

## National Assembly of Lao PDR

### Website Development Plan

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Based on Recommendations by **Rosalind Bush**  
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#### Executive Summary

The objective of this plan is to develop the website of the National Assembly based on the existing website launched from 2001 to 2006 with the expectation of more general public participation by which as much information and structure as the needs of the targeted audience is catered. The program will start in December 2006 and end in December 2008. The plan will be reviewed and revised prior to its expiry in December 2008. Specific objectives of Development plan are as follows:

- Redesign the website to better Re-arrange content and add new content to the website.
- Integrate advanced technology by procuring web sever, upgrading network hardware including setting up fibre optic cable to facilitate automated method of publishing content on the website as well as providing space for future growth of software applications
- Staff and improve the IT technician skills in order to oversee the contents on the website and cope with the overall control of the website effectively.

The development plan will be finalized and implemented after being commented by the Secretary General of the National Assembly.

The total budget of the project to compete the plan will cost about 20.000 USD excluding the fibre optic cable installation and software procurement.

#### Current situation

The Lao National Assembly is established through the universal direct suffrage of Lao people, with Rights and Power entrusted by the people. It is the representative of the multi-ethnic Lao people and the highest legislative body. The NA has existed for a total of 33 years, from the first to the sixth legislature since December 2, 1975, with the proclamation of an independent Lao People's Democratic Republic

The National Assembly has made efforts to gain utmost utilization of excellent Advanced ICT tools not only for storing, processing and transferring information but also for accelerated research and improvement of dissemination of information among members, National Assembly staff and general public. This includes the development of the National Website, which was established in 2001 and scored remarkable achievements in the past years. However it needs to expand its Information and more advanced technology integration with automation and modernization. Thus the National Assembly in recent days has prioritized website development for further improvement in the near future (2006-2008) at the top of the overall ICT development strategic Plan.

The National Assembly's website is available in both Lao and English languages. Information on the website is not as comprehensive as would be expected for a national assembly. It does not include information about upcoming, current or past sessions of the Assembly, there no information about legislation before the Assembly or passed by the assembly, and material is not regularly updated.

The NA website is currently hosted externally on the server belonging to the Department of Science and Technology (DST). There is no network connection to the server and the DST firewall prohibits .ftp through wireless connections, which is the only sort of connection currently available to the NA. This means that if updates are required a NA staff member has to attend the DST premises to make the updates directly on the server.

The NA building's network capabilities are limited. There is a particular problem with the internet connection. There is no fibre optic connection to the building, so the NA relies on a slow, wireless connection. The laying of an optic fibre cable is on The E-Government forward Plan which will connect 17 provinces nationwide together.

In addition to the problem with the Internet connection, the NA's Ethernet operates at 100 Mbps (Megabits per second) but some network hard handle the packets transfer at only 10 Mbps. 10 Mbps is quick enough for general networking tasks, but is not sufficient for hosting a web server and mail server. Fast Ethernet operating at 100Mbps is good for desktop video, multimedia, and other speed-hungry applications.

NA staff currently use MS Front Page and Notepad for HTML mark up.

Updating the content on the website is undertaken by a member of the NA staff who has good IT experience. The staff member performs these tasks along with his other duties and is not a dedicated web manager. His knowledge of web publishing was gained during his studies in Information Technology (IT).

Approval for the content to be published is made by the Vice Chair of the Foreign Affairs Committee. There is no delegated authority for staff members working in the NA to authorise publication of material on the website.

## **Recommendations for the redevelopment and expansion of the website**

### **1. Redesign website**

The NA website will be redesigned and content re-organised. Some of the existing content will be revamped and grouped together in a more appropriate structure (see Appendix A)

The website interface (the way it looks) will be chosen from a range of presented designs. Criteria for selecting a design will be that it is aesthetically pleasing, the design is appropriate for the culture and standing of the National Assembly, and that it is quick to download for users who have low speed internet connections. A site style manual and guidelines will also be included in the redesign project to assist with the maintenance of the site style.

To assist with informing the Lao and international public about the work of the National Assembly, new content will be added to the website. Documents that are of public interest – Legislation, upcoming programs, agendas, transcripts, and information about the work of the Assembly and its committees – are necessary inclusions. Material such as agendas and transcripts are already produced for use within the Assembly so protocols for publishing this material on the website need to be established. Methods for automating the publishing of this material to the website can be devised and this is vital for the timely publishing of this material. To maximise the usefulness of this material, it will be published as soon as it is available, and in the case of agendas and forward programs, before the event is held. Other information about

the role and functions of the National Assembly will need to be written and published on the website.

