



**BRIDGING THE DIGITAL DIVIDE IN GAELIC¹ LIBRARIES: REPORT ON THE
INVESTIGATION TO AW MELLON FOUNDATION
NOVEMBER 2008**

CONTENTS

1.	Background	2
2.	Problem statement	2
3.	Planning grant	2
4.	Management of the project / project leaders	3
5.	National implications	3
6.	Methodology, findings and elements for recommendations	4
6.1	Methodology	4
6.2	Findings	4
6.3	Elements for recommendation	5
6.4	Recommendations	6
6.4.1	Library system support structure	6
6.4.2	Site coordinators and system administrator roles	6
6.4.3	Review and ownership of process	8
6.4.4	Training	9
6.4.5	Relationship with various stakeholders in support of LMS	10
6.4.6	Costs	11
6.4.7	Budget and planning in libraries	11
6.4.8	Role of user groups	12
6.4.9	GAELIC membership	12
6.4.10	Assessment of GAELIC members management / support	13
	LMS	
7	Workshop on outcomes / work breakdown structure	13
8	Financial report	13
9	Conclusion	14

¹ GAELIC: Gauteng and Environs Library Consortium, FOTIM's major programme

BRIDGING THE DIGITAL DIVIDE IN GAELIC² LIBRARIES: REPORT ON THE INVESTIGATION

DRAFT REPORT TO MELLON

1. Background

GAELIC continues to be recognised as a successful FOTIM (Foundation of Tertiary Institutions of the Northern Metropolis) project. Since the establishment of the consortium in 1996, members have enjoyed the benefits of various collaborative initiatives, the most significant of which was the implementation of a state-of-the-art integrated library system software, namely Millennium from Innovative Interfaces Inc.

During the past 11 years, members of GAELIC have experienced various challenges and changes in the higher education landscape in South Africa. Furthermore, members have also experienced enormous changes and opportunities in the digital library environment.

2. Problem statement

During 2005 GAELIC undertook a comprehensive survey of all its libraries in order to assess the digital status of each, to determine the consortium's membership profile, and to identify needs and problems to be addressed by the consortium. The survey highlighted the considerable differences in the use of the Millennium system, including the age of the servers supporting the systems on campuses, the versions of the software and the modules and functionality being utilised, in campus ICT support and in library staff skills.

These differences, as well as the fact that institutions need to embark on reviews of systems and processes after a number of years of operation, prompted GAELIC to initiate this investigation, which is focused on the Millennium system, infrastructure and the skills of staff as well as on maximising the use of the available system functionality. The usage of the system was also to be benchmarked against other libraries and consortia, both nationally and internationally.

3. Planning Grant

The FOTIM Board and its members approved this initiative, and supported GAELIC in their application in July 2007 for a planning grant from the Andrew W. Mellon Foundation to embark on this exercise.

Dr. Zodwa Magwenzi, FOTIM Director and Dr Judy Henning, Co-ordinator of this project discussed the proposal for a planning grant with a representative of the Mellon Foundation and

² GAELIC: Gauteng and Environs Library Consortium, FOTIM's major programme

explained that the focus of the investigation was to enhance the use of the system and the investment made in it. After the implementation of the interventions identified in this investigation the institutions themselves will support ongoing research and development. FOTIM will continue to support collaboration between member institutions in order to ensure cost-effectiveness. The GAELIC Governing Board confirmed the commitment of members to future sustainability and to ensuring continued optimal usage of the system.

FOTIM/GAELIC made it clear that the outcomes of the study might result in the need for interventions in key areas to ensure that this goal is achieved. Whilst it is understood that the award of the planning grant is no guarantee of a future grant, FOTIM/GAELIC would like to submit a full proposal based on the recommendations of the investigation and to be judged on its merits. The Mellon Foundation supported the GAELIC initiative and awarded the planning grant to FOTIM/GAELIC in 17 September 2007.

