

MINUTES OF ACZISC MEETING #19

Atlantic Coastal Zone Information Steering Committee

Date: Monday, 7 October 1996 - 0900 hrs.

Location: Madawaska Room, Agriculture Research Station
Lincoln Road, Fredericton, New Brunswick

NAME	AFFILIATION	TEL. NO.
Present: * indicates ACZISC member		
Paul Bellemare*	Fisheries and Oceans Canada	(902) 426-3497
Alain Bourgeois	Pêches et Océans (for Yvan Vigneault*)	(418) 648-7676
Michael Butler*, Chair	Oceans Institute of Canada	(902) 494-1977
Connie Carruthers	Industry Canada (for Brian McShane*)	(902) 426-9905
Réjean Castonguay*	Province of New Brunswick	(506) 453-3917
Paul Currie	ADI Ltd.	(506) 452-9000
Brad Fay*	Province of Nova Scotia	(902) 424-4966
Randy Gillespie	Province of Newfoundland and NATI (for Neil MacNaughton* and Mike Cole*)	(709) 729-6096
Betty Godin	NB Dept. of Municipalities, Culture and Housing	(506) 453-2171
Sue Hanham	University of New Brunswick	(506) 453-4698
Larry Hildebrand*	Environment Canada	(902) 426-9632
Claudette LeBlanc	Oceans Institute of Canada	(902) 494-1977
John Legault	Fisheries and Oceans Canada	(506) 851-6221
Art Longard*	Province of Nova Scotia	(902) 424-4560
Dale Nicholson	Canadian Hydrographic Service	(902) 426-9558
Barry O'Rourke	Compusult Ltd.	(709) 745-7914
Jeffrey Parks	GIAC (for Andy Power*)	(506) 457-9627
Andy Sherin*	Natural Resources Canada	(902) 426-7582
Curt Speight	NS Geomatics Centre	(902) 667-7231
Eric Theriault*	Environment Canada	(902) 426-9558

1. **WELCOME AND INTRODUCTION OF PARTICIPANTS**

Mike Butler, ACZISC Chair, called Meeting #19 to order at 09:00 hrs. He welcomed guests and thanked Réjean Castonguay for making arrangements for the meeting room, including the computer and Internet connection, and the Province of New Brunswick for providing lunch. A roundtable introduction of all participants followed.

2. **ADOPTION OF AGENDA, AND REVIEW AND APPROVAL OF MINUTES FOR MEETING #18**

The provisional Agenda for Meeting #19 was reviewed. Mike Butler noted that the presentation on the NB Coastal Land Use Policy would be made by Betty Godin, NB Department of Municipalities, Culture and Housing. He added that the relevance of the ACZISC to the private sector would be discussed under New Business. The agenda was approved (copy attached).

The minutes of ACZISC Meeting #18 were reviewed and the following revision was made:

Page 12: **NOVA SCOTIA:** fourth paragraph... "The NS Land Use Committee is being reviewed and may be moved to Priorities and Planning." should read "**The future status of the NS Land Use Committee is being reviewed by Priorities and Planning.**"

The minutes were approved with the above revision. The revised minutes will be posted on the ACZISC website at <http://www.dal.ca/aczisc/aczisc> in WP5.1 format.

3. **STATUS OF ACTION ITEMS**

The status of the Action Items from Meeting #18 were reviewed. All Action Items were carried out other than the following:

ACTION 18.14: *Secretariat to develop email profiles for each of the ACZISC members to determine word-processing capabilities and encoding requirements for documents sent as attachments.*

STATUS: In progress.

ACTION 18.18: *Brian Nicholls to provide, when available, copies of a literature review of coastal zone management practices worldwide and an analysis of their application to Canada.*

STATUS: The document will be provided when available.

ACTION 18.20: *Larry Hildebrand to provide the Secretariat with a copy of the report on ICZM in Canada tabled at the OECD meeting in Paris last July.*

STATUS: The document will be provided when available.

4. **ACZISC WORKPLAN**

MEMBERSHIP: Mike Butler reported on developments regarding ACZISC membership:
Province of Québec: The ACZISC Secretariat has written a letter to Richard Chatelain, Ministère de l'Environnement et de la Faune (Environment and Wildlife) regarding the Province of Québec's participation in the ACZISC. Mr. Chatelain is familiar with ACZISC activities as he has been on the mailing list for ACZISC minutes for some time. Alain Bourgeois, DFO Laurentian Region, is acting as a liaison between the ACZISC and the Province of Québec through his work with the provincial departments of environment and fisheries.

Agriculture and Agri-Food Canada: The ACZISC Secretariat has been in contact with Christian de Kimpe, Coordinator, Natural Resources Section, Agriculture and Agri-Food Canada, Ottawa. Contact is also being maintained with Linnell Edwards, Research Scientist at the Agriculture Research Centre in Charlottetown. Mike commented on the importance of securing Agriculture Canada's participation in the ACZISC in view of the significant impact of agricultural practices on coastal zone management.

