

MINUTES OF ACZISC MEETING #16

Atlantic Coastal Zone Information Steering Committee

Date: Tuesday, 12 December 1995 - 0830 hrs.

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

NAME	AFFILIATION	TEL. NO.
Present: * indicates ACZISC member		
Joe Arbour*	Environment Canada	(902) 426-1701
Michael Butler*, Chair	Oceans Institute of Canada	(902) 494-1977
Réjean Castonguay*	Province of New Brunswick	(506) 453-3917
Mike Cole*	NATI	(709) 726-4252
Paul Currie	ADI Ltd	(506) 452-9000
Brad Fay*	Province of Nova Scotia	(902) 424-4966
Betty Godin	NB Dept. of Municipalities, Culture and Housing	(506) 453-2171
Ken Kinney	NB Dept. of Municipalities, Culture and Housing	(506) 453-2171
Claudette LeBlanc	Oceans Institute of Canada	(902) 494-1977
Art Longard*	Province of Nova Scotia	(902) 424-0347
Andy Montgomery	NS Land Use Committee	(902) 424-4963
Brian Nicholls*	Fisheries and Oceans Canada	(902) 426-3246
Dale Nicholson	Fisheries and Oceans Canada	(902) 426-4581
Dick Pickrill	Geological Survey of Canada - Atlantic	(902) 426-5387
Andy Power*	GIAC Atlantic	(902) 468-7777
Andy Sherin*	Natural Resources Canada	(902) 426-7582
Eric Theriault*	Environment Canada	(902) 426-9558
Yvan Vigneault*	Fisheries and Oceans Canada	(418) 648-2509

1. **WELCOME AND INTRODUCTION OF PARTICIPANTS**

Mike Butler, ACZISC Chair, called Meeting #16 to order at 08:30 hrs. He welcomed guests: Paul Currie, ADI Ltd; Betty Godin and Ken Kinney, NB Department of Municipalities, Culture and Housing; Andy Montgomery, NS Land Use Committee; and Dick Pickrill, Geological Survey of Canada - Atlantic. Mike introduced Brad Fay and Eric Theriault. Brad has been appointed as a second Nova Scotia representative on the ACZISC and Eric as a second Environment Canada representative. A roundtable introduction of all participants followed. Mike thanked Réjean Castonguay for arranging the meeting room and the Province of New Brunswick for providing lunch.

2. **ADOPTION OF AGENDA, AND REVIEW AND APPROVAL OF MINUTES FOR MEETING #15**

The Provisional Agenda for Meeting #16 was reviewed. It was noted that additional items on the agenda would be Updates on the Proposed Economic Study and the Gulf of Maine Council on the Marine Environment. A scheduled presentation on Charnet will not take place. The agenda was approved (copy attached).

The minutes of ACZISC Meeting #15 were reviewed and the following revisions were made:

Page 6: **ECNASAP:** at the top of the page... "funded by large sums of cash and in-kind contributions." should read "funded by **modest** sums of cash and large in-kind contributions."

Page 9: **NEW BRUNSWICK:** at the top of the page... "quality control on 1980 map sheets" should read "quality control on **1890** map sheets".

The minutes were approved with the above revisions.

Brad Fay commented that the minutes were good summaries of activities in coastal zone information management in the region and that they should be distributed as widely as possible. Participants suggested that other ACZISC documents (e.g., Action Items, CITAP reports, Standards reports, etc.) be distributed widely also. It was recommended that the Secretariat email the documents to members who would then distribute the documents widely to their network of contacts.

ACTION: Secretariat to email relevant documents to members in WordPerfect format.

Members to distribute the documents widely via email.

3. **STATUS OF ACTION ITEMS**

The Action Items from Meeting #15 are in progress or were completed other than the following:

CONTACT WITH ICOIN PROJECT OFFICE: It was recommended that the chairs of the CITAP, Database Directory and Standards Working Groups contact Hank Jones to establish additional links between the ACZISC and ICOIN activities. This has not been done to date. Mike stated that this was extremely important and that Hank was looking for feedback.

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 the ACZISC will have been in existence four years as of January 1996 and has now almost completed its membership objectives; an up-to-date list of Committee members with mailing and email addresses, and telephone and fax nos. is attached. Membership developments include:

Province of Québec: Yvan Vigneault (DFO) commented that Québec was currently reviewing its liaison with federal agencies. A letter has been written to Richard Chatelain, Ministère de l'Environnement et de la faune, Gouvernement du Québec, inviting the Province to participate in the ACZISC.

Province of Newfoundland: Mike Cole commented that he was unsure of the direction which will be taken by Newfoundland in regards to ACZISC participation. Mike Butler added that a committee has apparently

been formed in Newfoundland to formulate coastal zone policy. This could have a bearing on future participation by the Province.

Environment Canada: Joe Arbour reported that he would no longer be one of DOE's representatives on the ACZISC because of changes in his duties. His responsibilities will now focus on land-based sources of pollution. Larry Hildebrand, one of the founding members of the ACZISC, will rejoin the ACZISC as his replacement. Joe added that the ACZISC was unique in Canada and that it had proved to be an effective mechanism for cooperation and infrastructure building. He will continue to be active in the ECNASAP and Database Directory Working Groups. Mike Butler officially thanked Joe for his contributions and support.

