6 FRAMEWORK PROGRAMME - SCIENTIFIC SUPPORT TO POLICIES

Project no. FP6-SSP5- 044376

ARCHAEOMAP

ARCHAEOLOGICAL MANAGEMENT POLICIES

Instrument: Coordination action

Thematic Priority: Area 3.6 “The protection of cultural heritage and associated conservation strategies” - Task 3: To identify best practices for the long-term management of archaeological sites

PERIODIC ACTIVITY REPORT

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Project coordinator organization: Regione Siciliana, Assessorato Regionale ai Beni Culturali Ambientali, Dipartimento Regionale dei Beni Culturali ed Ambientali e dell’Educazione Permanente - SOPRINTENDENZA DEL MARE

PUBLISHABLE EXECUTIVE SUMMARY

The main objective of ARCHAEOMAP is to develop balanced, interrelated policies with an integrated coastal zone management focus.

The ARCHAEOMAP partner institutions are engaged to achieve this goal through a process of coordination, cooperation and synergy and through an innovative change in policies development, particularly at local level. The aim of the ARCHAEOMAP project is to draw up appropriate guidelines consisting of methodologies, professional skills, knowledge, good practices and awareness in order to set up innovative and integrated coastal zone management of the Mediterranean area encouraging nominations to the UNESCO World Heritage List.

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Revision: draft
**Project General Objective (long-term)** is: to educate international experts, professionals and consultants in preserving and in promoting bio-cultural diversity, considering that local knowledge, traditions, natural and cultural (tangible/intangible) heritage are crucial aspects of sustainable development.

**Project Specific objectives (short-term) are:**

1. To promote an environmental impact methodology of assessment based on the World Heritage Marine programme sustainability indicators.
2. To develop advanced guidelines on environmental sustainability for underwater and coastal archaeological sites of the Mediterranean basin.
3. To transfer and share scientific and technical information as well as to translate knowledge into social applications and policies at the local, national and international levels.
4. To encourage trans-boundary and serial nominations of ARCHAEOHIST pilots sites for inscription on the UNESCO World Heritage List (the Egadi Islands Archaeological Park in the Sicily Channel will be the first pilot site proposed) as an innovative example of sustainable development in Mediterranean area.

The ARCHAEOHIST International Committee that met in Palermo on 7th December 2007 and in Gerona on 6th and 7th March 2008, has gone over the contribution given by the cultural bodies that manage the underwater and coastal sites and the contribution offered by the NGOs that operate for the diffusion of the cultural heritage. Every single partner, has presented its organization giving its contribution preparing a file describing the archaeological sites under their management as well as the related methodology applied.

Palermo and Gerona meetings have lead to a shared concise GIS file already used by the Soprintendenza del Mare of the Sicily Region.

This GIS file has been fitted on the coastal archaeological sites by Wirt Artna Foundation of Malta. The Gibraltar Museum contribution will allow to widen the methodology used for listing and classifying by resorting to criteria of priority management (for ex. degree of conservation, risks runned by the site).

As far as social and environmental aspects related to pilot archaeological sites are concerned, the Liaison Méditérranéenne Association has contributed developing the socio-economic aspects of the archaeological site of Cartagine, already included in the UNESCO heritage, making the same ones fit for other pilot sites.

Soprintendenza del Mare and UNESCO have dealt with the environmental aspects; one has prepared the Starting Environmental Analysis file for the underwater and coastal sites; the other has defined a set of environmental indicators for pilot sites, starting from those ones normally used for Agenda 21 and adapting them to project needs.

During next meetings

- science contribution for archaeological sites management will be analyzed;
- action lines for a better pilot sites management will be identified;
- guidelines will be developed by identifying management best practices and by developing the scientific lines for policies support.
As far as the project didactical aspects are concerned, during the meetings, UNINETTUNO has developed the structure of a model for long distance teaching that will be enriched, during the next meeting, with the interview to cultural and scientific representatives of project partners. Moreover, UNINETTUNO and the Consorzio Universitario per l’Ateneo della Sicilia Occidentale and the Bacino del Mediterraneo – UNISOM, are working to arrange the structure of a Master dedicated to the coastal and underwater archaeological sites management. The final publication, the management guidelines, the e-learning module and the master will be instruments for the diffusion, at all different levels, of the methodology developed over pilot sites. Moreover brochures and project logo have been defined and approved by project partners. More information on the project, partners and leaflet have been made available on the web site: www.archaeomap.eu, where is visible the logo too.

Kick-off meeting – Palermo – Italy

Kick-off meeting – Palermo - Italy

Superintendence of the Sea – Rov Monitor

Cala Minnola site – Egadi Islands (Italy)
THE SEA OF EGADI

Foreword

The ARCHAEMAP project area selected for the archaeological sites sustainable development guidelines drawing up is the Egadi Islands one and in particular Cala Minnola roman republican wreck site.

This area, according to different factors, represents a wide and well defined microcosm representing entire coastal and insular Sicilian territory with its typical features, influences and logistics.

Egadi Islands are situated at the westernmost part of Sicily. The archipelago is made by three major islands: Favignana, Levanzo e Marettimo and of some minor ones.

Far away from Sicily, Marettimo is placed as an imaginary cusp of a sea triangle that, between Capo Boeo (Marsala) and Trapani promontory, it tapers in the middle with Levanzo and Favignana up to the highlands ramification of Marettimo, the ever present central Mediterranean keeper.

According to the analysis of few archaeological data collected before 2000-2001 research campaigns in the sea between the Archipelago of Egadi and the Sicilian coast, it was already possible to infer the great scientific interest and remarkable evocative significance of the area.

Historical data from classical sources have already put in evidence the important role played by these places in the ancient history of the Mediterranean, during the well known episode of the Egadi battle between Romans and Carthaginians in 241 b.C.

Nevertheless, that outline was vague and scarcely detailed and lacking in adequate documentation.

Surveys carried out by G.I.A.S.S. (now Soprintendenza del Mare) together with CEOM and the Guardia di Finanza, followed by recent researches carried on in cooperation with the RPM Nautical Foundation, give the run down of the underwater archaeological situation. Moreover they have also contributed to sketch out areas to include in a didactic-touristic route and to select sites for scientific studies to carry on with archaeological excavations and more detailed research activities.

The so far collected results show that the whole area situated between the promontory of Cofano and Marsala is really attractive and important under the scientific point of view in consideration of the intrinsic features of the underwater archaeological emergencies. This area is also complementary with the archaeological contest of the opposite islands coast and shows high environmental and landscape value.

By the way this territory has become the place for the first experience of underwater archaeological site management for tourist destination. The experience has been successful both in the heritage safeguarding and in meeting tourists favor.

We suggest to give a look to the monograph titled “Il mare delle Egadi”, published by the Soprintendenza del Mare (2005) in order to go into the subject of marine culture resources management in the Egadi islands.

The historical/archaeological contest

Before summarizing the historical/archaeological peculiarities of the underwater cultural features that have been identified during research it is worth to speak about historical and archaeological profile of the coastal areas starting from the archipelago.

Here, differently from the rest of Sicily, the most important painstaking archaeological attraction is not represented by the classical ancient ruins but by the high number of caves excavated by sea erosion in the limestone cliffs of Favignana and Levanzo during Pleistocene.
Marettimo, due to its different geo-lithological conformation, does not offer the same kind of evidence. The far most island offers a rich and spectacular sample of caves as well but, being at the sea level and so still under formation, they have no archaeological interest.

On the other side, the caves of the other two islands, reveal a past of human settlements: numerous and diffused, they date back to the Final Pleistocene or to the Upper Paleolithic (starting from around 12.000 years b.C.), following the presence of Middle Pleistocene fauna with elephants and other species now extinct. Caves are mainly concentrated near the Faraglione of Favignana or along the north-west coast of Levanzo. Their high value under paleontological and archaeological point of view places the two islands of the archipelago among the most significant prehistoric provinces in Europe, as the French areas of Périgord and of Ariège are. The importance of these caves is not exclusively due to the presence of the well known expressions of rocky art, as in the Grotta di Cala dei Genovesi, but to their stratified sediments as well.

The rare excavations carried on have put in evidence the presence of hunter communities since the Upper Paleolithic: very skilful in creating flint toolmakers, these communities developed primary farming and herding activities. These socio-economic changes occurred in connection with a big geographical change. It is sure that up to the latest glaciations (Würm) Levanzo and Favignana belonged to the coast of Trapani. On the archaeological ground, this situation, verifiable also through the study of the local bathymetry, is reflected in the images carved on the walls of the Grotta del Genovese of Levanzo where animals like the wild horse and ox, typical of grassland, are represented. With the end of Pleistocene, around 10.000 years b.C., a cut off of the link with Sicily occurred and the present insularity has become a constant factor.

It is interesting to remember that in Grotta d'Oriente, at Favignana, a Mesolithic tomb with a buried body with the head covered with something like a parure of shells has been discovered. Rare comparisons could be done with the famous Grotte dei Balzi Rossi near the border between Italy and France. This discovery informs on the relevant role played by the sea both as resource and as element linked to the magic-religious imaginary since primordial times.

Beside some isolated archaeological findings and some profaned tombs dating back to the middle and old bronze age, traces of human life in the archipelago during the most recent prehistoric ages are rare. Nevertheless the settlements of Torretta and of Calamonaci at Favignana prelude interesting developments.

