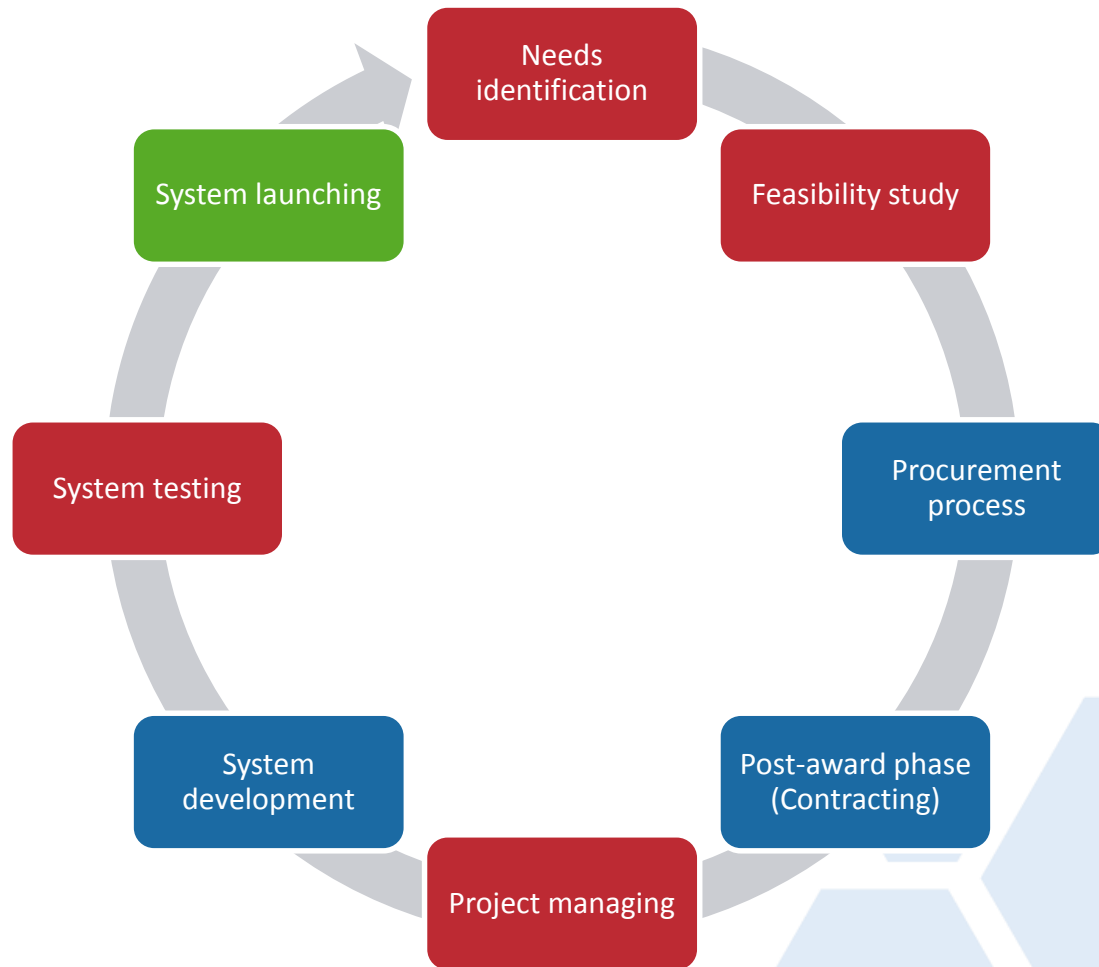
- SLA template development
- Negotiation
- Implementation
- Reporting
- Reviews