Industry Canada: The ACZISC Secretariat has been in contact with Industry Canada re naming two representatives to the ACZISC. Connie Carruthers has been proposed as the second member in addition to Brian McShane. Her area of responsibility and interest is related to ACZISC activities.

An up-to-date list of ACZISC members with mailing and email addresses and telephone and fax nos. is attached.

BUDGET/FUNDING/SUPPORT AND WORKPLAN: Mike Butler circulated the ACZISC 1995/96 and 1996/97 Budget (copy attached). The membership dues from one province and one federal department are outstanding.

ACTION 19.1: Members to review the ACZISC budget and provide comments to the Secretariat ASAP.

Mike commented that the major financial challenge facing the ACZISC was securing \$50K in matching funds from the federal government which are necessary for the ACZISC to continue operating. Continued financial support by the Council of Maritime Premiers, currently \$50K per year, is dependent on obtaining matching federal funding. The federal Working Group on Integrated Coastal Zone Management, identified as the appropriate body to approach in this regard, has been contacted. The jurisdictions represented on the Working Group are Agriculture and Agri-Food Canada, Environment Canada (EC), Fisheries and Oceans Canada (DFO) and Natural Resources Canada (NRCan).

Larry Hildebrand stated that the Working Group's terms of reference and operating structure were loosely defined at this time and that the Working Group will be looking at priorities nationally. A link with the ACZISC is being considered by the Working Group because it requires a good information base to be effective. The Working Group will be finalizing its operating approach in the near future.

Larry added that a regional committee of the Working Group had been struck. It will be focusing on the Bay of Fundy area initially. Alex Bielak, Manager of the Science Division, EC, heads the regional committee. A meeting of the committee will be held tomorrow and Andy Sherin will be representing NRCan at the meeting. Paul Bellemare commented that the ACZISC could facilitate the work of the Working Group and the regional committee.

DATABASE DIRECTORY: Claudette LeBlanc, chair of the Database Directory Working Group, reported that Version 3 of the Atlantic Coastal Zone Database Directory had been posted on the WWW with the assistance of the NS Geomatics Centre (NSGC) and Nautical Data International (NDI) Ltd. The report writer used to generate HTML reports from the database was developed by Alan Lane, NSGC and the search routines and the posting of the Directory on the WWW was

carried out by Jeremy Squires, NDI. She stated that future developments re the Directory on the WWW could include developing a geographic search capability and on-line updating.

An on-line demonstration of the Directory was given by Claudette. The three search options were demonstrated, i.e. by owner from a list, by keyword from a list, and by entering keywords. Claudette pointed out that the current method of displaying search results for search options 1 and 2 with index ID nos. only would be changed to displaying search results with the titles of the entries as is the case with option 3. The following comments were made by the participants:

- John Legault: Split-screen frames could be considered.
- Paul Bellemare: The URL for the Directory must be publicized as widely as possible.
- Barry O'Rourke: The Directory should be registered with as many search engines as possible, including a list of tags or keywords when appropriate.
- Andy Sherin: The Directory is the first on-line application of the CGSB standard for Directory Information Describing Digital Geo-referenced Data Sets.

Claudette reported that an extensive email distribution list was being developed to which a notice would be sent re the availability of the Directory on the WWW.

Members were asked to enquire about the availability of their jurisdiction's policies re data access, pricing, distribution, etc. on the WWW and to notify Claudette of the URL. Links to these URLs will be provided on the Database Directory homepage.

ACTION 19.2: ACZISC members to notify Claudette LeBlanc (email: leblancc@fox.nstn.ca) ASAP of organizations which and individuals who should be notified re the availability of the Atlantic Coastal Zone Database Directory on the WWW.

ACTION 19.3: ACZISC Secretariat to widely distribute ASAP a notice re the availability of the Directory at <http://www.ndi.nf.ca/ndi/aczisc/index.html>

ACTION 19.4: ACZISC Secretariat to register the Database Directory with WWW search engines ASAP.

ACTION 19.5: ACZISC members to notify Claudette LeBlanc ASAP of the URL for their jurisdiction's policies re data access, pricing, distribution, etc.

C-CODE: Andy Sherin, co-chair of the C-CODE (Consortium for Coastal and Ocean Data Exchange) Working Group, announced that Andy Montgomery had resigned as C-CODE co-chair due to his new responsibilities. He has been seconded to the Department of Justice where he will be working on the Juvenile Delinquent Act. A new co-chair will be sought.

Andy reported that a joint meeting of the C-CODE and Coastal Mapping Working Groups was held on 18 September at the Oceans Institute of Canada (OIC) to discuss a collaborative project. It was concluded that documenting existing, multi-partnership, coastal zone mapping projects which demonstrate the C-CODE objectives would be an effective method of furthering the goals of both working groups.

Two potential projects were identified: the Nova Scotia coastal thematic prototype map under development by the NSGC, and a proposed update of the FMG Database (Bay of Fundy, Gulf of Maine and Georges Bank). Alan McIver, EC, has submitted a proposal to the Program for Energy Research and Development (PERD) to update FMG because of the possibility that the moratorium on oil and gas exploration on Georges Bank will not be renewed when it expires on 1 January 2000.

