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Patrimoine mondial

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CONVENTION CONCERNING THE PROTECTION OF THE WORLD
CULTURAL AND NATURAL HERITAGE
CONVENTION CONCERNANT LA PROTECTION DU PATRIMOINE
MONDIAL, CULTUREL ET NATUREL

WORLD HERITAGE COMMITTEE / COMITE DU PATRIMOINE MONDIAL

Thirty-seventh session / Trente-septième session

Phnom Penh, Cambodia / Phnom Penh, Cambodge
16-27 June 2013 / 16-27 juin 2013

Item 7 of the Provisional Agenda: State of conservation of properties inscribed on the World Heritage List and/or on the List of World Heritage in Danger.

Point 7 de l’Ordre du jour provisoire: Etat de conservation de biens inscrits sur la Liste du patrimoine mondial et/ou sur la Liste du patrimoine mondial en péril

MISSION REPORT / RAPPORT DE MISSION

Tyre (Lebanon) (C 299)
Tyr (Liban) (C 299)

8-14 September 2012 / 8-14 septembre 2012

This mission report should be read in conjunction with Document:
Ce rapport de mission doit être lu conjointement avec le document suivant :

WHC-13/37.COM/7B
REPORT ON THE REACTIVE MONITORING MISSION TO THE WORLD HERITAGE SITE OF TYRE (SOUR), LEBANON

8–14 September 2012
Tyros, ca. September 1917 - September 1918
By Bavaria Air Squadron 304 / Aerial reconnaissance flights of the Lebanese/Palestine coast (WW I)

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The mission would like to thank the Mayor of Sour (Tyre) Mr Hassan Dbouk and his team for the warm hospitality the mission members received during the site visit in Tyre. The mission would like to encourage the local authorities to build upon the visible achievements of the urban rehabilitation project within the historic town of Sour and the fishing harbour and to develop strategic approaches for the further sustainable development of the city of Tyre and the World Heritage property.

The mission also would like to highlight the remarkable quality of the State Party reports prepared by the DGA, Cultural Heritage expert Ms Maya Hmeidan and the very precise maps elaborated by GIS expert Mr Ghassan Gattas that help to clarify the complex situation on the ground.

The mission would like to thank Director Dr Hamed Al Hamami and Culture specialist Mr Joseph Kreidi of the UNESCO Beirut Office for facilitating all logistical aspects and arrangements under the special conditions dominant in the country at the time of the mission.

The overall tense political and socio-cultural environment within the region urges the mission members to recall that cultural and natural heritage are increasingly threatened with destruction not only by the traditional causes of decay, but also by changing social and economic conditions which aggravate the situation with even more regrettable dynamics of damage and destruction. Imbued with a message from the past historic monuments remain to the present day as witnesses of generations that have passed. It is the achievement of the World Heritage Convention to make people aware on the unity of human values embodied in these monuments and to recognize ancient monuments as a common heritage of all people and as a common responsibility to safeguard them for future generations. It is hoped that the joined efforts within this reactive monitoring mission and the following procedures contribute to this aim.

Fig. 1 View on Tyre taken from Harmsworth History of the World, 1st Edition (1907), page 1741
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1 BACKGROUND TO THE MISSION

1.1 Inscription history

Tyre was inscribed on the World Heritage List in 1984 based upon decision of the World Heritage Committee during its 8th session in Buenos Aires, 2 November 1984 (SC/84/CONF.004/9).

The Committee decided to inscribe this site as defined in the nomination dossier submitted in 1983 by the then Director General of Antiquities Dr Emir Maurice Chehab who had conducted excavations at the site from 1957 until the outbreak of the Lebanese civil war in 1974. In 1982 a campaign was launched calling for international attention on the situation in Tyre in light of on-going military conflict. During the UNESCO evaluation mission in 1982 military occupation of the archaeological site was reported as well as informal settlements of war refugees next to the excavated areas. The need for larger zones “non aedificandi” and the banning of buildings larger than three stories around the areas of archaeological excavations was recommended by ICOMOS. Due to the on-going military threats at that time also the inclusion on the World Heritage List in Danger was suggested by ICOMOS during the evaluation of the initial nomination dossier but not followed on behalf of the Committee.

The map material provided by the State Party (Fig. 1) with the nomination dossier was considered inadequate by the Committee at the time of inscription. Therefore it was requested “to give details on the type of protection given within and around the zones of protection indicated on the plan as uncontrolled urban development should not destroy the old city” (see Decision 08COM IX.A). The perimeter of the site was also a matter of uncertainty even before the assembly in Buenos Aires. An earlier request of the Bureau to the State Party for clarification of the extent of the site is documented in the preparatory documents for the final decision (see SC-84/CONF.004/3 Paris, 24 September 1984) where the extent the site is said to reach several kilometres to the north and south. The source of this information is a letter of the National Delegation directed to the Bureau in 1984 and which was not included into the final inscription document.

During the Retrospective Inventory process, the World Heritage Centre requested in 2006 to the State Party to clarify the perimeter of the World Heritage property at the time of inscription. A map was submitted by the Ministry of Culture of the State of Lebanon in 2010. The World Heritage Committee took note at its 34th session in 2010 (Brasilia) that this map (Fig. 2) represents the inscribed property at the time of inscription adequately. Note: During the current mission this fact has been raised by the Directorate General of Antiquities as a matter for discussion and further clarification (see chapter 3.1 for details).