Key documents will be available on the website in Lao and English. If there is no capacity to provide translation services within the NA, continuing arrangements with an external translating service will be made.

Along with the redesigned website, a website policy will be developed and adopted by the Website working group of the National Assembly. This policy would set out the purpose, audience, content, and responsibilities of the various parties concerned with publishing content on the website. The policy would be a reference point for future decisions concerning the website, including the redesign process.

**Recommendation 1: Redesign the National Assembly website. Re-arrange content and add new content to the website.**

**Recommendation 2: Negotiate protocols with content providers to make documents available for publication on the website. Wherever possible, automated methods of publishing time-critical documents to the website should be developed.**

**Recommendation 3: Key documents on the website should be available in Lao and English. Arrangements for this service should be negotiated with an external translation service.**

**Recommendation 4: Develop and sign-off on National Assembly website policy that describes the purpose, audience, content and responsibilities of the various parties in regard to material published on the website.**

## **2. Technology**

**Web server:** The lack of a web server and the reliance on third party hosting will make the development of automated publishing and content management very difficult, if not impossible. The current situation where the NA is reliant upon a third party for web hosting is not sustainable if the website is to expand its offerings and update them regularly.

With its own server, certain NA staff can publish and update material automatically, thus enabling a devolved web publishing model for key documents. This will facilitate the publishing of content to the website in a timely manner.

With its own devoted web server, information stored in NA databases (e.g. Legislation) can be published to website using appropriate web publishing application. The security of this information will be better managed if the NA installs and manages its own web server.

Space on a commercial web server could be purchased, but there will be a question over the security of data stored on a server not controlled by the NA. For this reason, web hosting provided by a commercial ISP is not recommended.

**Recommendation 5: The National Assembly develop specifications for the procurement of a web server. Purchase and install dedicated web server for the National Assembly.**

**IT/computer network:** The reliance on a slow, wireless internet connection and the lack of a fibre optic cable link is a serious inhibitor to the development and hosting of the National Assembly website. Without this link the National Assembly is reliant upon third parties and has no control over access to its own data on the web server. In practice, this means that the timing of updates to the website is in the hands of third parties. Automated publishing processes are not possible under the current arrangements.

As a priority, the installation of the fibre optic connection to the National Assembly building will be undertaken. This work has been listed on the forward work plan of the National Science and Technology Agency but no schedule for its implementation until 2009.

While there are computing facilities available for staff, the current computing network is not sufficient for handling high speed data transfer. This is a problem for the productivity of staff working in the National Assembly and for any future growth of computer applications in the NA. Specific to this project, it is not sufficient for hosting a web server and mail server. The current Ethernet operates at 100 Mbps, but some hubs can only handle the packets transfer at 10Mbps. This is too slow for uploading information to the web server and many of the networking tasks associated with this. Replacing the network hardware as required would be a low cost and easy to manage solution to this problem.

**Recommendation 6: Install a fibre optic cable connection to the National Assembly building.**

**Recommendation 7: Review capacity of selected workstations and replace the LAN hardware to enable data transfer at 100 Mbps.**

**Software and hardware:** NA staff do not have access to appropriate software for web publishing tasks and application development. As a priority to enable publishing staff to maintain the website, they will need access to devoted web publishing software:

- Dreamweaver® (Web Publishing software)
- Adobe Acrobat Professional® (for creating PDF documents)
- Adobe Photoshop® (for creating and modifying web graphics)

Using Dreamweaver will improve the efficiency of web publishing tasks as it will reduce the time spent preparing material for publishing and will assist in maintaining the site style. Dreamweaver is an industry-standard web publishing software product. Acrobat Professional is required for creating PDF documents for the website. PhotoShop is an industry-standard software program that would be used for creating graphics and manipulating photographs for the website.

Purchased separately, the three nominated software programs would cost in the order of US\$1400, with future upgrades being significantly cheaper. Adobe also supply this software bundled with other Adobe/Macromedia programs for US\$1800. The additional programs would be useful in producing material for print output if staff have training in its use (this is not part of this project). Initially, one license of each application will need to be purchased, with a second license required later in the project when other staff have been trained in web publishing.