The C-CODE Working Group will monitor and carry out a systematic review of the projects during their development and implementation phases. Reports outlining successes and problem areas, and including recommendations, will be prepared. Meetings will be held on a regular basis with the project partners and a major workshop will be held at the end of the review process. Andy added that other projects could be considered; however, the working groups must be careful not to "spread themselves too thin".

The C-CODE Working Group will also monitor major national and international initiatives:

- Canadian Spatial Data Infrastructure (CSDI): CSDI will foster inter-operable database structures. C-CODE will monitor CSDI plans under development and report to the ACZISC. A CSDI presentation was made by Bob O'Neill, NRCan, at the Canadian Council on Geomatics (CCOG) meeting in Halifax last week. Brad Fay commented that participants at the CCOG meeting had discussed at length vertical integration of data and associated problems, e.g., ownership.
- North American Spatial Data Infrastructure (NSDI): NSDI is an American initiative which utilizes clearinghouses for data distribution. A number of these clearinghouses are non-U.S. based. Andy suggested that the ACZISC Database Directory on the WWW could become a clearinghouse if a conversion was developed between the Canadian and American standards for metadata. He added that this would provide the ACZISC with access to programs and expertise such as the geographical search capability being developed for NSDI. He distributed a document on clearinghouse activity (copy attached).

Other networking and data integration initiatives mentioned include:

- Mercator, developed by the Department of National Defence
- Land Information Network, developed by the Earth Science Sector of Geomatics Canada, NRCan
- Sealane, developed by DFO to provide access to information via the WWW. *Information in Sealane is available at <http://207.167.196.2/sealane/splash.html>.*
- GeoNova, developed by the Province of Nova Scotia.

Paul Bellemare reported that Mercator had received funding and that progress was being made. The private sector is currently doing work on data warehousing, etc. He suggested that it would be beneficial if the various agencies carrying out exercises similar to Mercator and the Land Information Network could be brought together to determine how these initiatives relate and how they could fit together. Paul added that these initiatives were also closely linked to standards. He suggested that C-CODE organize a meeting to review the major Canadian data integration programs under way or being planned.

ACTION 19.6: C-CODE Working Group to organize an "awareness meeting" prior to the next ACZISC meeting to identify and provide an overview of the major data integration programs currently under way in Canada.

STANDARDS: The Coastal Mapping Standards Working Group is co-chaired by Paul Bellemare and Réjean Castonguay. Paul commented that a number of standards-related initiatives were taking place in the region, nationally and internationally. These include initiatives of the ACZISC, CCOG, the Inter-Agency Committee on Geomatics (IACG), the Provinces, etc. Also several standards are being implemented, including DIGEST, S57, etc. Paul questioned how all these initiatives could be pulled together in Atlantic Canada to establish standards.

Réjean stated that there was an immediate requirement for the establishment of standards at the provincial level. He added that he would be meeting with Ed Light, Land Information Analyst, NS Department of Municipal Affairs, on 24 November to discuss standards from the NB and NS perspective.

Paul and Réjean suggested that, as with C-CODE, there was a need for an exploratory meeting to identify all the standards-related programs and activities being carried out by various groups and committees in Atlantic Canada. The purpose of the meeting would be to identify responsibilities, mandates, successes and success factors, and agreements and disagreements. A long-term plan of action for implementing standards on a step-by-step basis could then be developed. Réjean emphasized that goals in the action plan would have to be achievable. Paul added that copyrights should not be dealt with initially.

The following comments were made:

Brad Fay: There is a natural tendency to resist standards which are imposed; this must be overcome. Standards are required for the vertical integration of data and opportunities must be grabbed. For example, the CCOG proposal for integrating data for the road network is both timely and achievable as a demonstration project for standards.

Paul Bellemare: The proposed FMG update could also be used for standards identification.

Andy Sherin: It will be important to invite vendors to the meeting as it is vital that they be on side.

Barry O'Rourke: Inter-operability and standards can not be separated.

ACTION 19.7: Standards Working Group to organize an "awareness meeting" prior to the next ACZISC meeting to identify the standards-related programs and activities being carried out by various groups and committees in Canada and to develop a plan of action for implementing standards.

Paul suggested that meeting participants read the recommendations of the three ACZISC standards workshops held to date prior to the awareness meeting. These have been distributed to members.

ACTION 19.8: ACZISC members to familiarize themselves with the recommendations of Standards Workshops 1, 2 and 3 prior to the meeting. If required, these are available from the Secretariat.

COASTAL MAPPING: The Coastal Mapping Working Group is co-chaired by Curt Speight, NSGC and Eric Theriault, EC. Eric reported that a Coastal Mapping Workshop had been held at EC in Dartmouth on 29 May. The Workshop report was produced and distributed with the assistance of the NSGC mid-July.

Eric stated that it was agreed by the Coastal Mapping and C-CODE working groups at the joint meeting held on 18 September to document the development and implementation of specific coastal mapping projects. One of the identified projects is the NS prototype coastal thematic map under development by the NSGC.

