

NB/PEI EDUCATIONAL COMPUTER NETWORK

Over 40 Years of Inter-Institutional Collaboration

April 1, 2013 - March 31, 2014

MISSION

To ensure high quality Information and Communication Technology (ICT) services to all member institutions in New Brunswick and Prince Edward Island

VISION

To apply our collective skills and resources to the betterment of the New Brunswick and Prince Edward Island higher education communities through the deployment of state of the art technology while saving money for our provinces and institutions



Visit our website at: http://www.nbpei-ecn.ca (English) http://www.rie-nbipe.ca (French)

NEW BRUNSWICK and PRINCE EDWARD ISLAND EDUCATIONAL COMPUTER NETWORK MEMBERS















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Message from the Chair



On behalf of the NB/PEI Educational Computer Network, I am pleased to present our 2013-2014 Annual Report. The ECN is currently one of the best examples of inter-institutional collaboration in the post-secondary educational sector in the Maritimes. This document highlights the ECN's activities and accomplishments over the past fiscal year.

I would like to begin by thanking Doug Burton (UPEI) for chairing the Network Committee this past year. I would also like to thank our respective provincial governments, fellow Board and Network Committee members, partners and stakeholders for their continuous support, hard work and dedication.

This has been a milestone year with the development and publication of the ECN's first-ever Multi-Year Strategic Plan, focussing on expanding our work in the area of shared services. In addition, exciting developments have recently been announced by CANARIE which the ECN consortium and partners will be able to leverage in the upcoming year to improve the network. ECN members have also been hard at work renewing consortium-level shared service agreements such as internet service, anti-SPAM and anti-virus.

I hope you will enjoy reading the next few pages to find out more about the accomplishments of the ECN this year.

Robert M. CAmphell

Chair ECN Board of Directors

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EXECUTIVE SUMMARY

The NB/PEI Educational Computer Network (ECN), founded in 1970, connects all of the universities in New Brunswick (NB) and the university and community college in Prince Edward Island (PEI). The primary service provided by the network is connectivity among its members and to the wider world. However, additional benefits are enjoyed by the members in the areas of joint purchasing and licensing, shared support services, professional development, and the delivery of network-based services and information exchange.

This approach has enabled all members to realize the benefits of a high capacity, high speed communications network at a reasonable cost, regardless of size. It also allows the ECN members to take advantage of economies of scale not available to any individual member institution, and ensures that smaller institutions receive the same level of service as larger ones. Finally, member institutions become stronger on the national front by providing a united voice with respect to the collective needs of New Brunswick and Prince Edward Island members.

The Network Committee achieved the following deliverables in 2013-2014, meeting all of the objectives laid out at the beginning of the year in the approved 2013-2014 network plan/budget submission:

- The Université de Moncton hosted a one-day workshop on November 6, 2013 entitled "Technical Support – Exploring Efficiencies" for ECN members. The results of the facilitated discussion were summarized in a report with recommendations around three themes: increase professional development, improve the help desk, and collaborate within ECN. A follow-up message to conference attendees was sent by the ECN Network Committee on March 8, 2014 identifying activities already underway in these areas and new activities to be undertaken over the next few months as a result of the workshop.
- As reported last year, the ECN Board hired Dell to perform an IT Assessment of individual ECN member institutions (to assess the strengths and weaknesses of each organization's technical infrastructure and processes) and the consortium (to identify new areas of collaboration for the group). Based on the data and recommendations derived from the consortium-level report, as well as the recommendations derived from attendees of the workshop (summarized above), the ECN approved its first-ever 2014-15 to 2016-17 Multi-Year Strategic Plan, focusing on expanding its services in the area of shared services, in March 2014.
- On April 4, 2014, the provincial government, CANARIE, and F6 Networks announced investments in a new high-speed, dark-fibre network through New Brunswick as part of the coast-to-coast national research and education network. This is an excellent opportunity for the NB ECN members and their partners to utilize this private fibre within NB to reduce their current reliance on leased services in the northern part of the province. UNB has obtained funding from CANARIE, on behalf of the ECN and its partners, to assist in purchasing the capital equipment required to leverage this opportunity.
- ECN members have been jointly issuing RFPs for internet services for several years. A joint RFP for commodity internet services was launched in 2012 by ECN members and NRC and was awarded to BellAliant. The contract was extended in December 2012 to April 30, 2014. The ECN provides Internet access to the New Brunswick Community College (NBCC) and Collège Communautaire du Nouveau-Brunswick (CCNB) on a full cost-recovery basis.
- Several ECN Network Committee members participated in a panel discussion in June 2013 at the Atlantic Universities and Colleges Technology Conference (AUCTC), the Atlantic region's annual higher education IT conference, to discuss the value and benefits of the Dell IT Assessment process to individual institutions and to the consortium.
- UNB is making necessary improvements to its main data centre; to be completed in 2014-15. Given that critical ECN equipment is permanently housed at UNB, the ECN has contributed 10% to a maximum of \$150,000 towards the cost of the project.

