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MARTEC

ERA-Net Maritime Technologies

Co-ordination Action

ERA-Net

Trans-national R&D activities – Post MARTEC cooperation

D 4.2

Programs managers mobility plan

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TABLE OF CONTENT

1. Executive summary

The ERA-NET MARTEC (2006 – 2010) is an EU funded project in the 6th Framework Programme. The MARTEC partnership consists of 13 partners and 6 observers from 15 European countries.

As a contribution to the development of the European Research Area, the objective of MARTEC is to form a sustainable network and partnership of key funding agencies and ministries aiming at deepening the understanding of conditions for management of maritime technologies research between the key European countries actively funding RTD in this sector. In cooperation with the European industrial maritime cluster and other stakeholders this network intends to work out a strategy for future maritime technological research funding through transnational programmes and calls which are coherent with the European research policy and strengthening the European Research Area.

Due to the nature of maritime industry RTD, MARTEC will put particular emphasis on the coordination of national R&D programmes which are strategically planned to provide funding for projects which contribute to improving the international competitiveness of the European shipping and marine technology industry. The typical projects funded are technologically oriented with industrial partners involved.

In order to achieve these objectives, it is of importance for MARTEC to interact with representatives from the industry and the research communities. It is of particular interest to keep a close cooperation with the Technology Platform WATERBORNE.

Presented report provides a framework for implementation of the Programme Managers Mobility Plan. Based on the questionnaire, three pillars of the proposed plan – competence and knowledge, cooperation and set up of new actions, and communication and dissemination activities as the last one are presented in details.

Mobility is the last stage of the Programme / Project Management, before the act of mobility can take place (like the Board of MARTEC Programme Managers), common needs have to be expressed (through research strategy, development plans, common ideas, etc.), than discussed (using different communication ways). The last step are, on the one hand, implementation of agreed activities and solutions (in form of common calls, common programmes, exchange of staff, etc.), on the other hand the Programme Managers meet stakeholders and follow the progress in realization of projects, etc.

Presented document shows priorities of MARTEC partners in the range of post-project cooperation, and is focused more on its human factor as well as on administrative and technical issues, leaving the problem of strategy for future cooperation on its own (which should be implemented by Programme Managers) to be defined in the separated Deliverable (Del. 4.3 "Strategy paper on sustainable co-ordination on funding maritime RTD").

2. Introduction

Progressive integration of the European countries into the European Union, creating a more cohesive body, with common objectives and the policy was made possible thanks to the many legal mechanisms. Common cooperation at many different levels allowed on creation of strong mechanism, with own specific structure, political, social and economic goals. Across borders, competition of researchers, research institutions and businesses realised at multi-national level in bilateral or international cooperation, provides more and more opportunities for new technologies, knowledge information exchange, non- and formal contacts as well. All research and development policies, programmes and activities designed and operated at regional, national and the European levels are included in a broad range of perspectives, which creates the European Research Area. It's a kind of a big umbrella, covering with its shape not only EU itself, but also EU associated countries.

Presented in 2000 by the European Commission, the European Research Area appeared as a very big chance for development and was very warmly welcomed by research performers society. According to the European Union policy, expressed in the "Lisbon strategy"[1], investment in research should increase in Europe and approach 3% of GDP (contrary to present average value of less than 2 %). In order to support of this continuous growth's implementation, this newly designed system should be a kind of platform for multi-national co-operation in many fields of research integrating the scientific resources of EU. ERA on its own can be likened to a research and innovation equivalent of the European "common market" for goods and services.

Considering position of ERA in multi-aspect perspective one can see that there are several initiatives, less or more formal, which could be compared to the pillars forming its structure. To the most recognizable belong:

1. adoption of a "Broad-Based Innovation Strategy"[2], aiming improvement of the framework conditions for research and innovation. In this context, a modernised Community framework for the State aid for research and innovation and guidance for a more effective use of tax incentives for R&D were adopted in November 2006, a European patent strategy is being proposed to overcome the deadlock on the Community patent, and initiatives are being prepared to support the emergence of European 'lead markets' in promising technology-intensive sectors.

2. Policy Coordination, addressed through the 'open method of coordination' (use of voluntary guidelines and recommendations). This is stimulating a process of debate and reforms at national level, which has resulted in all Member States setting national R&D investment targets in the context of the overall EU 3% of GDP R&D investment objective and taking measures to improve their research and innovation systems.

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[1] http://ec.europa.eu/growthandjobs/index_en.htm
[2] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2006:0502:FIN:EN:PDF

3. <u>EU cohesion policy</u> and its financial instrument - the Structural Funds[3] - providing strong priority to the development of research and innovation capacities, particularly in less developed regions. Together with the priority given in most Member States' internal policies, this can help the whole of Europe to participate in and derive full benefit from the European Research Area. These initiatives are valuable steps on which further progress can be built.

4. <u>EU's Framework Programmes</u>, most recognizable instrument for funding research and designed to support ERA (at the moment approached is the midpoint of the 7th Framework Programme, 2007-2013). Under this "umbrella" specific programmes (Cooperation, Ideas, People and Capacities, Euratom and two Specific Programmes for the Joint Research Centre) are developed, bringing together all research-related EU initiatives under a common roof playing a crucial role in reaching the goals of growth, competitiveness and employment. 7FP has its own communication official portal, CORDIS, as a tool for research management and virtual place, where information on new initiatives on research funding are disseminated.

5. <u>European Technology Platforms</u> (like e.g. WATERBORNE TP) – network bringing together researchers, industry and other relevant stakeholders in a particular technological field in order to foster European research and development in the concerned area, allow on improvement of coordination of research activities and programmes. At the meetings of programme/initiative managers, members of different steering bodies, such like Steering Committees, Minor Groups, Advisory Boards, Representative Groups, Government Boards, Scientific and Technological Advisory Groups, etc., discussed is, among others, current progress in implementation of a Strategic Research Agendas, setting out the medium- to long-term objectives for the technology, with the mobilisation of significant financial and human resources. Engagement of the National Technology Platforms to all initiatives taking place at the European level is next important factor improving common understanding of EU needs.

6. European Institute of Innovation and Technology (EIT), flagship education institute designed to assist innovation, research and growth in EU (located in Budapest, Hungary)

Much ground work is still to be done to build ERA, particularly to overcome the fragmentation, which remains a prevailing characteristic of the European public research base. Fragmentation prevents Europe from fulfilling its research and innovation potential, at a huge cost to Europeans as taxpayers, consumers, and citizens. Identification of gaps and overlapping funding in the particular field (if it's necessary).