1.2 Criteria and World Heritage values

Tyre’s historic values are well studied as it is one of the great cities of antiquity. Historic accounts refer to many historical figures from classical times such as Alexander the Great to Early Christianity.
(Jesus Christ and Apostle Paul) and later the era of the crusades with figures such as Frederick Barbarossa among many others all related to important historic events in the historic city of Tyre. Mythological accounts refer to King Hiram of Tyre related to the construction of Solomon’s Temple in Jerusalem as well as to Europa sister of Cadmos of Tyre, conceived to be a historical figure from Phoenician times memorized and admired since he was supposed to have introduced the alphabet to Greece. As such Tyre attracted the interest of both western and eastern travellers ensuring its former fame also to survive in artistic painting and drawings of the late 18th and early 19th century.

The physical evidence of this exceptional historical significance is visible to some part today mainly in the two major excavations areas; the one of the Ancient City on the headland towards the sea and the other one of the Necropolis of El Bass on the mainland. Both have been excavated in the 1960’s and 1970’s while so far very little is known on the extent of physical remains in the shallow waters in the sea.

The text of the World Heritage nomination relates to the importance of Tyre as Phoenician city and its maritime power in the 2nd millennium BCE with its wealth and beauty summoned subsequently in history referring to its industries of glass production and purple dye. The site therefore is considered to bear an exceptional testimony to a civilization which has disappeared (criteria iii) and it is directly associated with events and ideas, and with artistic and literary works of outstanding universal significance (criteria vi).

As examples of the artistic value of the site among the individual physical entities mentioned at the time of inscription the hippodrome from the 2nd century AD is to be regarded as an outstanding example of its kind due its size (ca. 450m, the largest known from ancient times) and its considerable good state of preservation (a major section structurally enhanced in large scale reconstruction of the 1960’s) as well as the monumental reconstructed arch from the same period along the historical axis heading towards the historic city of Tyre. The outstanding value of the exposed roman-byzantine necropolis is underlined by archaeological findings of a Phoenician cemetery (from excavations that took place after the time of inscription in 2002) that gives an exceptional testimony of ritual burial rites and their related artistic expression spanning several millennia.

Together with more recent investigations undertaken on the geo-morphological genesis of the coastline of Tyre (Morhange et al. 2005) and some recent small scale archaeological interventions and documentation works undertaken on the main excavation area on the island site between 2010 - 2012 (BAAL Hors-Série VIII, DGA/Ministère de la Culture 2012) further understanding on the coastal morphology and of possible settlement patterns of the Phoenician period of Tyre could be achieved. During the international seminar “L’histoire de Tyr au témoignage de l’archéologie” held 3-4 October 2011 in Tyre, a thorough re-interpretation of the archaeological remains on the island site has been proposed based on the latest archaeological research and analysis on construction and functions of the ancient colonnades and bath remains up to now perceived as individual disjunctive entities. In light of the latest investigations a new image emerges of the main visible remains of the island site to be the testimony of splendid roman bath culture of monumental and even imperial scale while the underlying archaeological strata from Phoenician times have been little studied to the present date.

All this contributes to the extraordinary scientific value of the site of Tyre which is considerable.

In 2010, the World Heritage Committee adopted the retrospective Statement of Outstanding Universal Value of Tyre (decision 34 COM 8E) as follows:

**Brief synthesis**
Located on the southern coast of Lebanon, 83 km south of Beirut, the antique town of Tyre was the great Phoenician city that reigned over the seas and founded prosperous colonies such as Cadiz and Carthage and according to legend, was the place of the discovery of purple pigment.
From the 5th century B.C. when Herodotus of Halicarnassus visited Tyre, it was built for the most part on an island reportedly impregnable, considered one of the oldest metropolises of the world, and according to
tradition founded in 2750 B.C. Tyre succumbed to the attack of Alexander of Macedonia who had blocked the straits by a dike. First a Greek city, and then a Roman city were constructed on this site, which is now a promontory.

Tyre was directly associated with several stages in the history of humanity, including the production of purple pigment reserved for royalty and nobility, the construction in Jerusalem of the Temple of Solomon, thanks to the material and architect sent by the King Hiram of Tyre; and the exploration of the seas by hardy navigators who founded prosperous trading centres as far away as the western Mediterranean, that ultimately assured a quasi-monopoly of the important maritime commerce for the Phoenician city. The historic role of Tyre declined at the end of the period of the Crusades.

In the modern town of Soûr, the property consists of two distinct sites: the one of the town, on the headland, and the one of the Necropolis of El Bass, on the continent. The site of the town comprises important archaeological vestiges, a great part of which is submerged. The most noteworthy structures are the vestiges of the Roman baths, the two palaestrae, the arena, the Roman colonnaded road, the residential quarter, as well as the remains of the cathedral built in 1127 by the Venetians and some of the walls of the ancient Crusader castle. The sector of Tyre El Bass, constituting the principal entrance of the town in antique times, comprises the remains of the necropolis, on either side of a wide monumental causeway dominated by a Roman triumphal arch dating from the 2nd century AD. Among the other vestiges are an aqueduct and the hippodrome of the 2nd century, one of the largest of the Roman world.

**Criterion (iii):** Metropolis of Phoenicia in past times, sung about for its great beauty, Tyre rapidly became the most important centre for maritime and land commerce in the eastern Mediterranean. The Phoenician remains reflect the power, influence and wealth of the merchants of Tyre who navigated the Mediterranean waters and filled their warehouses with goods from their extensive colonies all around the Mediterranean coasts.