The period of the first Phoenician-Punic colonization is equally obscure. Archaeological evidence do not know anything similar to the neighbouring Mozia. Also for this period archaeological research backwardness has to be paid. Archaic materials found give evidence of a human presence dating back to VIII-VII b.C: then those coastal settlements or “emporia” that typically characterized the first Phoenician-Punic trade activities are expected to be found.

As far as following periods are concerned, considerations on the archaic period count. Nevertheless meaty evidences prove the presence of wide Hellenistic–Roman settlements in all the three islands of the archipelago. In particular, a wide rural settlement provided with a big catchment basin has been indicated, together with other ones, in the southern tableland of Levanzo. The above mentioned settlement seems to have great significance with its rooms floored with mosaics. Probably it is a “villa”, a seat for agro-industrial activities of control and management, probably diffused all over the island. Linked to this latest one, in good repair, there is the very interesting plant for fish processing (“garum” production) that finds its place on Punta Altarella.

At Favignana the wide area of San Nicola-Torretta is surely noteworthy: here a long diachronic evidence that goes from prehistory (middle bronze age) till ‘600 of modern era can be registered. Over the context allocation, the interest for the area is due to the strong rocky character of the structures in its inside. In fact there are ruins that refer of stoneworking and of intaglio, one of the main activities carried on by insular till present time.

The understanding Favignana without a contact with human stones creations is impossible. The magnificent quarries structures can be understood having a look to past time. Starting from Prehistory till modern era, passing through the different seasons of Phoenician-Punic, early
Christian and Renaissance hypogeism, San Nicola – Torretta area gives the idea of the millenary tradition of stone intaglio.

Nowadays deterioration conceals the relevance of hypogeums excavated in the rock and the skilful architectural articulations carved in Grotta del Pozzo, Grotta degli Archi and Grotta della Stele.

It is a relevant example of hypogeic architecture that links Sicily to other Mediterranean areas (from Tunisia to Cappadocia).

In the same area, traces of a plant for fish processing and of a nymphaeum carved in the rock, both of them dating back to roman period, can be found.

But very interesting archaeological evidence for their historical and cultural implications, can be found in the above mentioned Grotta del Pozzo, Grotta degli Archi and Grotta della Stele.

In the first one, the Punic inscriptions indicate that, between IV and I century b.C., the artificial cave was used for oriental cults practice. In the second one, traces of an “arcosolio” type tomb of the first Cristian era times have stood up well over the centuries. In the third, an inscription in vernacular neo-Latin reveals Cristian cults practice up to XIII century.

Some other cavities, at present still used as sheepfolds, have been used as meeting places during post-medieval era: evidence of this is given by the Grotta dello Stemma where a depiction of an heraldic elements is visible in a bas-relief.

From archaeological information is possible to infer the presence of settlements that since late Hellenistic period has increased during Roman period when also the most distant of the Egadi – Marettimo - offers remarkable evidence.

Ruins of the so called “Case Romane di Marettimo”, placed near a real gem of Byzantine religious architecture that is the outlying little church, reveal the presence of a military settlement also used as rural productive structure.

Setting the sea archaeological evidence in this contest does not means simply putting it in a network together with what in the Archipelago of Egadi we have described; it also means to keep in mind that we find ourselves not so far from the most western cusp of Sicily where some of the most important and well known ancient cities, such as Erice, Drepanum, Mozia and Lilibeo, that played a leading role in Mediterranean history, are placed.

**Sea archaeology and the Egadi battle**

Underwater archaeological sites of Egadi have brought to light finds from Hellenistic and Roman period, particularly those ones belonging to the late Hellenism and to the Early Empire (III century b.C. – II century a.d.).

The features of a lot of sites reveal the same ones as areas of frequent anchorage; from evidence supplied, other sites can be classified as wreck sites.

Sometimes remains are partially visible, other times remains can be perceived through isolated ancient traces dispersed in the sand or among the rocks; in any case the evidence is of unmistakable wreck, the most ones dating back to the period before Egadi battle and the era of Roman presence in the Mediterranean area. It is this one the period during which these seas are frequently ploughed as it coincides with the Carthaginian trade and military power at its height glory, when it incorporates, in a sole dominion, North Africa and West Sicily. Between IV and III century b.C. the Carthaginian eparchy created a system and a network among North Africa, Sicily and Sardinia giving rise to a marine force controlling the Mediterranean: a power based on the strict link between Cartagine and Sicily with flourishing Punic cities as Mozia, Lilibeo, Selinunte, captured after 409 b.C., Erice, Panormo, Solunto. The North African territory and West Sicily became a whole, closely connected through a dense network of political, military and trade links. This geographical mainstay had its vital core in the sea connection linking Sicily channel, Pantelleria and the Egadi Islands: this is the reason for which a lot of Punic-Hellenistic traces can be found in the seas of Egadi, Pantelleria and Sicily Channel.

In that period in that sea an intensive trade and military traffic took place, creating a backbone of a power trapping the whole Mediterranean in an apparently impregnable vice like grip.
In the same way, Romans understood that their destiny of dominant power over Mediterranean could be carried out only breaking up this axis between North-Africa and West Sicily. For this reason the battle, crucial for the whole Mediterranean destiny, took place in one of the focal points of this system of links: the Egadi Islands.

The demonstration of vulnerability of that link would have put Romans in the condition to achieve a twofold result. On one side it would have weakened the opponent side in its power core; on the other one it would have mined the enemy under the psychological point of view, showing the vulnerability in one of the points of its maximum strength.

As it seems to be simple explaining the underwater archaeological presences in the Egadi and the location of a battle that in strict time, on 10 march 241 b.C. decided the destiny of the world of those times, it is equally simple to explain, on the ground of these historical considerations, the presence of archaeological traces of the republican and imperial period too. Also Rome with its well established economic and cultural system, made its fortune thanks to a dense north-south network, from and for Africa.

In consideration of this, it is also given a justification to the archaeological traces found on Egadi Island and on Pantelleria, as well as to the power and to the vivacity of roman Lilibeo, a real link between Italy and Africa for the whole roman period till the barbarian invasions.

Deductions coming from our underwater archaeological research campaigns confirm what is emerging from the intensification of archaeological activities in Egadi and above all in Pantelleria and Lilibeo/Marsala. Recent researches trace a very rich picture made of prosperous trade, of a strong building industry and of a valuable handicraft activity that characterize the centuries under the roman empire rule in the Mediterranean.

Within the framework of that historical period reconstruction, sea and land are strictly linked in an indissoluble way as terrestrial archaeology data help to understand those ones of underwater archaeology and vice versa.

These archaeological-historical deductions have to be addressed towards the popular translation of what scientific research has dug up and brought into light from land and sea. In other terms the didactic/touristic offer outlined with the present study cannot leave out of consideration the interest over the period in which sea frequentation in this area was at its culmination: an evocation of a period during which the Egadi were the hub of that time world, first as core of the Carthaginian power, then as fulcrum in the Carthaginian and Roman conflict and subsequently, again, as the core of the power of Rome in the Mediterranean.

It is clear that under this point of view the Egadi Battle plays an important central role both for the event strong evocative power and for the historical centrality within the logical sequence of this Mediterranean area.

From the historical analysis and from the reconstruction of the battle kinesics, we have assumed that over the various periodic daydreams of improvised “treasure diggers” and amateurs archaeologists, it could not exist a real cemetery for the ships lost during that fateful 10 march 241 b.C. when both battle arrays counted their losses. This both for the limited losses and for the battle dynamics that parcelled out in many “hand-to-hand struggles” among single ships. The research carried out and of which is given here an account, gives a vide evidence of this. The same, from the historical sources throughout analysis carried on by Maria Ida Gulletta.

In order to go into the study of the battle thoroughly, we have taken into consideration three determinant factors that have lead to the conclusion here proposed and that represents also the basis to transfer during a visit what has been deducted during the research activity. The three factors are respectively the news on the past archaeological findings, the reconnaissance carried out during this study and the exegetical study in depth of the historical sources on the battle.

Going to Egadi and talking with local fishermen and scuba divers, once wariness has been overcome, the story to listen to has become a legend. It is possible to listen to the narration about the discovery of a lot of lead anchors near the eastern border of Levanzo, in the sea from Punta Altarella and Capo Grosso which, unfortunately, at that time, were taken for their melting in order
to obtain sounding lead. From tales it is possible to infer a supposed regularity in their positioning in the sea: this, both in terms of distance from the coast and in terms of deepness. This has lead to think that the above mentioned anchors have been abandoned rapidly, cutting ropes at moment of the mortal combat that Lutazio Catulo, the victorious roman admiral, launched to the navy of Annone, the admiral of the Carthaginian convoy arriving from Marettimo and directed towards Drepanum where the Carthaginian garrison’s rescue was falling under siege.

This hypothesis was in contrast with some other considerations based on the underwater archaeological point of view and with the interpretation of historical sources made by eminent ancient historians.

In itself, the presence of numerous anchors can be the consequence of repetitive anchorages due to the particular places conformation. If we think that the loss of anchors was and is frequent, it is possible to understand that with a one year loss (standing on underestimated statistical level), only few hundred years were sufficient for creating a cemetery of anchors in the deep sea.