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[3] Approved is the Operational Programme (OP) for Poland for the 2007-13 period. The "Innovative economy" OP has a total budget of around €9.71 billion (Community assistance through the European Regional Development Fund (ERDF) amounts to appr. 12,3 % of the total EU investment earmarked for Poland). The POIG is divided into eight priority axes, research can be funded within some of them. http://ec.europa.eu/regional_policy/country/prordn/details_new.cfm?gv_PAY=PL&gv_reg=ALL&gv_PGM=1204&LAN=7&gv_per=2&gv_defL=7.

In order to strengthen science and technology cooperation with non-EU countries EC adopted the Strategic European Framework for International Science and Technology Cooperation[4]. Definition of common priorities in R&D would generate more benefits than bilateral activities.

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[4] http://ec.europa.eu/research/iscp/pdf/com_2008_588_en.pdf

3. MARTEC approach

In the previous chapter the whole context of ERA initiative was discussed and there, where it was possible, commitment of human factor to all described activities was demonstrated.

The same as all other ERANETs contributing to the development of the European Research Area, each one in its particular field, the MARTEC's objective is to form a sustainable network and partnership of key funding agencies and ministries aiming at deepening the understanding of conditions for management of maritime technologies research between the key European countries actively funding RTD in this sector. In co-operation with the European industrial maritime cluster and other stakeholders this network intends to work out a strategy for future maritime technological research funding through trans-national programs and calls which are coherent with the European research policy and the strengthening of the European Research Area.

MARTEC puts particular emphasis on preparation and funding of common calls planned to provide funding for projects which contribute to improvement of the international competitiveness in the European shipping. The typical project funded within the ERANET MARTEC scheme is 1.) technologically oriented and 2.) consists of at least two industrial partners from two different countries involved, the second issue allows on, in a certain manner, implementation of mobility programme of research managers dealing with projects.

In order to achieve these objectives, it is of importance for MARTEC to interact with representatives from industry and the research communities (in order to keep a technology and know-how transfers between both them). It is of particular interest to keep a close cooperation with the Technology Platform WATERBORNE as well, and on another hand, with the National Technology Platforms.

Since 2006 all activities, that have been taken over within the MARTEC framework, can be considered as preparation to implementation of a sustainable platform of program managers' mobility. All MARTEC team members learnt a lot about funding schemes in partner countries, visited research and industry facilities (e.g. a captain's bridge simulator at University of Gothenburg, the DAMEN Shipyard in Galati, the Bulgarian Hydrodynamic Center (BHDC) in Varna). Moreover delivered are some documents, like:

- Analysis of barriers (Del. 2.1)
- Report on the use of new and existing network for European maritime research and testing facilities (Del. 2.3)
- Identification of areas for future co-operation including stakeholders interests (Del. 2.4)
- Action plan for common programs and joint calls and ideas for future joint activities in Maritime Research (Del. 3.1)
- List of criteria for the measurement of the success of joint activities (Del. 3.2)
- Development of common pool of evaluators and evaluation scheme, database and best practice guide (Del. 3.3),
- Strategy paper on sustainable co-ordination on funding maritime RTD (Del. 4.3)

4. Methodology

The whole work aiming preparation of this deliverable was begun since an attempt of approach of formulation of the programme manager position in post-project environment. According to the dictionary "to manage" has different meanings:

a.) to be in charge of; administer
b.) to succeed in being able (to do something) despite obstacles; contrive
c.) to exercise control or domination over, often in a tactful or guileful manner
d.) to contrive to carry on despite difficulties, esp. financial ones;

so manager means a person, who:

a.) directs or manages an organization, industry, shop, etc. – like, in our context, programme or project
b.) controls the business affairs of an actor, entertainer, etc.
c.) controls the training of a sportsman or team
d.) has a talent for managing efficiently
e.) is appointed by a court to carry on a business during receivership.[5]

Following the same way, for the word "programme" one has / is:

a.) a plan, schedule, or procedure
b.) a specially arranged selection of things to be done
c.) a performance or series of performances, often presented at a scheduled time
d.) a written or printed list of the events, performers, etc., in a public performance [6]

Through its semantic, a term "Program Manager" does not tolerate emptiness, abhors a vacuum – it does have to be a "human" part of certain system, independently on its complexity.
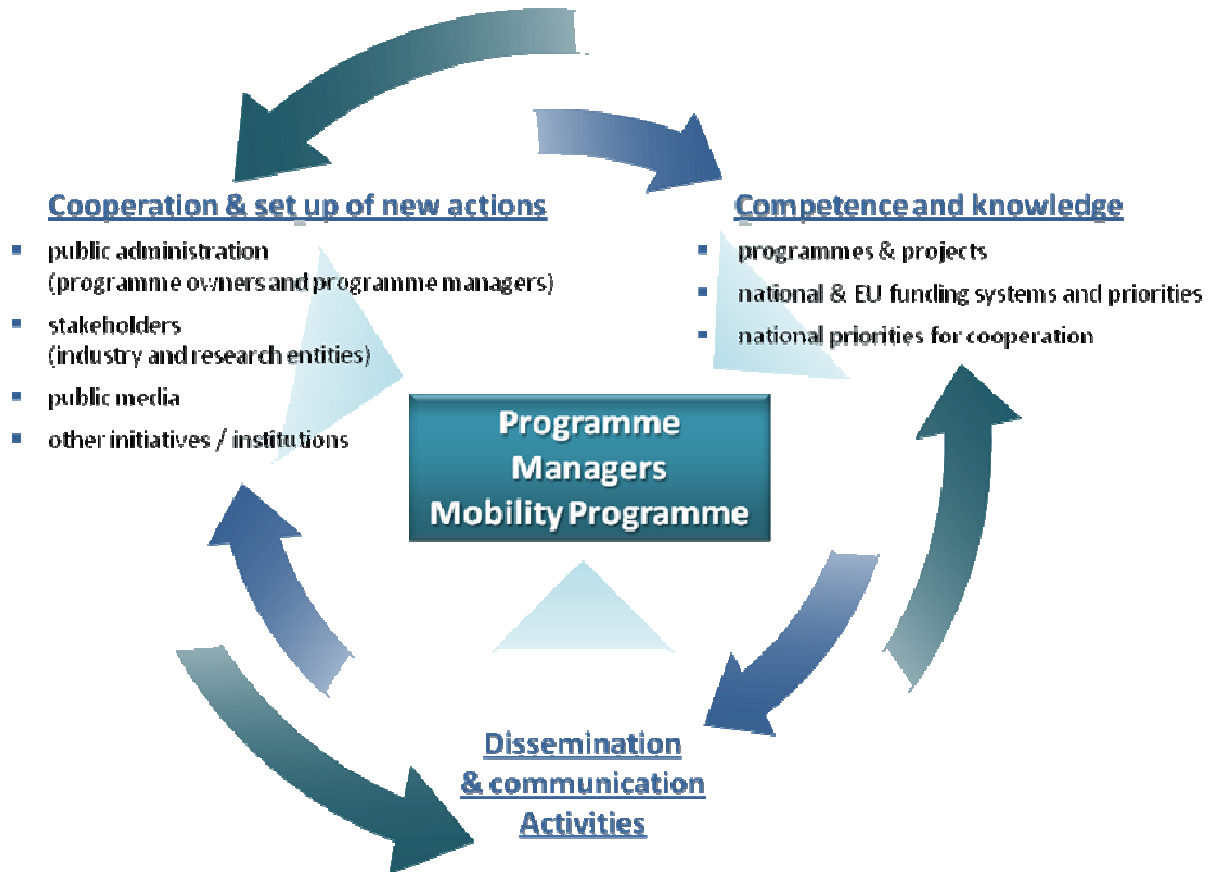
In the MARTEC context – Programme Manager, independently on the place of his activity – aims to continue information exchange and co-ordination of national RTD programs in marine technologies in order to integrate national funding system in the European research area. This position demands willingness to mobility and good interpersonal skills including networking and teamwork abilities, ease in identifying opportunities for improvement and making constructive suggestions for changes. Programme Manager is in a centre of interactions expressed by different groups of interests, like stakeholders, policy makers, etc.

