



OPEN SOURCE FOR AN EMERGING COUNTRY

Edmund Balnaves is a past Board member of ALIA and currently chairs the IFLA IT Section. In his IFLA role, Edmund has recently been closely involved in a collaborative project in Myanmar, aiming to create an open source digital resource for the Myanmar Parliamentary Library. As this small nation begins to open up to the rest of the world, projects such as this will play a critical role in helping establish not only a new democracy but also a new information economy.

The Union of Myanmar (previously Burma) is a country that is only just now reintegrating into the international community. It is ranked among the poorest countries in Southeast Asia, and the forthcoming census is expected to reveal, for the first time in 30 years, what the actual population figures are; expected to be about 60 million, or three times the population of Australia. After a new constitution in 2008 set the framework for the current democratic institutions, a new capital, Nay Phi Taw, was built in the middle of the country.

While a dictatorship can rule by decree, a functioning democracy needs access to, and visibility for, the legislative process. Making the work of the parliament accessible to members of the legislature and to the public is therefore very important. By implementing a digital library the parliament can also keep a permanent historical record of its work.

THE MYANMAR PARLIAMENT IS QUITE LITERALLY BUILDING THEIR DEMOCRATIC INSTITUTION FROM THE GROUND UP..

The Inter-Parliamentary Union (IPU) and the United Nations Development Program (UNDP) are working with the Myanmar Parliaments to undertake institution building projects. One of the initiatives arising from this is a project to build a digital library providing access to the work of the parliament to members and staff. While such a resource is taken for granted in most established parliaments, the Myanmar Parliament is quite literally building their democratic institution from the ground up in an incredibly short period of time.

At the national level the parliament, known as the Pyidaungsu Hluttaw (Union Assembly), consists of two chambers: the

Pyithu Hluttaw (House of Representatives) with 440 seats, and the Amyotha Hluttaw (House of Nationalities) with 224 seats. In both houses, 75% of the members are directly elected, with the remaining 25% being appointed by the Commander-in-Chief of the Defence Services. A third house, the Union Assembly, is a joint sitting of both lower houses. The parliament was re-established in 2010 following national elections. In 2012, the IPU organised two assessment missions and, jointly with UNDP, a project formulation mission to assist the parliament in identifying its future requirements as it strives to become a modern and effective institution.

I was chosen as the Australian expert to undertake the technical implementation and training in the DSpace system, while a team from Chile led by Claudia Cuevas Saavedra (past President of the Chile library association, Colegio de Bibliotecarios de Chile, and head of library services in the Chile parliament) was chosen as the library expert to provide training in digital library services.

This was a challenging project with little infrastructure in place within the parliament to support it. I supplied a small server for initial development and training in DSpace during the first visit. This facilitated the initial setup of the DSpace digital library and was used in the workshops to evolve the document and collection and functional requirements for DSpace in the Myanmar Parliament.

However, a critical component of the project was the selection of a local information technology vendor to provide ongoing support for the server and software. Three technical workshops were provided with the parliament and the vendor in installation, management and support of the DSpace system.

Also vital was the enlisting of the relevant sections of the parliament to understand and support the project locally. To achieve this, management and staff workshops were held over the two visits to Myanmar and staff and management were consulted in the division of work in building and managing DSpace. Dealing with three separate chambers required careful coordination with the directors in each chamber.

IMAGES (Left to right): Hluttaw parliamentary building.
Nay Phi Taw and Myan mar Hluttaw (Parliament) library and
information technology support staff undertaking DSpace training.

Administration and collection building roles were identified for the committees and library (submission of documents), review and subject management in the library (document approval, collection updates and community information or news), information and communication technology/administration of DSpace (community creation and collection, management/security of users and groups) and Inyaland or system support (server management, backups, metadata and adjustment of submission forms).

Early in the implementation, it became apparent that the language contextualisation of DSpace would be complicated by the lack of a generally accepted standard for encoding the Burmese character set. Operating independently from the international community, and making do with what they had at hand, there were some innovative but very non-standard approaches to Burmese language encoding based around standard US keyboard layouts. As a result, several encoding methods are used, and keyboard input differs according to the coding method used.

This meant different staff members are familiar with different encoding methods and character sets, even within the parliament itself. Storing different character sets for the same language was not within the standard DSpace implementation. However, being open source some nice and ultimately simple, customisation was possible to accommodate this problem.

TOGETHER WE ARE STRONGER

My role included (quite low level) technical work to develop transcoding scripts that may facilitate data entry in Myanmar3 and Zawgyi encoding formats. This allowed flexibility in making a decision on the language encoding for the digital library. Google appears to have standardised on Myanmar3 – a Unicode encoding method for the character set which is good for web and repository implementation – and in a joint meeting with deputy directors in each parliament, a ground-breaking agreement was reached between the Myanmar Parliaments to standardise on the Myanmar3 character set.

Myanmar has built a parliamentary and legislative framework in an extraordinarily short time. The investment in the new capital, Nay Phi Taw, is indicative of the determination to establish the young democracy. There are significant challenges ahead for the new democratic institution, as anyone who has seen the 25% reserved seats for military nominees to the parliament will understand. In Yangon, the rapid emergence of mobile phone companies and infrastructure spells the transition to a more open information economy. This is critical time to engage with Myanmar and to encourage the resources (such as information access to bills and legislation) to allow the development of informed debate.

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