

MINUTES OF ACZISC MEETING #15

Atlantic Coastal Zone Information Steering Committee

Date: Wednesday, 16 August 1995 - 0830 hrs.

Location: Pope Room, Coles Building
Richmond Street, Charlottetown

NAME	AFFILIATION	TEL. NO.
Present: * indicates ACZISC member		
Don Amos*	Public Works and Government Services Canada	(902) 496-5009
Joe Arbour*	Environment Canada	(902) 426-1701
Paul Bellemare*	Fisheries and Oceans Canada	(902) 426-3497
Michael Butler*, Chair	Oceans Institute of Canada	(902) 494-1977
Réjean Castonguay*	New Brunswick	(506) 453-3917
Bob Crawford	NS Dept. of Fisheries (representing Art Longard*)	(902) 424-0351
Claudette LeBlanc	Oceans Institute of Canada	(902) 494-1977
Kingsley Lewis*	Prince Edward Island	(902) 368-4871
John Major*	Canadian Coast Guard	(902) 426-3939
Brian Nicholls*	Fisheries and Oceans Canada	(902) 426-3246
Dale Nicholson	Canadian Hydrographic Service	(902) 426-4581
Janice Phillips	Bedeque Bay Environmental Management Association	(902) 436-7090
Andy Power*	GIAC Atlantic	(902) 468-7777
Jim Ramsay*	Prince Edward Island	(902) 368-4075
Andy Sherin*	Natural Resources Canada	(902) 426-7582
Eric Theriault	Environment Canada	(902) 426-9558
Herman Varma	Canadian Hydrographic Service	(902) 426-5736
Yvan Vigneault	Fisheries and Oceans Canada Laurentides Region	(418) 648-2509
Tammy Hill-Worth	Bedeque Bay Environmental Management Association	(902) 436-7090

1. **WELCOME AND INTRODUCTION OF PARTICIPANTS**

Mike Butler, ACZISC Chair, called Meeting #15 to order at 08:30 hrs. He welcomed guests: Yvan Vigneault, DFO Laurentides Region, Eric Theriault, Environment Canada, Janice Phillips and Tammy Hill-Worth, Bedeque Bay Environmental Management Association. Mike introduced Réjean Castonguay, NBGIC, who will be replacing Mary Ogilvie as the New Brunswick representative on the Committee. He also reported that GIAC Atlantic would now be representing the private sector in the Maritime Provinces on the ACZISC: Andy Power has been designated as the GIAC Atlantic member. A roundtable introduction of all participants followed. Mike thanked Jim Ramsay and Kingsley Lewis, representing PEI, for providing the meeting room and the lunch.

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

2. **ADOPTION OF AGENDA, AND REVIEW AND APPROVAL OF MINUTES FOR MEETING #14**

The Provisional Agenda for Meeting #15 was reviewed. It was noted that the agenda has been modified as recommended by the ACZISC Review (ACZISC Meeting #14): the Workplan will be dealt with in the A.M. and the Round-table will be brought forward in the P.M. and assigned additional time to allow more detailed reporting. Mike stated that an additional item on the agenda would be a presentation on the Fixed Link by Don Maynard, Jacques Whitford Environment Ltd. The agenda was approved (copy attached).

The minutes of ACZISC Meeting #14 were reviewed and the following revisions were made:

Page 2: **STATUS OF ACTION ITEMS - ACCORD:** ... "Distribution of the Accord" should read "Distribution of the **draft** Accord"...

Page 9: **NEW BRUNSWICK:** ... "The Province is spending \$1 million this fiscal year for the structuring of topographical data by UNB" should read "The Province is spending \$1 million this fiscal year for the structuring of topographical data by **industry**".

The minutes were approved with the above revisions.

3. **STATUS OF ACTION ITEMS**

The Action Items from Meeting #14 were completed other than the following:

IDENTIFICATION OF IN-KIND CONTRIBUTIONS TO ACZISC: This has not been done to date. Mike stated that this was extremely important and that the Secretariat would be in touch with members individually to obtain this information.

Other outstanding Action Items will be discussed in further detail within the context of the Workplan and Working Group reports (Agenda Item # 4).

4. **ACZISC WORKPLAN**

MEMBERSHIP: Mike Butler reported that GANS (Geomatics Association of Nova Scotia) and GIAC (Geomatics Industry Association of Canada) had consolidated representation for the private sector in the Maritime Provinces on the ACZISC. Andy Power has been chosen as the representative. The private sector in Newfoundland will continue to be represented by NATI (Newfoundland Association of Technical Industries); Mike Cole is the representative.