ITAA: Data quality
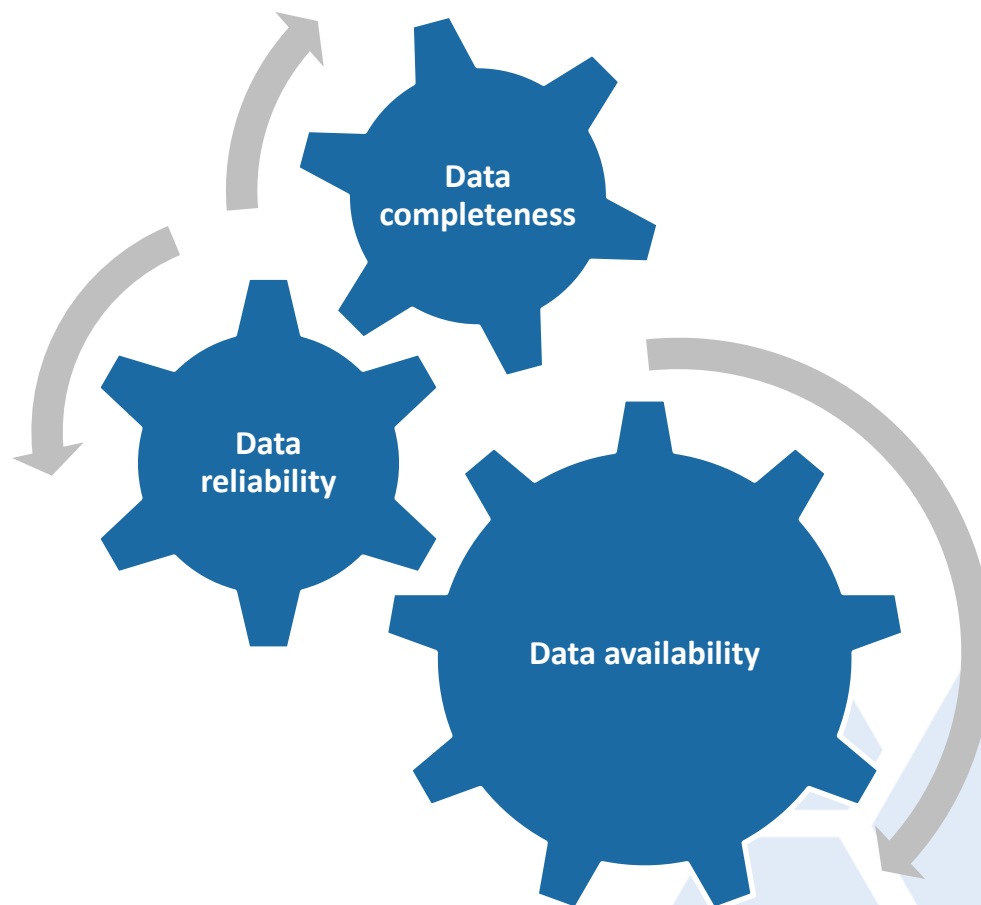
IT audit findings – examples 1/2

- **IT strategy and Enterprise architecture**
  - › Missing or incomplete IT strategy
  - › Missing Enterprise architecture
  - › Violation of architecture principles

- **Public procurement**
  - › Misusing of Negotiated Procedure without Publication
  - › Transparency of Public Procurement
  - › Vendor lock-in

IT audit findings – examples 2/2

- **Development and implementation**
  - › IS is not able to support appropriate processes
  - › Violation of Time schedule $\Rightarrow$ higher cost

- **Operations and services**
  - › SLA are not monitored and evaluated
  - › Penalties are not impose

- **Data Quality**
  - › Missing or wrong data
  - › Data is not available

Milestones of the Czech e-Government
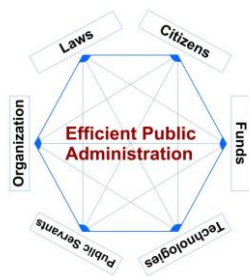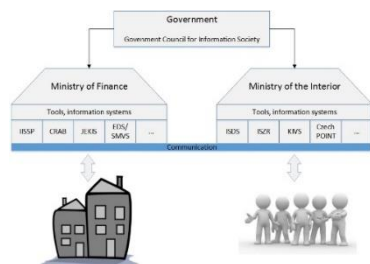