Contrary to the Deliverable 4.3, focused on all aspects of cooperation, information exchange and co-ordination of national programs in marine technologies (including support for martec projects) on their own and very shapely named "Development of a strategy and monitoring tools for sustainable co-ordination", submitted document presents the whole problem seen from the programme manager's point of view. Put at the centre of deliberations as some kind of clip, multi-dimensionally managed are all mutual relationships between competence and

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[5] www.thefreedictionary.com/manager, based on the Collins English Dictionary – Complete and Unabridged ©, HarperCollins Publishers 1991, 1994, 1998, 2000, 2003
[6] www.thefreedictionary.com/programme, based on the Collins English Dictionary – Complete and Unabridged ©, HarperCollins Publishers 1991, 1994, 1998, 2000, 2003

knowledge, co-operation and support for setting out of new partnerships, and last but not least, all communication and dissemination action.

Scheme 1 Position of Programme Managers on its own and Mobility Programme of Programme Managers in the funding system – correlations.

GROUPS OF QUESTIONS

As it was said before, the main objective of an ERA NET is funding of research related activities and the MARTEC ERA NET does not differ here from any others.

Preparation and implementation of strategy including other innovations activities with the aim of fostering the international cooperation in R&D as mean to increase the competitiveness of European maritime sector (the aim of Del. 4.3) needs a human being to run it successfully and efficiently. Development of the Programme Managers Mobility Plan is a natural consequence here and complements this picture.

Paragraphs below provide a review of all issues the Programme Manager has to deal with, being crucial to reach our goals.

Competence and Knowledge

Formulating first approach of the MARTEC project, two ideas for further cooperation were considered – continuation of this project without support of external sources (funded by MARTEC partner countries only) and realization of MARTEC II project, with incorporation of new partners). Although in both cases strategy for implementation of PMMP is more or less the same, but the crucial difference is funding, what will be discussed later.

One of the key questions, put as one of the first is, if there is a national general research funding system established in the MARTEC partner country. Some of countries poses also national research programmes in the particular field, in this case – maritime / MARTEC one (for details see Del. 1.1 "State of the art report (National programmes, funding organisations, National priority areas, national policies)". Definition of research priorities has been already done and is precisely described in the Del. 2.4 "Recommendations of areas of future co-operation in Maritime Research".

Combining of all above mentioned issues with information about general preference for funding (like kind of projects and funded research, that can vary in different countries / agencies) provides a huge matrix of the "first level", most fundamental knowledge, which is a substantial tool during establishing contacts with the MARTEC target group and initiation of new frameworks (see Scheme 1).

In order to discuss about this issue some questions have been developed:

1. If there is there a general research programme in your country ?
2. If there is a research programme related to the MARTEC in your country ?
3. If realization of MARTEC II project (incorporation of new partners) is acceptable for your country?
4. If post-MARTEC cooperation funded from own budgets of the MARTEC partners is acceptable for your country?
5. What are your funded research priorities in your country?
6. What are your funded research priorities in your country?
7. What kind of projects are funded in your country?
8. What kind of research is preferably funded in your country?

Cooperation and set up of new actions

The MARTEC Programme Managers deepening their cooperation with existing project partners make a group effort to associate with new ones in order to execute aims of ERA. Through continuous strengthening of interpersonal and inter-institutional contacts, common meetings, workshops and visits, these relationships will become closer and closer. Defining the MARTEC appropriate target group more precisely, one can address our offer to:

1. authorities of administration – programme owners (usually policy makers like ministries), programme managers (usually funding agencies - like PtJ, NCBiR, etc.), here forming national research programs, if necessary changing existing research programs, comparing them with other funding mechanisms (such as Structural Funds, etc.),
2. boards of national and international organizations (which can act as members, partners, observers, etc.),
3. stakeholders (private and public ones, like research entities, industry, associations, etc.)
4. media (as a natural way of communication and dissemination)
5. other funding organizations,

what, in a certain sense, facilitates preparation to further networking activities, described in the Del. 4.3.

During setting up of new partnership as well as debate on the work progress partners have an opportunity to discuss, in many cases face to face, and eventually establish a framework for cooperation. Then, at some point in such talks each interlocutor may present his/her opinion on, among other:

1. monitoring and analysis of the progress made, enter the new priorities (if needed) in the national development plan
2. methods of promotion and communication activities aimed at disseminating knowledge, in cooperation with project coordinators
3. targeted communication activities and disseminate knowledge to promote investments
4. direct actions like preparation of recommendations for shortening the innovation chain, changes in so-far adopted method of calls preparation, etc.

Research priorities on its own were discussed above, but each country has its own strategic needs. All partners were asked for identification of their priorities and expectations, based on their skills, own experience and knowledge of funding R&D systems and willingness to know-how exchange. Owing to the fact that all partners represent the public administration perspective, it was also interesting to make observations staying on the opposite site, and try to identify answers on the same questions, as they were stakeholders (e.g. research entities and enterprises).

In order to discuss about this issue some questions have been developed:

1. Question about research management systems in the MARTEC countries – priorities in gathering of information by other Programme Managers and well as stakeholders.

