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*“Creating and nurturing the MELIA (Mediterranean Dialogue on Integrated Water Management) Community of Practice: A strategic Coordination Action for the establishment of an Information and Knowledge Management, Sharing and Dissemination Platform for the IWRM in the Mediterranean Area - <http://www.meliaproject.eu>”*

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**Abstract**

There exists a general perception that water management models are still constructed from points of view that ignores contributions from all the key stake-holders, specially users and citizens, determinant for the impact on the territory of water schemes and the satisfaction of the water demand, specially from the sustainability point of view, taking into account the social, economic, environmental and institutional dimensions.

Research in this topic is of common interest of the EU and its Mediterranean Partner Countries (MPC) in view of the economic integration of both sides of the Mediterranean area, the risks associated to the climatic change and the increase in frequency of water risks events, such as droughts or floods, in the area. Another general perception in the Mediterranean area is the lack of visibility of the important role that Science and Technology play in the sustainable development of the region. Part of these problems is due to communication gaps between political and administrative institutions, scientists, cultural workers, lawyers, economist, end-users and citizens.

The **MELIA Community of Practice (MELIA CoP)** is based on a FP6 funded Coordination Action MELIA (*“Mediterranean Dialogue on Integrated Water Management”*) which aims at structuring an open dialogue between experts from both sides of the Mediterranean and among the key stakeholders concerned and affected by water use and management, such as scientists and professionals, decision makers, policy makers, water providers and, specially, citizens, whose awareness on the issues should be raised by using appropriate dissemination instruments, language and content. Many of these actors are involved into on-going and future initiatives, for instance those ones:

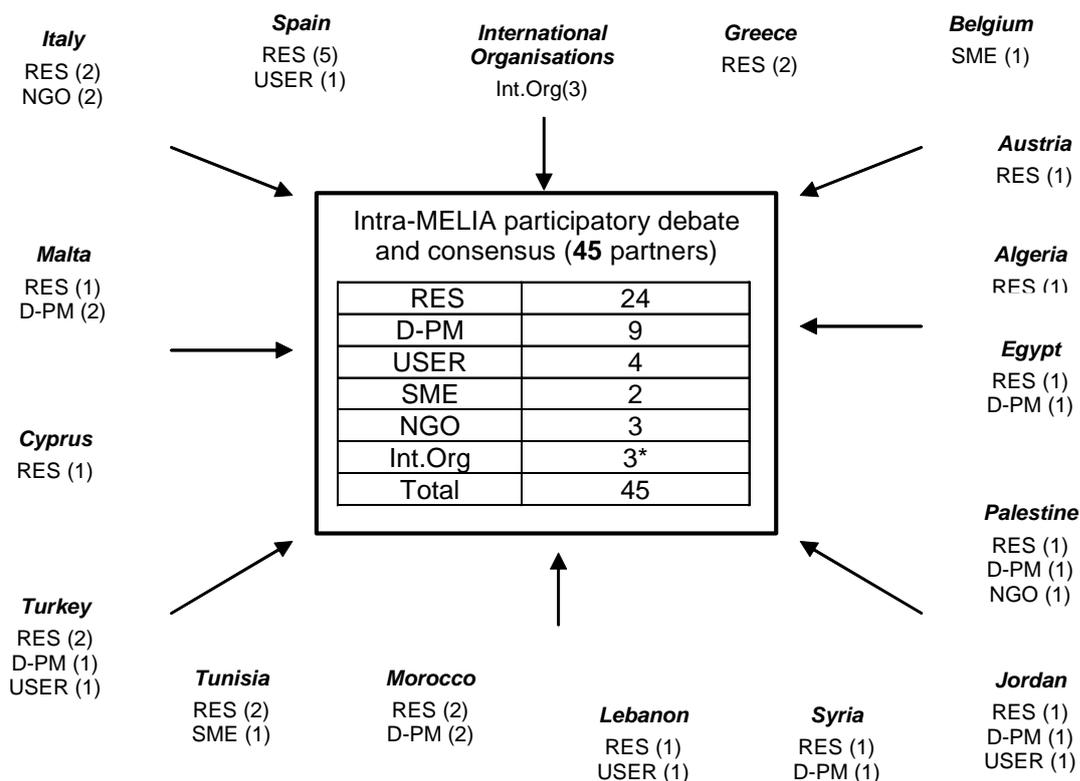
- Mainly focused on EU-INCO-MED/MPC context: WASAMED, FOGGARA, WADAMED, MED-REUNET, SED-Net DESURVEY, WADI, INECO, ...
- Rest of initiatives related to Water Management: SEMIDE-EMWIS, EU-MEDA-WATER, MED-EUWI, EU-MEDSTAT-ENV, ...
- Related to the rest (“all”) of EU and World Areas IWRM initiatives: EU-WFD, EU-LIFE, EU-SMAP, UNEP-MAP, EXACT, INCO-DEV Asia, FP ENVIRONMENT, HARMONICoP, INBO, ...