Curt reported on the prototype map which will consist of two major components:

- Base Map: This will be derived from the NS coastal base map series being developed by the NSGC in collaboration with CHS and NDI Ltd.
- Thematics/Resource Information: This will be derived from several sources, including provincial departments, community groups, DFO, EC, etc.

The prototype is being developed for an area in the Annapolis Basin. Curt added that the base map component should be completed by the end of October. Examples of the NS coastal base map series were circulated for review by Art Longard.

ICOIN: Mike Butler reported that ICOIN information can be obtained at <http://web.meds.dfo.ca> on the WWW. He commented that the ICOIN Project Office had produced valuable tools and technology that could be useful to other similar initiatives. Hank Jones, ICOIN Project Officer, is also involved in DFO's Sealane initiative. Mike suggested that this may be providing an opportunity to link ICOIN and Sealane technologies. Documentation on ICOIN is available.

ECNASAP: Mike Butler, co-chair (with Joe Arbour and Andy Sherin) of the Canadian ECNASAP Project Management Committee, briefed participants on the Canada/U.S. East Coast of North America Strategic Assessment Project (ECNASAP). An ECNASAP paper session and workshop took place at Coastal Zone Canada '96 in Rimouski, 12-17 August 1996. A summary document prepared for the paper session was distributed (copy attached). Also papers on ECNASAP are being presented at conferences worldwide by DFO and EC personnel in particular.

The Toolbox application developed for ECNASAP is being well received.

The Offshore Case Study project team is continuing to liaise with the National Marine Fisheries Service (NMFS) at Woods Hole re groundfish species aggregation and assemblage analysis. There is a possibility of linkages with other similar initiatives in Europe.

The Inshore Case Study focuses on shellfish. A presentation was made by Joe Arbour on the Case Study at a meeting of the Gulf of Maine Council on the Marine Environment (GoM CME) held at the Algonquin Hotel in St. Andrews, NB on 19-20 September. Possible linkages are being explored between the ECNASAP Inshore Case Study and GoM CME projects.

The Inshore Case Study is now moving into the area of aquaculture. A workshop is being organized for the spring. The Shellfish Register and the final report of the St. Andrews Workshop held in March 1995 will be published shortly.

PASSAMAQUODDY/ICOIN: Dale Nicholson, chair of the technical committee overseeing the Passamaquoddy/ICOIN project, stated that the project was on track and that Paul Currie, ADI, would be present during the roundtable to brief participants on the status of the project.

Paul Bellemare added that the project was addressing three issues: Spill Response; Habitat Protection; and Sustainable Development. The project has been funded in part under ACOA's Atlantic Geomatics Alliance.

The base mapping component of the Passamaquoddy/ICOIN system was demonstrated successfully during the CANUSLANT exercise held on 23-26 September in Passamaquoddy Bay. The full capability of the Spill Response system was not demonstrated, however, as the primary system in use for the exercise was the system developed by EC for the Habitat Sensitivity Mapping Program. Jeffrey Parks added that feedback received on the Spill Response system at the CANUSLANT wrap-up session was accordingly limited. *Information on CANUSLANT is available at <http://www.gov.nb.ca/canuslant/canuslant.htm>.*

COMMUNICATIONS: The ACZISC Communications Working Group is chaired by Mike Butler. He reported that the Secretariat was making progress re developing email profiles for each of the ACZISC members. This will facilitate the distribution of documents as attachments.

An ACZISC newsletter was produced and will be distributed in the registration packages for the Geomatics Atlantic conference scheduled for 7-9 October in Fredericton. The distribution of ACZISC newsletters in registration packages of relevant conferences is proving to be an effective means of communication and publicity.

The ACZISC Homepage has been further developed; an on-line demonstration was given. It was suggested that a policy be developed by the Communications Working Group for providing links in the ACZISC and Database Directory homepages.

ACTION 19.9: *Communications Working Group to formulate a policy for providing links to URLs of general interest in the ACZISC and Database Directory homepages ASAP.*

5. **ROUNDTABLE REVIEW OF COASTAL ZONE ACTIVITIES**

ENVIRONMENT CANADA: Eric Theriault reported that he was continuing his involvement in the Atlantic Region Habitat Sensitivity Mapping Program. A distribution licence for NRCan's NTS base maps used in the Mapping Program should be finalized by the end of October. The licence will allow EC to distribute the base maps in various formats, e.g., by layer. A pricing structure is being negotiated which will include a royalty for NRCan and an up-front cost. NRCan is the only data provider to the Habitat Sensitivity Mapping Program with which a distribution licence is currently being negotiated. Other data providers will now be contacted. A marketing plan is being developed.

Andy Sherin stated that the base maps are available in various formats from NRCan but that the COGIF format was the only one which was guaranteed to contain all of the data.

Eric stated that a contract will be issued for oil spill mapping for the portion of NF not mapped to date. Discussions are also taking place with Jim Dempsey, Cormorant Ltd., re mapping environmental data for Voiseys Bay.