The ACZISC Executive Committee continues its efforts to obtain active participation from Newfoundland; Neil MacNaughton has expressed his concerns over his inability to represent the Province adequately due to constraints within his Department. Discussions are ongoing with the Information Technology Secretariat in the Newfoundland Department of Industry.

Discussions are also taking place with Industry Canada; Andy Power and Mike Butler recently met with Bob Russell to discuss more active participation by Industry Canada in the ACZISC in view of the Department's involvement in high-tech communications. The outlook is promising.

Paul Bellemare has been pursuing ACZISC participation in Québec. As a result Yvan Vigneault, DFO Laurentides Region, is attending today's meeting as an observer. Provincial representation from Québec is also being pursued.

John Major stated that membership by the Canadian Coast Guard was tenuous because of the merger of the Coast Guard with Fisheries and Oceans Canada. Brian Nicholls added that Fisheries and

Oceans would be reviewing its involvement on the ACZISC, because of the Department's reorganization, to ensure appropriate representation.

It was suggested that communication with APICS could be improved by sending minutes to the chairs of appropriate APICS sub-committees.

Joe Arbour will be following up with Agriculture Canada re membership on the ACZISC at the end of the field season.

ACTION: Secretariat to obtain the names and addresses of APICS committee chairs and add them to the distribution list for ACZISC minutes.

Joe Arbour to follow up with Agriculture Canada re their stated interest in being represented on the ACZISC.

WORKPLAN AND BUDGET/FUNDING SUPPORT: Mike Butler distributed copies of the 1994-95 ACZISC Annual Report. The report is prepared for the Council of Maritime Premiers (CMP) as per the agreement between the CMP and the Oceans Institute of Canada. He also distributed copies of the ACZISC Budget Update and Revenue Summary (copies attached). Mike expressed his concern that budgeted revenues in terms of ACZISC dues had not been fully paid for either 1994-95 or 1995-96. This is resulting in cash flow problems for the Secretariat. It was suggested that a note be included in the next Budget Update to explain the negative \$10,639 figure indicated as Balance carried forward in 1995-96.

Andy Sherin stated that he was optimistic re NRCan's outstanding contributions in view of the priority that the Department is giving to coastal zone (CZ) issues. Joe Arbour will follow up re Environment Canada's dues for 1995-96. Andy Power suggested that the situation with Industry Canada's dues be documented in a letter addressed to Bob Russell.

ACTION: ACZISC members to follow up ASAP on status of their jurisdiction's 1994-95 and 1995-96 membership dues to the ACZISC, if not paid to date.

At Réjean's inquiry as to the billing procedure, Mike responded that invoices were issued to ACZISC members at the beginning of the fiscal year, followed by reminders if required.

Discussion ensued re provincial contributions. It was suggested that the Revenue Summary be modified to better reflect the total contributions made by the Maritime Provinces which include the contribution made by the CMP. It was recommended that the listing indicate Maritime Provinces as a header under which would be listed New Brunswick, Nova Scotia, Prince Edward Island and the CMP individually.

Mike reiterated that the identification of in-kind support is very important for leveraging funds, e.g. the funds obtained from CESED for staff support. It will also be very important in the ACZISC presentation to the Maritime Geomatics Committee scheduled for the fall, at which time the ACZISC will be requesting an extension of the agreement between the CMP and the Oceans Institute and an increase in funding.

DATABASE DIRECTORY: Claudette LeBlanc, chair of the Database Directory Working Group, distributed copies of the Working Group meeting held on 7 July at the OIC (copy attached).

Claudette reported that several entry updates had not been returned to date and requested that members follow up on entries from their jurisdiction.

Members suggested that the ACZISC should be offering advice re approaches and access tools for the Database Directory. It was recommended that Version 3 be made available on the Internet and that

electronic updating be addressed for future editions. The importance of publicizing the Directory was stressed.

Claudette reported that she had obtained a copy of the digital CGSB standard for "Directory Information Describing Digital, Geo-referenced Data Sets" from Brad Fay. It was recommended that the Database Directory Working Group review this tool and report at the next ACZISC meeting.

ACTION: ACZISC members to follow up ASAP re the Directory entries from their jurisdiction which have not been returned to date.

Database Directory Working Group to review and critique the digital CGSB standard for Directory Information and report at the next ACZISC meeting.

As recommended at ACZISC meeting #14, the Database Directory Working Group discussed data ownership at their meeting on 7 July: Claudette outlined the Working Group's conclusions (refer to meeting report).

Discussions continued re data ownership, access policies, liabilities, etc. in terms of ensuring access to information and data, in particular by non-government users. Andy Power stated that these issues have a negative impact on the identification of private sector entries for inclusion in the Directory. Andy Sherin added that the integrity of the Database Directory is affected if a significant number of the databases identified are not easily accessible. Kingsley Lewis commented on the importance of identifying databases and ensuring their accessibility in view of their potential influence on policy formulation. It was suggested that a workshop was need to discuss these matters further. CITAP was identified as the Working Group to deal further with these matters. It was also suggested that members provide copies of their data policies for use as Workshop information.