4. Management of the project / project leaders

The GAELIC Governing Board reviewed its goals and objectives in February 2007 and this investigation is one of three priority projects started with the intention of achieving these. The Board appointed a team of three board members to lead the project, take accountability, facilitate communication and monitor progress. This approach ensured commitment and support from the highest level in GAELIC and FOTIM. The management team members were:

- Dr J Henning (co-ordinator): Chief Operations Officer – Unisa Library
- Mr F Ubogu: University Librarian: University of the Witwatersrand
- Mr T Larney: Director Library Services: North-West University (Potchefstroom Campus).

The four-member technical team are experts in the field and focused on the technical aspects of the project and reported to the Management Team and ultimately to the GAELIC Governing Board and the FOTIM Board. The team members were:

- Ms L Erasmus (co-ordinator): Manager: Library Technology Services: Unisa Library and leader of the GAELIC Innovative System Focus Group,
- Mrs S Swanepoel: Head: Information Management and Procurement Services, University of Pretoria
- Mrs M Sibanda: Head: Technical Services and System Administrator, University of Limpopo (Medunsa Campus)
- Mrs C Malan: Library System Administrator, University of Johannesburg.

5. National implications

As part of the investigation to encourage optimal use of the Millennium system by GAELIC members, benchmarks from other libraries and consortia, both national and international, were used. Discussions were held with other consortia that are embarking on reviews of their own operations and systems. Presentations were made and discussions held at a DITCHE (Developing Information Technology Capacity in Higher Education) conference between GAELIC, SEALS (South East Academic Libraries) and CALICO (Cape Library Consortium). A meeting was also held between GAELIC and CALICO to discuss the reviews that are under way. It was agreed that the outcomes of the reviews would be shared.

The focus of the reviews has been different because the consortia use different systems and have different needs and priorities. However, because of this, sharing of outcomes will benefit the various consortia as we would learn from the differences as well. There is also commitment from the consortia to collaborate and share information over the next few years.

The investigation and sharing of outcomes of regional investigations will direct FOTIM/GAELIC's strategic plan in the area of library systems, as well as the role of the library system in view of the latest technological developments impacting on digital library services and library services in general.

6. Methodology, findings and recommendations

6.1 Methodology

The methodology of the investigation included the following activities:

- 6.1.1 A system survey was conducted among the GAELIC libraries in order to gain a better understanding of the differences in support and use of the Millennium system as well as the problems experienced in the GAELIC libraries.
- 6.1.2 Visits were made to all the libraries in GAELIC and SEALS in order to discuss various aspects of the Millennium system with a management group from the Libraries, as well as groups of staff members representing the users of each instance of the system.
- 6.1.3 A discussion with representatives from CALICO on their experience in a shared server environment was held.
- 6.1.4 Visits were made to library consortia in Spain and Estonia in order to benchmark the GAELIC libraries against overseas libraries in terms of supporting and using the Millennium system and to gain more insight into an overseas library consortium sharing a Millennium server and an overseas library consortium based on a decentralised server model.
- 6.1.5 Benchmarking GAELIC against SEALS and the overseas consortia and libraries was done.
- 6.1.6 Comparisons of the shared and decentralised server models as well as the benefits and challenges of each of the two models were made.
- 6.1.7 A literature survey was done by researching specific subject areas related to problems identified, for example, library consortia, new developments in academic libraries, technology planning, IT support, managing a systems office, technology training, process ownership, corporate culture, benchmarking, open source software for libraries, and the cost of running a library system.

6.2 Findings

The following areas of concern related to the Millennium system were explored and formed the basis of the findings of the investigation:

- 6.2.1 Lack of skilled library staff to support the Millennium system, and time constraints which impede ones ability to focus on development tasks.
- 6.2.2 Lack of commitment and unwillingness of library staff to take ownership of the Millennium system modules and functions.