Larry Hildebrand reported that the coastal zone would be a focus of activity for the NS Roundtable on the Environment and Economy. Two Working Groups will address respectively the establishment of a Centre of Excellence for Integrated Coastal Zone Management (ICZM) and the implementation of Coastal 2000 in support of community-based coastal zone management, including initiatives like ACAP and the DFO coastal projects.

Larry reported that the CZC'96 conference held in Rimouski in August had been a success. Two declarations in support of ICZM and the proposed Canada Oceans Act were adopted by the Conference participants. The declarations will be sent to the Premiers of the Provinces and to the Minister of Fisheries and Oceans.

A report outlining the status of ICZM in Canada was submitted to the Organization for Economic Development (OECD) in July 1996. The OECD will be using the Canadian and other national reports to determine progress made re ICZM. An overall status report will be prepared by the OECD.

A Canadian report was presented by Cheryl Fraser, A/ADM Policy, DFO Ottawa, to the UN Commission on Sustainable Development in New York (18 April - 3 May 1996). The paper outlines progress made in Integrated Coastal Area Management by Canada since UNCED '92.

ACTION 19.10: Larry Hildebrand to provide the Secretariat with a copy of the Canadian report to the UN Commission on Sustainable Development in New York.

A Eurocoast conference, Littoral '96, was held two weeks ago in Portsmouth, England. Eurocoast is an association of scientists, engineers and decision-makers within the European Community, providing a network of cooperation and exchange between different disciplines and interests. Participants at Littoral '96 expressed concerns with the plethora of coastal zone conferences being held around the world. They suggested that each conference address the same issues to compare results and recommendations, etc. Larry stated that the Internet will be a great tool for data exchange and collaboration. Eurocoast is interested in linking with the CZC Association. *Information on Littoral '96, including how to obtain a copy of the proceedings, is available at <http://strabo.geog.port.ac.uk/conf/littoral/littoral.htm>.*

NOVA SCOTIA: Art Longard reported that Coastal 2000 has been revised and condensed. The NS departments of Fisheries and Environment have identified the need for two pilot projects. An RFP is being drafted. As mentioned by Larry, implementation of Coastal 2000 and the establishment of a Centre of Excellence for Integrated Coastal Zone Management have become objectives of the NS Roundtable on the Environment and Economy.

Base maps have been provided by NS to communities carrying out coastal inventory and mapping projects.

Brad Fay stated that NS planned to complete the upgrade of the coordinate reference system and the production of the topographic and property databases for NS. The Province is considering producing a geo-referenced civic address database. The basic generic database could be used to generate value-added products. The 911 database currently in use is not geo-referenced.

Efforts to develop and adopt standards in NS are ongoing. The vertical integration of data is being encouraged, as well as partnerships and the exchange of data.

The Maritime Geomatics Committee has provided funds for Roger Tomlinson to present a series of lectures in the Maritime Provinces in November. He will be in Fredericton on the 19th, in Lawrencetown on the 20th, and in Halifax on the 21st as guest speaker at a GANS-sponsored dinner celebrating the 50th anniversary of the College of Geographic Sciences (COGS).

NEWFOUNDLAND: Randy Gillespie reported that a large number of coastal zone activities were ongoing in NF, including Voiseys Bay and an aerial photography project on the southwest coast.

A group is preparing a paper entitled a *Strategy for Geomatics in NF*. The group includes NATI, Operation On-line, the Department of Environment and the Department of Government Services and Lands. It is hoped that a Task Group will be established to implement the strategy.

John Fleming has retired as Deputy Minister of the Department of Environment. He is being replaced by Leslie Gratton, formerly with the Hibernia Management and Development Company. Ms. Gratton has a keen interest in coastal zone management.

INDUSTRY CANADA: Connie Carruthers reported that the Canadian International Business Strategy (CIBS) for 1997/98 was being developed by Industry Canada. Twenty-two documents which describe particular industries and plans for international business development are being drafted; these will be combined into one document.

ACTION 19.11: *Connie Carruthers to provide the Secretariat with a draft copy of the Canadian International Business Strategy under development for 1997/98.*

Connie stated that Industry Canada would be actively involved in Oceanology '97 to be held in Singapore, 12-14 May 1997 and Oceans '97 to be held in Halifax, 6-9 October 1997. Information on Oceans '97 is available at <http://www.sirius.ns.ca/oceans97/>.

FISHERIES AND OCEANS CANADA: Dale Nicholson reported that the chart for the Saint John River has been completed. CHS is looking forward to producing charts from source data and to applying the S57 standard which has been approved for Electronic Navigational Charts (ENCs). ENCs for major shipping routes will be completed to comply with Green Plan requirements.

DFO will be participating in celebrations in NF next year to commemorate the 500th anniversary of John Cabot's expedition to the New World.

The CHS Metadata Directory, an Oracle-based system, will be on-line shortly. Dale has been responsible for developing a user-friendly interface. Details are available on the CHS Homepage at http://www.chshq.dfo.ca/chs_hq/.

Paul Bellemare reported that a program is in place to develop a data management system for CHS. The initial focus will be on source data.

Paul is participating in a DFO Task Force to define an ocean management network/ infrastructure. The Task Force is chaired by Jean-Claude Theriault, DFO Laurentian Region.

