Coastal zones are areas of particular ecological, social, and economic value where many conflicting interests need to be resolved in order to ensure a sustainable development of this highly complex environment. Humanity has always shown a special interest in the coastal zone and a large fraction of the human population traditionally settles in or close to the coastal zone. Recent increases in coastal urban population and changes in land-use practices have led to rapid and large changes in sediment supplies and increases in nutrient, pollutant and pathogen loadings to coastal waters. Climate-induced changes in sea level are likely to increase the risk of inundation in many parts of the coastal zone. The on-going and anticipated changes pose serious risks to human health and the capacity of ecosystems to support products and services critical to the survival and well being of human populations, in developed and developing nations alike.

The Coastal Zone Community of Practice (CZCP) supports the Group on Earth Observations (GEO) in its goal to provide observations required for informed decisions concerning the coastal zone. High and immediate priorities for GEOSS are improved forecasts of sea-level rise and associated increases in coastal inundation that may be exacerbated by increases in the frequency of extreme weather.

Hans-Peter Plag, Paul M. DiGiacomo, Michael Bruno, Jimmy Adegoke

13th GEO User Interface Committee Meeting
Washington, D.C., USA, 16 November 2009
The **GEO Coastal Zone Community of Practice (CZCP)** objectives are to:

- Engage coastal users and data providers in the specification of requirements for *in situ* & remote coastal observations and derived information products in support of integrated coastal zone management
- Evaluate current and projected observational capabilities against these requirements, identifying gaps, redundancies and activities that need to be strengthened;
- Advise the **GEO User Interface Committee**, other CPs and GEO on matters relating to coastal zone observations and related societal benefits, and identify priority needs as well as areas for linkage, collaboration and support.

The **CZCP** tasks include:

- Organize workshops and develop “proof of concept” pilot projects that both address these gaps and enable data integration for the provision of new or improved decision support tools;
- Promote development or strengthening of networks of institutions globally, regionally, and across the CoPs that contribute to and benefit from GEOSS;
* CZCP Organizing group:
  Jimmy Adegoke
  Michael Bruno
  Robert Christian
  Franciscus Colijn
  Paul DiGiacomo (co-chair)
  Thomas Malone
  Liana Talaue-McManus
  Jose Muelbert
  Hans-Peter Plag (co-chair)

* Numerous GEO member nations, as well coastal user interests & applications (e.g., sea level rise and inundation; water quality; habitat, resource and integrated coastal area management) are represented within the CZCP.

* Frequent communication is occurring within this group to facilitate discussion and plan CZCP activities.

* Outreach to other relevant groups and activities.
Recent CZCP Activities

General Outreach:
- Coastal users/organizations/needs are being identified by the organizing group.
- Focus on presentations of the CZCP at relevant regional conferences.
- Authored a Community White Papers to OceanObs'09.
- Are adding information for interested potential organizations and new CoPs to the web page.

Strategy:
- On-going strategy discussion for the next years.
- Had a meeting of core group in June in Washington, D.C.
- Will have a CZCP meeting on November 20, 2009, Washington, D.C.
- Potential update of the Coastal Theme Report – what would be the process?

Main Activity:
- Series of regional workshops: Decision support through GEOSS
Main Activity

A series of CZCP regional users workshops is currently being planned and carried out:

GEOSS Support for Decision-Making in the Coastal Zone: Managing and Mitigating the Impacts of Human Activities and Natural Hazards in the Coastal Zone

Introduction: Global, regional and local trends in natural processes and human demands on coastal ecosystems jeopardize the ability of these ecosystems to support commerce, living resources, recreation and habitation. In this context, improved, integrated and sustained coastal observing capabilities are required to better support user information needs. The Group on Earth Observations (GEO) provides a valuable framework and mechanism to help implement these capabilities, and under the auspices of GEO, a Coastal Zone Community of Practice (CZCP) was initiated in 2006. The CZCP builds on the heritage of the former IGOS Coastal Theme (more background ...), which provided a strategy for integrated observations across the land-sea interface, and aims to enable broader participation, improved linkage to users, coordinated implementation, and enhanced societal benefits.

The CZCP is a user-driven community of stakeholders, the purpose of which is to develop a strategy, in the framework of GEO for engaging user groups across the land-sea interface in the development of those elements of the GOOS and GTOS that are required to provide and integrate data on terrestrial, freshwater, marine and atmospheric systems that converge in the coastal zone. Its specific objectives are to:

1. Engage data providers and users in the specification of requirements for in situ and remote observations
2. Evaluate current and projected observation capabilities against these requirements, and identify gaps, redundancies and activities that need to be strengthened;
3. Promote the development of workshops and “proof of concept” pilot projects;
4. Promote development or strengthening of networks of institutions globally, regionally, and across Communities of Practice (CPS) that contribute to and benefit from GEOSS to achieve the mutual goals of GOOS and GTOS.
A series of CZCP regional users workshops is currently being planned and carried out:

Much work was invested into preparation of two subsequent workshops in Africa:

1. Egypt:
   - follow up of a recommendation of the Athens Workshop;
   - main goal: understanding decision processes and GEOSS decision support in Southern Mediterranean countries;
   - local host: governmental organization (National Authority for Remote Sensing and Space Sciences);
   - problem: not able to secure sufficient funding (~$25,000);
   - postponed, hopefully in 2010
Main Activity

A series of CZCP regional users workshops is currently being planned and carried out:

(2) West Africa:
- Focus on regional CZ issues; goal to initiate a regional CZCP
- First scheduled for August 2009 in Accra Ghana
- Kind-off ad hoc approach to planning;
- Slow development of local organization; problems with local budget, change venue;
- Problems in securing sufficient funding (UNESCO, GEO, but no other sources);
- No strong support of regional organization due to reduced activities;
- postponed;
- UNESCO has invitation from Minister of Environment of Benin;
- Plan: Africa, Benin, Cotonou, February 2010, jointly with a Water Workshop
- Invitation and first circular on web page to come in the next few days

Much work was invested into preparation of two subsequent workshops in Africa
Main Activity

A series of CZCP regional users workshops is currently being planned and carried out.

Recent development:

(3) In the America; Puerto Rico:
- September/October 2010
- Preparation of program in progress
- Will be a topic at the “GEOSS in the Americas” and CZCP meetings,
  Friday, November 20, 2009;
- Scope: Coastal Zone issues relevant to the Americas
- Goal: Regional CZCP; interest expressed at the 2008 GEOSS in the Americas meeting
- CZCP has prepared a brief “business”-concept paper for a successful workshop.
Main Activity

A series of CZCP regional users workshops is currently being planned and carried out.

Recent development:

(4) In Asia: Potential focus on coastal Mega Cities
- Very early planning stage
- Initial contacts to Jakarta
Interested?

Meeting on Friday, November 20, 2009, Canadian Embassy