## DC 2007

# Proceedings of the International Conference on Dublin Core and Metadata Applications

"Application Profiles: Theory and Practice" 27-31 August 2007, Singapore

Organised by
Dublin Core Metadata Initiative, National Library Board Singapore,
& Nanyang Technological University

Edited by
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#### **Preface**

This year, the seventh annual International Conference on Dublin Core and Metadata Applications, DC-2007, is held in Singapore. This is the third time Dublin Core comes to Asia, after earlier stops in Tokyo (2001) and Shanghai (2004). With two of the previous conferences having taken place in Europe (Florence 2002 and Madrid 2005) and two in the Americas (Seattle 2003 and Manzanillo, Mexico 2006), this means that Asia has taken the lead in terms of Dublin Core conferences.

Also in practical terms, Asia is busy making its mark on the activities and directions of the Dublin Core Metadata Initiative with many participants and many developments in the region. In addition, two of the current five DCMI Affiliates are from this region (the National Library Board of Singapore and the National Library of Korea).

Singapore is also a particularly attractive location as the country is very much a gateway between continents and cultures, an important access point to the region, and with a knowledge economy that makes it an important player in the world today. In addition, the National Library Board, who is hosting the event together with the Nanyang Technological University, has a strategy to be a Knowledge Hub for the region and beyond.

It is therefore with great pleasure that we welcome local, regional and international metadata practitioners and researchers to Singapore for the week of meetings, presentations and informal discussions. We think we have again succeeded in offering an interesting program for people from many backgrounds and interests, and expect that the event will attract participants from all over the world.

We hope that the event will also create opportunities for the audience to discuss issues of common interest, to find common solutions, and to establish or renew personal and professional networks.

I want to thank the people at the National Library Board and Nanyang Technological University for hosting the event this year, and I would like to wish all of you a useful and pleasant week in Singapore.

Makx Dekkers Managing Director Dublin Core Metadata Initiative

# Message from Conference Chair

It is a pleasure and honour for the National Library Board Singapore (NLB) and our co-hosts, the Wee Kim Wee School of Communications and Information of Nanyang Technological University (NTU) to jointly host the International Conference on Dublin Core and Metadata Applications, DC-2007. NLB is a key player in supporting Singapore's transformation into a knowledge economy.

In the first phase that lasted ten years, NLB transformed the public library system in Singapore, making it more attractive and accessible. In the next five years, our goal is to provide individuals, companies and government agencies with real-time knowledge access that is necessary to succeed in a globally competitive environment.

We realize that the fields of Information Sciences, Semantic Web, and Information and Communication Technology are converging to enable knowledge access by the people. We noted that DCMI's international community is contributing towards this goal. As a part of our contribution towards this goal of provisioning knowledge access, NLB became an affiliate of DCMI. The same spirit has prompted us to host the DC-2007 Conference in Singapore.

DC-2007, the seventh International Conference on Dublin Core and Metadata Applications' theme of "Application Profiles: Theory and Practice" is a bridge to bring together the academic community and practitioners working in various application domains, to share their experiences and knowledge. This is a befitting theme for a conference to be held in multi-cultural and cosmopolitan Singapore.

I would like to thank all those who contributed their papers and attended the conference. Without their support and contributions the conference could not be successful.

N. Varaprasad Chief Executive National Library Board, Singapore

#### Introduction

The annual conferences on Dublin Core and Metadata Applications bring together leading metadata researchers and professionals from around the world to share their experience in metadata development and application, and to deliberate on theoretical issues. DC-2007 in Singapore is the seventh in a series of conferences previously held in Tokyo (2001), Florence (2002), Seattle (2003), Shanghai (2004), Madrid (2005), and Manzanillo, Mexico (2006). It is being hosted by the National Library Board, Singapore, in cooperation with the Wee Kim Wee School of Communication and Information, Nanyang Technological University. Holding the conference in Singapore in 2007 is particularly significant considering the various initiatives in Singapore to implement metadata standards for e-Government and e-Citizen sites, and research projects undertaken by the National Library Board, National Heritage Board and the WKW School of Communication and Information on various aspects of metadata applications.

The conference theme "Application Profiles: Theory and Practice" is timely as more and more communities are exploring the use of metadata standards, including Dublin Core, for enhanced description and discovery of knowledge resources. Conference presentations seek to explore the conceptual and practical issues in the development and deployment of application profiles in various domains to meet the needs of specific communities of practice. Discussions and deliberation in the conference will provide the means to document the use of metadata within specific contexts. Emerging experience in the creation of application profiles reveal layers of complexity involved in combining terms from different metadata schemes and mixed abstract models.

The conference will be opened by Dr Vivian Balakrishnan, Singapore's Minister for Community Development, Youth & Sports and Second Minister for Information, Communications and the Arts. Keynote addresses will be delivered by Johannes Keizer, Team Leader for Semantic Standards, Knowledge Exchange & Capacity Building Division, Food and Agriculture Organization of the United Nations, and Zhang Xiaoxing, Deputy Director, National Cultural Information Resource Center of China.

A total of 10 papers and 6 reports have been selected for presentation by an international panel of reviewers. Five paper sessions are organized around the following themes: conceptual modeling; application profiles—issues and practices; identification, registries and reuse; and metadata generation and integration. Full papers report innovative original work in detail or provide critical, well-referenced overviews of key developments or good practice. Project reports describe specific models, application, or activity in a concise format. Three special sessions will also be conducted on the topics of ontology modeling using topic maps, RDA, and Identifiers. The pre-conference tutorials cover areas of semantics, syntax, vocabularies, and application profiles while post-conference seminar will deliberate on metadata for the Semantic Web.

Stuart A.Sutton and Abdus Sattar Chaudhry Program Co-Chairs, DC2007

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