ACTION: ACZISC members to provide documentation re their agency's policy on data ownership, copyright, distribution and liability to Andy Sherin (CITAP Co-chair) by 31 September 1995.

CITAP Working Group to organize a 1-one day workshop, to be held in conjunction with the February ACZISC meeting, to review status and issues re data ownership, copyright, distribution and liability in each ACZISC jurisdiction.

CITAP: The CITAP (Coastal Information Technology Architecture Plan) Working Group is chaired jointly by Andy Montgomery, NS Land Use Committee, and Andy Sherin, Natural Resources Canada. Andy S. reported that they had not received comments on the draft CITAP vision and Workshop agenda circulated at the last ACZISC meeting (4 May). He also reported that names of potential Workshop attendees had not been provided as requested. He stressed that a broad mix of participants was needed to properly reflect the user community for coastal information. It was suggested that initially the focus of CITAP should be to identify "fundamental" databases and to develop agreements to engineer systems to provide seamless access to these databases. Andy commented that although technology would not be the primary focus of CITAP implementation at this time, it is important to remain informed of developments. He stressed that initially it was more important to resolve organizational issues. Input from community groups re identifying critical databases and access tools must be sought. Andy suggested that Internet could be used as a visual tool to identify access requirements for CITAP.

ACTION: ACZISC members to provide the CITAP Working Group Co-chairs, by 31 August 1995, with names of community representatives to attend the upcoming CITAP Workshop in Fredericton.

ACZISC members to provide comments on the draft CITAP Vision to the CITAP Working Group Co-chairs.

CITAP Working Group to organize CITAP Workshop for 26 September in Fredericton.

STANDARDS: The Coastal Mapping Standards Working Group is co-chaired by Paul Bellemare and, as of today's meeting, Réjean Castonguay who is taking over Mary Ogilvie's responsibilities on the ACZISC. Paul reported that Standards Workshop #3, focusing on the Data Model - i.e. transition from feature code to object code, is planned for Fredericton in September.

Action items from Workshop #2 should be acted upon because of recent developments, in particular the implementation of Chartnet. Chartnet is designed to facilitate access to data via Internet; this will accelerate the adoption of standards. Chartnet will also provide access to data models. Several partners are involved in Chartnet.

ACTION: Standards Working Group to organize Standards Workshop #3 for 27-28 September in Fredericton; to be coordinated with the CITAP Workshop (26 September).

Paul Bellemare to follow up on the status of Action Items from Workshop #2 prior to Workshop #3.

ICOIN: The ICOIN Working Group is chaired by Paul Bellemare. He reported that an ICOIN Steering Committee has been organized and is chaired by Pat LeBlanc, FEARO. The Committee will provide direction to the ICOIN Project Office; it will ensure that the Office is funded and staffed adequately to resolve pragmatic issues relating to implementation of the network.

Mike Butler stated that he had reviewed ICOIN products while in Ottawa mid-July. He was impressed with the demonstration. Mike distributed an ICOIN Briefing Note (copy attached) prepared by Hank Jones, ICOIN Project Office. Both Paul and Mike stressed the importance of putting ICOIN into practice; they suggested that pressure be applied where appropriate to advance ICOIN implementation.

Kingsley Lewis commented that it is important to identify issues which could be addressed by ICOIN; this will increase the chances of ICOIN being successfully implemented. Andy Power stated that the private sector would be very interested in accessing tools described in the Briefing Note.

ACTION: John Major to discuss ICOIN with Bill Rowat, Deputy Minister of DFO, at upcoming meeting (Friday, 18 August). Bob Crawford to request that Peter Underwood, who will also be present at the meeting, do the same.

Chairs of the CITAP, Database Directory and Standards Working Groups to contact Hank Jones, ICOIN Project Office, by 31 August re establishing additional links between ACZISC and ICOIN activities.

ACZISC Secretariat to write a letter to Bill Rowat to request that Hank Jones demonstrate the ICOIN products at the upcoming ACZISC meeting in November.

ECNASAP: Mike Butler, co-chair (with Joe Arbour and Andy Sherin) of the Canadian ECNASAP Project Management Committee, briefed participants on the status of the Canada/U.S. East Coast of North America Strategic Assessment Project (ECNASAP). He reported that the 18 month pilot project was deliverable oriented with a focus on ecosystems. The interdepartmental and intergovernmental project is being carried out by five project teams; funded by modest sums of cash and large in-kind contributions. Several ECNASAP presentations have been made to date, the latest by Geoff Howell using the Toolbook application at the Coastal Zone Mapping meeting sponsored by the ACZISC (15 August, Charlottetown). Other presentations have been made during the G7 Summit, the Gulf of Maine Council on the Marine Environment, the Coastal Zone Canada '94 Conference, etc.