1. Background

Following a pilot project in the late 1960's, the NB Educational Computer Network was formed in 1970 when the New Brunswick Higher Education Commission, Mount Allison University, I'Université de Moncton, the University of New Brunswick, and St. Thomas University entered into an agreement to share computer processing services. In 1974, the newly formed Maritime Provinces Higher Education Commission (MPHEC) assumed stewardship of the Agreement and in 1975, the University of Prince Edward Island joined as a full member, establishing the NB/PEI ECN. The signing of a five-year agreement, from May 1, 1992 to April 30, 1997, formalized the addition of Holland College as the next member of the group. A subsequent five-year agreement (May 1, 1997 to April 30, 2002) witnessed the addition of the Maritime Forest Ranger School (now the Maritime College of Forest Technology) to the list of member institutions of the ECN.

The latest five-year agreement was signed in April 2012 and covers May 1, 2012 to April 30, 2017. Current members are Mount Allison University, l'Université de Moncton, the University of New Brunswick, St. Thomas University, the University of Prince Edward Island, Holland College, the Maritime College of Forest Technology and the MPHEC.

The ECN is overseen by a Board of Directors, consisting of the Presidents of the member institutions and the Chief Executive Officer of the MPHEC. The overall management and operation of the network and the associated services is the responsibility of a Network Committee consisting of the Senior IT positions from each member institution. The ECN is funded by the Provinces of New Brunswick and Prince Edward Island, through the funding administered by the MPHEC, and is topped-up with some direct funding from the institutions.

In addition to providing connectivity among its members, the New Brunswick portion of the network also connects New Brunswick member institutions to the wider world through a shared connection to the Canadian Advanced Research Network (CANARIE) and through CANARIE to the world. The Prince Edward Island portion of the network also has a direct connection to CANARIE.

2. Governance

Board of Directors

The ECN is administered by a Board of Directors (Board) consisting of the following members:

- 1. The President of Holland College
- 2. The Director of the Maritime College of Forest Technology
- 3. The Chief Executive Officer of the MPHEC
- 4. The President of Mount Allison University
- 5. The President of St. Thomas University
- 6. Le Recteur de l'Université de Moncton
- 7. The President of the University of New Brunswick
- 8. The President of the University of Prince Edward Island

A Chairperson whose term is five years, renewable for a second five-year term, is elected by the Board. Quorum is five members. Decisions must have the unanimous consent of those members voting (with the exception of a vote declaring that the service of a given designated installation is inadequate; in this case, the designated member is ineligible to vote). Approximately two meetings are held each year. The MPHEC performs secretarial duties for the Board and manages the budget.

Network Committee

The NB/PEI Educational Computer Network Committee (Network Committee) consists of one representative nominated by each of the parties of the Agreement. Each party also nominates one alternate representative to the Network Committee. Members of the Network Committee and alternate representatives are appointed for an indefinite period of time or are replaced upon recommendation in writing to the Chairperson of the Board by the party who nominated that representative or alternate. The Chairperson, nominated by the Network Committee, is a non-voting member and is approved by the Board for a maximum of two 2-year terms. The MPHEC representative is the Secretary of the Network Committee. The Network Committee has approximately 5-6 meetings annually. The duties of the Network Committee are listed in Appendix A of the ECN Agreement. The Network Committee must make decisions by a unanimous consent of members voting.

The Network Committee submits, on or before January 15, a recommended Network Plan and Budget to the Vice-President (Finance) of each of the member institutions for confirmation. Once confirmed, the Network Committee submits the Network Plan and Budget to the Board for approval. At the end of the year, the Committee drafts an annual report for approval by the Board showing its performance compared to the Network Plan from the beginning of the fiscal year.

Designated installation

UNB is currently the designated, and the major, installation for the Network. As a designated installation, computer facilities and ICT services are provided by UNB to all ECN members as detailed in Appendices 2 and 3 of the ECN Agreement.