A computer workstation which satisfies the system requirements of this software will need to be purchased and made available for web publishing duties.

Additional licences of Adobe Acrobat Elements® will be required for some content providers. Acrobat Elements is a modified version of the full Acrobat product that has all the required features to enable PDF documents to be created and distributed. It is considerably cheaper to purchase than the full Acrobat suite and site licenses are available.

When development of dynamic web applications is undertaken, additional software will need to be added to the software suite. A separate, development workstation will need to be provided for this work.

To ensure ongoing support for the software by the vendors, provision will be made in the NA budget for the upgrading of software licenses and hardware components as required.

**Recommendation 8: Web publishing software and licenses be purchased for publishing staff. Start-up software required: Dreamweaver 8, PhotoShop CS or V6, Adobe Acrobat Professional V7.**

**Recommendation 9: A network hardware that satisfies the system requirements of this software is purchased and made available for the purpose of web publishing.**

**Recommendation 10: Additional software for the web development applications to be purchased when required.**

**Recommendation 11: A development workstation to be purchased and made available for the development of web applications.**

**Recommendation 12: A budget is made available to upgrade software licenses and hardware components as required.**

***Automated publishing processes:*** Some content that will be included on the website is prepared by other sections of the National Assembly. For example, programs and transcripts are produced by the Assembly Secretariat. These are often finalised soon before the commencement of the session. They could be manually sent to the web manager for inclusion on the website, but since this will cause a delay in their publication, it is preferable that a method for publishing direct to the website be developed.

This can be a simple method where, once finalised, documents can be saved in PDF format to a staging server, and then automatically uploaded to the appropriate folder on the web server. This process will maintain the security and integrity of the server but still allow time critical content to be published on the web server.

Specifications for a staging server and automated publishing processes (eg, Content Replication Service) will be part of the requirements of the new web server. A list of documents that will be published on the website, together with their authors, will assist in this task.

**Recommendation 13: Plan for automated publishing processes as part of the server procurement and installation process.**

### **3. Staff and skills**

***Web manager:*** A staffing structure needs to be established within the National Assembly to take responsibility for web publishing duties. A web manager<sup>1</sup> will be appointed to take responsibility for web publishing duties and overseeing the development of the website. The position of web manager will be located in the staffing structure of the NA Information Centre.

The person appointed to the position of web manager will need to have appropriate skills and experience to undertake the work. Ideally, the person appointed will have some knowledge of the work and processes of the National Assembly. Since the role of the web manager is primarily concerned with content management and information sharing, high level communications skills are more valuable than information technology skills (having both would be a bonus). In addition to gaining technical skills, the web manager will need to have a high level of literacy in Lao and English. A suitable candidate may be appointed from within the NA

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<sup>1</sup> The term "Web Manager" is an internationally recognised job description for a person or team of people who manage the content and infrastructure of a website. The web manager is an Information Management specialist, rather than an Information Technology specialist. The web manager does need some IT knowledge and experience, but the emphasis is on communication and knowledge management skills rather than IT skills. Information Technology specialists would provide support to the web manager.

organisation and trained in web publishing duties. This strategy would help develop capacity within the National Assembly and may be the preferred option. Alternatively, a person appointed from outside the organisation will need to be mentored to develop knowledge about the National Assembly's roles and processes.

Depending on the existing knowledge of the web manager, an appropriate, initial training program for the web manager would be intensive, formal training in web publishing and creating graphics for the web followed by a short-term work placement in another parliament doing similar work. The work placement will assist the web manager to consolidate his or her web publishing skills, learn about web site management issues, and build networks by working with supportive peers from a similar institution.

**Recommendation 14: A web manager to be appointed to take responsibility for web publishing duties in the National Assembly. The position of Web Manager would be part of the Information Centre staffing structure.**

**Recommendation 15: Appropriate training in web publishing and creating graphics to be provided to the web manager (if required).**

**Recommendation 16: A short-term work placement to be sought for the web manager in the web publishing team of another Parliament.**

***Information Technology and infrastructure support:*** If *Recommendation 5* is agreed to and implemented, staff within the National Assembly who currently provide IT and computer support will need additional training to manage the web server and web server security.