Larry Hildebrand's responsibilities relate to coastal zone conservation and, in particular, strategy development. He will be the primary coordinator for coastal zone issues for Environment Canada in the region. Eric Theriault, Emergency Response Officer, is with Environmental Protection and is involved in sensitivity mapping; Eric is the second DOE representative on the ACZISC.

Nova Scotia: As stated earlier, Brad Fay, Director of Policy and Standards, NS Department of Municipal Affairs, has been appointed as a second Nova Scotia representative on the ACZISC.

Fisheries and Oceans Canada: Dale Nicholson commented that DFO would be reviewing its representation on the ACZISC because of reorganization and mergers which have taken place in the Department.

WORKPLAN/BUDGET/FUNDING SUPPORT: Participants reviewed the current budget (1995/96) and Revenue Summary (1994-1996) and the proposed ACZISC Budget 1996/97, and Workplan (1996/97), distributed by Mike Butler. Copies are attached.

Mike reported that the financial status of the ACZISC was tenuous. This is due to outstanding ACZISC membership dues. He stated that he would be discussing possible additional ACZISC funding with the National Research Council (NRC), ACOA and Innovacorp. Brad Fay suggested that members inform the Secretariat of other potential sources of funding and support. Dick Pickrill suggested that the Executive Committee develop a contingency plan to continue operations if funds are not forthcoming. In the event of a shortfall in funding, it was recommended that emphasis be placed on core ACZISC projects.

ACTION: **Executive Committee to develop contingency plans by 16 January for the ACZISC to continue operations in 1996/97 if current funding sources are not forthcoming.**

It was suggested that the proposed 1996/97 Workplan be revised to indicate the level of effort in days dedicated to OIC activities and projects. Mike asked members to communicate with the Secretariat re further comments on the proposed Workplan and Budget. The Executive Committee will continue to develop the Budget and Workplan based on comments received from members.

ACTION: **Secretariat to revise the proposed 1996/97 Workplan by 16 January to indicate the level of effort in days dedicated to OIC activities and projects.**

ACZISC members to send comments to the Secretariat by 16 January on the proposed 1996/97 Workplan and Budget and to identify potential sources of funding and support for the ACZISC.

An ACZISC presentation was made to the Maritime Geomatics Committee of the Council of Maritime Premiers (CMP) on 9 November; by Mike Butler, Andy Power and Peter Outhit (chairman of the OIC Management Committee). The members of the Maritime Geomatics Committee are Ed Cram, Deputy Minister, NS Department of Municipal Affairs, Bob Gamble, President, NB Geographic Information Corporation, and Mike Kelly, Deputy Provincial Treasurer, PEI Department of the Provincial Treasury. They are assisted by Nancy Vanstone, Mary Ogilvie and Jim Ramsay respectively.

It was proposed to the Maritime Geomatics Committee that the CMP continue its funding support of the ACZISC and that the level of support be increased significantly, i.e. from \$50K/year to \$150K/year. This request was based on the ACZISC's past success in generating deliverables and in leveraging significant funds and in-kind support for its activities and projects. The current CMP/OIC funding agreement comes to an end on 31 March 1996. The ACZISC is awaiting a response to the presentation. A summary of the presentation is on the agenda of this meeting as item no. 7.

DATABASE DIRECTORY: Claudette LeBlanc, chair of the Database Directory Working Group, reported that updates were continuing to "trickle in" for the Atlantic Coastal Zone Database Directory. However, to date, updates for the Newfoundland component have not been received.

She also reported on the Working Group meeting held on 30 November at BIO. The Working Group agreed:

- That the Internet be the primary source of distribution for the Directory.
- That the ACZISC pursue an offer made by Nautical Data International (NDI) to post Version 3 of the Directory on Charnet at no charge to the ACZISC. NDI will also provide the expertise to develop HTML text and a browser for the Directory.
- That the Directory be posted in table format and with the capability to generate summary textual descriptions of the entries.
- That additional programming would be required to develop automated update software and forms for the Directory.
- That a proposal by Munin Multimedia Solutions to distribute the Directory on CD-ROM be considered by the ACZISC.
- That a proposal by HHW Consultants to link the Directory to its WWW consultants database project "Millennium Group of Independent Consultants: MaGIC" be considered by the ACZISC.

Members discussed the Working Group's recommendations. They agreed to check on the availability of a programmer to carry out the programming necessary for posting and updating the Database Directory on the Internet. Brad Fay suggested that the ACZISC consider securing royalties on the use and or distribution of the Database Directory by the private sector to generate value-added products for commercial applications. The revenue would be used by the ACZISC to help defray the cost of the ongoing update. Réjean Castonguay suggested that only a small portion of the Directory could be placed on the Internet to encourage users to purchase the full Directory on CD-ROM.