The Inshore Case Study is led by Joe Arbour. He reported that the Inshore Case Study would generate three major products focusing on shellfish beds and their rehabilitation: a Shellfish Register for the Gulf of Maine, a simple desktop application for managing shellfish resources and a process for utilising Strategic Environmental Indicators (SEI) at the estuary level. A Workshop to develop these indicators was held in St. Andrews last March. A Workshop report has been prepared by Peter Ricketts. The report has been distributed and has generated a good response to the proposed systematic approach for community level management of shellfish beds. Bob Crawford commented that NS will be identifying a site in NS, possibly Annapolis Basin or Shelburne, to complement the St. Andrews site in NB.

ACTION: Secretariat to distribute the St. Andrews workshop report re the ECNASAP Inshore Case Study.

Mike reported that the Offshore Case Study is led by Bob O'Boyle, Fisheries and Oceans Canada. Bob Rutherford, DFO Habitat Management, is very supportive of the Offshore Case Study; funds are being provided. The Offshore Case Study deals with aggregation and assemblage analysis of demersal species. The scientific validity of ECNASAP is being increasingly recognized and is now moving beyond the pilot phase. A DFO team will be visiting the NOAA Strategic Environmental Assessment Office in Silver Springs next week to plan the next phase.

NORTHUMBERLAND STRAIT: Mike Butler reported on the proposed Northumberland Strait Coastal Information Management System (NSCIMS). NSCIMS would be a fully functioning system used for practical applications; it would also serve as a showcase involving several projects for use in international marketing. A Workshop and several private sector-led meetings have been held in the last few months. Recent discussions have focused on the economic feasibility of the proposed project; Steve Murray, senior analyst for the DMR Group, has concluded that a business case cannot be made for the project at this time.

Mike commented that NSCIMS will be realized indirectly in the future. The NSCIMS Working Group will be reactivated if and when the private sector indicates interest in pursuing the project. A letter from Steve Murray was circulated for review.

COASTAL ZONE CANADA '94 CONFERENCE: Mike Butler reported that the CZC'94 Organizing Committee had been co-chaired by Brian Nicholls, Fisheries and Oceans Canada, and Larry Hildebrand, Environment Canada. Mike chaired the Program Committee on behalf of the ACZISC and the Oceans Institute of Canada. The goal was to hold a Conference involving all stakeholders in the CZ, especially community representatives. Five volumes of the Conference proceedings were prepared for distribution at the Conference.

Since the Conference a group of approximately 10 individuals have "struggled" with the analysis of Workshop & Roundtable reports and the preparation of a draft Conference Statement (Action Plan and Recommendations). This has been circulated to Conference participants for their input. The Statement is being edited as a result of the comments received. It will be distributed widely as a separate publication but also as an integral part of Volume 6 of the CZC'94 proceedings.

These activities are being carried out under the banner of the Coastal Zone Canada Association. The Association will be meeting shortly to determine its future role. Currently it is advising the Organizing Committee for Coastal Zone Canada '96 scheduled for 12-17 August 1996 in Rimouski. Pamphlets announcing the Conference were distributed. A Coastal Zone Canada '98 Conference is being considered for Vancouver. If the series continues, it will probably return to Atlantic Canada in the year 2000.

COMMUNICATIONS: The ACZISC Communications Working Group (chaired by Mike Butler) has set up a homepage on the Internet. The address of the site, still under construction is <http://www.dal.ca/~mbutler/aczisc.htm>

The ACZISC homepage will provide links to sites of relevance to the Committee's activities and projects. It was suggested that members provide the addresses of appropriate sites for inclusion in the ACZISC homepage.

ACTION: ACZISC members to provide the Secretariat with WWW site addresses to link to the ACZISC Homepage.

5. **PRESENTATION: FIXED LINK**

Andy Power reported that Jacques Whitford Environment Ltd was responsible for developing, implementing and maintaining the Marine Environmental Effects Monitoring (MEEM) Program for the Fixed Link project. Jacques Whitford Environment Ltd is a member of GIAC (only member from PEI); it employs 15-20 people in Charlottetown. Andy introduced Don Maynard, Senior Ecologist with Jacques Whitford, who provided an overview of the MEEM Program.

Don reported that before the Fixed Link project was begun certain effects were predicted. MEEM tracks these effects to make sure that the builder complies and makes the necessary changes to remain within acceptable limits. MEEM deals with ice climate, physical and chemical oceanography, shoreline erosion, benthic habitat and communities and marine plants. Each parameter has its own spatial boundaries. Focus areas are selected on the basis of being able to demonstrate cause and effect.