**Criterion (vi):** Tyre is associated with the important stages of humanity. Astute navigators and merchants, the Phoenicians were reputed to have given birth to the great figures of mythology including Cadmos, credited for the introduction of the alphabet to Greece and his sister, Europe, who gave her name to the European continent.

**Integrity (2009)**
As the exact boundaries of the site have not yet been formally approved, it must be assumed that the zones protected by the national legislation, as documented by the town plan, are assimilated into the inscribed property and include the essential attributes of the Outstanding Universal Value of the property. However, the physical vestiges of the aqueduct and some areas of the ancient necropolis, not cleared and still buried, located outside the protected area, are also attributes of the Outstanding Universal Value. As the overall archaeological prospection is incomplete, the full extent of the potential elements is not definite.

During the period of civil war (1975-1991), the urban development of Tyre progressed uncontrolled by the authorities and consequently numerous tower constructions were built in the immediate vicinity of the property. The integrity of the property is still threatened by urban sprawl and building speculation.

**Authenticity (2009)**
The key attributes of the property – the imposing ruins from the Roman city and the mediaeval construction of the Crusades on the former island, and on the mainland the necropolis, monumental way, aqueduct and hippodrome - reflect the former glory of Tyre. They are however highly vulnerable to lack of conservation and to development pressures that could weaken their ability to convey fully the significance of Tyre as powerful port city.

**Protection and management requirements (2009)**
The property is protected by the Antiquities Law No. 166/1933, and the Law on Protection of Cultural Property, No 37/2008. The conservation and management of the property is assured by the Directorate General of Antiquities (DGA). A Protection and Enhancement Plan is being prepared. The goal of this project is to ensure an improved presentation of the unique vestiges and to develop a new system for protection of the property that respects the international charters. A master plan for the town is already approved. It aims to provide maximum protection to the area surrounding the property and counter the phenomenon of urban sprawl that seriously affects the listed archaeological zone. The DGA controls all the construction and restoration permits. The Cultural Heritage and Urban Development project (CHUD) financed by the World Bank covers a large part of the measures necessary for the protection and management of the property. Conditions for the safeguarding of the property are the definition of the non aedificandi zones of land belonging to the State and the ban on the construction of buildings of more than three storeys in the immediate vicinity of the protected monumental vestiges.
1.3 Examination of the State of Conservation by the World Heritage Committee and its Bureau

The site was inscribed on the World Heritage List in 1982 in a period of military conflict. As the conflict situation worsened, UNESCO initiated the International Safeguarding Campaign for Tyre in 1985 in order to raise international attention. The on-going political and social crisis did not permit an effective management and protection of the property, albeit the formal end of military actions in 1991.

Plans for new large scale infrastructure projects brought Tyre to the attention of the World Heritage Committee in 1995. International efforts were undertaken in 1996-1999 within the International Safeguarding campaign for Tyre aiming at establishing a management system for the site and improvements in national heritage policy in general. However, the campaign launched in 1998 never effectively started and can be considered as obsolete. The World Bank financed Cultural Heritage and Urban Development (CHUD) has taken over. Since then the situation in Tyre has remained under close observation by the World Heritage Committee. The main threats have been addressed yearly in various State of Conservation Reports since then.

Conservation issues and main threats identified in these reports include:

- Urban development pressure, partly uncontrolled;
- Planning of National Highway connecting the city of Sour to the capital Beirut;
- Lack of comprehensive documentation, site management and conservation plan;
- Expansion of historical northern port affecting archaeological maritime remains;
- Enlargement of tourist facilities along the southern seashore;
- Insufficient monitoring and maintenance;
- Structural weakness of exposed archaeological remains;
- Institutional constraints (decision making process and staffing of key personnel);
- Insufficient documentation of the extent of Archaeological Remains and delineation of inscribed property.

During its 29th session (Durban, 2005) the World Heritage Committee requested the State Party to invite a joint UNESCO/ICOMOS reactive monitoring mission in order to assess the impact of foreseen or on-going projects and to determine the overall state of conservation of the property. Furthermore the State Party was requested to provide detailed reports on the impact of the proposed highway route Sour-Beirut, the establishment of the archaeological map and the plans for expansion of the northern fishing harbour to a commercial port which have been a matter of concern to the World Heritage Committee in the former years.

Though some progress was reported such as the enforcement of a the new Urban Plan in 2003 and ongoing geo-physical prospection to determine the extent of archaeological remains on land plots designated for development, due to the military conflict in summer 2006 the State Party was unable to concentrate fully on these requests and to report substantial progress.

The World Heritage Committee during its 32nd session (Quebec City, 2008) regretted that the State Party had not submitted a progress report without which it was not possible to assess the progress of activities at the property. The Committee requested the State Party to provide a detailed topographical map with geographic coordinates indicating the boundaries of the property and if possible those of its buffer zone and in consultation with the World Heritage Centre and the Advisory Bodies to develop a draft Statement of Outstanding Universal Value including the conditions of integrity and authenticity. In particular the Committee reiterated its request to invite
a joint UNESCO/ICOMOS reactive monitoring mission. This mission took place from 16-20 February 2009.

The terms of reference of the mission included examining the state of conservation of the property and the status of various recommendations made by the World Heritage Committee from its 28th session through its 32nd session, including evaluation of major infrastructure projects, mapping projects (locating archaeological features, sources of structural risks) and planned consolidation activities. The aim was to assess impacts to the Outstanding Universal Value and the conditions of integrity and authenticity for which the property was inscribed on the World Heritage List, as well as indications of improvement in the conservation of the property since the last report to the World Heritage Committee.

