Information systems development and design methodologies cover the information system development life cycle from its early inception to its realization and use. In the information systems area, the focus is mainly on the initial phases of information system development and design, starting from the initial strategic planning, to the phases of requirements collection and analysis, and to the design of the enterprise information architecture. The aim of this section is to present recent research results developed in the Italian context.

The three papers of this section focus on the phases of strategic planning, enterprise architectures development, and requirements elicitation and on the transition from requirements to design.

The first paper on Legal issues in eGovernment services planning considers the influence of strategic planning on development of enterprise architectures, targeting in particular the domain of service provisioning in e-government. Within the eG4M framework, developed by the authors to provide guidelines for definition of appropriate models for public administration enterprise architectures, the contribution of the paper is on considering legal issues in strategic planning.

The second paper analyzes the transition from strategic to conceptual information modelling. The paper proposes a methodology for elicitation and modelling of strategic information requirements. A framework for elicitation is proposed to identify information classes in enterprises which the authors validate in a real case study. The contribution of the paper is towards a systematic mapping of strategic information entities onto conceptual entities in the entity-relationship schemas.

The third paper is on Use case double tracing linking business modeling to software development strictly model-driven engineering approach. The work focuses on linking business modelling and system modelling. Based on an extension of use cases in UML to support business modelling activities, the authors propose a “double tracing” mechanism to establish links between business requirements and the software solution to be developed.

In conclusion, this section includes original and promising research results towards a systematic development of information systems, based on model-driven approaches. A particular attention is paid to the aspects of providing design guidelines of general applicability and on tracking design decisions. The approaches, validated in real case studies, pose a basis for innovative directions in information systems development and design methodologies.