Don reviewed the phytoplankton monitoring program component of the MEEM. Existing phytoplankton data (1988 and prior) are being used for baseline data. A two tier program has been developed to monitor temporal/spatial changes: Data from a Sea-WIFS sensor will be used following the launch of its Seastar satellite platform in September. Meanwhile data is gathered using a tethered buoy, developed by Satlantic, which mimics the sensor on Sea-WIFS. Data is collected based on a 2.5 km x 2.5 km square grid. Sampling is carried out every 2 days. This data, in addition to the existing data, will provide good baseline for comparison with the Sea-WIFS data when it is available. Sea-WIFS will provide daily images based on a 1 km x 1 km square grid. The images will be susceptible to cloud cover.

In terms of the actual construction, it is expected that 6 or 7 piers will be in place by the end of the 1995 construction season.

In response to comments and questions, Don added the following:

- CASI was not chosen as a sensor because of the limited swath and the high cost of using an airplane to carry the sensor. Also the template marking system in the version available at the time was a problem.
- The information being generated belongs to the client.
- There is some requirement to develop an integrated information management system. This is being designed by Jacques Whitford; the system will have a GIS component.
- An examination of case studies involving comparable environmental studies around the world has been carried out.

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

GIAC ATLANTIC: Andy Power reported that, as previously mentioned by Mike Butler, he will be representing both GANS and GIAC under the GIAC Atlantic banner. An MOU between GANS and GIAC is being developed. GANS will continue to exist but steps to remove duplication between the two organizations are being taken. GIANB, however, has been disbanded and its activities taken over by GIAC.

Andy distributed copies of the May/June GIAC Newsletter (copy attached). He commented that coastal and marine projects were prominent in the Newsletter.

Andy commented that a large number of CZ projects will be generated by the offshore oil and gas developments currently under way. He added that this could impact on DFO's mandate.

PRINCE EDWARD ISLAND: Kingsley Lewis reported that he was involved in policy development for PEI. He added that policy development often created demands for information and cited the following examples:

- A moratorium on development in a 500 metre band each side of the high water line was established in 1990 as a result of the PEI Commission on Land Use. The moratorium has resulted in significant changes to the type of development occurring along the coast. In place for the last four years, the moratorium has identified the lack of available information regarding impacts of land development on the water. The identification of these impacts is therefore highly speculative.
- PEI has limits on land ownership. Major changes were made last year to restrict purchases of major strips of coastline.
- The Borden Region Special Planning Area was established to plan for developments associated with the construction of the Fixed Link. The Link has generated renewed interest in developing the south coast of PEI.

PEI currently is facing two major issues. Non-resident ownership of the coast is as high as 80% in some areas. Also there is conflict between cottage development and farming. Changes will be made to the Planning Act to address these concerns. Provincial standards will be adopted.

The PEI Executive Council has directed that rural lands be studied in terms of overall policy. The farming industry is expanding and forested lands are also on the increase. This is creating land use conflicts.

The Federal/Provincial Committee on Land Use will be meeting next week in PEI. 25-30 people from across Canada will speak on issues relating to urban areas, agriculture, forestry, shore zones, etc. The goal is to come up with definitive statements re land use.

ENVIRONMENT CANADA: Eric Theriault briefed participants on the National Habitat Sensitivity Mapping Program. Eric is responsible for the Atlantic component of the Program which was established in response to the Brander Smith study on oil spill response. Mapping includes general mapping at 1:250 000 for the entire region and mapping at 1:50 000 for the Magdalen Islands, Northeastern NB (Miscou to Bouctouche), Southwestern NB, North shore of PEI and West coast of Cape Breton Island. Themes include geomorphology and human usage. The shoreline has been segmented using 143 attributes. The scale of the mapping is adequate to respond to large oils spills. MapInfo is being used as the mapping tool. Additional resources are now being sought for the Program.

Mike added that copies of an evaluation of Desktop Mapping Systems, including MapInfo, carried out by Environment Canada, were available on the side table.

NEW BRUNSWICK: Réjean Castonguay reported that NB is continuing its efforts to provide reliable geographic data. The Province is spending \$1 million this fiscal year for the structuring of topographical data by industry; this will be completed by 31 March 1996. Watermark Industries will carry out the quality control on 1890 map sheets. Three contract areas have been identified and RFPs will be issued.

Over the next four months, specifications will be prepared for a CZ mapping series. Progress is being made in the development of an MOU between CHS and NB. A lot of support for this mapping is forthcoming from various stakeholders. CZ mapping may be the major project undertaken by the NBGIC in the near future.