2007-2013

Smart administration
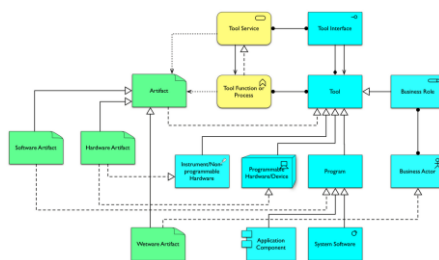
2015

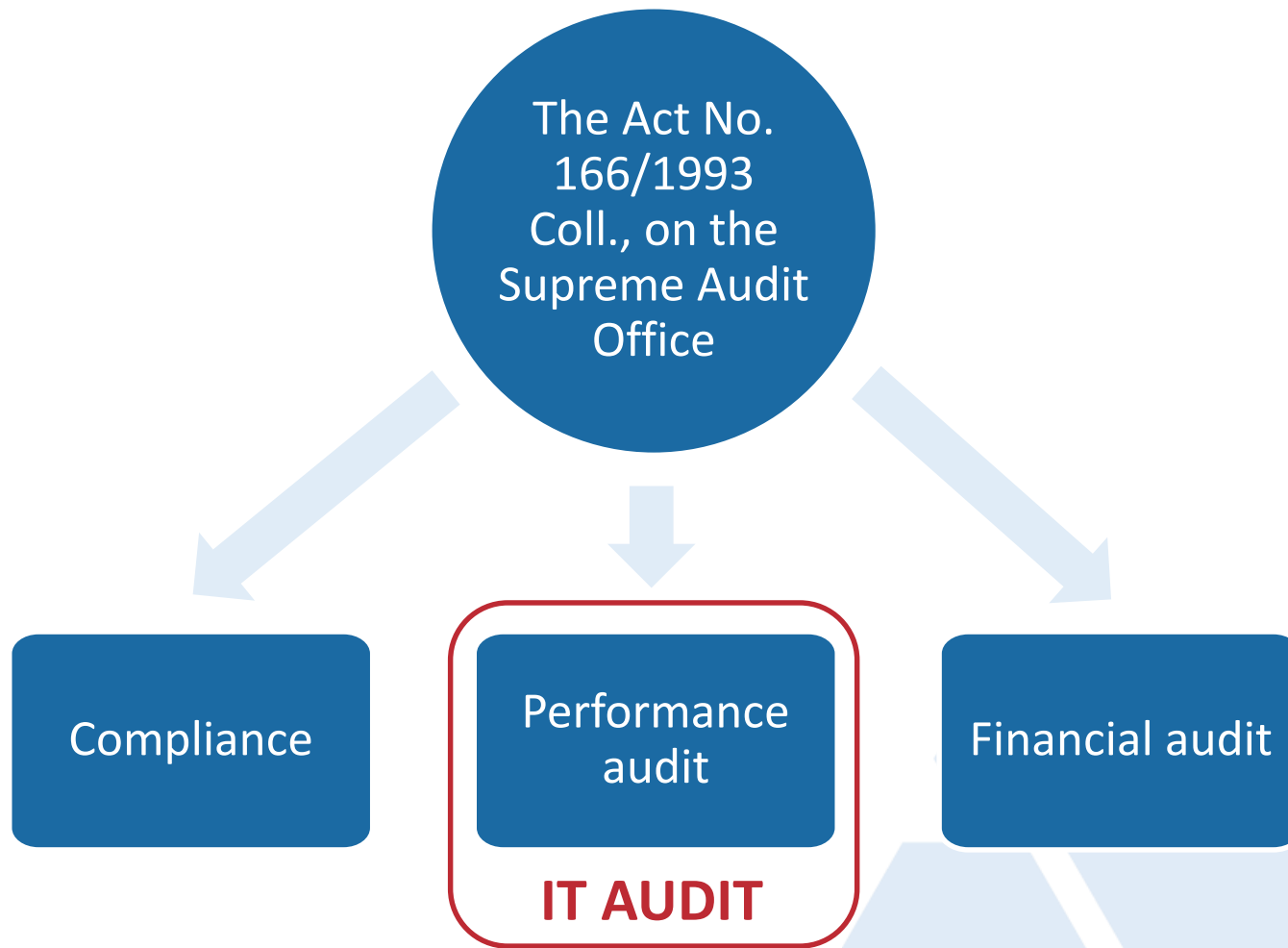ICT strategy

2014

Strategic Framework

2016

e-Government cloud

SAO´s recommendations

1. Create ministerial information strategies and concepts tied in to the e-Government strategic documents

2. In planning, procuring and developing information systems adhere to the architectural principles of the national architecture for public administration

3. Take the step to draw up enterprise architecture which are a tool for planning, managing and developing an organization, not just in the field of ICT