Most training programs in web server management have pre-requisite training programs and on-the-job experience. Therefore, the candidate who undertakes web server training may need to complete the pre-requisite courses. They will also benefit from a work placement in another parliament where they would be part of a team performing this work. This will assist them to consolidate their skills, build networks with peers in other parliaments with the potential to develop an informal mentoring relationship. The work placement will be for a period of 1 to 2 weeks and will coincide with the formal training program.

**Recommendation 17: A skills audit of the IT/computer support staff in the national assembly to be undertaken so that further training in web server support and security can be planned and undertaken.**

**Recommendation 18: Nominated staff members from the IT/computer support section undertake Microsoft web server management and security training.**

**Recommendation 19: A short-term work placement is sought in the IT/server support section another parliament for the staff member undertaking the training.**

Training of the web manager and server manager is required for the immediate and short-term support of the website. It is in the National Assembly's interests to ensure that other staff members are trained to a similar level so that there is back-up capacity in case of staff absence or retirement. Training other staff will involve a mix of formal and on-the-job training. The web manager and the server manager would be expected to have an active role in mentoring and training other staff.

**Recommendation 20: A professional development program for support staff in the web publishing and computer support service is planned and implemented. The timeframe for completing this training is within 12 to 18 months.**

**National Assembly of Lao PDR**  
**Appendix A: Proposed site structure for the NA website**

**Home page**

Enter National Assembly website

(Button) Lao version

(Button) English Language version

*These links will appear on the entry page, and also each page of the website:*

- Information about viewing page with international character sets in the web browser (eg UN Human Rights page):



- Copyright information
- Web manager contact: feedback form
- Page last updated date