- 6.2.3 Different functional areas in the libraries were found to operate in silos and there was a general lack of collaboration.
- 6.2.4 Keeping abreast of regular new releases and enhancements was seen to be a challenge.
- 6.2.5 There was a lack of appropriate infrastructure, for example, bandwidth and technically skilled staff.
- 6.2.6 Poor relationships with the University ICT Departments were cause of concern.
- 6.2.7 Integration with University systems was another factor.
- 6.2.8 Support from Innovative is a problem for some of the libraries.
- 6.2.9 Costs of running and maintaining the system were also a concern.

In general all the GAELIC libraries were satisfied with the Millennium system's positive impact on their library processes and the value added to their services.

6.3 Elements for recommendations

The recommendations based on the findings of the investigation are listed in item 6.4. The following elements formed the basis of the recommendations and should be considered by each GAELIC library to ensure that the Millennium system is used, supported and developed according to the library's needs:

- 6.3.1 Formal system support structure with adequately skilled staff
- 6.3.2 Shared responsibility (ownership) between system staff and functional experts to support and develop the Millennium system
- 6.3.3 Full responsibility to develop expertise within the Library through training and coaching with regular assessment and feedback on the progress of staff
- 6.3.4 Formal procedures for planning and budgeting to ensure progress and development, as well as coordination of new purchases in a consortium environment
- 6.3.5 Importance of building relationships with various stakeholders on strategic and operational level is acknowledged
- 6.3.6 Costs should be managed by considering hidden costs, costs in using the system and ensuring that the Millennium system is used optimally and serves the Library's needs
- 6.3.7 Active participation and involvement in user group activities by library management and staff
- 6.3.8 Make use of the opportunities that consortium membership offers in general, such as
 - 6.3.8.1 Joint negotiations for new products and services
 - 6.3.8.2 Sharing expertise and information
 - 6.3.8.3 Sharing training opportunities
 - 6.3.8.4 Proposals for the funding of joint projects
 - 6.3.8.5 Project management.
- 6.3.9** An assessment of the GAELIC libraries in terms of the management and support of the Millennium system should be repeated in a year or two in order to establish whether any progress has been made in addressing the problem areas.

6.4 Recommendations

The investigation confirmed that the GAELIC libraries do not use the Millennium system at the same level; not all of the libraries are on the same software release at the same time; the libraries do not have the same products installed on their servers and there are differences in the existing system support structures and mechanisms. Regardless of these difficulties some of the libraries are able to support and develop their systems and to cope with problems such as lack of sufficient technical staff, workload and lack of funds. The Millennium system itself is not the problem because all the libraries confirmed that the Millennium system had a positive impact on their library processes and services.

No specific recommendation will be made to change from the decentralised server model to a shared server model for GAELIC, because the project team could not find any proof that to change from a decentralised server model to a shared server model would resolve the problems identified during the investigation.

The recommendations are based on the findings of the system survey, site visits and literature survey. The project team recommends that each GAELIC library consider the following 6 elements as a minimum requirement in order to ensure that the Millennium system is supported and developed according to the library's needs and to ensure optimal use and return on investment.

6.4.1 Library system support structure

A formal Library system support structure should consist of the following elements:

- 6.4.1.1 Dedicated library system support posts of site coordinator and system administrator, with clearly defined roles that are to be performed by library staff members.
- 6.4.1.2 Desktop support provided by the Library itself or by the University ICT Department.
- 6.4.1.3 Server support provided by the Library itself or the University ICT Department.
- 6.4.1.4 Network and connectivity support provided by the University ICT Department.
- 6.4.1.5 Support mechanisms for communication/consultation, advice and information sharing purposes such as:
 - 6.4.1.6 Formal problem reporting and management system.
 - 6.4.1.7 Formal internal library system user group.
 - 6.4.1.8 Participation in external user groups: at consortium, national and international levels.
 - 6.4.1.9 Subscription to and participation in listserv discussions: at consortium, national and international levels.
 - 6.4.1.10 Use of web-based documentation/resources/manuals.

6.4.2 Site coordinators and system administrator roles

It is highly recommended that a library should have at least one dedicated and skilled site coordinator and/or system administrator to support the Millennium system.

Consideration should be given to the difference between the site coordinator role as a relationship role and the system administrator role as a delivery and technical role.