2. Questions about cooperation of funding agencies with partners implementing projects – priorities in gathering of information by other Programme Managers and well as stakeholders.
3. Question about implementation of best solutions in the MARTEC countries – priorities in gathering of information by other Programme Managers and well as stakeholders.
4. Question about maritime technology in the MARTEC countries – priorities in gathering of information by other Programme Managers and well as stakeholders.
5. Question about research centres dealing with MARTEC – priorities in gathering of information by other Programme Managers and well as stakeholders.
6. Question about enterprises dealing with MARTEC – priorities in gathering of information by other Programme Managers and well as stakeholders.

Both these two "looks", opinions, expressing two opposites sites, could be presented during direct consultation, and approved as common agreement. Generally speaking, it's quite common that certain part of negotiations is performed at the level of non-formal contacts, when creation of relationships network is easier.

As it can be seen, these seemingly simple action – the Programme Managers Mobility Plan is very laborious task, demanding precise definition and an appropriate strategy to its implementation, confirming that is inextricably linked with the "Strategy and monitoring tools for sustainable co-ordination", approved in the Del. 4.3.

In order to discuss about this issue some questions have been developed:

1. Question about target groups of dissemination and communication activities – potential stakeholders – which of these potential groups, in opinion of MARTEC partners, would be interested in setting up of cooperation (research platforms, universities, public research institutes, private research institutes, public authorities, policy makers, industry/companies, public media, other funding organisations (like national).
2. Question about direct activities (provided is broad variety of different actions that could be undertaken by Programme Managers, like exchange of managers, support for actions aiming shortening the innovation chain, exchange, promotion of the alignment of the MARTEC activities with the WATERBORNE Technology Platform, support for short-term exchange for researchers, etc.)
3. Questions about national priorities and procedures seen from the organization (country) and stakeholders point of view.

Expanding the range of questions related to direct actions more precise definition of calls was necessary. With the time going we have learnt a lot about them, how to organize them, coordinate, etc. In a certain moment there is need for wind of change, and next question represents a reflection, if there is a real need to improve all procedures adopted during the implementation of the MARTEC project. Potential modifications in evaluation procedure and other issues are discussed.

In order to discuss about this issue some questions have been developed:

1. Question about change of rules for call preparation – taking into consideration results of so far realised calls if there is a need for any modification.

2. Questions about change of rules for evaluation, any modification of payment (free instead of fee)
3. Question about MARTEC itself as respected platform for maritime research funding – general opinion of partners
4. Question about modifications in procedures and monitoring – if they are necessary or so far adopted mechanism works properly.

As so far two basic pillars of the Programme Manager Mobility Programme – competence and knowledge as well as cooperation and set up of new actions – have been described. Communication and dissemination activities, the last element which, as a spicy, has to link both mentioned above, putting the whole system in motion.

<u>Communication and dissemination activities</u>

Communication is a process whereby enclosed information in a package is channelled and imparted by a sender to a receiver via some medium. After decoding the message by the receiver a feedback is sent. The theory of communication says that all forms of communication require a sender, a message, and an intended recipient (individual or public), however the receiver need not be present or aware of the sender's intent to communicate at the time of communication in order for the act of communication to occur. With dissemination, only half of this communication model theory is applied. The message carrier sends out information, not to one individual, but many in a broadcasting system. An example of this transmission of information is in fields of advertising, public announcements, and speeches. Communication is an active process, dissemination is much more passive.

The Programme Manager Mobility Programme, in the context of MARTEC project, is a kind of an interpersonal relationship based on regular business interactions. Although at present signing of any documents, agreements, granting to PMMP legal status is not planned, the Memorandum of Understanding cannot be excluded.

Due to its international character, especially this relationship involves high level of interdependence. People in a relationship tend to influence each other, share their thoughts and feelings (using different forms of communications), and engage in activities together. Because of this interdependence, most things that change or impact one member of the relationship will have some level of impact on the other member.[7] On the other hand if common goals of the whole group are considered there is general tendency to reduce the number of problems.

As mentioned before, further continuation of cooperation depends on funding. At the moment a new MARTEC II proposal, submitted in January 2010, is in the negotiation phase, so funding for continuation of cooperation is ensured. Here we aim to focus on the situation, when proposal has been rejected and after MARTEC I completion each funding agency has to declare its own commitment to this fruitful cooperation. In order to reduce costs and simultaneously fulfil the requirement of

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[7] Berscheid, E., & Peplau, L. A. (1983). The emerging science of relationships. In H. H. Kelley, et al. (Eds.), *Close relationships*. (pp. 1–19). New York: W. H. Freeman and Company.

mobility it seems appropriate to organize meetings of program managers accompanying to conferences, workshops, fairs, and other maritime events. Then, debating on the MARTEC programme, priorities as well as other issues programme managers would have an opportunity to meet with stakeholders and experts and discuss together. On the other hand, each such event is a good chance to present results of projects funded so far in the ERANET scheme, and to support to establish links to other R&D projects/initiatives.

During preparation of this questionnaire the following activities in terms of communication and dissemination have been identified.

1. Communication

    I. Direct

    a.) workshops
    b.) meetings
    c.) events for technology transfer
    d.) conferences
    e.) congresses
    f.) fairs
    g.) info-days
    h.) brokerage events
    i.) press releases / conferences

II. Non-direct

   a.) Internet
   b.) mailing / skype conferences
   c.) exchange of information - links to other R&D projects
   d.) regular contact with experts

2. Dissemination

   I. Non-direct

   a.) Internet
   b.) newsletter
   c.) synthesis reports
   d.) news articles
   e.) broadcasting
   f.) database of programmes / projects
   g.) database of partnering / brokerage
   h.) scientific journals / papers / posters
   i.) website of post MARTEC cooperation consortium
   j.) e-learning
   k.) computer-based training courses

Focusing on funded projects, in the next step all partners have been asked for indication the most convenient path of access to their results. However proposed paths are more or less the same as those in case of non-direct dissemination, some others have been suggested as well:

   a.) Website or other electronic transmission paths
   b.) Conventional mail (post)
   c.) Personal pick up in the funding organisation office
   d.) Library (access to CD-ROM/DVD, hardcopies archived, as well as Virtual Library)
   e.) Database
   f.) Information Management System

In order to discuss about this issue some questions have been developed:

1. Question about research outputs dissemination channel used (priorities of individual funding agencies)
2. Question about research outputs communication channel used (priorities of individual funding agencies)
3. Question about most preferred / most convenient path of access to project results

The issue of expected added value of the Program Managers Mobility Plan for partners host organization was also considered in the questionnaire – in terms of benefits, that can be gathered during such cooperation.

The last question is related to actions for making MARTEC as commonly respected platform. Partners have been asked for their opinions on this issue.