3. Meetings

The ECN Network Committee met six times:

| Université de Moncton, Moncton Campus |
|--|
| University of New Brunswick, Saint John |
| Campus |
| Université de Moncton, Edmundston Campus |
| Université de Moncton, Moncton Campus |
| Teleconference |
| Teleconference |
| Teleconference |
| |

During the 2013-2014 fiscal year, the ECN Board held two meetings at which members approved the ECN's 2012-13 Annual Report and 2014-15 Budget as well as the ECN's first-ever multi-year strategic plan, covering fiscal years 2014-15 to 2016-17.

A list of the Board and Network Committee members is included in Appendix I. The activities of the ECN are summarized in the next section.

4. Activities of the ECN

4.1 Connectivity

NB REN (formerly NB ORAN)

The NB Research and Education Network (REN) is a joint initiative among CANARIE Inc., the Province of New Brunswick (PNB), the ECN, the National Research Council of Canada in NB, the New Brunswick Community College (NBCC) and Collège communautaire du Nouveau-Brunswick (CCNB). It provides a high-speed network that maximizes capacity while reducing capital and operating costs for all partners, and facilitates cutting-edge research and collaboration regionally and globally.

The network is comprised of fibre installations, redundant links around New Brunswick, improved bandwidth, and state-of-the-art equipment. Fredericton, Saint John and Moncton are connected through a new fibre build; the remaining centers currently rely on leased services.

On April 4, 2014, the provincial government, CANARIE, and F6 Networks announced that they are investing in a new high-speed, dark-fibre network through New Brunswick as part of a coast-to-coast national research and education network

(http://www.canarie.ca/en/news/release/press).

The photo on the right was taken during the announcement. This announcement

provides an excellent opportunity for the NB ECN members and their partners to utilize this private fibre within NB to reduce their current reliance on leased services in the northern part of the province (and possibly

reduce the amount spent by the ECN and its partners on this shared service). UNB has applied for funding from CANARIE, on behalf of the ECN and its partners, to assist in purchasing the capital equipment required to leverage this opportunity.



Left to right: Luc Bourgoin (CCNB), Peter Jacobs (UNB), Katherine Anthonisen (CANARIE), Paul Robichaud(MLA), David Alward (Premier), Jocelyne Roy-Vienneau (UdeM), Claude Landry (MLA), Tom Rivington (F6 Networks), Terry Nikkel (UNB)

The completed disaster recovery site at UNB Fredericton is the new home for the retired ECN router. In the event of a disaster at UNB's main Data Centre, this cold standby router can be quickly deployed to recover ECN connectivity for sites based in Fredericton.

CANARIE and the provincial ORANs decided to discontinue using the term "ORAN – Optical Regional Advanced Network". The national network, operated by CANARIE, will now be known as the Canadian NREN (National Research and Education Network). The provincial network will be referred to as NB REN (NB Research and Education Network).

PE REN (formerly PEI ORAN)

Through the PEI ORAN, connections to the CANARIE National Research and Education Network (NREN) are made to the University of Prince Edward Island, Holland College, and the provincial

Department of Education. Although the PEI ORAN is not directly connected to the NB ORAN, the two provincial high-speed networks are interconnected through the CANARIE NREN. Through the NREN, institutions in PEI have access to international research and education networks as well as services such as CANARIE's Content Delivery Service. The network continues to be extremely reliable with no interruption in service on the Charlottetown to Halifax connection.

The provincial network will be referred to as PE REN (PEI Research and Education Network) in the future to reflect the same changes at the national level, as noted in the previous section.

Commodity internet services

ECN members have been jointly issuing RFPs for internet services for many years. A joint RFP for commodity internet services was launched in 2012 by ECN members and NRC, awarded to Bell Aliant. The RFP for 2012-2013 was awarded to BellAliant. The contract was extended in December 2013 to April 30, 2014. ECN members provide Internet access to the New Brunswick Community College (NBCC) and Collège Communautaire du Nouveau-Brunswick (CCNB) on a full cost-recovery basis. This was initially a one-year trial but was extended into 2013-2014.

In 2011, CANARIE established direct connections with large Internet providers such as Google and Microsoft, allowing ECN traffic to travel over the Ultra-Highspeed CANARIE network. Since then, approximately one-third of the ECN's network traffic has been diverted to the CANARIE Content Delivery Service (CDS) thus providing improved performance and reducing overall costs for Internet services (and requiring less bandwidth from the commercial Internet provider). To provide an example of the savings enjoyed by the consortium, the graph to the right shows the change in the rate (dollars per megabit per second per month over the past fourteen years in New Brunswick).



