Message from the WODPEC 2010 Workshop Co-chairs

The RM-ODP standard (ISO/IEC Std. 10746 — ITU-T Rec. X.901-X.904, Reference Model of Open Distributed Processing) provides a comprehensive and coherent framework of concepts for the specification of complex large scale IT systems, and has taken on a new significance in the light of the Model-Driven Architecture (MDA) initiative from the OMG and the wide-scale adoption of Service-Oriented Architectures (SOA) as well as the emerging concepts of Enterprise Architecture (EA). Thus, we are witnessing major companies and organizations starting to use RM-ODP as an effective approach for structuring their large-scale distributed IT system specifications. With this increase in the significance of the RM-ODP comes the need to address a range of issues arising both from the practical application of its concepts and from its relationship with other enterprise architectural frameworks.

Examples of concept application are the achievement of effective and integrated business and service modelling, the complexity of specifying policy, security and system management requirements, the specification of coherent and consistent multi-viewed systems, and the use of UML as the language for ODP system modelling. Other frameworks and methodologies include the relationship between the RM-ODP and SOA, CBA, or EDA, the integration of ODP-based projects into development processes such as RUP, the relationship of the RM-ODP to EA frameworks such as TOGAF, DoDAF, or Archimate.

Following the success of previous WODPEC events (since 2004) as a traditional IEEE EDOC Workshop, WODPEC 2010 aims to continue to provide a discussion forum where researchers, practitioners, system modellers, tool developers and representatives of standardization bodies can meet and exchange experiences, problems and ideas related to the ODP framework for system specification, its practical application and long term evolution, and its use in conjunction with other architectural practices and approaches (e.g., MDA, SOA, CBA, EDA) in the realm of Enterprise Distributed Computing. This volume contains the proceedings of the sixth workshop, WODPEC 2010, held on October 25th, 2010, in Vitória, Brazil, in conjunction with the 14th IEEE International EDOC Conference – The Enterprise Computing Conference (EDOC 2010). Six papers were selected for oral presentation and publication, based on a thorough peer-review process, in which each paper was reviewed by several experts in the field.

Contributions this year fall broadly into two groups. The first is concerned with the scope and field of application of the ODP framework, and the second explores aspects of the modelling techniques used to express the framework. There are two papers in the first group, both concerned with extending the scope of the work to capture more information about the planning for and dynamics of new developments. Kutvonen discusses the extension of the organizational description to allow a more dynamic business ecology, in which metainformation repositories are used to allow the application of reflective techniques in the rapid creation of virtual enterprises. This approach is illustrated by reference to their Pilarcos architecture. Meisingset concentrates on the large scale planning and provisioning activities that occur when a large organization, such as a telecoms company, enters a new business area. He puts the case for adding additional concepts to support the planning and deployment aspects of system provision, allowing more emphasis to be placed on the specific system instances needed to realize the design produced. The argument is supported by detailed discussion of the interaction and data definition aspects from both the class and instance points of view.

The second group covers a number of specific aspects of the framework. Almeida, Cardoso and Guizzardi consider a high level view of system specification, discussing the representation of objectives in the enterprise viewpoint, applying the Unified Foundational Ontology (UFO) so as to deal more
accurately issues of social reality and intentionality. They show how a broad range of objectives, from high-level statements expressing the vision and mission of an organization to declarations of the results that must be achieved by business process execution, can all be integrated within a single conceptual framework. Linington also concentrates on the enterprise viewpoint, but examines detailed issues concerning in the representation of communities and community composition, particularly the way role-filling constraints are expressed when communities are abstracted to yield community objects. He proposes techniques for improving modularity by associating constraints with the abstraction and role-filling relationships involved.

Traverson tackles issues of traceability in viewpoint based frameworks, concentrating on contract management and service composition as a source of examples. He proposes a solution using a systematic process based on reliable construction techniques, and supports the proposal by describing its use to solve practical problems that arise when applying a service-oriented architecture in the electricity supply industry. Finally, Ruiz-González, Vallecillo and Romero look at the balance between using visual and textual notations for expressing large system specifications and how the advantages of both can be achieved by providing suitable synchronization mechanisms. They present synchronization algorithms and demonstrate that the process can be automated by describing a prototype tool.

We would like to take this opportunity to express our gratitude to all the people who contributed to the WODPEC 2010 workshop. We thank the authors for submitting content, which resulted in valuable information exchange and will certainly lead to stimulating discussions during the workshop, and we thank the reviewers for providing useful feedback on the submitted content, which undoubtedly helped the authors to improve their work. Finally, we appreciate the opportunity to hold WODPEC in conjunction with the EDOC 2010 conference, and we are grateful for the support we received from the EDOC 2010 organization.

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