Moreover, having a look to available sources, historians remarks put in evidence a never mentioned Phorbantia (Levanzo), on the contrary well known to ancients. All the sources referred to Aigussa (Favignana) and Hiera (Marettimo) instead; the first one as place of departure for the roman ambuscade and the second as leg of navigation for the Carthaginian ship before the unlucky journey towards the Sicilian coast.

Then, it was difficult to link up the anchor stocks findings with the battle. Moreover, the difficulty in locating the place of anchorage as that one where the battle took place came from other considerations. As the Carthaginians sailed, it was logical the presumption that the large Carthaginian fleet got lost in the wide sea and that the defeat came from the disturbing surprise of the roman attack, unexpected also because launched with boldness in adverse conditions as direction faced the blowing wind one (coming from West).

The limited dimension of the battle can be inferred from the estimation of the total losses suffered by opposing parts (only 62 boats on a total of 1200 involved during the whole first Punic-Roman battle).

Finally, analyzing the possible wreck scattering, it was inferable that the area of hypothetical of archaeological finding became indistinct because of the wind direction changing during the post meridian hours (from East) that surely led the wood towards west as to the area of the ambuscade.

The possible scene of the battle was difficult to identify as from the studies and their sources, the destination of Carthaginians, generally indicated in Drepanum, was indefinite, while it was sure that the site fortified by Punic was Monte Erice.

It was not clear if the selected landing place were in the current Trapani harbor or in an unspecified place of the northern coast spreading from Trapani to North (up to Monte Cofano).

In confirmation of the impossibility in sketching out this framework only with the textual analysis and the topographical considerations there is also the prudence that influential historians (from Holm to De Sanctis, from Pareti to Rizzo) have used in dealing with this subject.

Reading Polibio and other ancient historians without the support of the terrestrial and the underwater archaeological sources, it was not possible to give full details on the battle dynamics, preventing from going over a general identification of this area in the sea of Egadi as the real scene where the battle took place. For the same reason, it was not possible to give a definitive place to the political-military moment that both parties were living.

The study in depth of both topographic-archaeological and historical issues has led to different conclusions creating, above all, that essential critical and dynamical link between written and archaeological sources.

From the essay of Gulletta, it is possible to infer that the indication given by Polibio on the ambush place before the attack with “Aigussa in front of Lilibeo” can be well identified with Levanzo and not with Favignana. (Maria Ida Gulletta, "Navi romane fra gli Specola Lilybitana e le Aegades Geminae? Note per una ricostruzione della battaglia delle Egadi", in “Il mare delle Egadi” (edited by) S.Tusa, Palermo 2005).
This, by virtue of a rereading of Polibio’s passage made in the light of the subsequent Livio’s text for which a specification of the intended “Aigussa” arose from the need of differentiate it from the largest one (Favignana).

Acting with cleverness, Gulletta explains that if the “Aigussa in front of Lilibeo” were the “Aigussa that can be found in front of Lilibeo” the need of such a topographic clarification from Polibio could be explained only with the need of indicating not the bigger and the most well-known one that gives the name to the archipelago (Favignana), but its twin, the little Aigussa, the Phorbantia di Tolomeo, the Levanzo linked to the ancient memory of stormy seas all along the Rodies and Phoenicians routes directed towards the Tirreno.

Bearing in mind what above specified, now we focus the attention on the definition of the long Carthaginian navigation destination.

It is well known that Annone’s fleet, supplied with food, left Cartage with the principal aim of breaking the siege that was forcing the compatriots on the peak of San Giuliano (Erice), providing the same ones with victuals and other supplies of goods: they were exhausted because forced in a long isolation caused by Romans camped at the slopes of the same mountain.

In order to understand better the siege on San Giuliano and above all its topographic dynamics for a better definition of the possible place of attack decided by Annone’s fleet, it was necessary to know the topographic-archaeological conditions of this mountain, till now not known in detail.

In consideration of this, we have availed ourselves of the collaboration of Antonio Filippi that knows the places into deep and that has reconsidered writings as well as results produced on the matter till present time in the light of a reconnaissace of the mountain, identifying the archaeological emergencies that have allowed us to suppose, with more accuracy, the siege dynamics and, in consequence of this, the landing to which Annone was aiming at.

During the first Punic war Erice was a well known city in the religious ecumene as seat of the important shrine dedicated to Astarte/Venere. Due to the war it became the Carthaginian military fortress.

Starting from 260 b.C. Asdrubale had moved his habitants towards the coast of Drepanum with the intention of reinforcing the coastal defenses but the peak, tightly kept in Cartaginian hands, induced Romans, in 249 b.C., to besiege the western and southern side breaking the link between the military fortress on the peak and Drepanum port of call. There, nearby Pizzo Argenteria and Rocce del Calderaro, Romans created a fortified system, barring the link above.

Therefore, Carthaginians, in the intention of keeping the link with the sea, fortified the northern side of San Giuliano mountain raising a fortress near San Matteo plain (where an archaeological research carried out on surface brought into light Punic pieces of pottery dated back to III century b.C.) with the aim of protecting the coastal landing place located in Crocifissello in Bonagia bay. Thank to this landing place raising above San Matteo, besieged Cartaginians were supplied with provisions. This was the landing place towards which the Annone’s fleet was directed to during on 10 March 241 b.C.

Romans, conscious of the impossibility of turning the battle to their own advantage through an exhausting, unproductive and, by that time, long trench warfare, took the decisive and winning decision to lead the war on the sea. By this way the first Punic war ended in their favor.

Deductions from the archaeological topography of San Giuliano mountain lead to exclude that landing place of Drepanum was the destination of Annone as, even if possible both landing and discharge, it would have been impossible to reach, from west side, the Cartaginian fortress besieged at Erice, as mountain climbing was barred by the strong roman garrisons stationing on Pizzo Argenteria and on Rocce del Calderaro.

Having understood that the route followed by Annone was between Marettimo and Bonagia lead to some reconsiderations both on the sources rereading (possibility that Levanzo and not
Favignana were the island cited by Polibio as the area where Romans’ fleet was close to) and on the reminiscences of the anchors discoveries in Levanzo.

The three elements, reconsidered in the light of a joint interpretive perspective, acquire an incontrovertible logic that allows a more detailed battle reconstruction and, above all, more in compliance with those few data made available by underwater archaeological research, recently carried on for the present study.

In consideration of what above detailed, we have favored the reconnaissance of the eastern coastal area of Levanzo (Cala Minnola, Punta Altarella, Secca Scaletta) and the sea area in front of Capo Grosso (the northern end of Levanzo).

The archaeological findings circumstances, together with recoveries made during fifties, sixties and seventies, leads to classify, with an high degree of certainty, this site as one of the possible anchorage places of Roman fleet before the attack launched to Carthaginians on 10 march 241 b.C. So many anchors found in the site cannot be justified with practical reasons due to landing, recovery to escape a storm, loading-unloading, etc. As a matter of fact, the place of discovery is situated in one of the stormiest trails of sea of the whole archipelago of Egadi. It is near an high and inaccessible coast and above all in a trail of sea crossed by strong streams and lashed by sudden winds from which arose out rough and dangerous seas. Consequently no other reasons, different from the strategic/military ones, can be found to justify the presence of so many anchors in this area. The day of 10 march 241 b.C. crosses the mind with the image of the Roman fleet hidden to lay an ambush to the Carthaginians coming from Marettimo and directed towards the coast of Erice.

From this position is possible exercise a control over the trail of sea between Marettimo and the other two Egadi Islands: protected by Levanzo dimensions and for this hidden for those who comes from West and in a very good position for launching an attach to the Carthaginian fleet both if on the way running at the north of Levanzo (the most probable one) and if on the southern one, crossing the channel between Levanzo and Favignana.

Further researches carried out by the Soprintendenza del Mare in cooperation with RPM Nautical Foundation where is supposed the battle has taken place (north-west of Levanzo) have lead to the spotting of findings that have represented the incontrovertible evidence of what supposed. Among the archaeological findings discovered, we remember the bronze ram recovered on June 2008, most likely pertaining to a roman ship, that follows that one sequestered by Carabinieri in Trapani and found in the same zone.

In the same battle framework there is also a bronze helmet (Motefortino type) probably belonging to a roman soldier fallen during that battle.

Research with side scan sonar and a remotely operated vehicle equipped with a video camera continue and have given a contribution to make clear the role of this sea space in the inside of imperial routes thanks to the discovery of other wreckages.

From the analysis of data collected it is possible to reinforce the hypothesis that the route followed by Carthaginians ships were that one running at north of Levanzo and not that one of the channel between Favignana and Levanzo.

Moreover, the aim of the fleet was to give support to the Punic garrison blocked at Erice that, as demonstrated above, could not be reached from Drepanum (now Trapani) but from the side of Valderice – Bonagia (Crocifissello and fortress of San Matteo kept by Cartaginians)

Therefore, it is more logical that the Carthaginian fleet were directed towards Bonagia doubling, on north, Capo Grosso, where Romans ships were hidden and to which the anchors at present days identified, refer to.

The deductions on the Roman fleet place of anchorage and the consequent area in the inside of which the battle took place, if on one side answer to some historical questions on the battle itself, on the other one, do no reply to the questions over the location, in the sea bed, where the ships sunk. This question has already obtained a reply when we pointed out the impossibility of discovering a cemetery of sunk ships. On one side, the number of ships fallen lost during the battle is small: only 62. On the other side, in consideration of the battlefield conformation and of wind direction changes
during the conflict, as well as in consideration of the strong streams that cross this sea, it is sure that, after driftage, the destroyed ships sank going far from the battlefield north of Levanzo.