ACTION: **ACZISC members to check within their jurisdiction ASAP on the availability of a programmer to carry out programming for the Database Directory.**

The pros and cons of "selling" metadata were discussed. It was concluded that the "balancing" act between charging and not charging would continue to evolve based on government policies, user demands, the marketplace, etc. Andy Power commented that, in regards to the ACZISC Directory, the terms of the agreement with CESED would have to be considered when entering into agreements for its distribution. Andy Sherin added that a licensing agreement was required.

ACTION: **Database Directory Working Group to develop a Licensing Agreement for the Directory by 21 March.**

Mike Butler added that the ongoing arrangement between NS and the ACZISC re the production of their respective directories would be pursued.

CITAP: The CITAP (Coastal Information Technology Architecture Plan) Working Group is co-chaired by Andy Montgomery, NS Land Use Committee, and Andy Sherin, Natural Resources Canada. Andy M. reported that the CITAP Workshop held on 16 November in Fredericton had been well attended. A sense of strategic direction in carrying CITAP forward was achieved. The draft CITAP Status Report was distributed (copy attached). The recommendations in the Report were reviewed, including a proposal to

change the name to one which more accurately reflects the concept and objectives of CITAP. A draft Workshop report will be circulated mid-December; comments were requested.

ACTION: Meeting participants to send comments to the CITAP co-chairs by 19 January on the draft CITAP Workshop Report to be circulated by 15 December.

Andy S. provided background on the CITAP name - Coastal Information Technology Architecture Plan. CITAP was coined by the DMR Group in a report prepared for the ACZISC by the Coastal Information Network Consortium composed of DMR, ASL Environmental Sciences, CEF Fisheries Consultants, Earth and Oceans Research and NSTN. CITAP has evolved into a concept which now deals more with protocols and agreements than with technology.

Andy S. briefed participants on the Consortium for International Earth Science Information Network, (CIESIN), based in Michigan. Andy suggested that the terms "consortium" or "information cooperative" which imply shared ownership and unity of purpose might be useful terminologies in renaming CITAP. It was suggested that proposed new names for CITAP be forwarded to the CITAP co-chairs.

ACTION: Meeting participants to send suggestions to the CITAP co-chairs by 19 January re a more appropriate name for CITAP.

Brian Nicholls enquired if CITAP was heading in a new direction. Andy S. responded that the focus was changing to organizational and people issues because it has been recognized that these were more significant impediments to data exchange than technology. The CITAP concept of data exchange can best be demonstrated with "real" projects. The focus of CITAP must be on data agreements and protocols.

Dick Pickrill expressed concerns about the level of effort required to produce new products to demonstrate the CITAP concept. He added that efforts should be concentrated on facilitating existing projects and responsibilities.

Andy S. stated that products 1 and 2 identified in the Workshop Status Report would be extensions of ongoing activities, using CITAP to facilitate, enhance, etc. Product no. 3, the Tidal Information Calendar, would be a new product but it is not suggested that the ACZISC undertake this project. The publication of the Calendar will require a champion, e.g., the private sector, a tourism agency.

The CITAP Working Group proposes to implement CITAP on an incremental basis by improving on current ways of dealing with data exchange. Joe Arbour commented that ECNASAP could serve as a good example of the CITAP concept.

Réjean Castonguay reported that New Brunswick and CHS were in the final phase of an MOU re data exchange. Dale Nicholson commented that after the MOU is finalized it could be used as a template for other similar agreements.

The CITAP Working Group will be organizing a 1-day workshop to be held in conjunction with the next ACZISC meeting to review the status and issues re data ownership, copyright, distribution and liability in each ACZISC jurisdiction. Andy S. requested that members provide documentation re their agency's data policies prior to the Workshop.

ACTION: ACZISC members to provide documentation re their agency's policy on data ownership, copyright, distribution and liability to Andy Sherin by 31 January.

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

STANDARDS: The Coastal Mapping Standards Working Group is co-chaired by Paul Bellemare and Réjean Castonguay. Réjean reported that the Standards Workshop #3 held on 14-15 November in Fredericton had been successful. The Workshop focused on Data Models. Réjean thanked Dale Nicholson for preparing the Workshop report; he also expressed his gratitude to Tim Evangelatos, Canadian Hydrographic Service, and Doug O'Brian, IDON Corporation, for their contributions to the Workshop. Copies of the Summary and Actions Report were distributed and reviewed (copy attached); the full report was mailed to Workshop participants. Participants recommended the adoption of the report.

Andy Sherin reported that as per Action Item no. 7 in the Report he had put out a request on the Internet to identify discussion groups on the subject of coastal zone features. He has received one response from B.C. It is possible that Canada is a leader in this area.

Yvan Vigneault enquired as to the status of ISO 9000 re ACZISC member jurisdictions. Dale Nicholson reported that CHS was adhering to ISO standards. Gary Winters, formerly NRCan, is a certified ISO engineer. The CHS/ISO initiative is being led by the Québec Region. Réjean Castonguay reported that NB had no process or certification action to implement ISO. The cost of acquiring ISO 9000 certification is significant; however, the private sector is feeling pressure to comply because of the requirement for international contracts.