In 2013-14, the ECN purchased a statistics appliance providing useful and interesting data on the types of traffic and the volumes of traffic by member institution.

4.2 Shared Technical Services

Members currently jointly purchase and deploy anti-SPAM and anti-virus services, managed by UNB. The combination of these two services (greatly) benefits all ECN institutions by dramatically reducing junk mail and malicious attacks through email and general Internet use by users. Contracts are periodically updated through an RFP process.

The ECN has agreed to contribute one-time funding of up to \$150,000 to the costs of renovating the UNB data center. This strategic investment not only ensures the reliability and continuity of existing ECN shared services but recognizes that, of all the computing facilities in the ECN, UNB's will be the largest and most technically advanced. Once the renovation is complete, UNB will offer data center space to ECN members to house production or disaster recovery/backup systems and servers on a cost-recovery basis. Furthermore, the Université de Moncton is currently upgrading its data center and intends to provide space to ECN members for production or disaster recovery/backup purposes, thus potentially further reducing the need for data center facilities at individual ECN locations.

The ECN is planning to expand its shared services by implementing SharePoint (a Microsoft software platform used for file sharing and co-editing, document and records management, and collaboration projects) at a single ECN site. All ECN member institutions will be provided access to the site to assess the suitability of SharePoint for meeting individual institutional needs. At the time of writing this document, Sharepoint has been deployed at UNB by UNB and Mount Allison staff. The next step is the implementation of federated identify which will allow UNB to provide each member institution its own Sharepoint site within the one instance managed by UNB.

4.3 Joint Purchasing

As identified in Appendix B of the ECN Agreement, UNB negotiates software licenses on behalf of some, or all, of ECN members. Currently, the software being purchased on a joint basis by ECN members includes: Minitab, Waterloo Maple, Kaspersky anti-virus software and SPSS. Through joint purchasing, member institutions save thousands of dollars annually due to the volume licensing discounts offered by vendors.

In addition, following an RFP process, UNB recently signed a contract with Dell for PCs and laptops at preferred pricing. ECN member institutions can opt to purchase from Dell through the UNB contract.

4.4 **Professional Development**

The ECN hosts a one-day workshop for technical staff of ECN member institutions annually. On November 6, 2013, the Université de Moncton hosted a one-day workshop entitled "Technical



-Workshop participant, November 6, 2013 Support – Exploring Efficiencies" for ECN members. The results of the facilitated discussion were summarized in a report with recommendations around three themes: increase professional development, improve the help desk and collaborate within ECN. A follow-up email to conference attendees was sent by the ECN Network Committee on March 8, 2014 identifying activities already underway in these areas and new activities to be undertaken over the next few months as a result of the workshop.

In 2013-14, the ECN funded one employee per campus from member institutions to attend the Atlantic Universities and Colleges Technology Conference (AUCTC): the Atlantic region's annual higher education IT conference. Several ECN Network Committee members participated in a panel discussion at the Atlantic Universities and Colleges Technology Conference (AUCTC) that occurred in June 2013 to discuss the value and benefits of the Dell IT Assessment process to individual institutions and to the consortium.

4.5 National representation

In addition to sharing expertise and realizing economies of scale, an added benefit associated with acting as a collective is the ability to influence organizations such as CANARIE and the Federal Government. ECN members from UNB and UPEI represent the interests of the NB and PEI RENs (and thus the consortium as a whole) on the CANARIE Advisory and Technical Committees and keep ECN member institutions informed of what is happening on the national front. Recently, the President of UNB became a Board member of CANARIE.

By providing a united voice with respect to the collective needs of many of the New Brunswick and Prince Edward Island post-secondary institutions, ECN members become stronger on the

national front. For example, CANARIE released a proposal to implement connection fees for individual institutions in December 2012 as a result of a directive from Industry Canada to develop cost-recovery options for the purpose of complementing the government's three year investment. There was significant opposition across Canada to the proposed connection fees; ECN members representing NB PEI provided input to the discussions and kept the Network Committee and Board apprised of developments (the proposal was ultimately withdrawn).

Several ECN members are also members of the Canadian University Council of Chief Information Officers (CUCCIO) and keep other ECN members apprised of the activities of the organization. Periodically the Executive Director of CUCCIO, who is based in Fredericton, is invited to attend ECN Network Committee meetings to provide updates on current activities and discuss future potential collaboration.