In this way, this dialogue intends to create a Forum where water players can share knowledge, find consensus and propose new perspectives on the emerging needs of the different stakeholders such as agriculture, industry, trade and tourism and urban development, and appropriate integration of knowledge for integrated water management, in a region of scarce resources such as all the Mediterranean basin countries. This involves also looking beyond the physical aspects of water supply and sanitation.

The *MELIA Consortium (CORE GROUP)* is composed by **45 partners** representing 16 countries from both the EU (Italy, Spain, Cyprus, Greece, Belgium, Malta, Austria) and the Mediterranean (Turkey, Morocco, Algeria, Tunisia, Egypt, Syria, Lebanon, Jordan, Palestine) and different categories: Research Institutions, Decision-Policy Makers, Users, International or Intergovernmental Organizations, NGOs.

The wide range of categories involved in MELIA and the governmental and intergovernmental status of some partners will help to reach and apply concrete results and will be effective on the problems related to water management in the territory. The structure of MELIA includes most of the relevant water stakeholders in the discussion of the issues related to the integrated and sustainable water management in the Mediterranean area.

Figure: MELIA Consortium (CORE GROUP) Structure of participation by different countries and categories



Legend:  
**RES:** research Institution    **D-PM:** Decision-Policy Maker Institution    **USER:** water user, water services, boards  
**Int. Org:** International or Intergovernmental Organisation    **NGO:** non-governmental organisation

\* **Int. Org:** International or Intergovernmental Organisations (3): P2 CIHEAM-IAMB, P7 OIE, P44 REMOC

Some of the main targets of the MELIA Community of Practice are:

- Building a knowledge base for integrated water resources management (IWRM) planning, based on integrating contributions from different perspectives, involving the wide spectrum of stakeholders and based on the general frame defined by **EU Water Framework Directive**.
- Develop a Mediterranean-wide awareness of the social (cultural and participatory), economic and technological issues related to water management.
- Propose participatory mechanisms and prevention tools to avoid competition in resources allocation between regions states and different waters users.
- Provide legislative and administrative bodies with criteria and arguments agreed in a consensual way by a wide representation of social, economic, scientific and political actors from different countries, to support sustainable water policies and economy.
- Provide the intellectual basis and the indicators to perform a benchmarking exercise of Integrated Water resources management in the Mediterranean area.
- Contribute to the construction of a common frame and knowledge, and to the development of a common terminology and semantic and help water negotiations.

On the other hand, the *dissemination of the results of MELIA* will be the most relevant and appreciable output, carried out by means of a wide communication strategy, addressed to all those involved actors in water use who set up the *MELIA Community or Practice (CoP)*, in rising awareness at educational level, in research, administration and policy making.