The reactive monitoring mission report of 2009 (Toubekis and Dentzer 2009) described in detail the difficulties suffered by the property since its inscription in 1984, given the period of war in the country (1975-1991) and risks incurred more recently as a result of major infrastructure development projects and the 2006 conflict. Due to the long period of instability the authorities had difficulties in developing sustainable approaches to site management. Also there have been long periods when the authorities lacked the capacity to control development close to and within the property. The mission report also highlighted the many difficulties in managing a site which partly underlies the historic centre of Tyre and the modern town of Soûr, and whose ancient Phoenician northern harbour is most likely covered beneath the modern town and parts of the current historic fishermen port, and additionally nearby underwater remains on the south probably constitutes a submerged quarter of the ancient city.

Major long term conservation and management difficulties were noted in the 2009 mission report, including the following:

a) The extent of the property was not fully specified on inscription;

b) Construction of many high rise buildings took place during the war period in the vicinity of the property;

c) Insufficient number of key personnel and overlapping responsibilities in jurisdiction and an outdated legal framework have hindered co-operation in property management;

d) Requirements and procedures laid out in the Operational Guidelines are little known to those involved;

 e) Proposals to modernize the historic fishing harbour have threatened underwater archaeology resources associated with this property; to protect these resources, a maritime protection zone had been proposed since 2004 to the Ministry of Public Works and Transport without success;

f) A proposal to build a highway 2 km. to the east of the site’s hippodrome has been under discussion by the World Heritage Committee for many years. During this period, the World Heritage Committee has regularly been requesting a comprehensive archaeological map indicating the physical remains and designated protection zones. While the State Party has explained that an archaeological map is under preparation, the mission was able to determine that a lack of basic information and a lack of resources to implement the planned system were hindering this work.

The mission report also noted the results – both positive and negative - of more recent measures taken to improve the management system:

a) Since 2007 efforts have been intensified to create new posts for the management and conservation of cultural heritage within the Ministry of Culture;
b) A revision of the national cultural policy and the new structure for the Directorate of Antiquities is under parliamentary discussion;

c) The State Party has reported that a protection scheme for archaeological areas exists as well as an Urban Plan (revised in 1998 and 2003) that is used to manage the buffer zone of the designated archaeological area;

d) Continuing urban development pressure is difficult to resist: while the archaeological potential of development sites is investigated in advance, a three year moratorium on construction projects on public properties in Tyre ended in 2008 and has not been renewed though requested by the Directorate of Antiquities;

e) Concerning the planned highway, while the Directorate of Antiquities has secured relocation of an interchange which would have destroyed a set of rock cut Roman tombs, geophysical surveys undertaken have only covered a small area of the planned route up to 2010. Clearly, some parts of the planned route will impact on features associated with the Outstanding Universal Value of the property, including remains of the aqueduct and the ancient Necropolis. The mission noted in particular that an environmental and heritage impact study had not been included in the planning of the highway;

f) Original plans to restructure the entire fishing harbour have been altered and a marina for leisure boats which does not impact on the underwater remains is now being developed;

g) The State Party has successfully carried out a “Cultural Heritage and Urban Development” (CHUD) project for the restoration of the Old City Centre of Tyre in the direct vicinity of the property. It has now established a Centre of Submarine Archaeology in Tyre within the project, and has developed plans for improving site infrastructure and services.

The first phase of the Archaeological Component of the CHUD project involves emergency consolidation to be carried out in 2009-2010 on selected archaeological remains in Tyre. The Second phase (2010-2012) will focus on the definition and presentation of the Outstanding Universal Value of the site for residents and visitors.

While the mission noted the high quality of the damage assessment reports undertaken by the consultant to the CHUD project, the mission also noted the importance in the World Heritage context of conservation measures that maintain authenticity.

From a site planning and management perspective, the mission particularly regretted that the proposed CHUD restoration and site planning measures planned for execution in 2009 were not presented in an overall conservation strategy plan before tendering the work.

The mission also regretted that no progress had been made in elaborating a management plan for the site, building upon the great amount of data acquired by the consultants working on the property under the CHUD project.

While the 2006 military conflict did not cause damage to the site (although a bomb strike took place close to the archaeological remains), the difficult security situation in the south of the country exacerbates socio-cultural tensions and impedes meaningful stakeholder involvement in site management and planning, and in building necessary awareness.

The 2009 mission’s major recommendations included the following:

1) Encouraging the State Party to provide sufficient support and staff resources to the national Directorate of Antiquities so that it can fulfil its mandate;
2) Encouraging the State Party to bring into effect the maritime protection zone proposed by the Directorate of Antiquities;
3) Encouraging the State Party to extend the three-year urban development moratorium period and similarly placing a moratorium on the planned highway construction until the completion of the archaeological map recordings;
4) d) Requesting from the State Party a comprehensive management plan for the World Heritage property including delineation of the property, buffer zone, conservation strategy, short and long term action plan, and traffic plan;
5) Supporting the Directorate of Antiquities to prepare comprehensive documentation of the archaeological remains of ancient Tyre;
6) Supporting the Directorate of Antiquities in its efforts to complete a comprehensive archaeological prospection (magnetic and geo-radar) of the planned route of the highway and its adjunct territory.

In order to address the above issues, some of which pose a considerable threat to the property, the World Heritage Centre and the Advisory Bodies suggested that there is an urgent need for a defined ‘recovery’ programme.

