Research Questions

- What are the aspects of EA compliance?
- What are the meaning and goals of EA compliance evaluation?
- What are benefits of EA compliance evaluation?
- How can EA compliance evaluation be carried out?
Research Process

- A literature review and analysis
  - Scientific articles
  - Organizations’ public EA compliance method descriptions (mostly US Government sources)
  - Standards (such as TOGAF)
- Focus group interview of seven practitioners from five companies to validate and discuss the literature review results

Concept of Compliance

- Various definitions exist
- Compliance seems to be a multifaceted concept: it may indicate conformance of an object’s (e.g., a product, process, service etc.) characteristics’ (e.g., documentation and models) with at least one or more of the following:
  - business requirements
  - organization’s internal plans, policies, and standards
  - organization’s internal practices (e.g., project procedures and guidelines)
  - standards
  - regulations and laws, and
  - partners’ practices and policies
EA Compliance – an Initial Definition

- An affirmative indication or judgment that individual projects and investments will meet or have met the Enterprise Architecture related requirements, i.e. comply with the relevant specifications, such as established or approved enterprise architecture descriptions, policies, compliance criteria, and business objectives

Goals of EA Compliance Evaluation

1. Directing a project or investment to comply with EA – the proactive approach
2. Assuring the compliance between the impacts of investment or project and EA – the reactive approach
3. Ensuring the usability and appropriateness of EA policies, EA frameworks, EA descriptions, business objectives etc.
EA Compliance Evaluation

- EA compliance evaluation was discussed in terms of
  - More precise evaluation targets of compliance: what is evaluated, which objects are compared with each other?
  - Evaluators: who does the evaluation?
  - Levels of compliance: what is the "amount" of compliance?
  - Timing of evaluation: when the evaluation is done? and
  - Evaluation practices: how the evaluation can be carried out?

- Especially, evaluation targets and evaluators suggested by literature were considered to give too narrow a view

→ A broader view was outlined
Internal and External EA Compliance

- **Internal compliance**
  - compliance between investments – as well as the projects that implement the investments – and EA and its policies and guidelines
  - compliance between the impacts of the investments and projects and EA in order to ensure that expected results and affects have actually been achieved

- **External compliance**
  - compliance between the EA and the business objectives or strategies of the organization
    - are the EA guidelines, framework, target state, and so forth, in line with the business requirements
  - conformance with the laws and regulations the organization needs to obey
  - organization’s ability, with the help of its EA, to react to the changing environment of the organization

Possible EA Compliance Evaluation Targets

- **Business**; including e.g. vision, mission, strategies, and plans of actions.
- **Investment** that is needed to fulfill the business vision and mission.
- **Project**; the tool to implement the investment.
- **Enterprise Architecture**; a holistic view to the entire enterprise or organization aiming at better business-IT alignment.
- **External Directions**; including e.g. regulations, standards, or reference architectures that need to be taken into consideration in the business operations or IT development.
- **Partners**; they may provide their own procedures, guidelines or constraints in out-sourcing engagements or when an organization purchases COTS products.
- **Customers**; in some cases the organization’s customer’s EA, practices or guidelines need also to be taken into consideration when evaluating EA compliance.
- **Actual Impacts of the Project or Investment** indicating whether and how long a step, a transition, has been taken towards the target architecture state.
Possible Evaluators of EA Compliance

- The possible EA compliance evaluators are those stakeholders (or roles) that have the responsibility in the area of the evaluation targets:
  - Business Developer/Process Owner, Business Architect
  - EA Team/Enterprise Architect
  - Investment representative (e.g. a controller)
  - Project representative (e.g. a project manager)
  - Representative(s) of Out-sourcing or IT/Service Provider Partner(s)

- How about the EA governance board?
  - architecture board (e.g. The Open Group 2006) or an EA steering committee (e.g. CIO Council 2001)

Conclusions I

- The initial EA compliance definition was regarded as too limited → EA compliance was suggested to consist of external and internal compliance
- EA compliance has also a dynamic nature
  - The environment of the organization is constantly changing, and so is its architecture
  - Compliance – internal or external – can be evaluated to be on an appropriate and acceptable level at the moment, but it does not guarantee that this is the case next week, or next month
- Literature gave too limited a view of EA compliance evaluation targets and evaluators → a broader view was suggested
Conclusions II

Examples for EA compliance evaluation practices were presented, but each organization needs to make its own decisions on various issues, such as:

- Audience/stakeholders: Who is interested in the EA compliance evaluation results? Whom the results are presented to?
- Responsibilities: Who conducts the evaluation?
- Timing: When the evaluation is conducted (milestones)?
- Process and practices:
  - How the evaluation is conducted (processes and tasks)?
  - Which project or investment related artifacts are compared to which EA related artifacts?
  - Compliance levels: How many levels of compliance need to be defined? Is there a need to define specific levels of compliance?

Conclusions III

EA compliance depends on the EA maturity level:

- Both the meaning and content of EA compliance may vary according to the EA maturity level.
- In the lower levels of maturity EA compliance and its evaluation actually equals quality assurance, and especially the impacts of architecture development and architecture work are a focal issue.
- After the architecture work has become a more established process in the organization, the various aspects of EA compliance (internal and external compliance) will become more current.