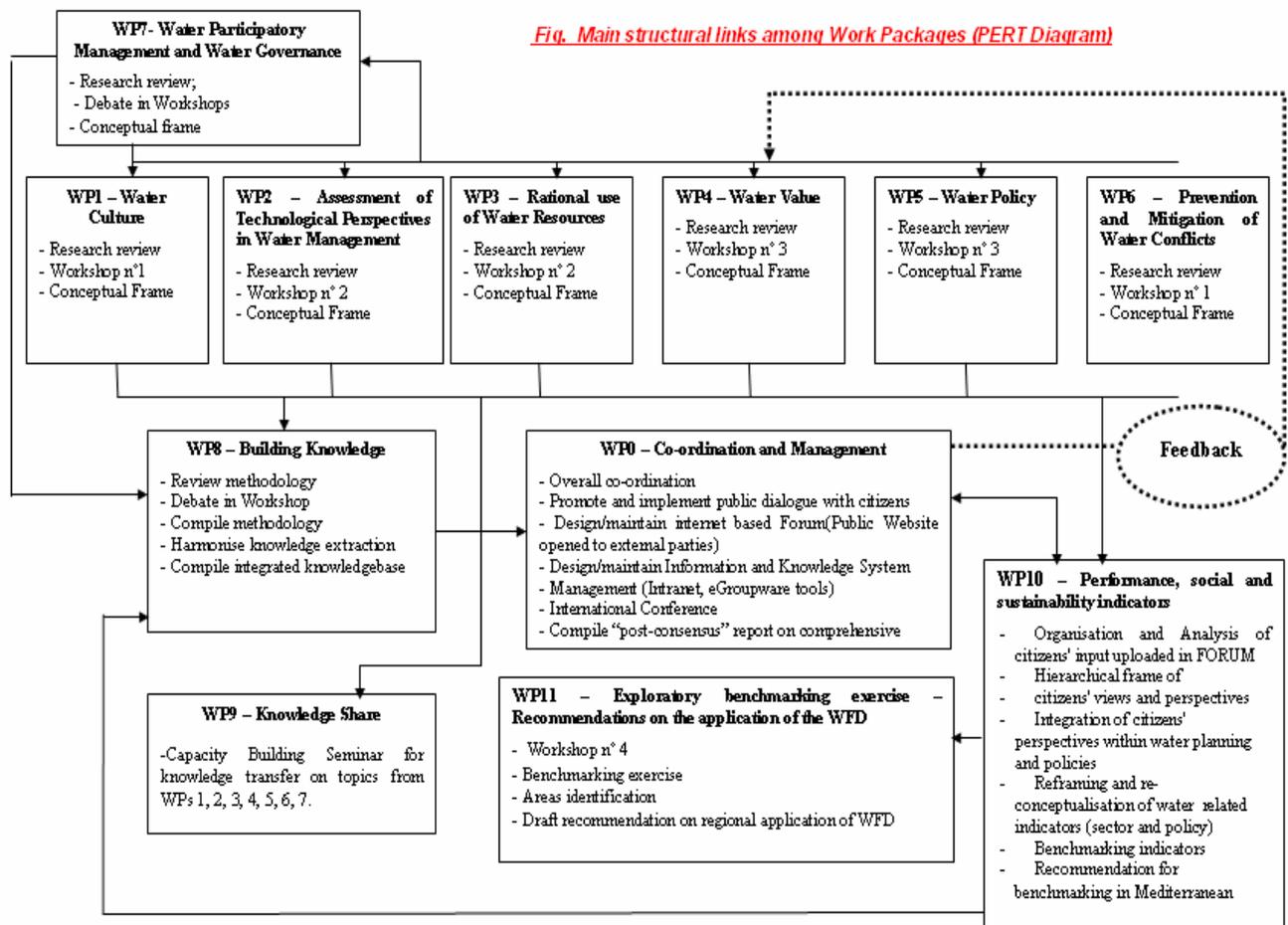
*MELIA Community or Practice* is a strategic response to the demands for increased skills and capacities in the water sector leading towards the implementation of IWRM in the Mediterranean Area.

Information management is an activity for the achievement of *MELIA Community of Practice* goals. By managing information within networks, a continuous organisational process is built in which knowledge is generated, adapted and shared, and transferred to water sector target groups and partners. The power of information management is in allowing *MELIA CoP* to explicitly enable and enhance the productivity of these activities and to leverage their value for the group as well as for individual members.

The information management cycle foreseen in Melia will assist specific knowledge functions and link them with institutions or individuals outside the network. The cycle of information management and knowledge creation will be organised in a way that the following cycle of functions is ensured:

- Establishment of the information base;
- Adaptation of information and sharing within the network;
- Transfer of the information to target groups (water users, managers, IWRM implementers);
- Generation – or better – consolidation of common knowledge (local and global levels).