ACTION: Andy Sherin to provide up-to-date information on ISO 9000 by 19 January to the Secretariat for distribution.

COASTAL THEMATIC MAPPING: Eric Theriault, co-chair of the Coastal Thematic Mapping Working Group, stated that the key areas of work for the Group would be to identify key thematic layers and their availability, to inventory planned and current coastal mapping projects, and to develop a field manual for collecting TEK information.

Mike commented that the ACZISC had initiated an Inventory of Current and Planned Atlantic Coastal Mapping Projects; forms have been distributed by ACZISC members to collect this information. A few responses have been received to date.

Mike also stated that he had received a draft outline proposal for a field manual. A final proposal will be distributed for consideration at the next ACZISC meeting. He added that he had a copy of a draft manual prepared by DFO Scotia-Fundy. Andy Sherin reported that he had copies of a manual and video prepared by the BC government. Joe Arbour suggested that support for a field manual could be sought at the upcoming meeting of the Gulf of Maine Council on the Marine Environment (14-16 December in Portland, Maine).

ACTION: Secretariat to distribute the final proposal for a Field Manual for Coastal Mapping at the next ACZISC meeting.

Joe Arbour to discuss the possibility of a joint effort between Canada and the U.S. re the production of a Field Manual for Coastal Mapping at the upcoming meetings of the Gulf of Maine Working Group and Council.

Dick Pickrill commented that a Coastal Thematic Mapping Working Group was very appropriate and that it would be supported by the Geological Survey of Canada - Atlantic. He recommended that the Inventory identify agency capabilities.

ICOIN: Mike Butler distributed a one-page ICOIN update (copy attached) prepared by Hank Jones, ICOIN Project Officer. Up-to-date ICOIN information can be obtained on the Internet at <http://web.meds.dfo.ca>; Hank would appreciate receiving comments.

ACTION: Members to review the ICOIN WWW site located at <http://web.meds.dfo.ca> and provide comments to Hank Jones, ICOIN Project Office (Email: ICOIN@am.meds.dfo.ca).

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). The Committee continues to hold monthly meetings. NOAA is reducing its involvement in the project due to other commitments which have precedence; however, the National Marine Fisheries Service (NMFS), the U.S. equivalent of Fisheries and Oceans Canada, is increasing its participation.

The Inshore Case Study is led by Joe Arbour. He reported that the Inshore Case Study pilot project would be completed in the near future. A Workshop on Shellfish Restoration was held in St. Andrews last March. A draft Workshop report has been circulated for comment; the final report will be circulated early in the new year (1996).

Data collection has been completed for the Shellfish Register for the Gulf of Maine. This will be published in hard copy by the U.S. Staffing problems at NOAA have delayed publication until March 1996. A digital version based on Toolbook is being developed by Geoff Howell, Environment Canada. Distribution on the Internet and CD-ROM are being considered.

Brian Nicholls enquired re the distribution of the digital system. Joe replied that he should be contacted for a copy. Joe also suggested that demos of both the ECNASAP Inshore and Offshore systems might be appropriate for the next ACZISC meeting.

ACTION: Interested individuals to contact Joe Arbour to obtain a digital copy of the ECNASAP Inshore Case Study information system (Toolbook-based).

Secretariat to invite Geoff Howell by 19 January to make presentations on the Toolbook-based products of the ECNASAP Inshore and Offshore Case Studies at the next ACZISC meeting.

Mike Butler circulated copies of the Report of the Workshop on Atlantic Demersal Community Structure, a product from the Offshore Case Study team, which is led by Bob O'Boyle (DFO). The process & products of the Offshore Case Study will be a major contributor to a DFO sponsored Cod Mortality Workshop to be held in St. John's, Newfoundland, in February '96.

Brian Nicholls commented that ECNASAP had been nurtured and championed by the ACZISC; he recommended that this be well publicized.

Andy Sherin stated that the ECNASAP Data Access and Distribution Project Team maintains a list service. He will provide information on how to access the service. The service could be used to distribute ECNASAP summary data; permission of the data providers would have to be obtained to do so.

ACTION: Andy Sherin to provide information on accessing the ECNASAP list server to the Secretariat for distribution to the members.

Andy Sherin reported that the ECNASAP Strategic Environmental Information Base (SEIB) Project Team had initially planned to provide and maintain the primary datasets and their gridded (aggregated data) derivatives. This is not feasible because of the lack of resources. Plans are now to only identify data providers and the various gridded datasets.

An ECNASAP paper session and workshop are planned for CZC'96 (Rimouski, 12-17 August, 1996).

PASSAMAQUODDY: Mike Butler introduced Paul Currie, project manager for the Passamaquoddy/ICOIN project. Mike also reported that Dale Nicholson was the chair of the Technical Committee overseeing the project. Paul commented that the project team was trying to ensure that Passamaquoddy/ICOIN did not end up being a dead end project. A consultative process was used to define the project and its deliverables. The decision-support system is rule based and application specific; the criteria were identified by the clients and used to build resident knowledge bases. Three beta sites have been established. The products will be marketed internationally; a potential market has been identified in Chile via the Champlain Institute. Detailed information will be provided to the Secretariat for distribution.

