ICZM-A COMPLEX INTERNATIONAL CONCEPT

4.1. ICZM: definition and characteristics
Integrated Coastal Zone Management (ICZM) is a broad concept used for the first time in USA in the ‘70s. Nowadays is being accepted in many of the coastal countries as the right framework towards coastal protection and development. Basically ICZM was seen as the management of the coastal zone taken as a whole in relation to local, regional and international goals with a particular focus on the interactions between various human activities and resource demands both within the coastal zone and between activities from the coastal zone and activities from other regions. A part of the management was the integration of environmental protection goals into economic and technical decision making process. (OECD, 1993) Recent definitions (European Environmental Agency, 2003; PROCOAST, 2000) emphasise the fact that ICZM is a dynamic, continuous, iterative and multidisciplinary process to promote sustainable management of the coasts. As shown before, the ICZM is based on the general system theory. This process unites in one complex ‘general system’ government and community, science and planning, sectoral and public interests by promoting and implementing an integrated plan for the protection and development of coastal systems and resources. An effective management involves an increasing number of disciplines – geomorphology, marine geology, oceanography, law, economics; geography etc. all together building up a multi-disciplinary, integrated view- a key point in development of ICZM.

ICZM covers the full cycle of information collection, design of planning, decision making, management and implementation, but it does not stop here as it is dynamic (because the system involved are usually extremely dynamic) and iterative. This means a continuous need of review and adaptation to the new conditions so that the cycle has to be started once again (Fig. 6).

(Fig. 6 The steps of the coastal management cycles-Richter 2001)
ICZM is also based on the awareness i.e. not only the use of both traditional and scientific knowledge but also the informed participation and co-operation of all stakeholders to assess the societal goals in a given coastal area and take actions towards meeting those objectives. The key points are on the one hand the dialogue and co-operation among stakeholders and on the other hand the co-ordination and integration.

4.2. ICZM dimensions
The integration covers different dimensions:
- Horizontal integration – i.e. integrated planning related to socioeconomic and ecological aspects,
- Vertical integration at various administrative bodies, at different levels of communication
- International co-operation - National government - Regional/County level - Local/Municipal level;
- Territorial integration taking into account the interrelations between the land and the sea, the terrestrial, estuarine, littoral and offshore components of the coastal zone;
- Integration through time in a consistent manner of the policies, planning and management strategies;

Another essential aspect of the integration is community participation.

Community participation
The participation of the public is essential in assuring the sustainability of ICZM. Jentoft (Simionetti, 2001) identifies two different types of communities:
- The ‘ideal’ community characterised by a social group having shared beliefs, a stable membership, the expectation of continuing interaction and a pattern of direct and multiplex relations;
- The ‘less than ideal’ community which is a society of people with more individualistic motivations, characterised by ‘social fissures, inequities and power differentials’

The first type of community is more likely to be receptive of what we could call ‘community-based co-management’ of natural resources. In this case the individual members and the community as a whole have an incentive to cooperate and restrain individual behaviours for the benefit of the entire community. This could contribute to a sustainable exploitation of resources and to a community’s ability to sustain the process of ICZM. The ICZM can also be seen, in this case, as a set of actions that build communities, as they will act in accordance with the needs of sustainability. Doing this implies for the ICZM practitioners to have knowledge of the nature of specific communities and the larger forces of culture, markets and society. (Simionetti, 2001) The Århus Convention (1998) concerning public right for information on environmental problems is fully embodied in its letter and spirit in the ICZM process. The integrated management includes by definition the participation of all the stakeholders ensures that no limit should be placed on the participation of the local community or general public. Calling for extensive public participation in decision making, the ICZM shows that negotiation and mediation before decisions are taken reduces conflicts and minimises the need for judicial proceedings. This will save energy, cost and, most important time which may be crucial given the risk of irreversible environmental damage. (Mecadie, 1999)

4.3. Benefits of ICZM
Over the long term, ICZM can assure the needed balance among environmental, economic, social,
cultural and recreational objectives, all within the limits set by natural dynamics. From the economic point of view, ICZM can reduce both conflicts between competing activities; risks to capital investment and can improve the efficiency of public and private investments. Administratively, ICZM, by facilitating co-ordination of policies, plans and management strategies at all levels- local, regional, national helps to achieve a consistent development of objectives and activities linking land and sea based management. Having the consistency induced by ICZM, the region/county can deliver effective responses to international (for example EU) directives and obligations (Procoast, 2000).

Three major outcomes of an effective ICZM can be underlined (Richter, 2001):  
- development of a robust and well-informed ICZM process;  
- positive changes in societal behaviour towards economically rational, socially responsible and environmentally sustainable forms of development;  
- improvements in the quality of ecosystems and social systems.

4.4. Constraining factors of ICZM

The ICZM is a long process, which takes a lot of time and commitment. Dealing with complex and dynamic factors it is better for the integrated management to be built upon a simpler but sound foundation. If it is overambitious it might risk failure and loss of self and public confidence. The factors that can constrain ICZM (after Peter R. Burbridge) are:

- Separation of the terrestrial and marine components of the coastal zone from the legal and institutional point of view;
- Sectoral approaches of the economic development planning and management of coastal areas and natural resources;
- Lack of cohesion and consistency in policies, planning, investment and management strategies at different administrative levels;
- Lack of political awareness of the strategic importance of coastal areas and resources (PROCOAST 2000)

4.5. ICZM Approaches

There is not only one single right ICZM approach. While the sustainability is ‘not a set of prescriptive actions’ (Key & Alder 1999), ICZM is a process that leads to action (Simonetti, 2001). Seen by many as an environmental management strategy, ICZM ‘seeks to synthesise principle and realities, operationalising them into decisions about coastal resource use’. ICZM prescribes behaviour, which affects a wide range of natural environments and human institutions. There is no Golden Rule or universal framework for promoting ICZM. The diversity of cases – corresponding to the variety of coastal systems and composing driving forces- makes reasonable the great diversity in approaches to the development and co-ordination of ICZM process.
4.6. ICZM at the Global level
Since its arising in the 70’s ICZM proliferated many efforts had been made in this respect in many countries of the world. In the year 2002, there were approximately 700 ICZM efforts in existence around the world. (Hildebrand, 2002) Current inventories are further developed and reviewed by ICZM practitioners and international assistance agencies. These ICZM efforts take place in all parts of the world, in all types of political regime, at all levels of governance at all levels of national economic development and in all types of environments. At the subnational levels there are over three times as many ICZM efforts then at the national level.

There is an obvious similarity in the specific problems and development opportunities that have motivated the initiation and development of a great majority of ICZM programs. This similarity regarding the motivating issues occurs although there is a considerable variation among coastal countries in terms of socio-economic and environmental conditions, morphological and climatic factors, laws and institutional systems.

Since 1990 there is a considerable increase in the number of developing nations and developing semi-sovereign states involved in the ICMZ process at the national or local level. Most of these developing countries have received substantial support. It is usually non-reimbursable grants from international assistance institutions (e.g. World Bank, GEF, Inter-American Development Bank, Canadian International Development Agency etc.) for the initiation and preparation of an ICZM effort. The support for implementation is provided as a loan not as a grant. (Hildebrand, 2002).

NOTE: This text is compiled from a book chapter relevant to ICZM