Moreover the well known Punic ship recovered during sixties and seventies by Honor Frost and today exhibited in Marsala at the Museum of Baglio Anselmi, almost surely sunk in that decisive day, has been found on south, some miles far from the battlefield. Also the so called “sister ship”, the boat identified nearby and never recovered had to belong to the battle period. Consequently, this would confirm the wide dispersion of wrecks. As it is known, the two above mentioned hulls were found not so far from the seashore of Isola Longa near Punta Scario. This would demonstrate that from Levanzo (at north) but probably further on, up to the channel between Favignana and Sicily (on south) wrecks probably occurred.

Nevertheless, the result obtained has a double value.

On one side it puts forward solid arguments in favor of the battle and identifies, in the eastern coast of Levanzo, the area reached by the roman ships that delivered the mortal attack to the Carthaginian fleet and in the North of Capo Grosso of Levanzo, the battlefield

On the other side we have been able to trace a system of archaeological underwater routes concerning the eastern coast of Levanzo (from Cala Minnola to Capo Grosso): here careful explanations can put the visitor in contact with all significant evidences partially linked to that event.

The battle of Egadi

On 10th march 241 b.C., a strong libeccio lashes the western peak of western Sicily. That wind herald an epochal political change in the Island that will definitively place the same one in the “western” field where stands out the austere Roman profile

The battle of Egadi is one of those historical and historiographical events that from Polibio onwards have nourished the debate over the Punic wars, the causes, and the consequent geopolitical turning point.

The anomalous situation that the Carthaginians, besiegers and besieged in Erice, gets worse with the roman fleet arrival and the consequent occupation of the waters in front of Drepana and of the roadsteads of Lilibeo.

The whole island western coast is cut off from every communication with Carthage; Lilibeo, fundamental sea and land junction of Punic Sicily, is a blind alley in the twofold roman block.

The Punic reaction aims at setting free Amilcare’s troops immobile in Erice, in order to find a solution to war carried out on two fronts, with an action aimed at blocking the ports and at demolishing the land sieges.

A vast force prepares itself to plough through the waters of the Sicily Channel. Big and nevertheless loser still before setting sail, because of a clash that Poblio already evidences as unequal: the image of Lutazio Catulo that trains seamen for the battle without a break is the expression of the roman state of fervor, of a power grown in the obstinacy, with clear goals, in the tenacity, in the capacity to absorb techniques, men and strategies and that by copying the secrets of naval mechanisms it seems to have acquired the inheritance of the most famous navy of all times.

The ships of Annone, warships exceptionally working as cargo boats for facing the needs of the troops besieged in Erice, sail from Carthage directed towards Hiera (Marettimo), necessary stopping place for continuing the navigation towards the three landing places of the island western coast, that a cabotage, normally difficult for the sandy roadsteads, would have put into risks for the presence of the enemy in the waters of Drepana and Lilibeo.

Lutazio Catulo, sensed the Punic ships route that, from Hierà, escaping the coast patrolled between Drepana and Lilibeo, would have pointed to Erice, widening the ray of navigation towards the north-eastern access of the present Torre di Bonagia: it was necessary to cut the route for turning into Romans favor that strong libeccio that even if favorable to enemies sails it would not have lightened the heavy load made of provisions, in case of attack launched by surprise.
For the first time, Egadi enter into the history of Sicily: islands, scattered as “goats” among the channel waves, fragments of a seaside from time to time Sicilian or African, islands of the wind and of the untrustworthy billows that ancient etymologies related to the stormy Egeo, making a circle round the places of a goodness and on stories of survivors.

The identification of Aigoussa polibiana with the current Favignana, as ambush place for the roman fleet and place of the disaster for the enemies ships is today lesser expected than it was in the historical literature on Punic wars; complicated rebuilding of a double navigation through the channel Levanzo-Favignana and the orientation of the battle between Favignana and the “Stagnone” of which refers the well known wreckage of Marsala, clash with the need of two routes that can be perfectly rebuilt: the Punic one, Hierà-Erice, directed towards the open sea for reaching a particular landing place, with difficulty could have been chosen for the complicated direction – due to enemies patrolling and to the sandy roadsteads – determined by the penetration of the channel between the two islands and then the changing in route towards Drepana and then Erice.

Romans of Lutazio Catulo, on the other side, had the need of a surprise attack that intuited the enemy route, should have been made fruitless because of the delay that, the descent towards Favignana and the penetration of the channel in the direction of Marettimo, should have implied; moreover a strong wind from South-West could be, with difficulty, defined pròs antion “opposite” with regard to roman ships in the channel, in a direction perpendicular as well as with the protection of the islands.

The Aegades geminae (Sil., 6, 685) Levanzo e Favignana, that prehistory wants linked with an end of lend and those Specola lilybitana that allow the leaking out of the Punic name of the Erice, in the latest act of Sicily philo-carthaginian, are the key for an alternative hypothesis on the battle places: it is the tradition converged in Livio, this time, shedding into light on a polibian topographic detail always read in a univocal manner.

The roman post that Polibio places at “Aigussa di fronte a Lilibeo” can be generically intended as placed at Favignana, even if the island is in front of the northern tip of the port, the present day Torre San Teodoro, exactly in opposition to Capo Lilibeo.

The livian text Aegates insulas Erycemque ante oculos proponite, quae terra marique per quattuor et viginti annos passis sitis – with a toponymy too much far from facts for being significant, but probably for this chronologic distance not accidental in the associations, invites to a rereading of the most available complete version on the battle of 241 b.C.: if the the “Aigussa di fronte a Lilibeo” were the Aigussa that is in front of Lilibeo such a topographical clarification from Polibio can be explained with the need to indicate that is not the biggest and the more well-known island, that one that gives the name to the archipelago (Favignana) but the Aigussa, the twin island, the smallest one, the Phorbantia of Tolomeo, Levanzo linked to the ancient memory of stormy seas along the Phoenician and Rodi routes towards the Tirreno.

The line covering the route Carthage-Erice ideally joins three points: Hierà, then the Aigussa of the hero Forbante and the Specola Lilybitana from which Romans probably sighted the enemies ships.

It is probably at the north of Levanzo, where the archaeological findings dating back to fifties reveal the wide and regular presence of anchors, trace of a broken mooring cut simultaneously, on the back of Capo Grosso cliffs, that Lutazio Catulo hided his fleet, changing battle array strategy with respect to the traditional hollow wedge and turning stems directly against the Punic fleet and the wind.

By that time, the route Hierà-Erice was blocked-up and the disaster unavoidable, Aphrodite had already turned the eyes towards the Urbe and the new temple.

For the sons of the twin Astarte, only unexpectedly wind blowing from North-East cleared away the latest most ancient and ancestral trace of their presence in Sicily: Venus Ericina had already appeared.
The management of the underwater archaeological sites in the Egadi Islands

The archaeological study that has been carried out, supported by the frequent underwater reconnaissance has been coupled with an analysis conducted by the team of economists of the University of Catania managed by Ilde Rizzo.

Research was aimed at defining the relation between costs and benefits in case of an investment for the creation, in some of the identified sites, of parks or of archaeological underwater itineraries to visit.

The analysis and its results are encouraging: in fact it comes out the cheapness of this operation for the booming underwater tourism that it generates.

A first itinerary has already been created in the area of the wreckage of Cala Minnola and a second one in the area of the anchors of Capo Grosso.

In the area of Cala Minnola the first remote control TV switch system has been created: by using four cameras live images from the deep sea floor and from the water above are sent back directly to Favignana, at the entrance of the city hall.

It is worthwhile for us to cite a passage of the long and articulated economical analysis on the feasibility of the project for the creation of parks and archaeological underwater itineraries.

Projects benefits are based on fruition, improvement and conservation demand of the archaeological finds as well as on the related research and education demand.

For benefits calculation, three different categories have been singled out:

- people availability to pay for archaeological underwater itineraries fruition, i.e consumers surplus;
- benefits for services producers (diver centers) coming from the archaeological itinerary, i.e. the producers surplus
- touristic expenditure for the benefits of the economy on the whole

To the above mentioned benefits it is necessary to add those ones coming from preservation.

As far as benefits coming from research and personal cultural enriching are concerned, the same ones are difficult to value: this because of the difficulties in the definition of the beneficiaries and of their related availability to pay for the same ones. For this reason these benefits have not been included in the calculation.

A sensitivity analysis has been carried out too: situations of uncertainty on both the graduality with which benefits will be produced in full within the estimated measure and on the demand weight have been taken into consideration.

Even in case of significant changing in the most relevant parameters, the project continues to present positive net benefits.

The study defines a management model for the proposed intervention.

An original integration between public and private has been pointed out: in this case, some activities management, for their nature and for the fact that produce collective benefits, has been committed to the public institutions, while other activities have been assigned to privates.