ACTION: Secretariat to obtain up-to-date information on the Passamaquoddy/ICOIN project from Paul Currie for distribution.

COMMUNICATIONS: The ACZISC Communications Working Group (chaired by Mike Butler) will be identifying a new site for the ACZISC homepage. It is temporarily located at Dalhousie University. Email will be increasingly used by the Secretariat for communications with the ACZISC.

5. ***PRESENTATION: CARIS BROWSER***

Michael Gourley and See Han Quik from Universal Systems Ltd. demonstrated the CARIS Internet Server and browser to participants. The Server allows browsing, distributing and viewing of maps over the Internet. Features such as zooming and panning across a map were demonstrated. Data stored in a database can be accessed by clicking on a location on a map. Sites can be located by retrieving an address or coordinates from a database. Pamphlets were distributed on the CARIS Internet Server. A CARIS Conference is scheduled for 27 May-1 June in Fredericton.

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

NATURAL RESOURCES CANADA/GEOLOGICAL SURVEY OF CANADA - ATLANTIC: Andy Sherin reported that Natural Resources Canada had been reorganized. Both the Geological Survey of Canada and Geomatics Canada have been placed in the Earth Science Sector. An internal workshop for the Sector entitled "Canadian Spatial Data Infrastructure Workshop" was held in November. The goal of the workshop was to identify ways for the Sector to provide leadership in terms of spatial data infrastructure development. Andy will keep the ACZISC updated re these developments and similar activities in the U.S.

Andy reported on the Ontario Shoreline Policy paper presented at the Canadian Coastal Conference, sponsored by the Canadian Science and Engineering Association (CCSEA), 18-21 September in Dartmouth. Some of the participants requested a copy of the paper; Andy will provide the Secretariat with a copy for distribution.

ACTION: Interested individuals to contact Secretariat for copies of the Ontario Shoreline Policy paper.

Andy displayed two posters produced by the GSC on Coastal Stability and the Monitoring of Physical Shoreline Changes in Nova Scotia. The latter is available from the GSC Publications Office. The GSC is interested in developing partnerships to maintain and expand monitoring sites.

The GSC is experimenting with a kinematic GPS which is capable of centimetre accuracy in the x, y & z axes. The equipment is being evaluated for accuracy and software functionality. To obtain high accuracy, a specific base station is required, usually located at a known benchmark.

The GSC is continuing its work with DEVCO on subsidence at the Point Aconi Coal Mine using multibeam data images.

Dick Pickrill reported that he was a member of a Working Group looking at the involvement of the Earth Science Sector in the coastal zone. The Group is also looking at pricing policies for data; changes are expected.

Geomatics Canada is carrying out a study via consultants re its information requirements, etc.

FISHERIES AND OCEANS CANADA: Brian Nicholls reported that DFO is undergoing reorganization and rationalization. The Gulf Region and the Scotia-Fundy Region are being combined into the Maritimes Region, headed by John Locke. An Information Management Branch is being established for the new Maritimes Region; it will be headed by Dave Swetnam. As a result of the DFO/Coast Guard merger, a single fleet of vessels has been established.

DFO is making efforts to coordinate efforts in coastal zone mapping to reduce duplication. Several coastal zone projects are being funded by DFO. Brian commented that he was involved in a literature review of coastal zone management models and their applicability to both the east and west coasts of Canada.

Considerable offshore oil and gas activities are ongoing in Atlantic coastal waters. The Panuke/Cohasset project is coming to an end; its abandonment will be of interest. LASMO will be taking over the site and may further explore it. The Sable Island project is also ongoing. The moratorium on Georges Bank will be coming to an end in 1999. A review panel will be in place by the end of the year. Andy Sherin added that there was considerable interest in oil and gas exploration offshore western Newfoundland.

Brian stated that an ocean management strategy will be developed for Canada, following passage of Bill C-98. He recommended that Chris Morry and Ken Yuen (Michaela Huard's replacement) with the DFO Oceans Program in Ottawa be invited to participate in the next ACZISC meeting to brief the ACZISC on the status of the Canada Oceans Act and Oceans Management Strategy.

ACTION: Secretariat to invite Ken Yuen and Chris Morry to the next ACZISC meeting.

Yvan Vigneault reported that DFO Québec is involved in several coastal zone activities:

Data inventory projects on coastal habitats in 5 major areas: North Shore, Gaspé Peninsula, Magdalene Islands, St. Lawrence Estuary, and the Saguenay River. The GIS database will have mapping at 1:50 000.

Fish habitat index modelling which use all available data to characterize fish habitat. The models will be used to respond to oil spill emergencies, and contribute to environmental evaluation and fish habitat enhancement.

Coastal Zone Canada '96 in Rimouski, 12-17 August.