Paul stated that he would be providing a map indicating the status of DGPS in Atlantic Canada. Land-based stations transmit corrections to moving platforms providing an accuracy of up to 5 metres. DGPS is intended for marine applications, including navigation, aquaculture siting and surveys, and will replace Loran-C which is being phased out. Concerns were expressed that Canada would then be at the mercy of the U.S. Navy which controls the satellites used to transmit the DGPS corrections. A DGPS workshop was held in Halifax this summer; a workshop report is available.

ACTION 19.12: Paul Bellemare to provide the Secretariat by 31 October with copies of a map indicating the status of DGPS coverage in Atlantic Canada.

DFO will be actively involved in Oceans '97.

1998 has been designated as the International Year of the Oceans by the United Nations. Preliminary discussions are taking place re producing a floating trade show which would travel on the Louis St-Laurent to Europe and to Lisbon for Expo 98. The trade show would be designed to market technologies.

The Canadian Centre for Marine Communications (CCMC) will be managing a \$2.5 million fund for ocean mapping. The funds will be mainly directed to industry. Paul provided a news clip to be included with the minutes (copy attached). He is a member of the Board of Directors for the CCMC.

In NS, the federal-provincial Agreement on Economic Diversification will focus on infrastructure programs which have economic spin-offs. The Agreement will incorporate several sectors, including an ocean component. Connie Carruthers added that this would be part of the federal transfer payments to the Province. Partnerships between the private sector and academia to develop products and services will be encouraged and marketing will be carried out by the private sector. Randy Gillespie added that a similar agreement was being developed for NF and recommendations have been made re information technology in the marine sector.

ACTION 19.13: Paul Bellemare to provide the Secretariat by 31 October with a copy of the Canada/NS Cooperation Agreement on Economic Diversification.

John Legault reported that the Coastal Habitat Inventory for the Gulf was nearing completion. The mapping project has been ongoing for two years. A demonstration will be available for the next ACZISC meeting. The coastal mapping projects undertaken by the former Gulf and the Scotia/Fundy Regions are slightly different; the Gulf mapping was done primarily from a fisheries perspective and extends offshore whereas the Scotia/Fundy mapping is focused inland and inshore.

Alain Bourgeois reported that the GIS system for fisheries management in the Laurentian Region would be completed this year.

A new project has been initiated in the Saguenay region because of the recent flood. Several scientific studies are being done to assess the impact of the disaster and to direct future activities. A new survey of the Saguenay River will be carried out by CHS for comparison with the 1995 survey.

A pilot project to determine the impact of the Canada Oceans Act on coastal zone management will be carried out. The project will have a community focus. Coastal zone maps will be produced to indicate usage.

COMPUSULT LTD: Barry O'Rourke stated that his company was interested in ACZISC activities because his company is actively participating in federal and provincial initiatives related to standards and inter-operability. Barry commented that Canada was a leader in database inter-operability.

Compusult is involved in the following projects:

- Applications for Rural Communities (ARC): The project is NF-based and is partly funded by CANARIE. It deals with tourism, fisheries and health. S57 may be adopted as a standard. *Additional information is available at <http://www.compusult.nf.ca/arc/index.html>.*
- Canadian Earth Observation Network (CEONet): CEONet is an Internet-based system that is being developed to facilitate the distribution and use of Earth observation data products and services throughout Canada. A 10 year project is being planned. Funding is provided by the Canadian Space Program.
- Mercator: This project focuses on geospatial information standards, data warehousing and related software tools development. It is funded by the Government of Canada, CANARIE, the private sector and in-kind contributions. David McKellar, Department of National Defence, is the project leader. A consortium has been formed to implement Mercator. Projects will be private-sector led.

NEW BRUNSWICK: Réjean Castonguay reported on the status of the NB Coastal Database. Copies of his overheads are attached. The project is divided into three components: ortho imagery acquisition (1996/97), and production of mapping for the landward side (1997/98) and seaward side (1998/99) of the coastal zone. Each component will undergo user requirements, pilot projects and validation. Réjean reviewed the specifications for the photography, and the background research and user requirement definition carried out for the project.

Réjean also reviewed the NB Property Information System on the Internet. The system is used primarily by lawyers, surveyors and real estate companies. It may be expanded with additional databases. Betty Godin added that the system was also used extensively for zoning.

NATURAL RESOURCES CANADA/GEOLOGICAL SURVEY OF CANADA - ATLANTIC: Andy Sherin displayed maps of the Val Comeau region of Northern NB. He described them as preliminary products from the collaborative work of NRCan, DFO, the NB Department of Fisheries and Aquaculture and the Fisheries Co-op. High resolution side scan sonar was used to identify areas of intensive lobster fishing.

Andy also described three posters on display:

- a poster prepared by Kimberley Edwardson, GSC - Atlantic, for a poster session at CZC'96 in Rimouski last August. The theme of the poster is *Maps and Analytical Products for a Coastal Information System: Examples from Newfoundland*.