In order to discuss about this issue some questions have been developed:

1. Question about expected added value of the Program Managers Mobility Plan for host Institution.
2. Question about Actions for making MARTEC as commonly respected platform.

Administration of future cooperation

The European Research Area has as its core message the need to overcome the traditional fragmentation of research efforts in the EU through better coordination and cooperation. The ERA-NET Scheme is about the coordination and cooperation of national and regional programmes and as such, it aims at the national and regional programme makers and managers. These are, in most countries, either working in the Ministries or working in national funding agencies, which implement programmes on behalf of their governments. Persons dealing with MARTEC in each institution involved in this initiative will cooperate together day by day, so provide some financial and logistic for this non formal platform implementing all PMMP activities is necessary.

In the questionnaire partners were asked for their opinions on possible options for further administration. During preparation of this part authors based on experience of some European platforms and how they are structured. The way they manage to coordinate all the actions they work in is by a secretariat. Most of the platforms we know have the same secretariat since they started to run out.

Collection of input from stakeholders

The outcome of task 4.2 is being built according to the results collected from the questionnaire and several meetings hold during last years. The first approach presenting main lines of prepared plan was presented in the Brussels meeting in March 2009. Later on, developed document was presented during the Gothenburg meeting (September 2009), afterwards some questions were clarified and some changes were done. This draft was sent to MARTEC Partners and some results came up in late October 2009. The last results of the questionnaire were discussed in the Galati meeting hold in March 2010 and the initial draft of the deliverable was prepared by May 2010.

5. Analysis of results

<u>Competence and knowledge</u>

Building of each home begins from the foundations. Transposing this statement to discussed initiative – initiation of Programme Manager Mobility Programme, we find that the establishment of any co-operation requires knowledge on priorities of each partner, his expectations and development strategies. The main priority of the whole group is to approach the goal of ERA – overcoming of traditional fragmentation of research efforts in the EU through better coordination and cooperation, so despite the different and sometimes opposing interests the whole group has one goal and seeks an agreement.

In this part of the questionnaire, participants were asked about national general research funding programme and research programme related to the MARTEC in their countries. Moreover, an information was demanded about preferred cooperation model of post-project teamwork, this, as directly related to available funding ability, is also quite crucial issue.

Each of countries represented in the MARTEC project has national research programme. Additionally, some of countries poses also national maritime research programmes.

Additionally MARTEC research priorities have been already presented in the Del. 2.4 "Recommendations of areas of future co-operation in Maritime Research", where each country has presented its statement and priorities.

First of the last two information, that complete the full overview of the general knowledge depend on legal status of each funding agency, the second one are priorities for funding of different types of projects.

All partners support experimental development and industrial research projects, among the whole group only Poland[8] and France do not fund fundamental research. Funding organizations usually do not make any restrictions related to the structure of project consortia, and all kind of project, independently on the number of countries involved, could be realized. Both projects: made at the local level (like regional bilateral and regional multinational ones) as well as these ones made as trans-/multinational pan-European are in focus of interest of all funding agencies. No special priorities / requirements have been identified, each entity aiming to be funded has to fulfil national eligibility criteria.

<u>Cooperation and set up of new actions</u>

The next part of questionnaire aimed to indicate which group of potential stakeholders should attract the biggest attention of the Programme Managers, who is a target group and what kind of measures should be undertaken in order to strengthen cooperation. Spreading the possessed know-how, the Programme

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[8] In this context Poland means NCBiR. According to the set of six Laws Package "Building a knowledge – the reform of science for the development of Poland", that enter into force on 1 October 2010. Then, based on one of new Law, the National Centre for Science is established, and it and assume an obligation to finance fundamental research projects.

Managers tend to act as a liason for many MARTEC target groups, whose representative come from:

1. governmental organizations - like ministries directly dealing with MARTEC, policy makers being research programme owners (usually ministries), programme managers (usually funding agencies - like PtJ, NCBiR, etc.), here forming or changing existing national research programs,
2. representative of maritime research entities - like maritime universities, faculties of maritime related science at universities, etc.,
3. industry associations and technology platforms - boards of national and international organizations, like CESA, WATERBOTNE TP, SURSHIP, national maritime / water transport platforms, FP7 initiatives related to transport (like ERANET Transport II), etc., (which can act as members, partners, observers, etc.).
4. maritime industry - private and public ones,
5. media (as a natural way of communication and dissemination),
6. other funding agencies implementing other programmes, under which the funding of research projects is also possible (like the Structural Funds),

so, all communication and dissemination activities taking place between Programme Managers and representative of above listed groups aim to make stronger and more collaborative network. Here, with a few exceptions, almost each of the project partners agreed that collaboration with selected "target group" are natural paths for developing of post-project cooperation. Expansion of this post-ERANET network is in a common interest, so relationships of any character (member, partner, observer, etc.) with representatives of these are welcomed. Only the British partner (BIS – Dept. for Business, Innovation and Skills) emphasized that there are no public research institutions (PuRI) in the Great Britain, so in his case relationship BIS–British PuRI cannot be considered.

Outcome of the Task 3.4 (Integration of new Partners and New Member Countries) - Deliverable 3.7 "Maritime industries stakeholder database for the new Member Countries" provides broad review of potential discussion partners, research and industrial entities, coming from new Member Countries. This document, on its own, can be considered as such kind of handbook for each entity willing to undertake any common action. On the other hand, many entities from MARTEC countries (in Del. 2.3 are listed: BG, D, FI, FR, GR, I, NL, N, PL, RO, S, SP, S, UK) and some other ones (AT, BE, HR, RUS, TK) have in their disposal research facilities, of which description provided is in Del. 2.3. As so far, only BHDC, listed in Del 2.3, has been visited during the Varna meeting of MARTEC programme managers.

Besides research priorities (described more in details in Del 2.4) each partner (country) has its special needs, requirements and wishes, expectations, knowledge of existing national RTD systems, see certain potential in establishment of new network with new partners. The MARTEC I have been an excellent opportunity to gather know-how about all these issues, to meet and continue discussion, already more focused on actual needs.

During the MARTEC I each partner had an opportunity to learn more about research management systems in the MARTEC countries and it remains one of main

priorities of each of them. One can expect also that will be also interesting for new MARTEC II members. So far cooperation of funding agencies with partners implementing projects and implementation of best solutions and practices in the MARTEC countries are in centre of interest of all partners. Permanent contacts with research centres and enterprises dealing with MARTEC are the most significant element of this more and more complicated puzzle; and were identified as having the same level of importance for each partner. The last, lacking element, broad scope of maritime technologies in the MARTEC countries, completes this matrix.