In parallel with the CZ mapping initiative, the NB Department of Municipalities, Culture and Housing is developing policies for land use in the CZ as a consequence of the CLURE recommendations. These

policies have been favourably reviewed by the Deputy Ministers Committee. The Deputy Ministers have requested a definition for the inland boundary of the CZ. Réjean stated that the policy should be in place early next year and that it will create a demand for information. Kingsley Lewis supported this notion and gave the example that PEI now has good erosion information because CZ development requirements necessitated its collection.

ACTION: Réjean Castonguay to distribute NB's coastal zone management policy on its completion.

CANADIAN COAST GUARD: John Major reported on the merger of the Coast Guard with Fisheries and Oceans Canada. The Ship Safety Group, however, will remain with Transport Canada. The future role of the Coast Guard will be determined. In the intervening period, the Coast Guard will continue to administer the Canada Navigable Waters Act; it receives authority from the Canada Shipping Act. The merger will result in a combined departmental budget of \$250 million and 2945 py's for the Maritime Region.

A program review for the Coast Guard had been carried out prior to the merger. Additional cuts are expected.

PUBLIC WORKS AND GOVERNMENT SERVICES CANADA: Don Amos reported that Public Works was also undergoing reorganization and is being affected by changes in the Coast Guard and Fisheries and Oceans Canada. Currently the Department is involved in another phase of the Argentia project in collaboration with AGC. It is also carrying out a significant resurvey in Caraquet; significant dredging will be required to maintain the channel.

Software development commissioned by Public Works has been completed. The Bottom Classification System translates soundings and processes the data in the field. The System will be used by the Coast Guard and by CHS in nearshore surveys.

FISHERIES AND OCEANS CANADA: Paul Bellemare commented that the amalgamation of Fisheries and Oceans and the Coast Guard brought together the people and tools required to fulfil Canada's responsibilities in ocean management. The regrouping of Regions will also have a positive impact for collaboration in coastal zone management (CZM). Another major event affecting CZM is the tabling of the Canada Oceans Act (Bill C-98). Consultation re the Act will take place. The ACZISC can play an important role in this process.

Brian Nicholls stated that, once the Canada Oceans Act is proclaimed, an ocean management strategy will be developed. Michaela Huard, DFO Oceans Program, Ottawa, will be charged with this task. Brian suggested inviting Michaela to make a presentation at the next ACZISC meeting re. the status of the Act and the ocean management strategy. He added that Chris Morry, responsible for CZM projects in DFO, could also be invited.

ACTION: Secretariat to invite Michaela Huard and Chris Morry to brief the ACZISC on the status of the Canada Oceans Act at the upcoming ACZISC meeting.

Brian reported that an MOU is being developed between DFO, DOE, NRCan and Agriculture Canada which addresses various resource issues including CZM. The Committee developing this MOU is being chaired by Gerry Swanson.

Brian stated that at the local level scientists were becoming more involved in community activities re CZM. He reported on a community-based project within the context of the Gulf of Maine Council on the Marine Environment which is being funded by the U.S. Environmental Protection Agency (EPA). This mapping project will identify major spawning areas through interviews with fishers. Brian is involved in the project.

Brian added that Paul Boudreau, currently with the Land-Ocean Interactions in the Coastal Zone (LOICZ) in Holland, would be visiting BIO in September.

Paul Bellemare reported that CHS is very active in electronic navigational chart production. This is being driven by demand. Electronic charts are being used in every type of vessel. The next step is to generate bathymetric charts, considered as "thematic" products, from the soundings or source data.

Dale Nicholson added that it now takes 2 years to produce bathymetric charts by digitizing hard-copy charts. CHS is examining ways of producing charts from source data to greatly reduce that turn-around time. Dale added that the liability aspect of paper charts is addressed by a recognized quality control process. A recognized process must also be developed for charts generated from source data to reduce liabilities.

As stated by Réjean earlier, Paul repeated that an MOU re the sharing of data between CHS and NB is being finalized. NB will use the data to produce a CZ mapping series. NS and PEI have expressed interest in a similar agreement. A meeting has been organized with NS in early September.

Paul reported that a Chartnet node will be implemented at BIO. It will have a browser component.

A REET meeting and associated trade show is scheduled for 5-7 September in Summerside. Paul suggested that an ACZISC presentation might be appropriate.

CHS has acquired a multi-beam system for shallow water. It can be used on small "trailerable" boats. It should be operational by the fall.