(Maurizio Caserta, Tiziana Cuccia, Isidoro Mazza, Giacomo Pignataro, *Valutazione economica (analisi costi – benefici)*, in “il mare delle Egadi (a cura di) S.Tusa, Palermo 2005)
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Partner 11:
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Partner 13:
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Centre National de la Recherche
Scientifique (CNRS) - Geosciences Azur
(UMR 6526) - France

Partner 15:
Mr Farrugia Mario
Fondazzjoni Wirt Artna - Malta

Partner 2:
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Partner 4:
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Man - Italy

Partner 6:
Mr Tili Ridha
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Partner 14:
Mr Guerout Max
Groupe de Recherche en Archeologie
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Section 1 – Project objectives and major achievements during the reporting period

Give an overview of general project objectives, show the project’s current relation to the state-of-the-art

The state of the art concerning knowledge, safeguard and valorisation of underwater and coastal archaeological sites in the Mediterranean Sea is really various depending on the coastal countries. Spain, France and Italy are standing at adequate standards in the field of research and conservation, but they seem to be at a very beginning level as regards sites valorisation, in particular the underwater ones. This does not concern Southern Italy and Sicily, where both underwater and coastal natural parks as well as archaeological paths already exist.

From an institutional point of view, offices for sites safeguard and management have been established and cooperation with Universities and Research Bodies has been conceived to ensure steady innovation in the scientific field. Cooperation with private partners has been planned to realize a joint surveillance mission to determine whether the integrated sustainable development of coastal zones is respected in terms of safeguarding of this extraordinary places engraved in the Mediterranean memory.

Legislative instruments issued, grant sites protection and conservation.

Since 2001, in Sicily Region, a Special Office has been working to increase the value of cultural heritage. Among its tasks, this structure promotes, coordinates and monitors initiatives oriented towards the enhancing of the value of cultural and natural heritage, as well as landscapes.

Greece and Turkey are in an optimal situation in terms of heritage safeguard and are almost at an adequate level of research.

Other coastal Mediterranean countries, such as Malta, near-Eastern and Northern Africa countries still lack in research and in underwater sites management. On the other hand, their coastal sites improvement and management may be considered sufficiently advanced.

A problem concerns the unsuccessful adoption of a city management plan to ensure the safeguard of archaeological zones as well as their protection through the creation of an appropriate landscape design. Another problem concerns the pressure of excessive and uncontrolled tourism that tends to turn heritage into a trading commodity rather than a cultural good, which should be protected and increased in its value.

As regards the safeguard of underwater sites, with exception of Malta, the problem does not exist simply because water sports are not practiced at all. The situation is very different in coastal sites which require extensive safeguarding because of their accessibility.

The marine environment is coming under an increasing threat due to several factors, as for example: urban coastal development, tourism needs, pollution, climate change, geological events, seismic risk etc. Relatively intact marine ecosystems are becoming rare in Mediterranean Sea. In consideration of this, urgent actions are needed to establish a network involving the most representative and ecologically important marine areas.

The UNESCO World Heritage Convention is aimed at giving an important contribution to marine protected areas safeguard. Its international profile, legal status, site-based orientation and comprehensive natural heritage criteria provide for a practical approach for a strategic enhancement of the worldwide marine conservation.

The project aim is to develop a common framework for sustainable development of the zone to preserve its natural, cultural and underwater heritage.

General Objective (long-term) of the project is to educate international experts, professionals and consultants in preserving and promoting bio-cultural diversity, considering that local knowledge,
traditions, natural and cultural (tangible/intangible) heritage are crucial aspects of sustainable development.

**Project Specific objectives (short-term) are:**

1. To promote an environmental impact methodology of assessment based on the World Heritage Marine programme sustainability indicators.

2. To develop advanced guidelines on environmental sustainability for underwater and coastal archaeological sites of the Mediterranean basin.

   **Sub-objectives:**
   2.1 Realisation of a co-ordination and comparison action, among circum-Mediterranean Countries, through the analysis of case studies and researches developed in the fields of climate change, geological events and seismic risks; protection from coastal corrosion and prevention of natural hazards due to sea-level rise; a balance between visitors’ interests and good conservation of site conditions; promotion of sustainable cultural tourism and traditional economy.
   2.2 Enhancement of sites from the environmental, cultural and socio-economic point of view, improving communication and sharing management choices among Northern and Southern Mediterranean countries and elaborating an innovative, valid approach to tackle the problems of coastal and underwater archaeological sites linked to biological and cultural diversity.

3. To transfer and share scientific and technical information and to translate knowledge into social applications and policies at the local, national and international levels.

   **Sub-objective:**
   3.1 To contribute to the development of scientific-technological policies and instruments for an integrated coastal zone management. This will concern archaeological coastal and underwater pilot sites and will take into consideration scientific, cultural, public and tourist resources. Human activities impact and new integrated cultural, environmental and socio-economical strategies for territory promotion will be take into consideration too.

4. To encourage trans-boundary and serial nominations of ARCHAEOMAP pilots sites for inscription on the UNESCO World Heritage List (the Egadi Islands Archaeological Park in the Sicily Channel will be the first pilot site proposed) as an innovative example of sustainable development in Mediterranean area.

   **Sub-objectives:**
   4.1 To use ARCHAEOMAP for promoting the UNESCO World Heritage Convention on safeguard of cultural (tangible/intangible) natural and underwater heritage as a large-scale marine conservation network in the Mediterranean basin. The UNESCO World Heritage Marine Programme aims at facilitating collaboration between governments and stakeholders for networks promotion and marine protected areas conservation, using as a support the prestige of the World Heritage Convention.
   4.2 To build a Mediterranean Marine Heritage Managers Network, through the creation of ARCHAEOMAP International Committee, for strengthening conservation capacity and effective management. These pilot sites will become models of best practices with the possibility to share experience with sites preparing nominations, as well as with sites already inscribed in the UNESCO World Heritage List. To develop strategic partnerships in support of a common Mediterranean Marine Heritage. To integrate intangible heritage as an important factor for sustainable development and a fundamental element of the Mediterranean people identity.
Summarise the objectives for the reporting period, work performed, contractors involved and the main achievements in the period

During the first project development period, the following objectives and sub-objectives have been pursued:

1. To promote an environmental impact methodology of assessment based on the World Heritage Marine programme sustainability indicators.

2. To develop advanced guidelines on environmental sustainability for underwater and coastal archaeological sites of the Mediterranean basin.

Sub-objectives:

2.1 Realisation of a co-ordination and comparison action, among circum-Mediterranean Countries, through the analysis of case studies and researches developed in the fields of climate change, geological events and seismic risks; protection from coastal corrosion and prevention of natural hazards due to sea-level rise; a balance between visitors’ interests and good conservation of site conditions; promotion of sustainable cultural tourism and traditional economy.

2.2 Enhancement of sites from the environmental, cultural and socio-economic point of view, improving communication and sharing management choices among Northern and Southern Mediterranean countries and elaborating an innovative, valid approach to tackle the problems of coastal and underwater archaeological sites linked to biological and cultural diversity.

The ARCHAEOMAP International Committee, has already met twice: it has examined the contribution given by the public and private cultural organizations that manage the underwater and coastal sites and the contribution offered by the NGOs that operate for the diffusion of the cultural heritage.

Every single partner, has presented his organization giving his contribution preparing a file describing the archaeological sites under their management as well as the related methodology applied.

Palermo and Gerona meetings have lead to a shared concise GIS file (see Annex 1) already used by the Soprintendenza del Mare of the Sicily Region.

This GIS file has been fitted on the coastal archaeological sites by Wirt Artna Foundation of Malta (see Annex 2).

The Gibraltar Museum contribution will allow to widen the methodology used for listing and classifying by resorting to criteria of priority management (for ex. degree of conservation, risks runned by the site) (see Annex 3).

As far as social and environmental aspects related to pilot archaeological sites are concerned, the Liaisons Méditerranée Association has contributed developing the socio-economic aspects of the archaeological site of Cartagine, already included in the UNESCO heritage, making the same ones fit for other pilot sites. (see Annex 4).

Soprintendenza del Mare and UNESCO have dealt with the environmental aspects; one has prepared the Starting Environmental Analysis file for the underwater and coastal sites (see Annex 5); the other has defined a set of environmental indicators for pilot sites, (see Annex 6), starting from those ones normally used for Agenda 21 and adapting them to project needs.

The ARCHAEOMAP International Committee will still meet in Rome in December 2008 and in Paris and Palermo in 2009. Within this Committee, “la Soprintendenza del Mare” of the Region of Sicily is responsible for overall coordination of the project and UNESCO for scientific coordination specifically. The Archaeomap secretariat in Paris is hosted by UNESCO’s Division of Science Policy and Sustainable Development at Natural Sciences Sector.

[4]
During next meetings, science contribution for archaeological sites management will be analyzed; action lines for a better pilot sites management will be identified; guidelines will be developed by identifying management best practices and by developing the scientific lines for policies support. As far as the project didactical aspects are concerned, during the meetings, UNINETTUNO has developed the structure of a model for long distance teaching that will be enriched, during the next meeting, with the interview to cultural and scientific representatives of project partners. Moreover, UNINETTUNO and the Consorzio Universitario per l’Ateneo della Sicilia Occidentale and the Bacino del Mediterraneo – UNISOM, are working to arrange the structure of a Master dedicated to the coastal and underwater archaeological sites management. All partners have been involved in these objectives achievements, taking part to the meeting an by giving their contribution (see Annex 7-8).