Ecosummit: A workshop of approximately 500 people to be held in Montréal in the spring. The goal of this large consultation project is to identify priorities and success stories in community level partnerships. A "green plan" will be developed for the Québec Region based on fauna, flora and habitats. The workshop is sponsored by the private sector and three levels of government. A report will be presented at CZC'96.

Yvan added that DFO Québec works closely with the DOE Centre Saint-Laurent.

Dale Nicholson reported on the coverage of CHS surveys in 1995; he distributed a map indicating the coverage areas (copy attached). CHS is continuing with the production of electronic navigational charts.

Three hundred charts are currently in production; after these are completed, they will be maintained by CHS.

A workshop on DGPS was held at BIO on 16 October at BIO. A workshop report was prepared.

ACTION: Dale Nicholson to provide copies of the DGPS Workshop Report to the Secretariat for distribution.

CHS is continuing to seek support for the maintenance of the Permanent Water Level Network.

Chartnet has been installed at BIO and is being tested. CIDAS, a component of Chartnet, is being used by ACRSO for file management, user reporting, etc. Note: the Atlantic Centre for Remote Sensing of the Oceans (ACRSO) has recently been renamed as the Alliance for Marine Remote Sensing.

Dale will be meeting with the NS Geomatics Centre and NDI re data sharing for the production of coastal base mapping for NS.

ENVIRONMENT CANADA: Joe Arbour reported that flood damage risk maps are being digitized at DOE. Published map coverages are available on the E.C. Homepage.

Using information collected for shellfish programs, closure maps will be added to the Toolbook system developed for ECNASAP; this is under development.

DOE's Ecosystem Monitoring and Assessment Network (E-MAN) is linking locations across the country established for monitoring and assessment. A marine node for the Grand Banks is being established through Memorial University in St. John's.

The mineral deposits of nickel, cobalt and copper at Voisey Bay, Labrador are generating a lot of interest and environmental concerns. Land claim issues must be addressed. Facilities for transporting the ore by sea will have to be built. Dave Scrutton, DFO Nfld, is interested in mapping the Voisey Bay area.

Eric Theriault briefed participants on the National Habitat Sensitivity Mapping Program. A contract has been awarded (Ed Owens) for shoreline segmentation. Resources required to respond to spills, etc. are identified by segment of shoreline. Sensitivity mapping of the Maritime Provinces and the South coast of Newfoundland will be completed this year. DOE is also using information from other sources, e.g., videos produced by Jacques Thibault, NB Department of Natural Resources and Energy, and by the GSC - Atlantic.

NEW BRUNSWICK: Réjean Castonguay reported that NB has budgeted \$1 million for maintaining and structuring topographical data. In response to an RFP for this task a \$2 million proposal was received from a consortium composed of Geomacadie and Geoplan in NB, GeoNet in PEI and Eastcan in NS. As a result of higher than anticipated costs, specifications have been modified and expectations lowered. A contract was signed in November for 1890 map sheets to be completed by the end of July '96.

The delays in the topographical structuring project have caused corresponding delays in developing coastal zone mapping specifications. This will be addressed in the new year with a \$1 million budget. Departmental requirements will be identified; municipalities will be key players.

Ken Kinney, NB Department of Municipalities, Culture and Housing, reported that the coastal zone management policy being developed by the Deputy Ministers Committee on Land Use, will become official NB Government policy. Draft version 13 of the ecosystem-based CZM policy, was endorsed by the Committee in June 95. An ecosystem identification project has been initiated as a result; this is being carried out by Betty Godin. The land use and marine sectors have been separated because the marine sector was not comprehensively dealt with in CLURE. Additional marine issues are being identified by the

NB Department of Natural Resources and Energy (NBDNRA) and the NB Department of Fisheries and Aquaculture (NBDFFA). Another presentation will be made to the Deputy Ministers in January. Digital orthophotos are being recommended for coastal zone ecosystem delineation. It is anticipated that the CZM policy will be adopted late 1996; the marine policy may or may not be included.

Coastal zone management will be carried out by the Ten District Planning Commissions. They will have to be supplied with adequate data to carry out this management. Each will have a CARIS workstation.

Betty Godin stated that the NBGIC had carried out experiments on digital orthophotos with USL and Geomacadie. This experience is being put to good use in the ecosystem delineation project. Problems have arisen because the data is ten years old and the topographic databases have not been developed for coastal zone mapping applications. Coastal zone delineation in terms of resource management will require accurate mapping. A pilot area will be mapped and a system for delineation will be developed by merging orthophotos; 500 m buffer zones will be established around ecosystems and the shoreline. The "wet" side being scoped by NBDNRA and NBDFFA will be added to the land side.

The NB Department of Municipalities, Culture and Housing, the lead agency in CZM, will be soliciting support from other departments to access NBGIC's program funds for the acquisition of aerial photography.

NOVA SCOTIA: Art Longard reported that there is renewed interest in NS re oil and gas exploration. The Canada/NS Fisheries Advisory Committee has been reactivated as a result of the Georges Bank moratorium coming to an end in 1999. In addition to the Province, DFO and the private sector are represented on the Committee.