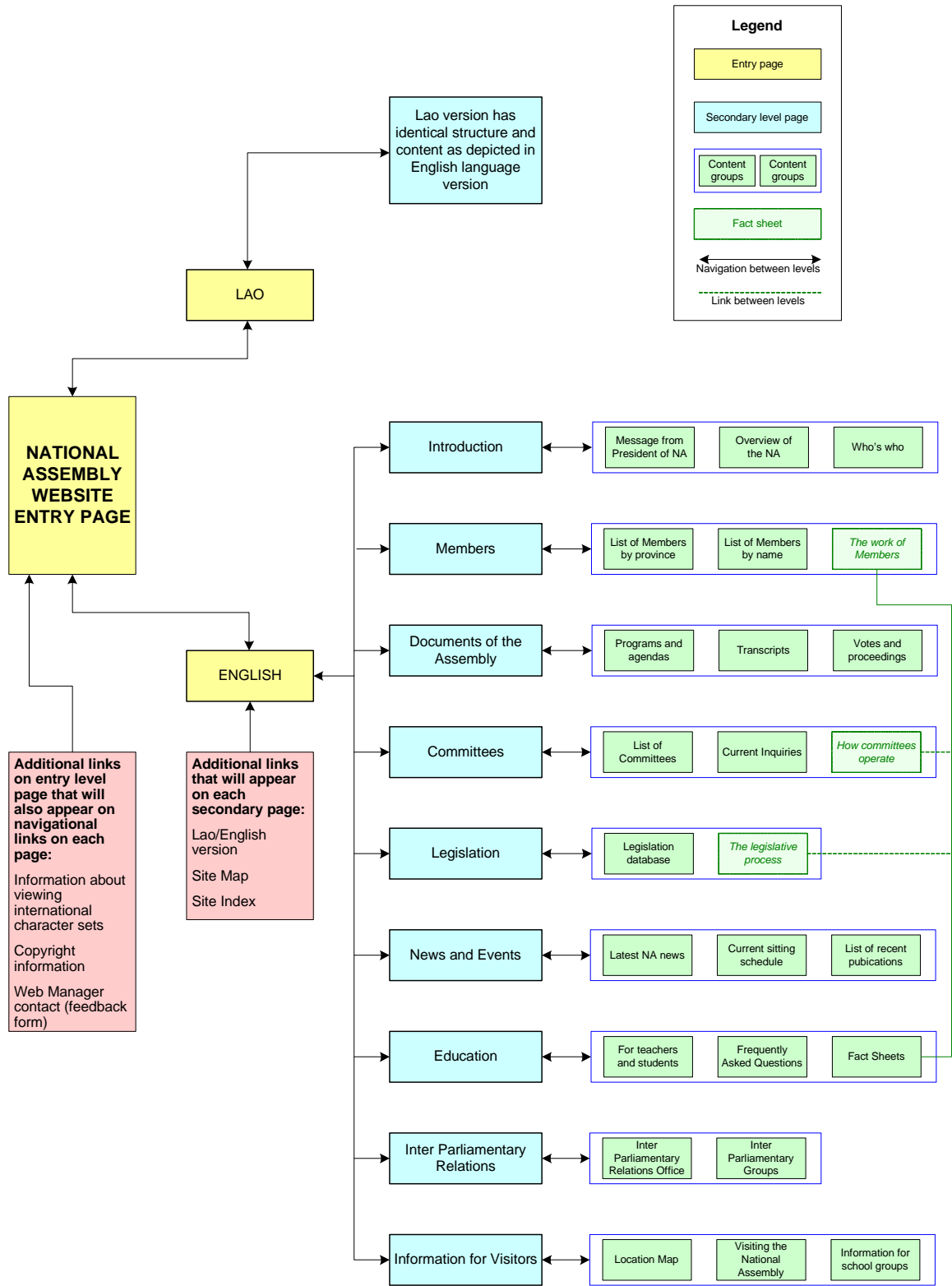
## Second level pages

Standard navigation buttons to appear on all second level pages	
Button text	Description of content and sub buttons (in italic)
Introduction	<p>This content area contains general information about the National Assembly and the NA website. It will link to subsequent HTML pages from the same group, as well as to other areas of the website. Main areas include:</p> <ul style="list-style-type: none"> <li>• <i>Message from President of NA</i>: amend existing text, include photograph of President. Link to fact sheet on the role of the President and other officials.</li> <li>• <i>How the NA works: an overview</i>, with links to Fact sheets on various topics and FAQs</li> <li>• <i>Who's who in the National Assembly</i>, information about office holders, staff and officials, with a brief description of their roles and duties. Links to fact sheets.</li> </ul>
Members of the National Assembly	<p>This content area will contain all information and contact details for all Members of the National Assembly</p> <ul style="list-style-type: none"> <li>• <i>Members by province</i></li> <li>• <i>Members by name</i></li> </ul> <p><i>Consolidated contact list of Members</i> Table of contact details with PDF printable version</p>
Documents of the Assembly	<p>This section will contain links to documents produced for the Assembly sessions and resulting from the assembly sessions. It will include:</p> <ul style="list-style-type: none"> <li>• <i>Upcoming programs and agendas</i></li> <li>• <i>Transcripts</i></li> </ul>
Committees	<p>This content area will contain information about NA Committees. It will include:</p> <ul style="list-style-type: none"> <li>• <i>List of Committees</i> (hyperlinked list of committees)</li> <li>• <i>Current inquiries</i> (hyperlinked list of committee inquiries)</li> <li>• <i>How Committees operate</i></li> </ul>
Legislation	<p>This content area will contain information about Legislation and the legislative process. When it is developed, it will contain a link to list of Legislation and Bills-in-progress:</p> <ul style="list-style-type: none"> <li>• <i>Legislation database</i></li> <li>• <i>The legislative process</i></li> <li>• <i>Legislation fact sheets</i></li> </ul>



<b>Button text</b>	<b>Description of content and sub buttons (in italic)</b>	
News and Events	<p>This section will contain information about news and activities of the National Assembly. Special parliamentary events (eg. ASEAN conference) would link from this page.</p> <ul style="list-style-type: none"> <li>• <i>Latest NA news</i></li> <li>• <i>Current sitting calendar</i></li> <li>• <i>Recent publications</i></li> </ul>	
Education	<p>This content area contains educational materials for teachers, students, and members of the general public.</p> <ul style="list-style-type: none"> <li>• <i>Fact Sheets</i></li> <li>• <i>For Students and Teachers</i> (learning materials for national curriculum modules).</li> <li>• <i>Frequently asked questions</i></li> </ul>	
Inter parliamentary information	<p>Pages in this content area will be accessed by other National Parliaments. They will contain information about contacting the Laos National Assembly Inter-Parliamentary Office, and information about membership of international parliamentary bodies.</p>	
Information for visitors	<p>This content area will contain information about the NA building and precinct. It will assist visitors – both international and locals – who visit the National Assembly. It will contain information about opening hours, conditions of access, security arrangements, parking etc. The section may also include a photo gallery of the building and precincts.</p> <ul style="list-style-type: none"> <li>• <i>Location map</i></li> <li>• <i>Arrangements for visitors</i></li> <li>• <i>Information for school groups</i></li> </ul>	
Permanent navigational links will appear on each page of the website, excluding the top entry level page.		
Site map		The site map will assist visitors to find the information they require on the website. It shows how the information is categorised and grouped together
Site index		The site index will assist visitors to find the information they require on the website. It is a hyperlinked, alphabetical listing of topics, documents and subject matter.
Displaying characters	Lao	Link to information about displaying Lao character sets in web browser.