With the adoption of the retrospective Statement of Outstanding Universal Value (see above)) in 2010 it has been stressed that the overall archaeological prospection is still incomplete and the exact boundaries of the site have not yet been formally approved. As such it must be assumed that the zones protected by the national legislation, as documented by the urban plan, are assimilated into the inscribed property and include the essential attributes of the Outstanding Universal Value of the property. However, the physical vestiges of the aqueduct and some areas of the ancient necropolis, not cleared and still buried, located outside the protected area, are also attributes of the Outstanding Universal Value. As the overall archaeological prospection is incomplete, the full extent of the potential elements is not definite.

1.4 Justification of the mission

At its 33rd session (Seville, 2009) with decision 33COM 7B.57 the World Heritage Committee noted with great regret the many difficulties being experienced by the State Party in protecting the Outstanding Universal Value of the property, as identified in the World Heritage Centre/ICOMOS joint reactive monitoring mission of 16-20 February 2009 and the State party was requested to invite another joint World Heritage Centre / ICOMOS monitoring mission to the property to help develop a recovery programme addressing the key issues identified by this report and the previous requests of the Committee. However, in February 2010, the Minister of Culture stated that he did not consider such a mission necessary.

At its 34th session (Brasilia, 2010) with Decision 34COM 7B.57 the World Heritage Committee reiterated this request since the annual report of the State party did not comment or respond to the recommendations of the 2009 joint reactive monitoring mission so that the Committee remained concerned.

During the 35th session (UNESCO Paris, 2011), the World Heritage Committee took note that the State Party had provided a state of conservation report for the property and additional information on the management system, on improved institutional mechanisms, and information and studies related to on-going developments at the property. However the World Heritage Centre and the Advisory Bodies concluded that there was a lack of any indication that the recommendations of the 2009 World Heritage Centre/ICOMOS reactive monitoring mission had been addressed thoroughly, nor the World Heritage Committee’s previous decisions. The World Heritage Committee reiterated therefore its request to the State Party to invite a joint World Heritage Centre / ICOMOS monitoring mission to the property. The mission was foreseen in spring 2012 and finally took place from 9-14 September 2012,
thus after the 36th session of the World Heritage Committee. At that session, the Committee adopted Decision 36 COM 7B.52, as follows:

**Decision:** 36 COM 7B.52

The World Heritage Committee,

1. Having examined Document WHC-12/36.COM/7B.Add,
2. Recalling Decision 35 COM 7B.51, adopted at its 35th session (UNESCO, 2011),
3. Notes the information provided by the State Party on the implementation of actions at the property and urges it to secure the necessary resources to address holistically pressing concerns at the property and to prioritise the development of a management plan;
4. Also urges the State Party to finalize the process of definition of a buffer zone for the property, including the definition of appropriate regulatory measures, to protect the property from excessive development and to submit a request for minor boundary modification to this end according to paragraphs 163-165 of the Operational Guidelines;
5. Requests that a Heritage Impact Assessment be carried out for projects being undertaken in heritage areas and that these, along with the technical specifications for the redevelopment projects be submitted, in accordance to Paragraph 172 of the Operational Guidelines, to the World Heritage Centre for review by the Advisory Bodies prior to approval and implementation;
6. Also requests the State Party, the World Heritage Centre and ICOMOS to organize the foreseen reactive monitoring mission to the property before the end of 2012, in order to assess any changes in the state of conservation of the property since the 2009 mission;
7. Further requests the State Party to submit to the World Heritage Centre, by 1 February 2013, an updated report on the state of conservation of the property and the implementation of the above, for examination by the World Heritage Committee at its 37th session in 2013, with a view to considering, in the absence of substantial progress, the possible inscription of the property on the List of World Heritage in Danger.
2 INTERNATIONAL POLICY FOR THE PRESERVATION AND MANAGEMENT OF THE WORLD HERITAGE PROPERTY

2.1 Protected area legislation

Legal protection of cultural and natural heritage in Lebanon is maintained by laws and by presidential and/or ministerial decrees.

**Law on Antiquities (n° 166/1933)**
Archaeological remains in Lebanon are protected by the Law on Antiquities No. 166/1933 (dated 7 November 1933) inherited from the French mandate. The Antiquities Law is supplemented by two additional laws from the field of Urbanism and Construction.

**Law of Urbanism (n° 69/1983)**
For the protection of archaeological zones detailed urban plans are considered obligatory by the Law of Urbanism n°69/1983 (dated 9/9/1983). These urban plans set the rules and conditions for the protection of areas of special historic and artistic value. The Tyre Urban Master Plan has been established by Ministerial Decree MD n° 11/2003 and governs all constructions within the cadastral entity of Tyre.

**Law of Construction (n° 646/2004)**
According the Law of Construction n° 646/2004 buildings of importance are to be treated only after following individual regulations. For larger areas of special interest such towns with historic value special regulations can be adopted. For the Old City of Tyre a General Building Code has been established and sanctioned by a Presidential Decree PD n° 611/2007.