An initial approach to this cycle is based on the following Thematic Work Packages Structure and their relationships:



At this point, a proper communication system based on the new Information and Communication Technologies (ICT) within the *MELIA CoP* is central for its efficiency and to facilitate information mapping sharing. *MELIA Community of Practice* is about people and their interactions, and thus communication is critical.

A context-oriented platform will be first created to support spatially distributed Work Packages teams. On the other hand, the ubiquitous access to the *MELIA CoP Platform* is one very important aspect, especially due to the remote and mobile *Community of Practice(CoP) member's* nature (distributed *CoP*) who should desire to access to own working resources from different locations. This is the main reason to design the user interface to be based on Web technology as a commonly well-understood and accepted user interface paradigm.

All these concerns are reflected in <http://www.meliaproject.eu> whose main skeleton is based on a *Thematic Work Packages structure which aims at a symbiosis of physical and virtual work environments.*



This visible face of *MELIA CoP Platform* presents itself a web-based portal, which allows the *MELIA CoP members* to log into the so-called personal area and to Work Packages areas. All resources like library of documents, addresses, Web services (Email, Instant Messaging, Fora, Intranets, Video and Audio Conferencing,...) may be accessed on the web portal. This one is the core design of *MELIA CoP Platform* (based on an agent-oriented approach, using standard web browser interface technology, integrating existing Web services to a common view) greatly alleviated the problems of varying request distributed networked knowledge members. Groupware tools may be plugged in or removed as required, allowing to adapt the collaborative environment to specific needs. This could be different kinds of team awareness tools, different document, address, or calendar servers, or also additional features like project management tools (*Documents and Activities Workflow, External Editors, ...*) With respect to this, the web user interface proved to add a significant contribution to flexibility.

**Figure Example of the Taxonomy of Work Package 11**



The availability of *MELIA CoP members* and their work environment becomes uncoupled from their physical locations. So, *MELIA Work Packages* workspaces need to offer team members intuitive and ubiquitous access to each other, and to information and resources of their Work Packages, secure and transparent to their physical workplaces and their own tools.

Despite these technological developments, *'human factors'* should not be neglected in an increasing virtual environment. Useful as they are, *ICTs cannot replace face-to-face contacts and more conventional means of communication.* While *ICTs* continue to offer a ever-widening range of options, regular meetings, workshops or conferences are still necessary.

Therefore, *MELIA CoP Platform* will facilitate the collaboration of people in teams into each Work Package, providing a ubiquitous and secure access to selected *Web services* required for the teamwork within the respective context.

In this way, the essential outcomes of information management and knowledge generation and transfer for *MELIA Community of Practice (CoP)* will be lead to provide innovative strategies to support development to relevant stakeholders, such as the Directors of Water and the Ministries of EU and MED Countries, and on the other hand, raising public participation and awareness. Their level of impact is in direct relation with their level of activity and operation.

The approach will ensure:

- An effective development of new knowledge and efficient combination of the best available information (synergy of members, national and international partnerships) applicable at local level and available as part of the global knowledge base.
- Distribution, into a first stage of information and later, new knowledge, within the network and transfer to target groups in the water sector in the Mediterranean Area.
- Local anchorage of knowledge, for local accessibility and local development.

Information management and knowledge generation enhances *MELIA Community of Practice* performance as it:

1. *Makes things visible*: for a network, the most active way of gaining visibility is through operational information management and knowledge generation. As much as it is important for networks to have a formal structure, they acquire reality once their active operations begin, and this as we have seen is through information management, knowledge generation and delivery of capacity building.
2. *Promotes policy acceptance*: in the case of networks this is promoting and raising awareness about the need for IWRM. *The core of the content is IWRM and as information (and then knowledge) circulates policy is impacted within the water sector and related target groups, including decision makers and governments in the Mediterranean Area.*
3. *Facilitates platform processes*: the information management and knowledge generation cycle requires effective networking. Without effective participation of *MELIA Community of Practice* members (*MELIA partners, independent experts, anonymous contributors ...*) and recipient groups there will be no real information management. Network development and information management are simultaneous processes contributing to each other.