In case of many enterprises the first contact with Programme Manager occurs, when the call is published. Having in mind, that, according to accepted call procedures, priority funding is given for projects which include at least two independent industrial participants from two partner countries and only these projects can be realised, which receive funds from at least two MARTEC countries, each project partner was asked for "becoming an entrepreneur" and identification of his responses. As it was recognized, expectations of enterprises/stakeholders are more "selected" and focus more on practical site of cooperation – exchange of information on maritime technology in the MARTEC countries and relations between institutions acting as programme manager and research centres / enterprises dealing with MARTEC. The practical approach of stakeholders expect results (reached through cooperation) and do not focus specially on the theory, which in this case is: research management systems and execution of best solutions in the MARTEC countries.

Among several recommended ways of further direct activities, that may broaden this initiative, organization of calls (common / joint / thematic ones) has been identified by all partners as the most important issue, other activities do not already attract so much attention. Common promotion of the alignment of the MARTEC activities with the WATERBORNE Technology Platform was recognized as slightly less interesting (ca. 95 % of responses), but of very high priority, and is considered as more important than bilateral programme managers exchange and support for short-term exchange for researchers. On the other hand, the issue of support for actions aiming shortening the innovation chain along with support for actions engaging stakeholders realising innovative ideas and performing research activities - both of them need to be précised (why not during direct talks in course of meetings?), and then, perhaps will be in favour of the whole group. The last proposed idea – compilation of a dossier of R&D-active units or stakeholders in the MARTEC area (what in certain degree has been done for the New Member States, see Del. 3.7) to activate industry to participate in different events will be realised through communication and dissemination processes, and will be discussed separately.

In the next question, we focused on preparation of calls, as the most popular topic identified among all considered direct activities. After over four year of cooperation in MARTEC certain schemes (mechanisms) has been developed, including preparation of calls (for more details see Del. 4.1 "Report on the outcome of the first call and other trans-national activities"). At the moment nobody wishes to changes so far adopted rules, so all procedures – payment for evaluators, monitoring of projects, etc. – remain the same as they are at the moment. In course of realisation of this project they have been verified and work properly.

Third part of this puzzle provides us a tool, which make the whole analysis coherent. Through the description of priorities related to the competence and knowledge, cooperation and set up of new activities, we came to the part that expect personal engagement. Project partners have been asked for providing responses on the questions related to communication and dissemination. Feedback has been analysed in the sequence:

1. communication (of data about e.g. coming call, interesting events, etc.)
2. dissemination (of knowledge on funding systems, etc.)
3. access to project results

and priorities for each factor have been identified, indicating potential lack of- / the highest interest in the particular activities.

Absolutely all partners agreed, that independently on the form of project continuation, the website of post MARTEC project is necessary. The is no doubts that Internet is the fastest way of communication / dissemination and each information that appears at the website, at the same moment is available to audience. Moreover, all other suggested dissemination methods seen here:

a.) <u>synthesis reports and news articles</u> are very competent source of knowledge, not only for Programme Managers themselves, but also for researches, and is in favour of almost all project partners,

b.) <u>programme / project database</u> are a crucial point for gathering of knowledge. Their development, as well as cooperation with other data bases in order to ensure information exchange is recommended – this issue will be a object of two tasks in the MARTEC II project,

c.) <u>database of partnering / brokerage</u> is already seen as less important, as potential project partners can find themselves,

d.) <u>scientific journals / papers / posters</u> should poses acknowledgement to MARTEC, what is to be done by funding beneficiary

are listed according to the priority for the MARTEC partners, from the highest to the lowest, but much higher than the last three

e.) <u>broadcasting, computer-based training courses</u> and <u>e-learning</u>

which are considered as the less important, seeing from the Programme Managers point of view.

Before all of these actions will be realised, regardless of their priorities, their discussion and proper preparation in most cases is done via mailing / skype / phone conferences, as the most efficient ways for communication. In eyes of all project members regular contacts with experts are necessary.

As said earlier the Programme Managers meet together and programme further cooperation. Based on the part related to administration, most of partners prefer model including two meetings per year, see Del. 4.3. There were several kind of events identified in the questionnaire, they are listed below, according to their importance, from the highest to lowest:

a.) info-days and the Programme Managers' meetings – identified as having the highest priority and making debate of Programme Managers and probable stakeholders possible. Different issues arising here, new opinions, consulting and solving of potential problems, may suggest possible ways of sustain cooperation, with other initiatives as well, resulting in better mapping of national research programme and, if necessary, its update.

b.) workshops and events for technology transfer – another places, when Programme Managers can meet the representatives of research and industry, but that stakeholders play here the main role, and Programme Managers are as an "advisory board", who can recommend e.g. certain solutions, based on the project results. Moreover, only 50 % of partners think that MARTEC representatives should be present at conferences, congresses, despite the fact, that they are the most popular method of dissemination of project results.

c.) brokerage events attract attention of 50 % of partners, the presence of representatives at different fairs related to MARTEC is already considered as less important, although these events contribute to the competitiveness of the European maritime industry.

d.) only 25 % of partners have recognized press releases / press conferences as a valuable method of communication of research results.

Each time there is different audience at such meetings, usually coming from different research areas, from research entities or industry, having experience in applying for funds in diverse funding schemes, like MARTEC, national, structural, EU and other ones. Each presentation, opinion, idea, remark, commercialisation possibility, progress in research always reflect actual state of the art of the maritime technologies, shows new perspectives for research (what may require changes in research programmes), address fragmentation and reduce duplication of research effort on maritime technologies across Europe, identify and respond to gaps in research activities, what results in improvement of the cost-effectiveness of current research programmes. In the longer perspective, all the previously discussed measures, will give a direct effect of growth of competitiveness of the European maritime industry and the European research community in the field of maritime technologies.

Internet (databases, website of projects, other digital transmission paths, etc.) – the best way to ensure access to research results across Europe, as the most technologically advanced, is the most preferred methods. Less than 20 % of project partners find post (conventional mail) as well as stored in libraries CD-ROM/DVD with data or archived hardcopies of reports, as convenient method. Nobody wishes to go the funding organisation office to personally pick up any documents, as they should be, in opinion of Programme Managers, broadly available.

Looking from the partners host organization's point of view, in opinion of some of them information exchange and co-operation (with different players at the research market) within this framework is one of expected added values of the Program Managers Mobility Plan. Effects of cooperation, like dissemination of successful projects / results may be a base making MARTEC as commonly respected platform.

6. Administration

Discussion of organisation of further cooperation is also necessary, because many different models can be found. Here this issue is shortly presented.