## Website structure



## National Assembly of Lao PDR Appendix B: Website Strategic Plan

This document outlines the three priority areas for improvement to the National Assembly (NA) website: content, infrastructure, and support.

- *Content* concerns the information that is available on the website. Content also includes the management of English translation of material to be published on the website.
- *Infrastructure* concerns the hardware, software and networking required to keep the website functioning.
- *Support* concerns the training and development needs of NA staff who will be responsible for contributing content, publishing material to the web, and maintaining the infrastructure.

### Duration

This plan covers the period from December 2006 through to December 2008. The plan will be reviewed and revised prior to its expiry in December 2008.

### Prioritising the work

Items are categorised as priority 1, 2, or 3.

- *Priority 1* indicates the work is essential and other priorities cannot be successfully undertaken until Priority 1 work is completed. Priority 1 category work will add significant value to the website.
- *Priority 2* indicates that the work is high priority. This work can be commenced immediately and published on the website when Priority 1 is completed. Priority 2 work will be subjected to ongoing updating and enhancing for the life of the website.
- *Priority 3* indicates that the work is of less immediate importance but will be undertaken within the specified timeframe. Progress on work in other categories is not dependant upon work in this category. Priority 3 items are sometimes dependant on other projects to be completed before they can be undertaken. Priority 3 items are important for the future expansion and development of the NA website.

## Site design and content

	Description	Priority	Date commence	Date completed
1	Rebuild website to improve the navigation, categorisation of existing and new material, and the look and feel.	1		
2	Develop specifications for contracting the service provision of the English language translation of content.	1		
3	Advertise and negotiate contract for the provision of English language translation services	2		
4	Establish method and process for publishing upcoming programs, session reports, and session transcripts	1		
5	Publish agendas, session reports, and session transcripts on website	2		
6	Establish method and process for publishing Committee reports on website	1		
7	Publish Committee reports on website	2		
8	Develop site index and site map	1		
9	Publish educational materials (school modules) on the website	1		
10	Develop and publish NA News section on website	2		
11	Promote website to NA members, staff and public	3		

## Infrastructure

	Description	Priority	Date commence	Date completed
1	Develop specifications for new NA web server and software, including security requirements	1		
2	Develop specifications for new mail server and software	1		
3	Investigate and report on networking capabilities of NA building	1		
4	Establish secure location for web and mail servers within the NA building	1		
5	Purchase and install new web and mail servers	1		
6	Purchase web publishing software	1		
7	Investigate and develop specifications for workstation and database for database development	2		
8	Purchase workstation and software for database development	2		
9	Investigate and recommend Web Content management software for future automation and management of expanded website	3		

## Support

	Description	Priority	Date commence	Date completed
1	Establish web publishing team and team structure. Team will include: <ul style="list-style-type: none"> <li>• Dedicated publishing staff</li> <li>• IT support staff</li> <li>• Seconded staff for initial stages of project</li> <li>• Ongoing staff to manage and publish material</li> </ul>	1		
2	Recruit or appoint web manager	1		
3	Undertake skills audit of web publishing and IT infrastructure team	1		
4	Plan and implement skills training program for web publishing and IT infrastructure team. Priority areas are: <ul style="list-style-type: none"> <li>• web publishing</li> <li>• content management</li> <li>• server management</li> <li>• database development</li> </ul>	1		
5	Undertake IT skills audit of staff from other areas of NA who will contribute content material to the website	1		
6	Plan and implement IT skills training for key staff who will provide content for website.	2		
7	Establish Publishing and IT Support professional development plan to ensure skills are improved and kept current as technology evolves.	3		