If applicable, comment on the most important problems during the period including the corrective actions undertaken

One of the main problems discovered is the delay with which scientific documents produced by partners are presented. During the next MTA meeting there will be the possibility to go into the problem thoroughly.

Section 2 – Workpackage progress during the period

To provide an overview of the actions carried out in the reporting period, based on the workpackages¹ which were active or planned to be active during the period.

During the first 12 months of the ARCHEOMAP project, the following work packages were active:

- **WP 1**: Definition of project staff, planning of activities, initial and end meeting of International Committee (Palermo)
- **WP 2**: Intermediate meetings of International Committee for sustainable development of Mediterranean basin (Barcelona and Alexandria) and International Forum in Paris and “Educational Atelier”
- **WP 3**: Results elaboration, preparation of editorial publishing and distance teaching module
- **WP 4**: Diffusion, dissemination and transferability of results
- **WP 5**: Technical and scientific coordination
- **WP 6**: Recommendations and guidelines
- **WP 7**: Planning, internal and overall coordination activities, communication, networking, monitoring activities and internal assessment of activities
- **WP 8**: Management of the activities in relation to the European Commission

WP 1 Definition of project staff, planning of activities, initial and ending meeting of International Committee (Palermo).

The Objectives of this first period where the definition of competences and responsibilities for the

¹ The workpackage on Project management should not be reported here but under Section 3
realization of every single project phase; the formalization of the partnership through a nominative organizational chart of the International Committee and the Management and Decision-making Committee; the meetings planning and organization; the first International Committee meeting at “Palazzo dei Normanni” in Palermo.

For reasons due to organizational problems, the first project meeting has taken place on 7th December 2007 at Palazzetto Mirto, the seat of the Soprintendenza del Mare, instead of at Palazzo dei Normanni.

Because of the meeting short duration, protracted unofficially for half a day, it has not been possible to reach all planned objectives. All participating organizations have been presented and the EC Principal Project Officer presentations have been completed, as reported in the KoM report (see Annex 7).

Table 1: KoM List of Participant

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization name</th>
<th>Participant org. short name</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sebastiano Tusa</td>
<td>Regione Siciliana Dipartimento Beni Culturali e Ambientali – Soprintendenza del Mare</td>
<td>SOPMARE</td>
<td>Italy</td>
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<tr>
<td>Philippe Tissayre</td>
<td>Regione Siciliana Dipartimento Beni Culturali e Ambientali – Soprintendenza del Mare</td>
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<tr>
<td>Giacoma Brancato</td>
<td>Regione Siciliana Dipartimento Beni Culturali e Ambientali – Soprintendenza del Mare</td>
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<tr>
<td>Roberto Morinilli</td>
<td>Regione Siciliana Dipartimento Beni Culturali e Ambientali – Soprintendenza del Mare</td>
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<tr>
<td>Mustafa El Tayeb</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
<td>UNESCO</td>
<td>INO</td>
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<td>Salvatore Giannino</td>
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<td>Margarita Tor Vigneron</td>
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<tr>
<td>Salvatore Brucato</td>
<td>Comitato Pro Arsenale Borbonico</td>
<td>ARSENALE DI PALERMO</td>
<td>Italy</td>
</tr>
<tr>
<td>Rita Cedrini</td>
<td>International Institute for</td>
<td>INTERINSTITUTE</td>
<td>Italy</td>
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Table 2: KoM List of Absents:

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<tr>
<td>Roberto Bertini</td>
<td>Consorzio Universitario per l'Ateneo della Sicilia Occidentale e il Bacino del Mediterraneo</td>
<td>UNISOM</td>
<td>Italy</td>
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<td>Ridha Tili</td>
<td>Liaisons Mediterranée</td>
<td>TUNISIA</td>
<td>Tunis</td>
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<tr>
<td>Abelaziz Belkhodja</td>
<td>Liaisons Mediterranée</td>
<td>TUNISIA</td>
<td>Tunis</td>
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<tr>
<td>Maria Amata Garito</td>
<td>Università Uninettuno - Università Telematica Internazionale</td>
<td>UNINETTUNO</td>
<td>Italy</td>
</tr>
<tr>
<td>Costas Sueref</td>
<td>Archeological Museum of Florina</td>
<td>AMF</td>
<td>Greece</td>
</tr>
</tbody>
</table>
The other objectives: definition of competences and responsibilities for the realization of every single project phase, formalization of the partnership through a nominative organizational chart of the International Committee and the Management and Decision-making Committee have been reached during the second meeting as the meeting report refers. (see Annex 8).

**WP 2: Intermediate meetings of International Committee for sustainable development of Mediterranean basin (Barcelona and Alexandria) and International Forum in Paris and “Educational Atelier”**.

The objectives of this WP for this first period have been the following ones: to work out an interdisciplinary study of pilot cases referred to coastal archaeological sites in the Mediterranean basin; to draw up, in the form of report through editorial publication, the results of the local operations linked to the pilot project; to elaborate an e-learning module to be diffused in the Euro-Mediterranean area.

During the second meeting held at the site of the Centro d’Arquelogia Subaquatica de Catalugna on 6th and 7th March 2008, instead of at the “Archaeological Museum” of Barcelona the theme “The contribution of Culture to sustainable development around the Mediterranean basin” has been developed further on.

The strategies for the management of the pilot sites of Cartagine, Gibraltar and Villefranche sur Mer have been presented.

The general guidelines have been defined; the web site has been presented; a brochure proof has been looked over; some logo proposal have been evaluated.

As far as the e-learning module is concerned, the UNINETTUNO representative has undertaken to prepare a structure of the model to present during the next meeting (See Annex 9).

<p>| Table 3: Gerona meeting list of participants |
|-----------------------------|-----------------------------|---------------------|---------------------|
| <strong>Organization name</strong> | <strong>Participant org. short name</strong> | <strong>Country</strong> | <strong>Representative (short-cut)</strong> |
| Regione Siciliana Dipartimento Beni Culturali e Ambientali – Soprintendenza del Mare | SOPMARE | Italy | Sebastiano Tusa (ST) |
| Regione Siciliana Dipartimento Beni Culturali e Ambientali – Soprintendenza del Mare | SOPMARE | Italy | Nicola Bruno (NB) |
| Regione Siciliana | SOPMARE | Italy | Giacoma Brancato (GB) |</p>
<table>
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<th>Institution</th>
<th>Country</th>
<th>City</th>
<th>Contact</th>
</tr>
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<tr>
<td>Dipartimento Beni Culturali e Ambientali – Soprintendenza del Mare</td>
<td>Italy</td>
<td>Rome</td>
<td>Mustafa El Tayeb (MET)</td>
</tr>
<tr>
<td>United Nations Educational, Scientific and Cultural Organization</td>
<td>Italy</td>
<td>Rome</td>
<td>Salvatore Giannino (SG)</td>
</tr>
<tr>
<td>International Institute for the Study of Man</td>
<td>Italy</td>
<td>Rome</td>
<td>Carmelo Sebbio (CS)</td>
</tr>
<tr>
<td>Association pour la Sauvegarde du Patrimoine Maritime de Villefranche-sur-Mer</td>
<td>France</td>
<td>Nice</td>
<td>Bérangère Guers (BG)</td>
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<td>Tunis</td>
<td>Ridha Tlili (RT)</td>
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<td>Tunis</td>
<td>Ouafa Ben Slimane (OBS)</td>
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<tr>
<td>Università Uninettuno - Università Telematica Internazionale</td>
<td>Italy</td>
<td>Rome</td>
<td>Emma Angelini (EA)</td>
</tr>
<tr>
<td>Departement of Underwater Archeology - Supreme Council of Antiquities</td>
<td>Egypt</td>
<td>Cairo</td>
<td>Alaa El-Din Mahrous (AEDM)</td>
</tr>
<tr>
<td>Graeco -Roman Museum</td>
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<td>Cairo</td>
<td>Salwa Mahmoud Abd-El-Meguid (SMAEM)</td>
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<tr>
<td>Museu d’Arqueologia de Catalunya</td>
<td>Spain</td>
<td>Barcelona</td>
<td>Xavier Nieto Prieto (XNP)</td>
</tr>
<tr>
<td>Associazione Archeo-Antropologica Approfondimenti Interdisciplinari Operativi</td>
<td>Italy</td>
<td>Rome</td>
<td>Sergio Frau* (SF)</td>
</tr>
<tr>
<td>Associazione Archeo-Antropologica Approfondimenti Interdisciplinari Operativi</td>
<td>Italy</td>
<td>Rome</td>
<td>Claudio Giardino (CG)</td>
</tr>
<tr>
<td>Centre National de la Recherche Scientifique</td>
<td>France</td>
<td>Paris</td>
<td>Eric Duliere (ED)</td>
</tr>
<tr>
<td>Fondazzjoni Wirt Artna</td>
<td>Malta</td>
<td>Valletta</td>
<td>Jonathan Borg (JB)</td>
</tr>
<tr>
<td>CNRS of Lebanon</td>
<td>Lebanon</td>
<td>Beirut</td>
<td>Alexandre Sursock (AS)</td>
</tr>
<tr>
<td>Gibraltar Museum</td>
<td>Gibraltar</td>
<td>Gibraltar</td>
<td>Darren Fa (DF)</td>
</tr>
</tbody>
</table>

*first day only
Table 4: Gerona meeting List of Absents:

<table>
<thead>
<tr>
<th>Organisation name</th>
<th>Participant org. short name</th>
<th>Country</th>
<th>Representative (short-cut)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consorzio Universitario per l’Ateneo della Sicilia Occidentale e il Bacino del Mediterraneo</td>
<td>UNISOM</td>
<td>Italy</td>
<td>Roberto Bertini (RB)</td>
</tr>
<tr>
<td>Università Uninettuno - Università Telematica Internazionale</td>
<td>UNINETTUNO</td>
<td>Italy</td>
<td>Maria Amata Garito (MAG)</td>
</tr>
<tr>
<td>Archeological Museum of Florina</td>
<td>AMF</td>
<td>Greece</td>
<td>Costas Sueref (CS)</td>
</tr>
<tr>
<td>Fondazione Athena Sviluppo</td>
<td>ATHENA</td>
<td>Italy</td>
<td>Giampaolo Natoli (GN)</td>
</tr>
</tbody>
</table>

WP 3: Results elaboration, preparation of editorial publishing and distance teaching module.