4. Using project management for the processes of procuring and developing IS

Mandate for IT Audit

The Act No. 166/1993 Coll., on the Supreme Audit Office

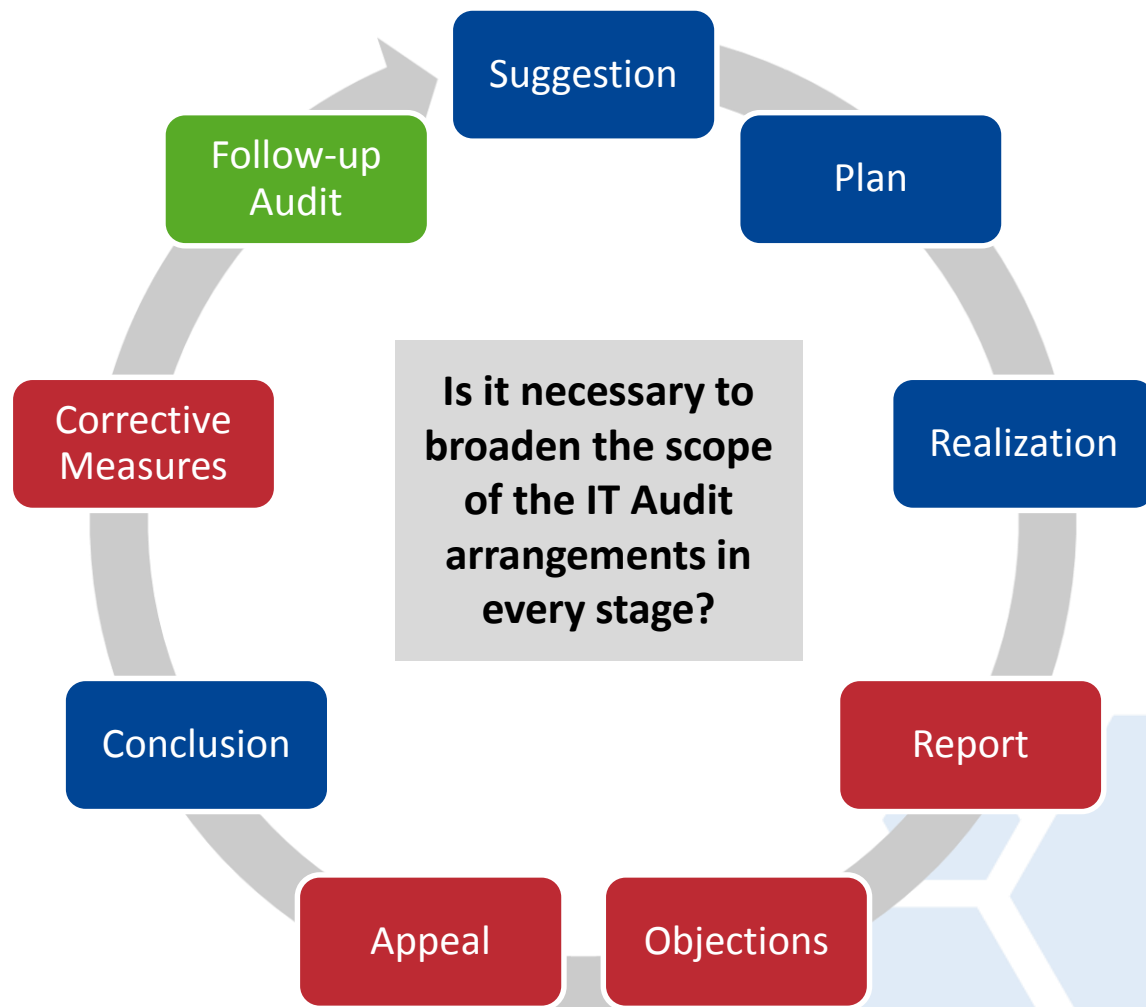Compliance

Performance audit

IT AUDIT

Financial audit

Performance audit - IT audit relationship in the 3E Logic Model

NEEDS

Provide services to citizens

OBJECTIVES
1. Computerization of ID card issue
2. Reduction of time spend at office
3. Less administra. load

INPUTS
1. Issue requests
2. Database of citizens