These roles require different skills and focus which should be well understood. One job description may describe both roles, but the tasks for each of the roles should be clearly defined. Therefore the roles could be separate KPA's in the job description. The job incumbent would then be appraised for performance of both roles.

Site coordinator (important role):

6.4.2.1 The site coordinator builds relationships with Innovative staff, Millennium system users, other GAELIC libraries and the University ICT Department.
Recommended skills required include:

6.4.2.1 Communication skills.

6.4.2.2 Ability to work with people at different levels (managerial and operational).

6.4.2.3 High level of understanding of the library system, library processes and services, among others.

6.4.2.2 Responsibilities of the site coordinator may include the following:

6.4.2.2.1 Manage calls logged with Innovative's helpdesk.

6.4.2.2.2 Manage access to CSDirect and other Innovative resources.

6.4.2.2.3 Disseminate all communication received from Innovative via the Innovative Mailing List and Innovative's Private Subscription List to the relevant staff in the library.

6.4.2.2.4 Maintain the Innovative Contact List.

6.4.2.2.5 Attend to users' needs and requirements regarding the library system for example system support, enhancement requests.

6.4.2.2.6 Coordinate all activities including training, implementation of products/ new functionality, new releases and updates and support of the library system.

6.4.2.2.7 Ensure timely communication regarding system changes, system availability, etc. to stakeholders.

6.4.2.2.8 Ensure that all system administration tasks are performed by the responsible staff members including system administrators, circulation and acquisitions staff, University ICT Department, etc.

6.4.2.2.9 Provide advice and guidance on the support of the library system.

6.4.2.2.10 Address the development of interfaces with other University systems for example HR, Finance and Student systems.

6.4.2.2.11 Liaise closely with the University ICT and/or Library IT Department which is responsible for hardware support, desktop support, network infrastructure and connectivity.

6.4.2.2.12 Represent the library and its interests within GAELIC and any other platform dealing with the Millennium system.

System administrator (urgent role):

6.4.2.3 The system administrator performs technical tasks – trouble shooting, first level technical/system support and development, and the recommended skills required include inter alia:

- 6.4.2.3.1 Advanced System Access and Administration and basic library system training.
- 6.4.2.3.2 Web design skills.
- 6.4.2.3.3 Basic understanding of network infrastructure.
- 6.4.2.3.4 Knowledge and understanding of library processes and services.

The fact that the system administrator performs support and development tasks should be acknowledged. If no time is available for development tasks, no new initiatives will be explored and implemented.

The core responsibilities of the system administrators should be library system or IT-related tasks. If this is not the case the support and development of the library system will be neglected.

A second staff member should be designated and trained to act as a back-up especially for the system administrator.

6.4.2.4 Responsibilities of the system administrator may include the following:

- 6.4.2.4.1 Provide technical support by trouble shooting system problems reported by the users
- 6.4.2.4.2 Provide general advice and guidance on the use of the library system.
- 6.4.2.4.3 Log calls with Innovative or the University ICT Department if the problems have to be escalated for resolution.
- 6.4.2.4.4 Implement/activate new system functionality/products.
- 6.4.2.4.5 Implement changes to and customise the WebPAC.
- 6.4.2.4.6 Perform system administration tasks, for example, maintain system parameters, access to the system and monitor the performance of the system.
- 6.4.2.4.7 Install new releases and system updates.
- 6.4.2.4.8 Communicate new developments and changes, system availability, etc. to the library system users.
- 6.4.2.4.9 Work closely with the site coordinator, if the role is performed by another staff member. Two-way communication is vital between the site coordinator and system administrator.

6.4.3 Review and ownership of processes

Library staff should be empowered and encouraged to take responsibility for the different library system modules and functionalities used within the relevant library processes. The review and ownership of processes should be defined in specific job descriptions. This means that selected library staff members should be actively involved in the implementation of changes and new functionality, explore new functionality, drive the process of implementation of new products or functionality and other system related changes rather than expecting the system support staff to perform these roles. The library system support staff play only a technical support role.