Paul stated that Oracle MD has been implemented and multi-beam datasets will soon be loaded in the system. He introduced Herman Varma, CHS, and stated that Herman is a member of the ISO Committee responsible for Geomatics Data Models. Herman briefed participants on developments in data management and, in particular, Oracle MD. He added that Oracle MD will revolutionize the GIS industry and that GIS will become an application tool rather than a data management tool. Value-added resellers (VAR) and GIS vendors are positioning themselves to take advantage of these developments. Herman added that Oracle MD is designed for very large datasets.

NACOM: Paul Bellemare reported that this was the last year that NACOM would be receiving seed funding. Additional funds may be available from the Department of National Defence. This year NACOM's focus will be on data management and experimenting with application tools.

NOVA SCOTIA: Bob Crawford, sitting in as a replacement for Art Longard, reported that NS was exploring the production of CZ base mapping. An Issue Group is currently identifying requirements for the mapping. An MOU with CHS will be sought. The Province will seek funds for this project together with a commitment by the line departments. It is proposed that the project will be carried out over a four year period; proof of concept should be completed by the end of this fiscal year and production will take place over the next three years.

A group has reviewed the public response to the CZ2000 document. Another draft has been prepared which includes a plan for implementation. This will be reviewed by the Land Use Committee in September. Discussion re CZ2000 will be required with the federal government.

The Province is exploring integrated resource management through the Land Use Committee.

A policy statement on pricing and distribution of information is being developed and should be available in September. A final decision on the policy will be made by the Deputy Ministers. Bob added that Brad Fay had been appointed as Director of Policy and Standards for the Land Information Management Service of Municipal Affairs.

NATURAL RESOURCES CANADA/GEOLOGICAL SURVEY OF CANADA - ATLANTIC: Andy Sherin reported that Natural Resources Canada was being reorganized. Two Assistant Deputy Minister positions have been eliminated. The Minerals and Energy Sector has been divided in two sections. Both the Geological Survey of Canada and Geomatics Canada now report to ADM Mr. Mark Everell.

For the first time since its formation, the Geological Survey will not have its own director; the implications of this move are not known. Mr. Everell is also the chief advisor for science to the Deputy Minister. Hugh O'Donnell has been appointed as senior advisor to the Deputy Minister.

Andy briefed participants on the 7th Canadian Coastal Conference (CCC '95) scheduled for 18-21 October at the Dartmouth Holiday Inn. The Conference is sponsored by the Canadian Science and Engineering Association (CCSEA). A pre-Conference Workshop on multi-beam mapping will take place on the 18th and field trips are being organized for the 21st. Paper and poster sessions are scheduled for the 19th and 20th. Andy will distribute the final program.

ACTION: Andy Sherin to distribute the final program of the Canadian Coastal Conference ASAP.

Paul Bellemare added that a DGPS Workshop has been scheduled on 16 October and a Permanent Water Level Network Workshop on 17 October. Also it was mentioned by Andy Power that Geomatics Atlantic was scheduled for 16-19 October.

Andy Sherin reported on surveys which have been completed at Poverty Beach in NS and on erosion by ice in the PEI National Park. A survey will be conducted in Shelburne 12-21 September.

Four 1:10 000 base maps have been acquired from NS.

Andy mentioned that oil and gas activity was "heating up" off Port-au-Port in Newfoundland.

CANADIAN HERITAGE: Mike Butler circulated and reviewed a letter received from Francine Mercier who was unable to attend today's meeting due to prior commitments. The letter (copy attached) outlines recent activities by Parks Canada.

7. **PRESENTATION: PASSAMAQUODDY/ICOIN**

Mike Butler introduced Mark Doucet of ICOIN Inc. who made a presentation on the Passamaquoddy/ICOIN project. Mark explained that the goal of the project was to develop a knowledge-based system to help define user requirements for three applications: watershed management, EMO response, and sensitive habitat protection. System development is being carried out jointly with UNB. The system will be PC-based. Off-the-shelf Eclipse software is being used; software is not being developed if it is readily available. Documents describing the project are available.

ACTION: Secretariat to obtain documents on the Passamaquoddy/ICOIN Project for distribution to members.

Mark added that the project would be collaborating with ACAP sites in the region, however, he expressed concerns about the lack of standards in ACAP mapping.

The Passamaquoddy/ICOIN project is monitored by a Technical Advisory Committee composed of Dale Nicholson, Art Skaling (NB Emergency Measures Organization), Barry Jones (NB Fisheries and Aquaculture), Bob Rutherford (Fisheries and Oceans), Bill Ayer (NB Environment) and others. A Financial Committee is also monitoring the project. Its membership includes Eli Harris, Steve Babbit, and Wayne Gunter. Funding for the project is provided in part through ACOA's Atlantic Geomatics Alliance on a loan basis. The ACOA advisor for the project is Dave Coleman (UNB).

Mark stated that ICOIN Inc. would be discussing potential business deals with the ICOIN Project Office in the near future.