3. Printer of ID card

PROCESSES
1. Identity verification
2. Authorising requests
3. Printing of ID card

OUTPUTS
1. Verified identity
2. Authorised request
3. ID card

OUTCOMESS
1. Simplification and time reduction of ID issue process for citizens
2. Reduce cost of ID issue

Economy

Efficiency

Effectiveness

SAO´s usual audit lifecycle

The SAO´s capacities to conduct IT audits

23 performance & IT auditors

283 auditors

456 employees
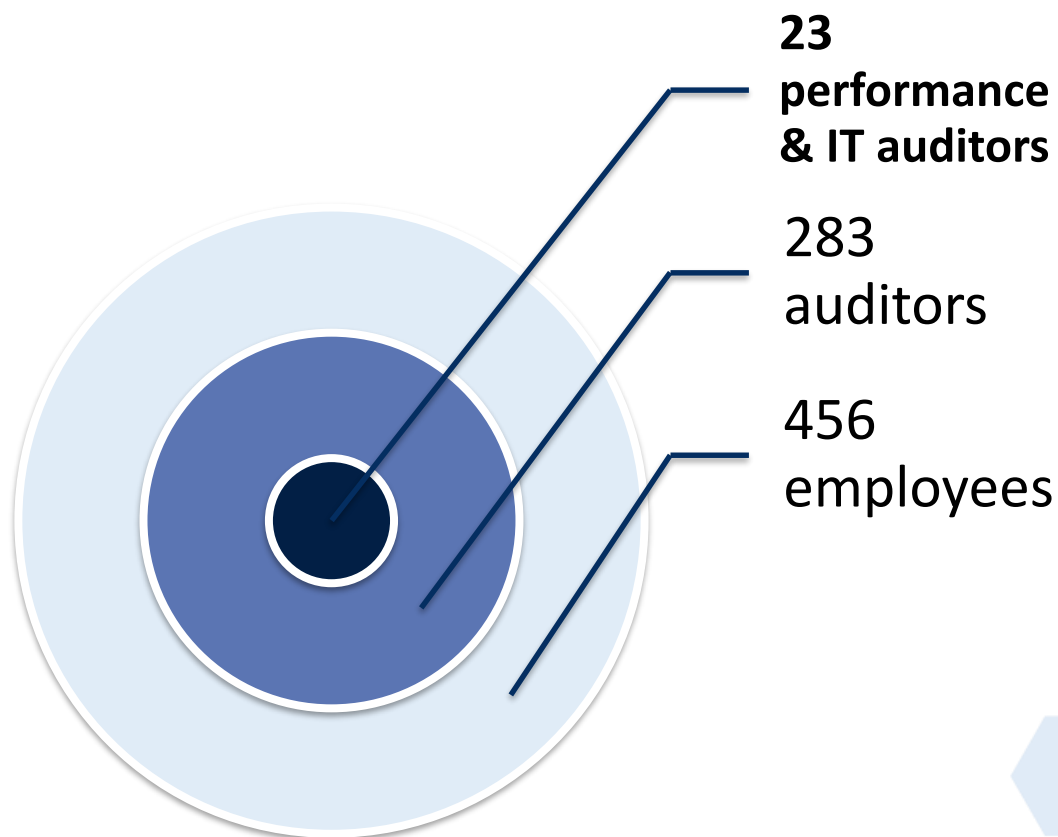
Three Scopes of SAO´s Capacity Building