CZ2000 is currently undergoing internal review and edit. It will be distributed to federal agencies for discussion within the next 6 months.

Brad Fay reported that a proposal was being developed to produce 1:50 000 coastal zone base mapping from the 1:10 000 NSTDB and CHS charts. A recent workshop looked at thinning these maps & charts for this purpose. An MOU between NS and CHS is being developed. Specifications are also being developed; these should be completed by summer 1996. The coastal mapping program would follow. A map fund has been established in NS for the production and maintenance of mapping; it is funded by sales of digital mapping products.

NS is participating in thematic resource mapping projects in the Gulf Region of DFO with John Legault and Lee MacNeill. Inverness and Antigonish County will be completed in January '96. The lack of detailed chart coverage for NS is causing problems.

GIAC ATLANTIC: Andy Power reported on GANS and GIAC activities; a summary report was distributed (copy attached) and reviewed.

Andy commented that the offshore oil and gas industry was reviving. In addition to areas already mentioned, Hibernia and Terra Nova are generating interest and activity.

GIAC and GANS members are exporting services internationally to countries such as Malaysia, on "how not to carry out fisheries".

In marine construction, the Fixed Link is progressing but construction is limited in the winter season.

There is currently a surge in NS re delivery of information; year-end funds can be spent to contract the private sector to carry this out.

Andy added that money has been levered for the Champlain Institute. Projects are being initiated. The Institute is being supported by the CMP and the private sector. Because of reduced budgets, the Institute will be advertising for an Administrative Assistant and not a high level Director as previously planned. More details will be provided at the next meeting.

NATI: Mike Cole commented that it was unfortunate for the private sector in Nfld that the Province was not actively participating in the ACZISC.

As part of the Nfld Economic Strategy, a technology secretariat has been established; Operation On-line is one of its projects. It will be staffed through secondments from the private sector and government agencies.

The Nfld Department of Industry, Trade and Technology is establishing a marine information program to aid development of products for oil, gas and fishery applications.

Oil and gas exploration is the main source of revenue for industry in Nfld. The west coast of the Province is "ramping up" and Voisey Bay is attracting a lot of attention. Some export of services is also generating revenues.

7. **PRESENTATION: THE ACZISC - A 3 YEAR PERSPECTIVE**

Mike Butler presented a summary of the presentation made to the Maritime Geomatics Committee on November 9. He distributed copies of the overheads used in the presentation (copies attached).

Discussions followed:

Art Longard suggested that base funding could be obtained on the basis of generating interest in ACZISC activities rather than on in-kind dollar contributions.

Andy Power, present at the November 9 presentation, stated that the Maritime Geomatics Committee was very focused. He suggested that ACZISC activities in sustainable development and economic growth aspects of information management go beyond the Maritime Geomatics Committee's mandate. He added that the private sector views geomatic activities, economic growth and wealth creation as being tied together. The coastal zone has huge economic potential and its value will have a major impact on our future prosperity. A study is needed to reinforce this.

Dick Pickrill commented that the value of the ACZISC's work to the Atlantic community must be shown to the Premiers; conversely the repercussions of not doing the work should also be articulated.

Andy Power added that efficiencies attributable to the private sector and governments working together as a result of ACZISC activities are a marketable commodity.

8. **UPDATES**

ECONOMIC STUDY: Mike Butler commented that the value of the coastal zone of Atlantic Canada was estimated to be in the billions. However, this is not generally appreciated by the political hierarchy and the economic facts have not been appropriately documented. Accordingly, he circulated a draft proposal submitted by Maurice Mandale, former senior economist with the Atlantic Provinces Economic Council (APEC). The proposal (copy attached) entitled "The Economic Impact of Atlantic Canada's Coastal Zone: Exploring the Concept" was reviewed. Mike added that the information required for the study was available but it was fragmented and not easily accessible.

Discussions followed:

Andy Montgomery suggested that, in order to fall within the ACZISC mandate, the study should be done in terms of establishing an information infrastructure to allow economic evaluations to be carried out on demand.

Brian Nicholls stated that ground rules would have to be established for the study. For example, the economic study carried out for the Gulf of Maine Program was flawed because the value of shellfish was not included in the study.

Andy Sherin commented that François Boulanger, DFO Québec, has expertise in economic studies and could make valuable contributions to the proposed study.

Mike Butler asked members to provide further comments on the proposed study.

ACTION: **ACZISC members to provide comments to the Secretariat by 19 January on the proposal to carry out an Economic Study re Atlantic Canada's Coastal Zone Activities.**

ATLANTIC ACCORD ON THE INTEGRATED MANAGEMENT OF THE COASTAL ZONE: Mike Butler reported that the Accord had been developed by the Oceans Institute of Canada (OIC) and submitted to the ACZISC for comment. The ACZISC later approved the Accord in principle because it would assist the ACZISC with its mandate of information management.

The Accord was then circulated to the Premiers and Ministers in Atlantic Canada. It received positive responses but additional information was requested. Accordingly, the OIC organized a 1-day workshop on 16 November to further inform politicians & senior bureaucrats re the Accord. The workshop was cancelled because of scheduling conflicts. A letter has been circulated suggesting that another workshop could be organized by the OIC if sufficient interest is indicated.