The objectives are: to ensure the elaboration of International Committee meeting results and the preparation of the final publication and of the long distance-teaching module. The work related to this WP has taken place during Gerona meeting and the following post meeting elaboration phase.

The primary partners involved have been the following ones; Soprintendenza del Mare, UNESCO and UNINETTUNO. All the other partners have participated to the definition of the deliverables ensuring technical achievement.

In particular UNINETTUNO has been deeply involved in the elaboration of the e-learning module content and organization. The scheme reported in Table 5 has been suggested for an e-learning module of 8 h. The Partners will record a 30 min interview on the items listed in the Table and related to their role in the Archeomap project. The interviews will be recorded in the UNINETTUNO head office in Rome, during the third meeting that will be held from 15th to 17th December 2008.

UNINETTUNO furnished information on the didactic model and some guidelines for the recording of the e-learning modules (see Annex 9).

Table 5 - E-LEARNING MODULE

<table>
<thead>
<tr>
<th>Partic. no.</th>
<th>Participant name</th>
<th>Participant org. short name</th>
<th>Country</th>
<th>Content **</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinator</td>
<td>Regione Siciliana Dipartimento Beni Culturali e Ambientali – Soprintendenza del</td>
<td>SOPMARE</td>
<td>Italy</td>
<td>-Introduction on the problems of underwater cultural heritage management</td>
<td>30 min</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30 min</td>
</tr>
<tr>
<td></td>
<td>Mare</td>
<td>-Archaeological site description</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
<td>-Archaeological site description</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Comitato Pro Arsenale Borbonico</td>
<td>-Archaeological site description</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Consorzio Universitario per l’Ateneo della Sicilia Occidentale e il Bacino del Mediterraneo</td>
<td>-Archaeological site description</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>International Institute for the Study of Man - Istituto Internazionale per gli Studi dell’Uomo per l’Area Mediterranea</td>
<td>-Archaeological site description</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Association pour la Sauvegarde du Patrimoine Maritime de Villefranche-sur-Mer</td>
<td>-Archaeological site description</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Liaisons Mediterranée (ex Ministère Tunisien de la Culture)</td>
<td>-Archaeological site description</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Università Uninettuno - Università Telematica Internazionale</td>
<td>-Archaeological site description</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Archaeological Museum of Florina</td>
<td>-Archaeological site description</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>CRDepartment of Underwater Archaeology – Supreme Council of Antiquities</td>
<td>-Archaeological site description</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Museu d’Arqueologia de Catalunya</td>
<td>-Archaeological site description</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Fondazione Athena Sviluppo</td>
<td>-Archaeological site description</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Associazione Archeo-Antropologica Approfondimenti Interdisciplinari</td>
<td>-Archaeological site description</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Moreover a draft developed with UNISOM on a proposal for an e-learning module for a Master on Underwater Cultural Heritage Management is present in Annex 10.

**Corrective action taken or planned**
The WP 3 plan has been modified according to the location of the third meeting that will be held in Rome (Italy) instead of Alexandria (Egypt). The e-learning module will be recorded in the UNINETTUNO site.

**Planned activities for the next period**
The planned activity will proceed as scheduled, taking into account the abovementioned modification, in order to ensure the achievements of the planned objectives.

**WP 4: Diffusion, dissemination and transferability of results**

**Objectives** of this WP for this first period are: to translate the project methodologies in “best practise” to draft and then to publish on the Web. To collect all possible useful data coming from the developed actions and definition of the related applicable standards. To produce and to communicate environmental policy-driven results.

The main task of this action is the valorisation of the experience of completed actions, aiming at applying the developed methods to other contexts.

All documents related to the project development have been collected. The definitive documents have been made available on the public section of the web site. The general guidelines have been defined for drafting the “best-practices manual”.

The web site for project activities results diffusion has been created. An informative leaflet has been drawn up and articles on the local press have been published (see “news” on the web site: www.archaeomap.eu).

Articles on the project have been put on line on UNESCO and EU sites.

**Corrective action taken or planned**
The WP 4 plan has been not modified because deviations were not noted and the results achieved are satisfactory.

**Planned activities for the next period**
The planned activity will proceed as scheduled in order to ensure the achievements of the planned objectives.
WP 5: Technical and scientific coordination

Objectives of this WP are: To coordinate the interdisciplinary pilot study up to the achievement of the expected outcomes. To define an interdisciplinary analysis methodology for sustainable development of Mediterranean costal sites, starting up a network animated by experts and organized by the International Committee. The scientific coordination activity has been carried out by UNESCO and Soprintendenza del Mare. During Palermo KoM, UNESCO has presented the document of scientific coordination (see Annex 11), and during Gerona meeting it has presented and discussed the Archaeomap guidelines and recommendation – Indicators for Integrated Coastal Management (ICOM) (see Annex 12).

Corrective action taken or planned
The WP 5 plan has been not modified because deviations were not noted and the results achieved are satisfactory.

Planned activities for the next period
The planned activity will proceed as scheduled in order to ensure the achievements of the planned objectives.

WP 6: Recommendations and guidelines

Objective for this first period was: the valorisation of the acquired methodology, aimed at applying the developed method to other contexts. Definition of the applicable standards for the developed methodology. This could be subdivided into three strategic sub-objectives:
• the specific analysis of the methodologies adopted (for example monitoring actions, strategic wide-scale plans, training poles, specific intervention etc.) related to the pilot studies.
• Comparative analysis among project actions, methodologies and triggered dynamics referring to the cultural, environmental and legislative contexts in order to identify the potential and the transferability conditions.
• The project methodologies generalization in “best practise”, their drafting, their publication on the Web site.

Description of work
This WP carrying out crosses the whole project and is based on the collection of all documents related to the project development of Models with long, medium and short-term forecast. During Gerona meeting, a discussion over the general guidelines to draft a “best-practices manual-guideline”, has been faced: this instrument will be used as an accessible and useful guide on different geographical and environmental analysed backgrounds. UNESCO has prepared a general document of Archaeomap Guidelines And Recommendation (see the Annex 13). Superintendence of the Sea has prepared a description of the Egadi Islands archaeological sites that will part of the final publication (see Annex 14).
Table 6: Deliverables List
List all deliverables, giving date of submission and any proposed revision to plans.

<table>
<thead>
<tr>
<th>Del. no.</th>
<th>Deliverable name</th>
<th>Workpack no.</th>
<th>Date due</th>
<th>Actual/Forecast delivery date</th>
<th>Estimated indicative person-months *)</th>
<th>Used indicative person-months *)</th>
<th>Lead contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Leaflet (LF)</td>
<td>4-5</td>
<td>Month 2</td>
<td>January 2009</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Website (WS)</td>
<td>4-5</td>
<td>Month 3</td>
<td>January 2008</td>
<td></td>
<td>1-2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Initial meeting and work planning report (IR)</td>
<td>1-3-4-5-7</td>
<td>Month 6</td>
<td>December 2007/ IR – 23.06.2008</td>
<td></td>
<td>1-2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Plan for rising public participation and awareness (PRP)</td>
<td>1-4-5</td>
<td>Month 2</td>
<td>Next update December 2008</td>
<td></td>
<td>1-2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Title</td>
<td>Code</td>
<td>Event</td>
<td>Date/Details</td>
<td>Reference</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>-------------</td>
<td>-------------------------------------</td>
<td>-----------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>The contribution of Culture to sustainable development in the Mediterranean basin report (FIR) / Mid Term Assessment Report (MTAR)</td>
<td>2-3-4-5-7</td>
<td>Month 13</td>
<td>FIR – 17 October 2008 / MTAR – January 2009</td>
<td>1-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>“The contribution of Science to sustainable development in the Mediterranean basin” report (SIR) - PC Presentation about examined sites (PCP)</td>
<td>2-3-4-5-7</td>
<td>Month 16</td>
<td>SIR – January 2009 / PCP march 2009</td>
<td>1-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Strategy of ARCHAEOM AP guidelines report / publication (FR)</td>
<td>1-3-4-5-6-7</td>
<td>Month 24</td>
<td>October 2009</td>
<td>1-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>DVD, CD-Rom and TV documentary (DVD-CDR-TVD)</td>
<td>3-4-5</td>
<td>Month 24</td>
<td>October 2009</td>
<td>1-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>First administrative and financial reports (AFR)</td>
<td>8</td>
<td>Month 12</td>
<td>December 2008</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Administrative and financial reports (AFR)</td>
<td>8</td>
<td>Month 24</td>
<td>November 2009</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
11 Teaching module on ARCHAEO AP methods (TM) 3-4-5 Month 24 October 2009 1-2-8

11 Final plan for using dissemination knowledge (FPK) 1-4-5 Month 24 October 2009 1-2

*) if available

Table 7: Milestones List
List all milestones, giving date of achievement and any proposed revision to plans.