Paul Bellemare commented that a piece of the software (DEIS) being developed by McLaren Plansearch would be well suited to the Passamaquoddy/ICOIN project.

Mark mentioned that a computer demonstration was being finalized and that the first presentation was scheduled to take place at the REET meeting in Summerside next month.

8. **UPDATES**

ATLANTIC ACCORD ON THE INTEGRATED MANAGEMENT OF THE COASTAL ZONE: Mike Butler reported that the Oceans Institute had received positive responses to the proposed Accord. The Institute will be determining what the next steps should be to promote implementation of the Accord.

COASTAL ZONE MAPPING: Mike Butler reported on the Coastal Zone Mapping meeting held yesterday (15 August) in Charlottetown. He proposed that a Coastal Zone Mapping Working Group be established to follow up on progress in coastal zone mapping, particularly thematic mapping. Members endorsed this recommendation. Eric Theriault, Environment Canada, volunteered to be a member and Paul Bellemare recommended that Bob Crawford, DFO, be approached re membership in the Working Group.

ACTION: Secretariat to organize a Coastal Thematic Mapping Working Group by 30 September 1995.

As a follow-up to an Action item from ACZISC Meeting #15, Mike distributed a draft form for an Inventory of Coastal Zone Mapping Projects. He requested comments from participants on the format and content of the form. Mike reiterated that the Inventory would be used to identify current and extant coastal zone mapping projects of relevance to CZM and that it would be published as a component of the Database Directory. It was suggested that a covering letter be written to accompany the form when distributed to explain the purpose and use of the Inventory.

ACTION: ACZISC members to provide comments ASAP to the Secretariat re the draft questionnaire for an Inventory of Atlantic Coastal Mapping Projects, as distributed at ACZISC meeting #15.

Mike also reported on the stated requirement for a Coastal Zone Mapping Manual. The Secretariat has contacted individuals with the Green Plan and TAGS re funding for the manual. Jim Ellsworth of ACAP is supportive and will look into the availability of funds. Several individuals are providing input, including Bob Christie of the Pictou Harbour Environmental Protection Project. MacNeill and Associates and Nexus will be drafting a proposal including an outline for the manual; they have suggested that the ACZISC act as scientific authority for the project if funds are located. Members discussed the proposed Manual which was then endorsed, in principal, by the ACZISC.

9. **ANNOUNCEMENTS AND PUBLICATIONS**

Mike Butler reported that the Oceans Institute may be moving off the Dalhousie University campus.

He mentioned that a paper would be presented at the Geomatics Atlantic Conference entitled: "The Atlantic Coastal Zone - A Regional Opportunity with Global Potential".

The NS Oceans Initiative has elected its first council. Progress is also being made in the Oceans Network being developed by Dalhousie University and IDRC.

The Canadian Arctic Resources Committee and the Canadian Nature Federation are monitoring and responding to the development of the Canada Oceans Act.

John Major announced that he would be attending the Submerged Lands Conference scheduled for 24-28 September in Annapolis, Maryland.

ACTION: John Major to report on the Submerged Lands Conference at the upcoming ACZISC meeting.

10. **OTHER BUSINESS**

ECONOMIC STUDY: Mike Butler reported that he had recently attended a presentation which considered the economic value of coastal activities. The presentation was made to the Gulf of Maine Council and Working Group in Portsmouth on 3 August. The ACZISC Executive Committee subsequently met with one of the authors of the study, Janice Plumstead, North American Policy Group, Dalhousie University, to discuss the feasibility of a similar study for the coastal zone of Atlantic Canada.

Andy Power added that he believes that the dollar value re CZ activity has been seriously underestimated in the past. For example, Canada's oceans and ocean resources are directly responsible for approximately \$6-8 billion of the countries national income (NACOM'94). However, value-added production re. fisheries in NS alone is known to be worth \$800 million. He added that the proposed study would be more sellable to the Provinces if the economic values for each Province could be indicated separately as well as combined for the entire Atlantic Region.

ACTION: ACZISC Executive Committee to draft a letter by 31 August describing the intent and objectives of carrying out an economic analysis re the contribution of coastal resources, industries and activities to the economy of Atlantic Canada. This letter will be used by ACZISC members to solicit financial support within their jurisdiction for the study.

ACZISC members to identify potential funding sources to carry out the economic study ASAP.

11. **NEXT MEETING AND ADJOURNMENT**

Members recommended that meeting #16 be scheduled in Newfoundland only if the Province becomes an active member of the ACZISC. Otherwise the meeting will be held in Fredericton.

ACZISC Meeting #16 is provisionally scheduled for November 1995 in St. John's, NF.

ACZISC Meeting #15 adjourned at 17:00 hrs.