CANADA OCEANS ACT: Recommendations for revisions to Bill C-98 were made, via videoconferencing, to the Standing Committee on Fisheries & Oceans by Associates of the Oceans Institute of Canada. Mike distributed copies of the comments made to the Committee by OIC Associates and a discussion paper on a National Marine Conservation Strategy and the Canada Oceans Act prepared by the Canadian Arctic Resources Committee/Canadian Nature Federation.

Art Longard stated that NS had made high level representations re Bill C-98. NS suggested that the provinces be referenced in the Act in terms of CZM; changes to the Act were made as a result. NS is now satisfied with the contents of the Act.

The NS Oceans Initiative also made comments on the Act.

Briefing sessions by DFO staff had previously been held at BIO. Concerns were expressed that these sessions were not well publicized. However, it was stated that the parliamentary schedule for Bill C-98 could still accommodate comments.

Brian Nicholls provided a brief history of the Act, including the report of the National Advisory Board on Science and Technology (NABST), the Ministers Discussion Paper, the draft Act, etc. The current version of the Act is a result of considerable negotiation and compromise. After the Act becomes law, regulations will be developed with the "teeth" required for its enforcement.

COASTAL ZONE CANADA '94 AND COASTAL ZONE CANADA '96: Brian Nicholls, co-chair of the CZC'94 Organizing Committee, reported that post-conference activities re CZC'94 were ongoing. Bills are still being paid by Brad Fay, chair of the CZC'94 Finance Committee; copies of the Proceedings Volumes 1-5 are still being sold; and Volume 6, a record of Conference deliberations, is in preparation. DFO Québec did an analysis of the Conference Proceedings; Yvan will make available a copy of the analysis to Brian for translation.

The wind-up of Conference activities is taking longer than anticipated. Funding is available to complete and print Volume 6 which will include workshop and round table reports and the Conference

Recommendations and Call for Action. A draft copy of the Conference Recommendations and Call for Action has been circulated and comments have been received; the revised document will be distributed separately as well as included in Volume 6.

CZC'96 is being planned; the Organizing Committee is chaired by Mohammed El-Sabh from the Université de Québec in Rimouski. The Conference is scheduled for 12-17 August 1996 in Rimouski. It was suggested that members publicize CZC'96 as widely as possible. A call for papers was distributed. CZC'98 is being considered for Vancouver/Victoria and CZC 2000 may be scheduled for Halifax.

ACTION: ACZISC members to publicize the upcoming CZC'96 Conference as widely as possible.

Interested individuals to submit paper abstracts to the CZC'96 Conference by 1 February; for further information, contact Mohammed El-Sabh: Tel (418) 724-1707, Fax 724-1842, Email mohammed_el_sabh@uqar.quebec.ca

The series of coastal conferences is being coordinated by the CZC Association. The Association will work closely with the Canadian Science and Engineering Association which organizes the Canadian Coastal Conferences. Discussions are also taking place with NOAA re coordinating with the U.S. series of Coastal Zone Conferences; CZ97 will take place in Seattle, a site selected prior to discussions with the CZC Association.

GULF OF MAINE COUNCIL ON THE MARINE ENVIRONMENT: Brian Nicholls reported that the GoM Council had undergone a self examination exercise this past year. It was carried out at the senior ministerial level rather than by the Working Group as in the past. The review identified habitat as the prime area of focus and concern. Environmental Protection Agency (EPA) funds have been made available via retiring Senator Mitchell of Maine. Some GoM projects are of direct interest to the ACZISC, e.g., DIMC deliberations; the collection of anecdotal information on habitats etc. Council and Working Group meetings will take place 13-14 December in Portland. Mike Butler distributed the Gulf of Maine Highlights and a memo from Jeff Taylor, Council Chair, re GoM program areas.

Brad Fay stated that the Data and Information Management Committee (DIMC) of GoM is responsible for EDIMS (Environmental Data and Information Management System); Brad is one of the DIMC co-chairs and Claudette LeBlanc is a member. EDIMS is a network which will be used to link databases related to the Gulf of Maine; a prototype has been developed. A DIMC meeting will take place tomorrow (13 December) also in Portland; a proposal to further develop EDIMS and update the GoM Directory of Datasets will be reviewed. The ACZISC has contributed both versions 1 & 2 of the Atlantic Coastal Zone Database Directory to the GoM Directory of Datasets.

9. **ANNOUNCEMENTS AND PUBLICATIONS**

Mike Butler circulated for review the "National/Nfld and Labrador Round Tables - Partnership for Sustainable Coastal Communities and Marine Ecosystems" and "Coastal Community News".

10. **OTHER BUSINESS**

No new business was discussed.

11. **NEXT MEETING AND ADJOURNMENT**

ACZISC Meeting #17 is provisionally scheduled for 21 March 1996 in Halifax, NS.

ACZISC Meeting #16 adjourned at 17:00 hrs.