- two posters prepared for Georges Bank using an acoustic image of the bottom. There is renewed interest in Georges Bank because of the possibility that the moratorium on oil and gas exploration may not be renewed when it expires on 1 January 2000.

A survey of Chedabucto Bay is scheduled for November.

A pamphlet on Aerial Videos of Canada's Coasts was distributed. Videos of the Bras d'Or Lakes and les Iles-de-la-Madeleine have just been completed. *Information on the aerial videos is available at <http://agcwww.bio.ns.ca>.*

A multi-beam survey off Louisbourg, NS is scheduled for late October.

A new collaborative project between NRCan, DFO and EC for the Upper Bay of Fundy is being initiated to determine the history of sea level in the region. Considerable damage was caused by the Saxby Gale in 1869. Damage caused last September by a storm surge at high tide as a result of hurricane Hortense is now being assessed by coastal communities.

Geomatics Canada has changed its fee structure for digital data. Digital data can now be bought in bulk by length of line, layer, etc. *Information on the fee structure is available at <http://www.ccg.nrcan.gc.ca>.*

New documents on *Excellence in Geomatics* were distributed. *Information is available at <http://www.geocan.nrcan.gc.ca/excellence/>.*

Andy briefed participants on two articles: *Surveying the Survey - A View from Capitol Hill* by Congressman Ralph Regula and *Government Support for Geologic Research Faces an Uncertain Future* by Senator Larry E. Craig. Both articles appeared in the March 96 issue of *Geotimes*. Andy stated that the articles were "wake up calls" and he urged members to read them (copies attached).

GIAC ATLANTIC/GANS: Jeffrey Parks distributed and reviewed a summary of GANS activities (copy attached).

GIAC has assumed responsibility for the GIS Sourcebook from Geomatics Canada.

Informal links have been established between GIAC and the Champlain Institute.

GEODESY AND GEOMATICS ENGINEERING/UNB: Sue Hanham commented that there were a lot of similarities between Canada and New Zealand, her country of origin, in matters related to coastal zone management, e.g., beach rights, aboriginal rights, etc. She briefed participants on her area of study at the University of New Brunswick. In particular, she will be looking at the implications of the NB Coastal Policy.

PASSAMAQUODDY/ICOIN: Paul Currie briefed participants on the status of the Passamaquoddy/ICOIN Project. The project is being carried out by ICOIN Industries Inc., a consortium composed of ADI Ltd, Washburn Gillis, Geodat Information Service and Watermark Industries. He distributed brief write-ups (copies attached) of the three applications being developed: Spill Response; Habitat Protection; and Sustainable Development. Collaboration with the Gulf of Maine Council on the Marine Environment will result in the U.S. portion of

Passamaquoddy Bay being included in the study area. The project is scheduled for completion by March 1997. *Additional information on the ICOIN Industries Inc. products are available at <http://www.discriminate.ca/icoin/homepage.htm>*

As stated earlier by Jeffrey Parks, the Spill Response system was demonstrated during the CANUSLANT exercise in Passamaquoddy Bay. However, there was not an opportunity to demonstrate the full capability of the system. Eric Theriault commented that the system in use was the Habitat Sensitivity Mapping system developed by EC specifically to respond to the recommendations of the Brander Smith Panel on Tanker Safety.

Concerns were expressed over the duplication and lack of cooperation between the Spill Response system developed by Passamaquoddy/ICOIN and the Habitat Sensitivity Mapping system.

Paul Bellemare stated that there had to be a shift from the prototype phase to commercial application in order to capitalize on the large investment made in the Passamaquoddy/ICOIN project. He suggested that the systems developed by the project could be installed at several sites for beta testing; if suitable, they could become a "standard" and be commercially viable, particularly as export products. The at-home application of products is extremely important when selling internationally.

ACTION 19.14: ACZISC members to identify potential beta test sites for the applications being developed for the Passamaquoddy/ICOIN project by 31 October.

Paul requested the opportunity to demonstrate the Passamaquoddy/ICOIN applications at an upcoming ACZISC meeting.

CANADIAN HERITAGE: Mike Butler distributed a message received from Francine Mercier. She expressed her regrets at not being able to attend the meeting. Parks Canada will be undergoing another reorganization: there are plans to create the Parks Canada Agency which would be separate from Canadian Heritage. Currently, all National Parks and National Historic Sites are reporting directly to the Assistant Deputy Minister, bypassing the regional and district offices.

There is a strong probability that the Bonavista/Funk Island project in Newfoundland will receive the go-ahead.

6. ***PRESENTATION: NB COASTAL LANDS POLICY***

Betty Godin briefed participants on the NB Coastal Zone Policy currently under development. Copies of her slides are attached. She reviewed the background, including the activities of the Commission on Land Use and Rural Development established in 1992. The NB Coastal Zone will be managed under two policies:

- the Coastal Land Use Policy will deal with the landward side and will be administered by the Department of Municipalities, Culture and Housing. The Policy, developed by an Inter-departmental Committee, has recently been approved by the Deputy Minister's Committee on Land Use.

- the Marine Policy will deal with the seaward side and will be administered by the departments of Fisheries and Aquaculture and Natural Resources and Energy.