Ownership of processes means responsibility and providing leadership for specific library processes.

6.4.3.1 The process owner is responsible for the ongoing review of library processes and identifies process problems in order to:

- Improve workflow
- Ensure the ongoing development of expertise (of not only one person but more than one) within each module or functional area of the system.
- Identify incorrect use of the system and training needs.
- Report occasions when the system does not function as expected.
- Consider how new features in new releases or products can be applied and the impact they will have on the processes and services.
- Consider opportunities to enhance library services through process improvement.
- Be aware of and stay aware of system possibilities and consider opportunities the system may present by studying available documentation, monitoring the IUG listserv and other listservs (create an awareness of how other users are using the system and the problems they experience); participation in listserv discussions is encouraged.
- Staff core competencies (skills, knowledge and behaviours) should be reviewed and updated continuously with all system changes and new developments. A reassessment of current competencies is required as soon as the competencies are updated. Core competencies related to the use of the library system, as well as other general and related library technologies, should be defined in each job description.

6.4.3.2 The optimal use and development of the library system will be ensured by:

- The acknowledgement of the process owner role that includes the development of expertise in the use of the system and ensuring that the Millennium system is used optimally in the relevant library processes.
- A formal internal library system user group to improve the integration of processes and collaboration between functional areas, promoting the use of the system as an enabler for smooth workflow, communication, the sharing of knowledge and expertise, etc.
- The acknowledgement of a shared responsibility for the library system between the library staff and the library system support staff. The library staff are the functional experts and the library system support staff are the technical experts.

6.4.4 Training

6.4.4.1 A more sustainable approach to system training is suggested to ensure capacity building and ongoing optimal use of the Millennium system by:

- Sharing of the responsibility for system training between the expert library staff users and the system support staff for training of new staff members or ongoing training of staff in the use of new system functionality. The experts are better equipped to present training on how the system can be used within their processes. System training is not the sole responsibility of the system support staff.
- Defining the type of system training needed in order to identify the most suitable training provider, for example:

- In-service training provided by internal experts
- New product training provided by Innovative.
- Personal development training provided by external experts from GAELIC, User Group, etc.
- A prerequisite to attending system training sessions is that there should be a formal reassessment of library staff skills in order to determine progress made by staff members after attending training sessions. The method of assessment may include either self-assessment or peer observation, after the staff have had the opportunity to practice and to implement what they have learned. Regular feedback should be given to the staff on whether they are improving or not. Library management should support the reassessment of staff by incorporating the reassessment in their performance management exercise.

6.4.4.2 Various approaches to learning or to building capacity within a library should be considered:

- Internal user group meetings to share knowledge and experiences regularly.
- Partnerships – forming relationships and working together with colleagues in the library or from another library.
- Coaching and mentoring.
- Group training – lectures, demonstration, hands-on, etc.
- One-to-one training – especially for basic topics and skills.
- Training the trainer (peer training).
- Networks for example GAELIC to share in training opportunities.
- Buddy system – one staff member trains and supports another.
- Lists of experts within GAELIC who are available for advice and formal training.
- Webcasts and webinars.
- Teleconferences.

6.4.4.3 Other learning opportunities should be considered such as:

- Consulting and studying resources such as the User manual, library's own procedural manuals, CSDirect and Innovative Users Group documentation.
- Reading electronic discussion lists (listservs), blogs, articles, books.
- Attending conferences to take advantage of specific sessions, exhibits, and to network.
- Visiting other libraries sites virtually and physically to see what they are doing.
- Completing tutorials available on the web.
- Preparing a talk or training material for others.
- Taking self-study courses.
- Listening to podcasts.
- Viewing recorded and archived webcasts, etc.

6.4.5 Relationships with various stakeholders in support of the library system

The ongoing building of relationships with all the stakeholders lies with the library management and the library system support staff.

Certain library positions have specific relationship responsibilities:

6.4.5.1 The Library Director should influence University Management, the University ICT Department and Innovative and should create an awareness of the library's needs and plans at a strategic level.