In opinion of most partners find establishment of regular secretary (organized by one of the partners) as the best way to solve this problem. A rotary secretariat was not accepted by the partners and they consider much better that one partner accepted to host it for the whole time, although only 4 partners would accept to host it.

Costs that partners could cover by their own would be in most cases personal costs, travel costs and some of them also the arrangements and preparation of meetings.

Organization of one or two meetings per year is considered enough to discuss all tasks by most of partners. In the question about how to get the money for financing the secretariat, partners will not support the secretariat costs, but none of them gave any financing alternatives.

Other very important point asked was about the possibility of having a common MARTEC HELP DESK. Partners consider this a good idea but it should only give help for partners search. Not for IPR, Assessment for other funding lines or any other help.

7. Conclusions

Once all the questionnaires were analysed, main conclusions are as following:

1. To maximize effort of MARTEC in approach to reach the ERA goals (to attain the highest effectiveness, etc.) identified are three pillars forming PMMP – Competence and Knowledge, Cooperation and set up of new actions and Communication and dissemination activities. Specified are their key elements and defined their importance to the individual partners.

2. Defined is a target group of potential stakeholders, which should attract the biggest attention of the Programme Managers. It was emphasised that research / industrial stakeholders focus on practical approach (like implementation of calls).

3. To maximally facilitate flow of information a wide library of communication and dissemination methods have been defined. In common opinion of all partners use of Internet seems to be one of the most efficient and most stakeholder-friendly pathways of communication and research results access.

4. It is recommended to combine the obligations of participation in regular post-cooperation meetings with communication activities. Identified are several opportunities (like conferences, workshops, fairs, etc.) of direct interaction of the Programme Managers and stakeholders. These meetings can be organized under umbrella of MARTEC itself as well as other initiatives, where MARTEC is involved (like WATERBORNE TP, SURSHIP meetings, etc.) in order to minimize economic effort.

5. Definition of resources (like personal) is necessary. Establishment of regular secretary (organized by one of the partners), declaration of certain sum dedicated to project costs (personal, travel and arrangement costs) organization of one or two meetings per year are considered as prerequisites for fruitful cooperation.

6. Programme Managers should implement a strategy for further development of post project collaboration (see Del. 4.3), which is inextricably linked to the task being the object of this Deliverable.

8. List of events

Presented are some data on upcoming international events (organized in and abroad of MARTEC countries) related to maritime technology, that can be found at the following pages:

- CFP Reform Watch in EU www.cfp-reformwatch.eu/
- 9th International Navigational Symposium on Marine Navigation and Safety of Sea Transportation, Trans-Nav 2011, transnav.am.gdynia.pl/
- Marine Technology Society www.mtsociety.org/
- Sea Technology Magazine www.sea-technology.com/meetings.html
- Informa Events www.informaglobalevents.com/event/greenshiptechnology
- IC on Harbor, Maritime & Multimodal Logistics Modelling and Simulation, www.msc-les.org/conf/HMS2011/
- Society of Maritime Industries, www.maritimeindustries.org/events/list.jsp
- ASME, calendar.asme.org/home.cfm
- DG Joint Research Centre, EC, https://energyefficiency-fisheries.jrc.ec.europa.eu/conferences

Fairs

- DG Joint Research Centre, EC, https://energyefficiency-fisheries.jrc.ec.europa.eu/fairs
- Hamburg Fairs, www.hamburg-messe.de/smm_istanbul/smm_istanbul_en/start.php
- Baltexpo 2011, www.maritime.com.pl/events/indexm-en.php?url=baltexpo09/baltexpo09-en.php
- Some other upcoming events (mainly fairs), www.maritime.com.pl/events/indexm.php?url=start.php

European Maritime Day 2011 will be held in Gdańsk, Poland, co-organized by the European Commission and the Polish Presidency of the European Union.

9. Annex

Questionnaire used to gather data and to prepare this Deliverable.

MARITIME TECHNOLOGIES

			Yes / No	Priority (1-5)	Availability		
					Own resources	Cooperation	Others (subcontracting)

COMPETENCE AND KNOWLEDGE

			Yes / No	Priority (1-5)	Own resources	Cooperation	Others (subcontracting)
1.	Research funding system	- Is there a general research programme in your country					
		- Is there a research programme related to the MARTEC in your country					
2.	Preferences for funding (I) - Possible ways of future cooperation after completion of the MARTEC project	- realization of MARTEC II project (incorporation of new partners)					
		- post MARTEC cooperation funded from own budgets of the MARTEC partners					
	- funded research areas	- Shipbuilding					
		- maritime equipment and services					
		- ship and port operations					
		- Inland water and intermodal transport					
		- offshore industry/offshore technology					
		- offshore structures for renewable energy					
		- polar technology					
		- fishing/aquaculture					
		- safety and security					
		- environmental impact					
		- human elements					
3.	Preferences for funding (II)	- regional bilateral projects					
		- transnational multinational projects					

- kind of projects	- regional multinational projects						
	- multinational, pan-European projects						
	- Are there any special priorities regarding to projects or there are no special rules / requirements?						
- kind of funded research	- fundamental research projects						
	- industrial research projects						
	- experimental development projects						

COOPERATION AND SET UP OF NEW ACTIONS

4.	We = "country" Needs of our country / offer of co-partners – skills, experience, knowledge of existing national RTD systems	- research management systems in the MARTEC countries					
		- cooperation of funding agencies with partners implementing projects					
		- implementation of best solutions in the MARTEC countries					
		- maritime technology in the MARTEC countries					
		- research centres dealing with MARTEC					
		- enterprises dealing with MARTEC					
5.	We = "applicants calls" – e.g. research entities and companies Calls' beneficiary needs / offer of co-partners – skills, experience, knowledge of existing national RTD systems	- research management systems in the MARTEC countries					
		- cooperation of funding agencies with partners implementing projects					
		- implementation of best solutions in the MARTEC countries					
		- maritime technology in the MARTEC countries					
		- research centres dealing with MARTEC					
		- enterprises dealing with MARTEC					
6.	Direct activities	- common / joint / thematic calls					
		- bilateral programme managers exchange					
		- Support for actions aiming shortening the					

		innovation chain						
		- Support for actions engaging stakeholders realising innovative ideas and performing research activities						
		- compilation of a dossier of R&D-active units or stakeholders in the MARTEC space to actively target industry participation in the events						
		- Promotion of the alignment of the MARTEC activities with the WATERBORNE Technology Platform						
		- Short-term exchange for researchers						
7.	Preparation of joint / open / thematic calls	- Should we change rules of their preparation ? (Y/N)						
		- Should we change rules for evaluators payment						
		- Could, at the moment, MARTEC be considered as so respected platform for funding research that activities such as e.g. acting as an evaluator would be strong advantage for own career of researchers?						
		- Should evaluation be made for fee						
		- Should evaluation be made for free (satisfaction / CV)						
		- Should we change procedures and monitoring						