Institutional capacity development

Organizational systems capacity development

Professional staff capacity development
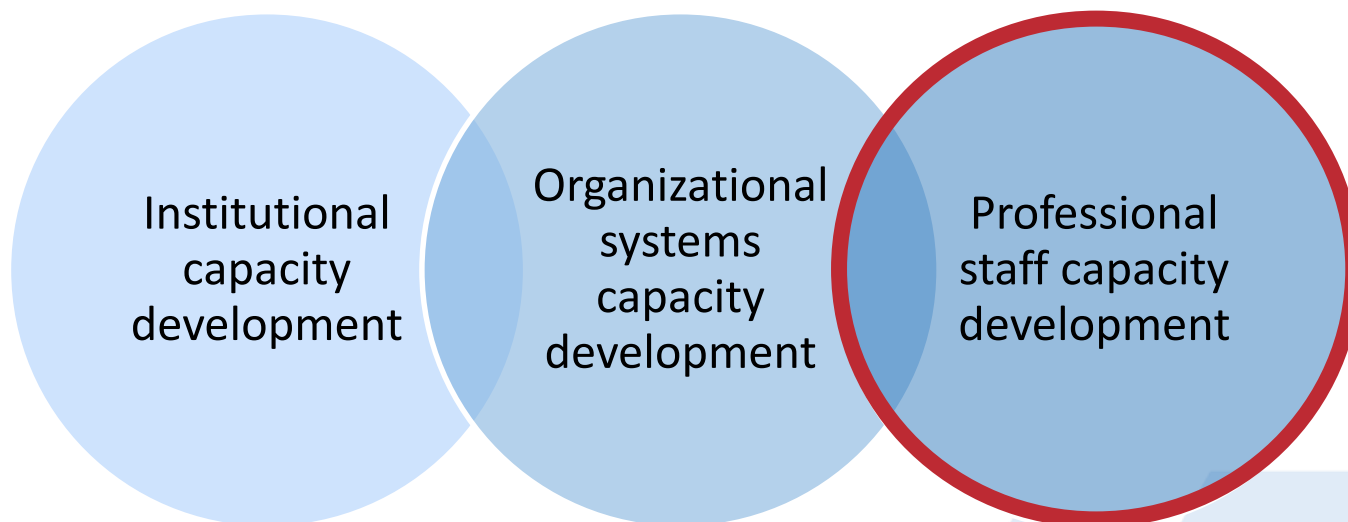
ICT development is one of the most important challenges facing today's SAIs