4.6 Sharing of information and best practices

Prior to most of the Network Committee meetings, members submit a site report summarizing activities within their organizations. Time is set aside at these meetings for members to ask each other questions as a way of sharing information and following best practices. Email list-servers for the ECN Network Committee and technical staff are managed by UNB.

5. Financial status

A copy of the approved budget and actual expenditures for 2013-2014 (showing a surplus of \$46,632 [NB: \$78,864; PEI: (\$32,532)]) as well as the balance of the ECN committed funds as at March 31, 2014, is included in Appendix III. The initial projection of using \$88,795 from the surplus was not required for various reasons. Once again, for New Brunswick there was savings on Internet costs over the year thanks to discounted rates received from the provider. Maintenance costs were also lower than budgeted as some equipment was retired. Finally, the contribution to NB REN was lower than budgeted. In PEI, the amount budgeted for the PE REN was funded from a different source.

The ECN's accumulated surpluses of \$511,105 (NB: \$430,914; PE: \$80,191) will be used in upcoming years to fund new initiatives under the consortium's shared services function, as identified in the business plan.

APPENDIX I

Board Members as of March 31, 2014 were:

Institution

Mount Allison University St. Thomas University Université de Moncton University of New Brunswick University of Prince Edward Island Holland College Maritime College of Forest Technology MPHEC

Representative

Dr. Robert Campbell (Chair) Ms. Dawn Russell M. Raymond Théberge Dr. Eddy Campbell Dr. Alaa Abd-El-Aziz Dr. Brian McMillan Mr. Gerry Redmond Ms. Mireille Duguay

Network Committee Representatives and Alternates as of March 31, 2014 were:

Institution

Representative

Alternate

Mount Allison University Mr. Helmut Becker St. Thomas University Mr. Dan Hurlev Université de Moncton M. André Lee University of New Brunswick Mr. Terry Nikkel University of Prince Edward Island Mr. Blair Vessey Holland College Mr. Richard MacDonald Maritime College of Forest Technology Mr. Jim Bowen MPHEC Ms. Rachael Anderson

Mr. Peter Crawshaw Mr. Robert Brewer Ms. Rina Robichaud Mr. John Jackson Mr. Doug Burton Mr. Greg Mermuys Mr. Mike Boucher Ms. Lisa Robichaud

The Chair of the Network Committee was Doug Burton.