COMMUNICATION AND DISSEMINATION ACTIVITIES

8.	Research outputs dissemination channels used (I)	- internet						
		- newsletter						
		- synthesis reports						
		- news articles						
		- events for technology transfer						

#	Category	Item					
		- broadcasting					
		- database of projects					
		- database of partnering / brokerage					
		- scientific journals / papers / posters					
9.	Research outputs dissemination channels used (II)	- website of post MARTEC cooperation consortium					
		- regular contact with experts					
		- regular contact with end users / stakeholders					
		- face to face interactions					
		- e-learning					
		- computer-based training courses					
10.	Research outputs communication methods used	- workshops					
		- meetings					
		- conferences					
		- working panels					
		- congresses					
		- fairs					
		- Info-days					
		- brokerage events					
		- press releases / conferences					
		- mailing					
		- links with other R&D projects					
		- research platform					

#	Category	Item					
11.	Access to project results	- Website or other electronic transmission path					
		- Conventional mail (post)					
		- Personal pick up in the funding organisation office					
		- Library (access to CD-ROM/DVD, Virtual Library, hardcopies archived)					

		- databases					
		- Information Management System					

12.	Expected added value of the program managers mobility program for your Institution? (try to describe)						
13.	Actions for making MARTEC as commonly respected platform? (try to identity)						

<div align="center" style="color:red">IPR RULES</div>

	Do you have general property legislation in your country	*check it here – www.wipo.int/clea/en/*					
14.	Rules and / or procedures for using rights on intellectual property (IPR)	- financing organization funds 100 % of project budget and poses all resulting intellectual property rights					
		- proportional ownership divided between all financing organizations					
		- Support for actions engaging stakeholders companies to realise innovative ideas from their own sources / research					
		- approval of a final project report financing organization may / can / decide to transfer the rights of use of the project results to the project applicant					
15.	Actions to be undertaken to review the national approach on IPRs	- exchange of funding agencies personnel					
		- involvement of a commercialisation team reviewing commercialisation practises					

		- compilation of commercialisation best practise recommendations					
		- standard IPR template guidelines and guidelines for licencing and spin-out activities					
16.	Requirements / Constrains put by your organization in terms of innovation? (try to identity)						

IPR MANAGEMENT

17.	Creation of an IPR guide for managing the research results of a project from the consortium point of view						
18.	Creation of a guide showing how to protect the IPR, giving details about the specificity of the maritime sector						

NETWORKING ACTIVITIES

19.	Do you consider necessary / important to accept in the MARTEC new members from:	- Asia					
		- Europe					
		- North America					
		- others (which)					
20.	Do you think it would be important to have enterprises involved in MARTEC strategy?						
	In which way?	- as new members					
		- as collaborators					
		- Observer					
		- others: which?					
	What kind of actions do you	- common pilot actions					

	consider interesting to have with enterprises?	- information exchange						
		- others: which?						
21.	Do you think it would be important to have collaboration with TP in the MARTEC network?	- Waterborne TP						
		- others:						
	In which way?	- as collaborators						
		- as new members						
		- Observer						
		- Others: which?						
	What kind of actions do you consider interesting to have with TP?	- common pilot actions						
		- information exchange						
		- others: which?						
22.	Do you think it would be important to have collaboration with Research Centres in the MARTEC?							
	In which way?	- as collaborators						
		- as new members						
		- Observer						
		- others: which?						
	What kind of actions do you consider interesting to have with RC?	- common pilot actions						
		- information exchange						
		- others: which?						
23.	Do you think it would be important to have relation with these NETS in the MARTEC?	- Europe- innova (http://www.europe-innova.org/)						
		- Europe Enterprise network						
		- National networks						
		- …						
		- …						
	In which way?	- as collaborators						
		- Observer						
		- others: which?						
	What kind of actions do you consider interesting to have with	- information exchange						
		- others: which?						

	other NETs?							
24.	Management procedures	- analysis of barriers;						
		- Improvement or new one with the new members						
		- Creation of a Program Best Practice Guide						
		- Common monitoring procedures						
		- Common reporting procedures						
		- identification of necessary changes						

CREATION OF A MARKET PLACE WITH FIVE DIFFERENT WINDOWS

25.	Technology foresight	- Patents						
		- Papers						
		- Projects with R&D results						
		- Congresses						
		- Meetings						
		- Webs, specialised press…others						
26.	Capacities (Database)	- Europe						
		- non Europe (where)						
27.	Facilities	- European (done but with possibility to be improved)						
		- Non European (where)						
28.	Technology transfer opportunities	- European						
		- Non European (where)						
29.	External expertise consultants	- Creation of a new database						

DISSEMINATION

30.	Should MARTEC give information about other instruments interesting for the enterprises as …	- Training						
		- Project management						
		- Proposal preparation (Exploratory awards)						
		- Possible Project Diagnosis						

		- Active partners' search						
		- Others						
31.	Do you think that MARTEC should give information about other different Funding lines including 7FP?	- Information						
		- Assessment						
		- Proposal preparation						
		- Others						
32.	Create a Junior Researchers mobility programme (under 35)							
33.	Do you consider interesting to introduce MARTEC in social networks? (I.e facebook, youtube channel, myspace…)							
34.	Activities for developing student research (in cooperation with different universities from member countries)							
35.	Common visits of national important / interesting Research Centres							
36.	Project Incubator (Identify new Project ideas)	- Seminars and conferences						
		- International brokerage events						
		- Webs						
		- Publications						
		- Others						
37.	What do you think about the possibility of having a common MARTEC HELP DESK for enterprises?	- IPR						
		- Giving assessment in Funding programs						
		- Partner search						
		- Others						
38.	Other Ideas							

ADMINISTRATION OF FUTURE COOPERATION

39.	Forms of engagement in mutual cooperation	- establishment of regular secretary dealing with post-MARTEC activities					
		- rotary secretariat					
		- secretariat organized by one of partners					
		- Would you accept to host this secretary ?					
40. .	Which MARTEC Costs (Person month also) would you cover?	- personal costs					
		- travel costs					
		- arrangements and preparation of meeting					
		- others					
	- number of meetings you could participate in, per year)	- one - two MARTEC meetings					
		- more than two MARTEC meetings					
	- possible methods of MARTEC's secretariat donation	financial support by a certain sum per partner					
		- financial support by a certain sum per partner – for administration only					
		- financial support by a certain sum per partner – for administration and calls together, independently on the number of proposals that have to be evaluated					