**Law on the Environment (n° 444/2002)**
The Environment Law n° 444/2002 stipulates the protection, conservation and management of nature and biodiversity. The Law allows the establishment of special protected areas by presidential or ministerial decree. The Law furthermore requests to any public or private major development project an obligatory Environmental Impact Assessment (EIA) to be provided prior to any execution of works. EIAs have to evaluate threat on the general environmental conditions and the natural resources. Results are to be approved by the Ministry of Environment. Furthermore a Strategic Environmental Assessment (SIA) is requested when governmental institutions propose large scale infrastructure plans. Under this code, the coastal area along the southern seashore, from Ras el Ain (southern end) to the Rest House Beach Resort (northern end) within Tyre cadastral zone is declared as a nature reserve by a Presidential decree no.708/1998 as depicted in the Urban Master Plan of 2003 in order to protect marine sea life (turtles, dolphins etc.) by preventing hunting or fishing. This provides additional protection to possible remains of ancient ports and shipwrecks or settlement remains possibly buried in the sands close to the seashore.

**Further Decrees on the Marine Public Domain:**

According to information of the DGA the marine area of Tyre is subject to some legal protection. The Ministry of Agriculture restricts all kind of marine fishing activities except line fishing, up to a distance of 500 meters away from the shoreline. Due to ambiguities in national regulations dating back to 1929 illegal fishing activities close to the coast of Tyre are on-going and the Ministry of Culture is working on a presidential decree to legally protect the marine coastal area of Tyre up to a depth of 10m. For the time being underwater archaeology is under the protection of the National Law on Antiquities and the international UNESCO Convention of the Protection of the Underwater Cultural Heritage.
2.2 Institutional framework

The conservation and management of the property is assured by the Directorate General of Antiquities (DGA). The DGA is a technical unit of the Ministry of Culture of the State of Lebanon and is responsible for the protection, promotion and excavation activities of all cultural heritage in Lebanon.

The DGA is divided into several further directorates:

The **Directorate of Archaeological Excavations** is responsible for excavating, organizing and referencing archaeological sites. This directorate also oversees the preservation of archaeological structures and remains during the execution of major construction projects, agricultural works, quarries, public facilities and infrastructure, taking appropriate administrative and legal measures to undertake and control excavation where archaeological remains are uncovered. It authorizes and monitors requests by local and foreign parties to undertake such operations and is concerned with managing, guarding and preserving sites as well as ensuring that research and studies are published appropriately.

The **Directorate of Archaeological Monuments and Built Heritage** is responsible for surveys of sites, landmarks, monuments and buildings of archaeological, scientific, geometrical or artistic value, either above or below ground, standing, vanished, scattered or in territorial waters. The directorate is also responsible for listings in the general antiquities inventory, recognized or categorized cultural property lists. It is responsible for proposing draft laws and regulations to protect cultural property along with its appropriation and appropriation of adjacent property guarding and maintaining it. The directorate is involved in publicizing and documenting archaeological sites for further study and making provisions to welcome visitors. It is also responsible for detecting violations of archaeological sites, traditional and historical monuments as well as ordering prosecutions where necessary. It participates in the planning of studies and projects with public and private institutions, universities, scientific institutes and individuals worldwide in contributing to the preservation of heritage and assist in these tasks.

The **Directorate of Movable Archaeological Property** handles the tasks of documenting and inventorying movable objects and antiques found within Lebanese territory and territorial waters whether above or below ground. It is also responsible for listing movable property in the general antiquities inventory, recognized or categorized cultural property lists.

The **Technical Assistance Unit within the DGA** is a pillar of the Cultural Heritage and Urban Development (CHUD) Project, a strategic plan for the promotion of Lebanon’s cultural heritage with sub-projects in five historic city centres. With financial support from the World Bank (International Bank for Reconstruction and Development), the Agence Française de Développement and the Italian Cooperation, the CHUD project is intended to protect, rehabilitate, and revitalize five Lebanese historic cities (Baalbek, Byblos, Saida, Tripoli and Tyre) and their associated archaeological remains suffering from the negative impacts of the civil war (1974-1991).

This programme is implemented by the Government of Lebanon’s Council for Development and Reconstruction (CDR) an autonomous institution endowed with extended jurisdiction and directly accountable to the Council of Ministers through the Prime Minister providing planning and financing instruments for the rehabilitation of Lebanon’s infrastructure affected by the long years of military conflict. The **CHUD** project is composed of three components:

- Rehabilitation of Historic City Centres / Urban Infrastructure improvement (~ 70 million USD)
- Archaeological Site Conservation and Management (~20 million USD)
- Institutional Strengthening (~6 million USD)
The CHUD framework and the associated projects have been planned in the years 2000-2002. Since then the initial budget planning had to be adjusted several times. The coordination of the complex stakeholder structure (Municipalities, Direction Générale des Antiquités, various ministries) as well as the management of the co-financing and international loan instruments of the CHUD project has led to a delay in the implementation of the various sub-projects. Also due to the effects of the military conflict in 2006 the implementation phase of the CHUD project in general has been extended now up to 2017 and overall funds will be increased reaching a total of approx. 112 million USD for all five cities together.

The urban rehabilitation component of the CHUD project is supervised by an urbanistic unit located directly within the CDR and facilitated by regional officers in the local municipalities. The activities of the archaeological conservation and site management component are summarized in the Baalbek and Tyre Archaeological Project (BTAP) which will be executed at the World Heritage sites of Baalbek and Tyre supervised by a special technical assistance unit within the DGA.

2.3 Management structure

Since 2010 the DGA has no appointed director, therefore the Minster for Culture has assigned the tasks of the Director General to the Head of the Archaeological Excavations Section Mr Assaad Seif. In addition to his original responsibilities and duties Mr Seif has to coordinate with the Minister of Culture on all DGA related matters.