<table>
<thead>
<tr>
<th>Milestone no.</th>
<th>Milestone name</th>
<th>Workpackage no.</th>
<th>Date due</th>
<th>Actual/Forecast delivery date</th>
<th>Lead contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Initial meeting of International Committee</td>
<td>1</td>
<td>Month 3</td>
<td>Month 2 – December 2008</td>
<td>1-2</td>
</tr>
<tr>
<td>2</td>
<td>Barcelona meeting</td>
<td>2</td>
<td>(month 7)</td>
<td>Gerona March 2008 – Month 4</td>
<td>1-2-10</td>
</tr>
<tr>
<td>3</td>
<td>Alexandria meeting</td>
<td>2</td>
<td>(month 12)</td>
<td>Rome December 2008 – Month 13</td>
<td>1 – 2 - 7</td>
</tr>
<tr>
<td>4</td>
<td>Paris Forum and “Educational Atelier”</td>
<td>2</td>
<td>(month 16)</td>
<td>April 2009 – Month 17</td>
<td>1 - 2</td>
</tr>
<tr>
<td>5</td>
<td>Closing International Committee meeting</td>
<td>1</td>
<td>Month 23</td>
<td>Month 24</td>
<td>1--2</td>
</tr>
</tbody>
</table>

WP 7: Planning, internal and overall coordination activities, communication, networking, monitoring activities and internal assessment of activities

Objectives
- To define working groups' knowledge and responsibilities in the different phases of the work, realize an executive general agenda.
- To establish skills and responsibilities during the different phases of the project.
- To build a solid partnership and to establish efficient communication, obtaining uniformity of behaviour from each partner, obtaining complete statements, coherent with the UE parameters.

[16]
Description of the work

The

Section 3 – Consortium management

WP 8: Management of the activities in relation to the European Commission

Objectives

- To respect the timing, monitoring and to verify the traceability and accuracy of costs.
- To keep the work group closely-knit.
- To ensure that the expected objectives are achieved and the necessary actions are carried out, organizing the project partners’ meetings.
- To guarantee the partial and conclusive statement submission.

Description of the work

The project continues in reaching its objectives, in the tasks fulfillment with respect of plans defined, even if some delays occurred during works in progress. (see Project timetable and status – Table 8)

The Soprintendenza del Mare has assigned all internal tasks to subcontractors making all payments planned for the first period.

A modification occurred in the assignment to the sub-contractor Solutis s.r.l. at the project beginning. The above mentioned company was closing, so the Soprintendenza has consequently appointed GAIA Italy srl, already in its suppliers list, for the same assignment ascribed to Solutis srl. With GAIA Italy srl support, the Soprintendenza del Mare, has organized Palermo meeting of 7th December 2007 and the following one held at Gerona on 6th and 7th March 2008.

In the specific, a logistic support to meeting partner organizer and to all other partners for visa applications and travel organization has been given.

Soprintendenza’s personnel staff and those ones recruited with “contratti a progetto” have managed the communication aspects among partners and with the EC; they have verified the documentation supplied by the partners allowing a feed back in case of lacking or incomplete documents; they have made payments and they have drawn up the financial report for medium term; they have drawn up meeting reports; they have translated in English all the documents where necessary, also for Italian when the situation required it.

UNESCO has received the advance in compliance with the letter of Agreement undersigned with the Soprintendenza del Mare.

With the other partners, an agreement for a refunding based on expenses receipts presentation has been reached: this in order to avoid risks of administrative mismanagement.

Nevertheless, some partners that have already taken part to EU financed project (French CNRs and UNINETTUNO, have asked for the advance presenting the expenses justification subsequently.

The problems put in evidence during this first period have been of two types:

Problems with partners: without any advance paid the administrative charge for refunding has been heavy. In particular in those cases where the documents presented were incomplete.
This has produced a slowdown in refunding and inconveniences as well as troubles for partners. The budget has been revised both for coping with some partners' requests and for conforming its content to the moving of the next meeting from Alexandria in Egypt to Rome. This moving has also caused organizational inconvenience due to the search for a new seat for the meeting.

The Soprintendenza del Mare has supported some partners in preparing the documents, MTA report included.

Some problems linked to the use of English language have been pointed out: some partners are not able to draw up reports and official documents in languages different from their one (Italian or French).

As regards the participation of partners to project activities, all of them have demonstrated a deep involvement and interest during the meetings, even the scientific documents have been presented with delay.

This aspect will be discussed during the next meeting that will take place in Rome and a solution, if possible, will be given.

As regards the communication matters, with some of them, getting in touch with email has not been possible for a certain period: this because of the severe rules for server protection. Now the problem seems to be solved.

With other partners, for a certain period, no communication has been possible with any kind of tool. A solution has been found involving other partners linked to these ones for other activities. This system worked only in certain cases.

Moreover about the Greek partner, the Archaeological Museum of Florina has sent a fax requesting a withdrawal from the project: the problem will be managed recurring to the procedure for the amendments to the contract.

Internal problems:

The main problems related to project management in the inside of the Soprintendenza, have been generated by the differences in administrative procedures between those ones applied in the EC and those ones followed by the Regional Administrations. More complex regional procedures have produced a slowdown in the administrative and financial contest.

Annexed to this report the contribution of partners at the MTA report (see Annex 15, 16, 17, 18, 19, 20, 21, 22, 23)
Table 8. Project timetable and status.

<table>
<thead>
<tr>
<th>Task</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1.1</td>
<td></td>
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</tr>
<tr>
<td>Task 1.2</td>
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<tr>
<td>Task 2</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Task 3.1</td>
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<td></td>
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<td>Task 3.2</td>
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<td>Task 3.3</td>
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<td>Task 7.2</td>
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</tr>
<tr>
<td>Task 7.3</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Revision: draft
The Milestone expected to Barcelona was moved to Gerona for logistic reasons.

Section 4. Plan for using and disseminating the knowledge

In Table 8 a list of the dissemination actions is reported as a function of the typologies of activities. Next update for Plan for using and disseminating the knowledge is expected at the meeting that will be held in Rome next December.

Table 8. Overview of the dissemination

<table>
<thead>
<tr>
<th>Planned/actual Dates</th>
<th>Type</th>
<th>Type of audience</th>
<th>Countries addressed</th>
<th>Size of audience</th>
<th>Partner responsible/involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>16/10/08</td>
<td>Press release</td>
<td>Research</td>
<td>Europe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>07.12.07</td>
<td>Press release</td>
<td>General public</td>
<td>Italy</td>
<td>Coordinator</td>
<td></td>
</tr>
<tr>
<td>27/12/07</td>
<td>Nice Matin</td>
<td>General public</td>
<td>France</td>
<td>ASPVM</td>
<td></td>
</tr>
<tr>
<td>07.12.07</td>
<td>Press release</td>
<td>General public</td>
<td>France</td>
<td>ASPVM</td>
<td></td>
</tr>
<tr>
<td>9/12/07</td>
<td><a href="http://www.ansamed.it">www.ansamed.it</a></td>
<td>General public</td>
<td>Italy</td>
<td>Coordinator</td>
<td></td>
</tr>
<tr>
<td>2/12/07</td>
<td><a href="http://www.archeogate.org">www.archeogate.org</a></td>
<td>General public</td>
<td>Italy</td>
<td>Coordinator</td>
<td></td>
</tr>
<tr>
<td>8/12/07</td>
<td><a href="http://www.archeologiasubaquea.it">www.archeologiasubaquea.it</a></td>
<td>General public</td>
<td>Italy</td>
<td>Coordinator</td>
<td></td>
</tr>
<tr>
<td>6/12/07</td>
<td><a href="http://www.maville.com">www.maville.com</a></td>
<td>General public</td>
<td>France</td>
<td>ASPVM</td>
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</tr>
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<td>6/12/07</td>
<td><a href="http://www.fondali.it">www.fondali.it</a></td>
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<td>Coordinator</td>
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- A complete file containing the whole report, including the Annex on the Plan for using and disseminating the knowledge.
- A separate file containing the Publishable Executive Summary.
- A separate file containing the Plan for using and disseminating the knowledge.
- A separate file containing the Publishable results of the Plan for using and disseminating the knowledge.

In agreement with Articles 11 and II.7 of the contract, all reports must be submitted in writing by registered mail with acknowledgement of receipt. The periodic reports must also be submitted by electronic means (file formats must be Word- and Excel- compatible or PDF) either as enclosures to the e-mail addressed to FO+ PO email addresses or on 2 CD-ROM joined to the paper version of the reports.

All periodic reports described in Sub-sections 2.1-2.9 shall be submitted within the same deadline of 45 days following the end of the reporting period in question. The delivery date is the time of arrival of the paper version of the complete set of reports.