Betty commented that NB had 2,065 km of coastline and three types of coast with different tidal patterns: the Bay of Fundy, Northumberland Strait and Baie des Chaleurs. The recently adopted Coastal Land Use Policy restricts development within 30 metres of the coastal zone and development within 500 metres is subject to review. A review process has been established which applies to new buildings, structures and uses of land within the defined coastal areas. Existing buildings, structures and uses of land will not be affected. The policy established minimum standards and criteria for public lands, public access to the shore, beach and dune protection, residential and cottage development, salt marsh protection, agriculture and dyked lands, and industrial siting.

It was suggested that a presentation on the NB Marine Policy be scheduled for an upcoming ACZISC meeting.

7. **UPDATES**

ATLANTIC ACCORD ON THE INTEGRATED MANAGEMENT OF THE COASTAL ZONE:

Mike Butler reported that the Accord had been an initiative of the OIC with input from the ACZISC and was being widely disseminated.

COASTAL ZONE CANADA CONFERENCE SERIES: CZC'98 will take place in Victoria, BC from 30 August to 3 September 1998. The CZC'98 Organizing Committee is co-chaired by Michael Dunn, Canadian Wildlife Service, Environment Canada, Delta, BC and Joe Truscott, BC Ministry of Agriculture, Fisheries and Food, Victoria, BC. CZC'98 will have a community focus.

CZC 2000 will be held in Saint John, NB on 18-23 September 2000.

Larry Hildebrand has been elected as the new president of the CZC Association; Barry Jones is the new vice-president and Brian Nicholls will serve as past-president.

ECONOMIC STUDY: Mike Butler reported widespread verbal support for the proposed study on the Impact of Atlantic Canada's Coastal Zone Activities on the Economy of the Region and its Provinces. The proposal has been submitted to the OIC by Maurice Mandale, Economic Research and Analysis (formerly with APEC). Mike stated that letters of support for the study from industry associations would facilitate the fund raising effort.

ACTION 19.15: OIC to seek letters of support ASAP from industry associations for the proposed study entitled Impact of Atlantic Canada's Coastal Zone Activities on the Economy of the Region and its Provinces.

GULF OF MAINE COUNCIL ON THE MARINE ENVIRONMENT: Mike Butler reported that the ACZISC was continuing its relationship with the Gulf of Maine Council on the Marine Environment. Several ACZISC and Secretariat personnel are involved in the Working Group and committees of the Council.

Larry Hildebrand reported that the Council had spent the last year developing a new 5-year Action Plan. He suggested that the Action Plan be reviewed by the ACZISC Secretariat to identify additional areas of cooperation between the ACZISC and the Council.

ACTION 19.16: *Secretariat to review the 5-year Action Plan of the Gulf of Maine Council on the Marine Environment in the context of the ACZISC Workplan prior to the next ACZISC meeting.*

8. **ANNOUNCEMENTS AND PUBLICATIONS**

Mike Butler distributed global fishery maps produced for the former International Centre for Ocean Development (ICOD) and posters produced by the Alliance for Marine Remote Sensing. He also circulated documents for review, including reports on the Saguenay Marine Park and the Gulf of Maine Program, Analyse des actes de la conférence CZC'94 undertaken by DFO Laurentian Region, and a brochure on the NS Oceans Initiative.

9. **OTHER BUSINESS**

ACZISC/PRIVATE SECTOR: Mike Butler reported that the relevancy of the ACZISC to the private sector was discussed at a meeting of the ACZISC Executive Committee on 27 September at BIO. He distributed copies of the minutes of the Executive Committee meeting (copy attached). The following comments were made:

Paul Bellemare: The private sector could assist the ACZISC in developing an infrastructure for coastal zone information.

Larry Hildebrand: It may be time for the ACZISC to evaluate its direction; a rethink might be necessary.

Andy Sherin: An ACZISC review took place a year ago; the focus of the ACZISC should now be on achieving its goals.

John Legault: Brief descriptions of coastal zone projects on the WWW could be of benefit to the private sector in identifying business opportunities.

Art Longard: Governments would benefit from receiving input from the private sector in terms of project development.

Jeffrey Parks: Access to information is critical to the private sector. The ACZISC has been a good source of information and facilitates networking.

Barry O'Rourke: Today's meeting has been a good source of information re coastal zone activities in Atlantic Canada.

Paul Currie: The ACZISC informal approach is conducive to private sector participation.

Mike Butler asked that participants contact the Secretariat with further comments.

ACTION 19.17: *ACZISC members to provide comments to the Secretariat by 31 October re the Executive Committee's discussions on the relevancy of the ACZISC to the private sector.*

CANADA OCEANS ACT: Art Longard requested that an update on the proposed Canada Oceans Management Strategy be provided at the next ACZISC meeting.

10. **NEXT MEETING AND ADJOURNMENT**

ACZISC Meeting #20 is provisionally scheduled for Tuesday, 4 February 1997 at the Bedford Institute of Oceanography in Dartmouth, Nova Scotia.

ACZISC Meeting #19 adjourned at 17:00 hrs.