As described by the 2009 reactive monitoring mission report, the shortage of staff in all units of the DGA is a key reason for the shortcomings in management till present. Although there has been an organizational reform in 2008 the results are not regarded satisfactory since the general recruitment policy of the government does not encourage the replacement of vacant positions due to political circumstances. Furthermore no specialized unit exists within the DGA with experience in management of World Heritage sites. The management of the World Heritage sites is assigned to the responsibilities of the Archaeological Excavation Section which is comprised of eight archaeologists in total, including the Head of the Section (the de facto acting DG) for the entire country (two archaeologists for the South Region, excluding Saida); one archaeologist for the North Bekaa Region; one archaeologist for the Capital Beirut and West Bekaa region; two archaeologists for Mount Lebanon Region and Saida; and one archaeologist for the North Region). Consequently, these
archaeologists are in charge of the World Heritage properties within their regions and act as site managers.

These archaeologists coordinate with Municipalities in areas of archaeological interest as they examine the development permits in the region and do undertake watching briefs at the sites. Furthermore they coordinate all archaeological emergency excavations that take place in the region in the context of private development projects. As such, these site managers are in charge of the local management of the sites and especially the compilation of documents on archaeology related matters. Furthermore they have to follow-up and supervise any conservation intervention at the archaeological sites and they are entitled to monitor, report and to stop any illegal actions on cultural properties in their region.

2.4 Response to the recognition of values under international treaties and programmes (World Heritage, Biosphere Reserve designation)

According to information provided by the State Party, the following international conventions were adopted and partly directly transferred to national law.

- The United Nations Convention on Biological Diversity (Rio Earth Summit, 1992) ratified in 1994 as per law nº 360/94;
- The Ramsar Convention on Wetlands of International Importance (Ramsar, February 1971), ratified on the 16th of April, 1999.
3 IDENTIFICATION AND ASSESSMENT OF ISSUES

At its 35th session (UNESCO Paris, 2011) the World Heritage Centre and the Advisory Bodies emphasized the absence of significant progress since none of the previous recommendations and decisions of the Committee since 2006 seemed to have been addressed by the State Party (see document WHC-11/35.COM/7B.Add). As a result the Committee reiterated the request to the State Party to invite a joint UNESCO/ICOMOS reactive monitoring mission with a view to considering, in the case of confirmation of the ascertained or potential danger to the Outstanding Universal Value, the possible inscription of the property on the List of World Heritage in Danger.

These relate in particular to the following concerns:

- The incomplete archaeological and urban mapping to enable efficient site management, including the definition of the boundary of the inscribed property and its buffer zones;

- The impact of the highway construction work on the archaeological resources and the Heritage Impact assessment requested by the Committee;

- The potential reinstatement of the moratorium on new development on government owned properties and in the vicinity of the site (expired in 2008);

- The continued degradation of the cultural resources due to climatic conditions, failing past interventions and urban encroachment;

- The lack of a conservation and site management plan for the identification of priorities, responsibilities, time lines, clear targets and indicators;

- The status of plans for the new marina development and underwater protection scheme for the entire island of Tyre.

Noteworthy here is the fact that the State Party Conservation reports for years highlight achievements within the urban rehabilitation component of the Cultural Heritage and Urban Development project (CHUD) project. The interventions within the Archaeological component (BTAP) have now reached the implementation phase including interventions within the perimeter of the inscribed property and on the archaeological remains.

Although the progress of the CHUD project was regularly reported to the World Heritage Centre, no formal procedure of assessment – such as foreseen in paragraph 172 of the Operational Guidelines - was established to critically reflect on the proposed interventions through external review of the Advisory Body, ICOMOS.

3.1 Management

The situation of the Ministry of Culture and the Directorate General of Antiquities (DGA) are very much affected by the overall tense social and political atmosphere in Lebanon especially after the 2006 military conflict and the effects from the on-going crisis in neighbouring states.

At the beginning of the mission, the de facto acting Director of the DGA Mr Assad Seif laid out the current situation. According to his statement the DGA is in its third year without an appointed Director General and therefore was unable to respond to the various requests on behalf of the World Heritage Committee. He explained that the Ministry of Culture in 2010 decided to follow a proactive strategy in order to address the issues recommended by the reactive monitoring mission in 2009. Therefore the DGA recruited a cultural heritage expert on a temporary basis with financial support from the CHUD
project to assess the issues raised in the 2009 mission report and the World Heritage Committee decisions out of the own institutional perspective and to develop an Action and Mitigation plan.

Shortly before the start of the reactive monitoring mission “A progress Report on the Implemented Actions 2009-2012” (see Appendix) was finalized and used as basis for the discussion and assessment of state of conservation of the site.

In this progress report the DGA addresses key management issues and the causes for the delays in a self-critical tone and with a problem-solving attitude defining adequate means to overcome the identified shortcomings. The report identifies national administrative procedures as a main obstacle to improve the situation at the property. It explains how the overall funds allocated in the national budget as well as national budgetary regulations of the Ministry of Finance do not allow a timely action on occurring management issues. Site maintenance costs are too high in respect to the allocated funds. Disbursement regulations for expenditures and bidding processes related to outsourcing of services within the national administrative system have not been modernized for decades thus not fitting any more to the operational needs of the DGA (and other administrative departments in Lebanon in general).

As a result, the DGA faces the problem that it does not find qualified experts to conduct emergency actions since hired experts have to wait for months to receive their payments although services of work have been fully acknowledged. Archaeological excavations are currently almost entirely conducted as emergency excavations in the context of development projects of the private sector. According to Mr Seif almost 50 archaeologists alone in Beirut are working in this field.