6.4.5.2 The Site Coordinator/System administrator is responsible for the relationship with the University ICT Department and Innovative on operational issues for example follow-up on outstanding calls and other service issues, user needs and requirements and possible enhancements.

6.4.5.3 The Site Coordinator/System administrator is responsible for the relationship with the users of the library system – providing support in the form of advice, problem solving or the escalation of problems to Innovative or the University ICT Department; awareness of the users needs and requirements; sharing of information about the system; etc.

6.4.5.4 Both the University ICT Department and Innovative should be informed about unacceptable service levels – with regular communication about operational needs, service requirements, changes in the library, etc. recommended

Various mechanisms should be considered to facilitate the communication between the Library and the stakeholders: regular formal meetings, e-mail discussions, teleconferences, etc.

6.4.6 Costs

The following should be considered in making an informed judgment on costs related to running the Millennium system:

6.4.6.1 Conduct a Return on Investment (ROI) study in order to understand the costs and benefits of the library system by considering resources, capability (quality), utilisation and beneficial effects. An ROI study is complex and merits a separate study on its own by an expert.

6.4.6.2 Consider the total cost of ownership (TCO) which is about the management, use of staff time, best workflow practices and system reliability and quality.

6.4.6.3 Calculate hidden costs for example payment of annual maintenance fees but not ensuring that the latest release is installed and relevant new features considered, activated and used. Using the system optimally reduces hidden costs.

6.4.6.4 Identify and share standardised criteria of costing the library system within GAELIC.

6.4.6.5 Explore joint purchases and cost sharing possibilities to save on expenses.

6.4.6.6 Discuss an alternative cost model for additional products with Innovative.

6.4.6.7 Consider proposals for additional funding for specific joint projects from the government in addition to foreign and other donors.

6.4.7 Budgeting and planning

Proper budgeting and planning for the Millennium system leads to sufficient skilled support and development of the system.

Annual planning with regard to the library system should be done jointly in consultation with the Library/University ICT Dept. and should address the following:

6.4.7.1 Software release planning.

6.4.7.2 Hardware upgrade, including server and operating system.

6.4.7.3 Purchase of new software products.

6.4.7.4 Maintenance fee for hardware and software.

6.4.7.5 Upgrading network capacity (bandwidth).

6.4.7.6 Workstation capacity.

6.4.7.7 Human resources (capacity building in order to ensure sufficiently trained technically skilled staff is available)

Procedures should be in place to determine library needs regarding the purchase of new products which will enhance the service strategies and improve the processes of the library. Proper planning will ensure that funds are available, as well as the required capacity in terms of physical and human resources, to facilitate the support and development of the system.

Joint negotiation for the purchase of new products is recommended at consortium level because purchase costs can be reduced in terms of a negotiated discount on the purchase price and the issuing of a single invoice by Innovative. If joint purchasing of products is considered by GAELIC, coordinated planning and budgeting should take place at consortium level and individual member library level.

6.4.8 Role of user groups

There is real value in having a structured user group where members are actively involved in sharing information, knowledge and expertise at a regional, national and international level.

The project team recommends the formation of a user group structure within GAELIC to:

6.4.8.1 Facilitate and promote the optimal use of the Millennium system.

6.4.8.2 Create the awareness of new developments.

6.4.8.3 Communicate specific/unique needs and user requirements from the GAELIC member libraries to Innovative as Innovative prefers structured and formal feedback from user groups.

6.4.8.4 Coordinate joint projects and communication with Innovative at consortium level.

This group should actively support and participate in the national IUG:SA activities. GAELIC should use opportunities to gain support from the IUG:SA member libraries to jointly negotiate and discuss Millennium issues with Innovative.

GAELIC libraries should be encouraged to send staff to the User Group Conferences in the USA, Europe, and elsewhere in order to create awareness of how other libraries are using the Millennium system, to serve as motivation for new ideas and enthusiasm, and to meet other Millennium users and key Innovative staff. The GAELIC group should then create an opportunity to report back on these IUG Conferences to library staff from the GAELIC libraries.