AI

Adaptive Security Architecture

Digital Technology Platforms

Intelligent Apps

Intelligent Things

The Blockchain & DLT

01 I0

Digital Twins

Conversational Systems

VR and Augmented Reality

Mesh App & Service Architecture
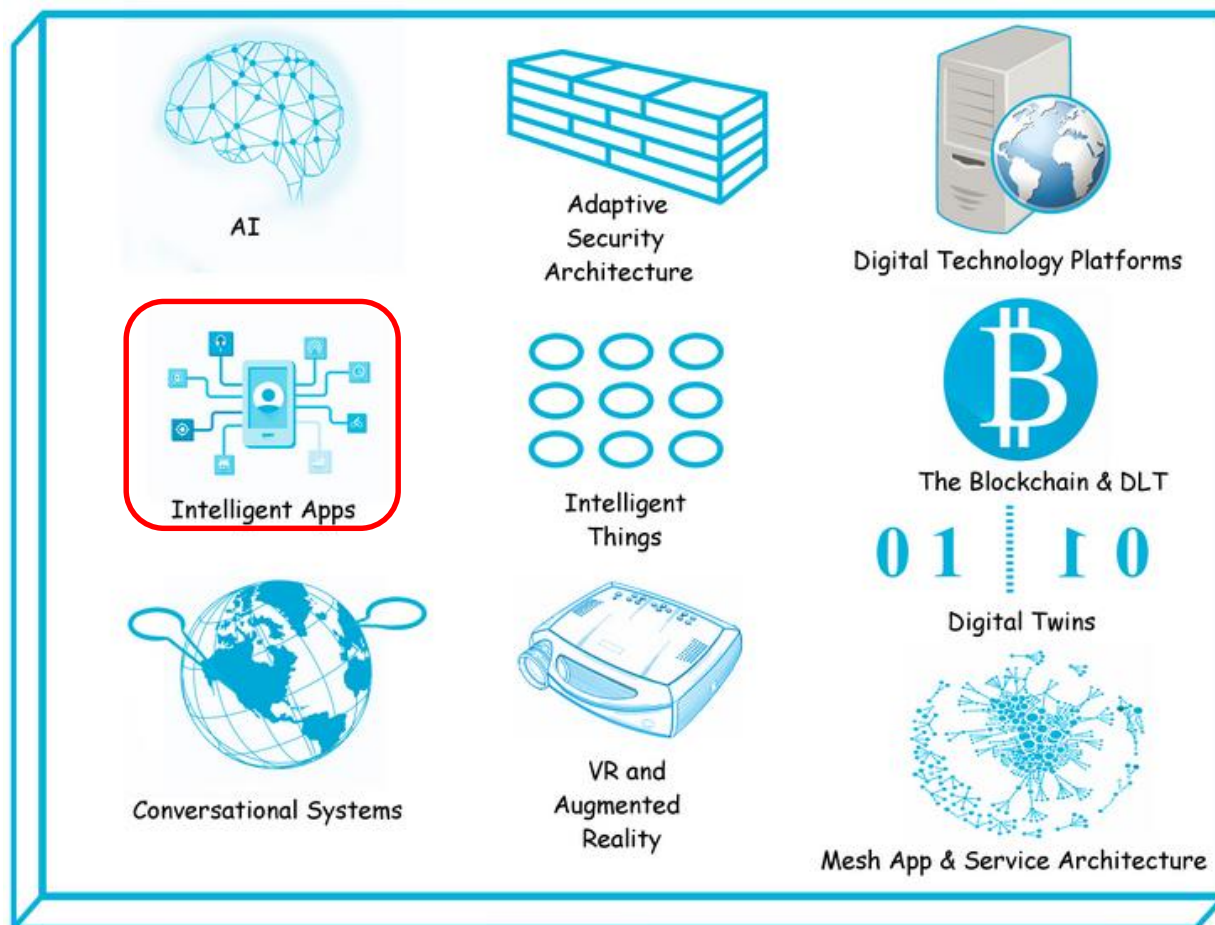
Source: Gartner's top strategic trends for 2017

Summary raises questions that have already been answered, but

- **Mandate for IT Audits**
  - › Do SAIs have a specific mandate for IT Audits?
  - › If not, where will the mandate of SAI for IT audits be derived from?
  - › Is the overall mandate provided to SAIs sufficient to conduct IT audits?
  - › How should the relationship between IT audit and other audits be established?

- **Capacities of SAIs to conduct IT Audits**
  - › Do SAIs have adequate capacity to conduct IT audits?
  - › How should they develop their capacity to conduct IT audits?
  - › Do SAIs allocate adequate and competent resources (human and financial) for IT audits?

Thank You For Your Attention

Martin Hruška | martin.hruska@nku.cz