APPENDIX II





Prince Edward Island Research and Education Network

APPENDIX III

EDUCATIONAL COMPUTER NETWORK NEW BRUNSWICK AND PRINCE EDWARD ISLAND STATEMENT OF REVENUE AND EXPENDITURES*

| Account DescriptionEudget 2013-2014Actual 2013-2014RevenueProvincial Transfers946,548 26,476 26,476 26,476 26,476 26,476 26,476 26,476 26,476 26,476 200,00Committed Funds88,795 201,819973,014Expenditures1,061,819 973,014973,014Expenditures202,796 202,384202,384Network Shared Services202,796 202,384202,384Telecommunications283,127 150,000256,716PEI Provincial Lines & Internet Access 150,000150,000 91,12391,123Advanced Network Connection 39,00039,000 19,00019,000 10,000Total Recommunications472,127366,639Hardware, software, maintenance Hardware30,000 27,628 118,047 122,934223,896Meetings Network Committee Collaborative Projects Total Hardware, Software, Maintenance13,000 163,10212,352 150,000 163,102Total Expenditures Net revenue (net loss)0 46,632464,473 46,632464,473 46,632Balance, April 1, 2013 Net revenue (loss) for the year464,473 46,632464,473 46,632 | PERIOD ENDED: 3/31/2014 | | |
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| UNB as the designated installation (service provider)202,796202,384Total Network Shared Services202,796202,384Telecommunications283,127256,716PEI Provincial Lines & Internet Access283,127256,716Advanced Network Connection39,00091,123Advanced Network Connections472,127366,839Hardware, software, maintenance30,00027,628Hardware Software118,047122,934Maintenance75,84943,496Total Hardware, Software, Maintenance223,896194,058Meetings13,00012,352Collaborative Projects150,000163,102Total Expenditures1,061,819926,382Net revenue (net loss)046,632NB & PEI Committed Funds Balance as at March 31, 2014:464,473Balance, April 1, 2013464,473Net revenue (loss) for the year464,473 | Expenditures | | |
| Total Network Shared Services 202,796 202,384 Telecommunications PEI Provincial Lines & Internet Access 283,127 256,716 NB Internet Access 150,000 91,123 Advanced Network Connection 39,000 19,000 Total Telecommunications 472,127 366,839 Hardware, software, maintenance 118,047 122,934 Hardware 30,000 27,628 Software 118,047 122,934 Maintenance 75,849 43,496 Total Hardware, Software, Maintenance 223,896 194,058 Meetings 13,000 12,352 Collaborative Projects 150,000 150,750 Total Meetings 163,000 163,102 Total Expenditures 0 46,632 Net revenue (net loss) 0 46,632 Net revenue (loss) for the year 466,632 | | | |
| TelecommunicationsPEI Provincial Lines & Internet Access283,127256,716NB Internet Access150,00091,123Advanced Network Connection39,00019,000Total Telecommunications472,127366,839Hardware, software, maintenance30,00027,628Hardware30,00027,628Software118,047122,934Maintenance75,84943,496Total Hardware, Software, Maintenance223,896194,058Meetings13,00012,352Collaborative Projects150,000150,750Total Meetings163,000163,102Total Expenditures046,632Net revenue (net loss)046,632Net revenue (net loss)0466,473Net revenue (loss) for the year464,473Net revenue (loss) for the year466,473 | | | |
| PEI Provincial Lines & Internet Access 283,127 256,716 NB Internet Access 150,000 91,123 Advanced Network Connection 39,000 19,000 Total Telecommunications 472,127 366,839 Hardware, software, maintenance 30,000 27,628 Hardware 30,000 27,628 Software 118,047 122,934 Maintenance 75,849 43,496 Total Hardware, Software, Maintenance 223,896 194,058 Meetings 13,000 12,352 Collaborative Projects 150,000 150,750 Total Meetings 163,000 163,102 Total Expenditures 0 46,632 NB & PEI Committed Funds Balance as at March 31, 2014: 8alance, April 1, 2013 464,473 Net revenue (loss) for the year 464,473 46,632 | Total Network Shared Services | 202,796 | 202,384 |
| NB Internet Access 150,000 91,123 Advanced Network Connection 39,000 19,000 Total Telecommunications 472,127 366,839 Hardware, software, maintenance 30,000 27,628 Hardware 30,000 27,628 Software 118,047 122,934 Maintenance 75,849 43,496 Total Hardware, Software, Maintenance 223,896 194,058 Meetings 13,000 12,352 Collaborative Projects 150,000 150,750 Total Meetings 163,000 163,102 Total Expenditures 1,061,819 926,382 Net revenue (net loss) 0 46,632 NB & PEI Committed Funds Balance as at March 31, 2014: 464,473 Balance, April 1, 2013 466,32 | | | |
| Advanced Network Connection 39,000 19,000 Total Telecommunications 472,127 366,839 Hardware, software, maintenance 30,000 27,628 Hardware 30,000 27,628 Software 118,047 122,934 Maintenance 75,849 43,496 Total Hardware, Software, Maintenance 223,896 194,058 Meetings 13,000 12,352 Collaborative Projects 150,000 150,750 Total Meetings 163,000 163,102 Total Expenditures 1,061,819 926,382 Net revenue (net loss) 0 46,632 NB & PEI Committed Funds Balance as at March 31, 2014: 464,473 Balance, April 1, 2013 464,473 Net revenue (loss) for the year 466,32 | PEI Provincial Lines & Internet Access | | |