The GAELIC Heads of Libraries should take responsibility within the national user group (IUG:SA) environment for the relationship with Innovative by creating an awareness and understanding of specific strategic issues related to the South African environment.

6.4.9 GAELIC membership

In general make use of the opportunities that consortium membership presents, such as:

- 6.4.9.1 Joint negotiations for new products and services.
- 6.4.9.2 Sharing expertise and information.
- 6.4.9.3 Sharing training opportunities.
- 6.4.9.4 Proposals for the funding of joint projects.
- 6.4.9.5 Project management.

All these opportunities can facilitate the improvement in the support and use of the Millennium system. Active participation and taking leadership in the consortium activities can serve as a development opportunity by broadening the expertise of staff of GAELIC member institutions.

6.4.10 Assessment of the GAELIC libraries in terms of management and support of the Millennium system

A final recommendation is that the assessment of the GAELIC libraries in terms of managing and supporting the Millennium system should be repeated in a year or two. GAELIC cannot enforce the recommendations but can facilitate a repeat of the assessment in order to see how many libraries have made progress in addressing their problem areas and how many maintain their good level of management and support of the Millennium system.

7. Workshop on outcomes / work breakdown structure / training

The report on the investigation was presented and discussed at a workshop for members and discussed at the Governing Board meeting on 29 July 2008. A summary of the recommendations on GAELIC's role and Member Libraries' roles were compiled. A work breakdown structure would be developed (actions / responsibilities / dates) at a workshop that will be scheduled early in 2009. A contract trainer has been appointed to work with the Site-Coordinator at the University of Venda to enhance the training provided and in line with the focus of the investigation.

8. Financial Report

Financial summary compiled in separate PDF document. Commitments outstanding as on 31 March? are workshop costs and the salary of the contract trainer.

9. Conclusion

FOTIM tasked the project team to find ways of bridging the digital divide that exists between its member institutions. Firstly, the project team assessed the Millennium system functionality being used at the institutions, identified problem areas, and confirmed that there are differing levels of support and use of the Millennium system. These existed due to the specific problems experienced by a library or in some cases by choice as a library uses system functionalities differently according to its needs. All the GAELIC libraries indicated that processes and services have improved since the implementation of the Millennium system, regardless of problems experienced in supporting the system. A few of the GAELIC libraries can serve as examples to follow because they are able to support and develop their systems regardless of problems such as lack of sufficiently technical staff, workload and limited funds available for the library system. The Millennium system is not the problem and has all the capabilities to be used as a platform to bridge the digital divide.

The benchmark exercise enabled the project team to identify the areas where GAELIC and its member libraries differ from their overseas counterparts, such as: formal and structured planning and budgeting for the Millennium system; availability of technically skilled staff; differences between libraries is not a concern, they accept libraries have different needs, etc. Certain circumstances such as the educational, socio-economic and cultural environment are also different and problems therefore have to be addressed in a different way from the overseas consortia.

The assessment of the current cost and return on investment of running and supporting the Millennium system at each institution indicated that opportunities should be created for joint negotiations for the purchase of Innovative products. The GAELIC libraries should consider hidden costs, total cost of ownership and a cost benefit study in order to make an informed judgment on costs related to running the Millennium system.

During the investigation the benefits and challenges of a shared server model and decentralised server model were considered. The project team could not find any proof that to change from a decentralised server model to a shared server model would resolve the problems identified during the investigation.

The recommendations made to the GAELIC member libraries will address the organisational issues and resolve problems related to the support and use of the Millennium system.

The GAELIC Governing Board decided that no technological interventions will be proposed for GAELIC before progress is made in addressing these problem areas. Only after these have been eliminated, will a library be able to take the development of digital library services to a higher and more effective level through maximum use of the functionality available in the Millennium system. The challenge for bridging the digital divide within GAELIC lies in the ability of the GAELIC libraries to address the organisational issues as identified during the investigation.