| Total Telecommunications 472,127 366,839 Hardware, software, maintenance 30,000 27,628 Hardware 30,000 27,628 Software 118,047 122,934 Maintenance 75,849 43,496 Total Hardware, Software, Maintenance 223,896 194,058 Meetings 13,000 12,352 Collaborative Projects 150,000 150,750 Total Expenditures 1,061,819 926,382 Net revenue (net loss) 0 46,632 NB & PEI Committed Funds Balance as at March 31, 2014: 464,473 Balance, April 1, 2013 466,32 | | , | |
| Hardware, software, maintenance 30,000 27,628 Hardware 30,000 27,628 Software 118,047 122,934 Maintenance 75,849 43,496 Total Hardware, Software, Maintenance 223,896 194,058 Meetings 13,000 12,352 Network Committee 130,000 150,750 Collaborative Projects 150,000 150,750 Total Meetings 163,000 163,102 Total Expenditures 0 46,632 Net revenue (net loss) 0 46,632 NB & PEI Committed Funds Balance as at March 31, 2014: 466,473 Balance, April 1, 2013 466,473 Net revenue (loss) for the year 466,32 | | | |
| Hardware 30,000 27,628 Software 118,047 122,934 Maintenance 75,849 43,496 Total Hardware, Software, Maintenance 223,896 194,058 Meetings 13,000 12,352 Network Committee 150,000 150,750 Collaborative Projects 150,000 163,102 Total Meetings 1,061,819 926,382 Net revenue (net loss) 0 46,632 NB & PEI Committed Funds Balance as at March 31, 2014: 464,473 Balance, April 1, 2013 466,322 | Total Telecommunications | 472,127 | 366,839 |
| Software 118,047 122,934 Maintenance 75,849 43,496 Total Hardware, Software, Maintenance 223,896 194,058 Meetings 13,000 12,352 Network Committee 13,000 12,352 Collaborative Projects 150,000 150,750 Total Meetings 163,000 163,102 Total Expenditures 0 46,632 Net revenue (net loss) 0 46,632 NB & PEI Committed Funds Balance as at March 31, 2014: 464,473 Balance, April 1, 2013 464,473 Net revenue (loss) for the year 466,632 | | | |
| Maintenance 75,849 43,496 Total Hardware, Software, Maintenance 223,896 194,058 Meetings 13,000 12,352 Network Committee 13,000 150,750 Collaborative Projects 150,000 150,750 Total Meetings 163,000 163,102 Total Expenditures 1,061,819 926,382 Net revenue (net loss) 0 46,632 NB & PEI Committed Funds Balance as at March 31, 2014: 464,473 Balance, April 1, 2013 464,473 Net revenue (loss) for the year 464,632 | | | |
| Total Hardware, Software, Maintenance 223,896 194,058 Meetings 13,000 12,352 Network Committee 13,000 12,352 Collaborative Projects 150,000 150,750 Total Meetings 163,000 163,102 Total Expenditures 1,061,819 926,382 Net revenue (net loss) 0 46,632 NB & PEI Committed Funds Balance as at March 31, 2014: 464,473 Balance, April 1, 2013 466,632 | | | |
| Meetings 13,000 12,352 Collaborative Projects 150,000 150,750 Total Meetings 163,000 163,102 Total Expenditures 1,061,819 926,382 Net revenue (net loss) 0 46,632 NB & PEI Committed Funds Balance as at March 31, 2014: 464,473 Balance, April 1, 2013 466,632 | | | |
| Network Committee 13,000 12,352 Collaborative Projects 150,000 150,750 Total Meetings 163,000 163,102 Total Expenditures 1,061,819 926,382 Net revenue (net loss) 0 46,632 NB & PEI Committed Funds Balance as at March 31, 2014: 464,473 Balance, April 1, 2013 464,473 Net revenue (loss) for the year 464,632 | l otal Hardware, Software, Maintenance | 223,896 | 194,058 |
| Collaborative Projects150,000150,750Total Meetings163,000163,102Total Expenditures1,061,819926,382Net revenue (net loss)046,632NB & PEI Committed Funds Balance as at March 31, 2014: Balance, April 1, 2013 Net revenue (loss) for the year464,473 46,632 | | | |
| Total Meetings163,000163,102Total Expenditures1,061,819926,382Net revenue (net loss)046,632NB & PEI Committed Funds Balance as at March 31, 2014: Balance, April 1, 2013 Net revenue (loss) for the year464,473 46,632 | | | , |
| Total Expenditures1,061,819926,382Net revenue (net loss)046,632NB & PEI Committed Funds Balance as at March 31, 2014: Balance, April 1, 2013 Net revenue (loss) for the year464,473 46,632 | • | | |
| Net revenue (net loss)046,632NB & PEI Committed Funds Balance as at March 31, 2014: Balance, April 1, 2013 Net revenue (loss) for the year464,473 46,632 | Total Meetings | 163,000 | 163,102 |
| NB & PEI Committed Funds Balance as at March 31, 2014:Balance, April 1, 2013464,473Net revenue (loss) for the year46,632 | Total Expenditures | 1,061,819 | 926,382 |
| Balance, April 1, 2013464,473Net revenue (loss) for the year46,632 | Net revenue (net loss) | 0 | 46,632 |
| Balance, April 1, 2013464,473Net revenue (loss) for the year46,632 | NB & PEI Committed Funds Balance as at March 31, 2014: | | |
| | Balance, April 1, 2013 | | |
| Balance, March 31, 2014 511,105 | Net revenue (loss) for the year | | 46,632 |
| | Balance, March 31, 2014 | | 511,105 |

*as per MPHEC audited financial statements

EDUCATIONAL COMPUTER NETWORK NEW BRUNSWICK STATEMENT OF REVENUE AND EXPENDITURES*

PERIOD ENDED: 3/31/2014

| Account Description | Budget 2013-2014 | Actual 2013-2014 |
|---|---------------------|---------------------|
| | | 2010 2014 |
| Revenue | | |
| Provincial Transfers | 860,948 | 860,938 |
| Committed Funds | 44,046 | 0.00 |
| Total Revenue | 904,994 | 860,938 |
| Expenditures | | |
| Network Shared Services | | |
| UNB as the designated installation (service provider) | 192,657 | 192,265 |
| Total Network Shared Services | 192,657 | 192,265 |
| Telecommunications | | |
| NB REN contribution | 230,000 | 200,000 |
| Internet Access | 150,000 | 91,123 |
| Advanced Network Connection (CA*Net4) | 24,000 | 19,000 |
| Total Telecommunications | 404,000 | 310,123 |
| Hardware, software, maintenance | | |
| Hardware | 30,000 | 27,628 |
| Software | 93,257 | 98,683 |
| Maintenance | 62,580 | 31,152 |
| Total Hardware, software, maintenance | 185,837 | 157,463 |
| Meetings | | |
| Network Committee | 10,000 | 9,831 |
| Collaborative Projects | 112,500 | 113,093 |
| Total Meetings | 122,500 | 122,923 |
| Total Expenditures | 904,994 | 782,774 |
| Net revenue (net loss) | | |
| | 0 | 78,164 |
| NB Committed Funds Balance as at March 31, 2014: | | |
| Balance, April 1, 2013 | | 352,750 |
| Net revenue (loss) for the year | | 78,164 |
| Balance, March 31, 2014 | | 430,914 |
| | | |

*as per MPHEC audited financial statements

EDUCATIONAL COMPUTER NETWORK PRINCE EDWARD ISLAND STATEMENT OF REVENUE AND EXPENDITURES*

PERIOD ENDED: 3/31/2014

| Account Description2013-20142013RevenueProvincial Transfers85,60088Direct HC/UPEI Transfer26,47620Committed funds44,749156,825113Total Revenue156,825113ExpendituresNetwork Shared Services156,825113 | ctual 3-2014 55,600 66,476 0 2,076 |
|---|---|
| Provincial Transfers85,60083Direct HC/UPEI Transfer26,47620Committed funds44,7491Total Revenue156,825113ExpendituresNetwork Shared Services1 | 6,476 0 |
| Direct HC/UPEI Transfer26,47620Committed funds44,74944,749Total Revenue156,825112ExpendituresNetwork Shared Services20 | 6,476 0 |
| Direct HC/UPEI Transfer26,47620Committed funds44,74944,749Total Revenue156,825112ExpendituresNetwork Shared Services20 | 6,476 0 |
| Committed funds44,749Total Revenue156,825ExpendituresNetwork Shared Services | 0 |
| Expenditures Network Shared Services | 2,076 |
| Network Shared Services | |
| | |
| LINB as the designated installation (service provider) 10,139 1/ | |
| UND as the designated installation (service provider) | 0,119 |
| | 0,119 |
| Telecommunications | |
| Provincial Lines & Internet Access 53,127 5 | 6,716 |
| Advanced Network Connection 15,000 | 0 |
| Total Telecommunications68,12750 | 6,716 |
| Hardware, software, maintenance | |
| Hardware 0 | 0 |
| | 4,251 |
| | 2,344 |
| Total Hardware, software, maintenance38,05936 | 6,595 |
| Meetings | |
| | 2,521 |
| | 7,658 |
| Total Meetings40,50040 | 0,179 |
| Total Expenditures156,82514 | 3,608 |
| Net revenue (net loss) | |
| <u> </u> | 1,532) |
| PEI Committed Funds Balance as at March 31, 2014: | |
| Balance, April 1, 2013 11 | 1,723 |
| Net revenue (loss) for the year (3 | 1,532) |
| Balance, March 31, 2014 8 | 0,191 |

*as per MPHEC audited financial statements