Consequently the DGA does not have operational resources to conduct any large field activities from its own national budget and therefore is dependent on agreements with external third parties such as academic research institutions or infrastructure developers to conduct any research based or preventive archaeological excavation.

The DGA progress report summarizes the overall situation of the Cultural Heritage Sector in Lebanon and the situation in Sour/Tyre in particular. The drawn conclusions are fully in line with the observations of the 2009 reactive monitoring mission report. The progress report has been externally financed within the institutional capacity building component of the CHUD project out of a 40.000 USD sum for contracting of external temporal staff expertise to support the DGA in the set-up of a mitigation plan.

Based on this assessment the progress report concludes with an Action Plan for the period 2012-2014 in order to address the issues raised by the World Heritage Committee and the joint UNESCO/ICOMOS monitoring missions in the past. The Action Plan summarizes objectives (see Appendix) and proposes individual activities which can be considered as preparatory measures for the drafting of a management plan to be formulated after the successful implementation of the individual actions defined.

The objectives and activities of the Action Plan are structured in a comprehensive manner following the logic and argument of the comments made by the many previous experts. Key issue and first milestone to achieve is the enhancement of staff resources of the DGA which has been put forward to the Council of Ministers to be decided upon before the end of 2012. Based on the availability of these special expert resources, the DGA will finalize the long requested inventory, survey and mapping prerequisites required for the creation of the final management plan which is then to be drafted afterwards. This includes the revision of boundaries of the World Heritage property and the delineation of buffer zones. New in this context is the intention of the State Party to modify also the extent of the inscribed property as well.
3.1.1 Extent of Site

The State Party submitted in 2010 a map to the WHC showing the actual Urban Plan in place since 2003. The map shows an aerial picture of Tyre covering the entire cadastral entity of Tyre and overlaid with the zoning and protection scheme for the city and its environs (Fig. 2, see Annex for enlarged version, taken from the Annual Progress Report). The Word Heritage Committee took note of this map in 2010 when it was submitted by the State Party in the context of the retrospective inventory requesting the State Parties to indicate the extent of the property at the time of inscription.

A column placed next to the map explains the zoning scheme in detail and indicates the according surface areas in hectares (ha). This zoning is showing the areas protected by law and defines land use and building codes in the sense of the Law of Antiquities Nr. 166/1933 in combination with the Law of Urbanism Nr. 69/1983 - important here is the area depicted as AR – Archaeological Zone (State owned property).

During the current mission the DGA stated that the State Party submitted this map to indicate the current protection codes for the property. The legal protection includes the excavation areas at the time of inscription in 1984 but stretches further east to cover also large areas belonging to the State (foreseen at the time of excavations to be future research areas).

According the explanation of the DGA some of these State owned areas are to be considered “uncontrolled territory” due to the presence of Palestinian refugee camps there since decades and that the governmental authorities do not exert any control or power.

The State Party does not share the view that this map indicates the extent of the inscribed property neither at the time of inscription nor to the present day (see page 7f in the 2009-2012 progress report).

The interpretation of the State Party regarding the extent of the site at the time of inscription is depicted in Fig. 4 basically consisting of the main excavated areas until 1984. Key argument here is that due to the fact that Lebanese regulations do not allow the governmental authorities to exercise any power on the Palestinian camp territories consequently no management system can be implemented, even if the authorities would like to establish one.

The need to clarify the boundaries and the extent of the site and its buffer zones has been urged with Decision 36 COM 7B.52 (St. Petersburg 2012) is well acknowledged by the State Party and has been repeatedly stated during the mission. The State Party is determined to demonstrate its ability to adopt and implement the necessary regulatory measures for the management and protection of the property.
For that reason the State Party is in the process of drafting a boundary modification request according paragraphs 163-165 of the Operational Guidelines, to be submitted to the Committee for evaluation at its coming session in 2013.

The mission would like to recall the findings of the reactive monitoring mission of 2009 stating that all known archaeological remains of considerable scale especially in the hinterland of Tyre are still little studied and that especially the still unknown remains of all historic periods constitute the extraordinary scientific value of this site that are at least reflected in appropriate large drawn buffer zones.

As it can be seen from the draft map (taken from 2009-2012 progress report page 90 map Nr. 20) that was presented during the mission (Fig. 6) the State Party considers the historic town and harbour and the entire island area as well as the surrounding waters to be included into the inscribed property (LandWHS and MaritimeWHS on the map) based on the recent understanding of the extent of the ancient remains city of Tyre. It further defines a series of buffer zones to the property. The form and shape of these buffer zones are taken directly from the complex urban zoning map.

The mission takes note of the fact that the State Party is preparing a formal boundary modification request. The mission encouraged the State Party in this effort and reminded to elaborate the plan further according the format laid out in the Operational Guidelines.

As stated above the State Party is determined to clarify the issue on the extent of the inscribed property and is willing to establish buffer zones to...
protect the Outstanding Universal Value of the property.

The mission laid out that boundary modification requests follow a certain procedure after submission to the World Heritage Centre in which the Advisory Bodies are involved at different stages before the decision on the modification request is taken by the World Heritage Committee.

Since the intention of the buffer is to achieve further protection to the inscribed property it is important to clearly define the function of the buffer zone and the rationale behind its delineation. Beside the mechanisms of protection proposed it must also become clear what the buffer zone contains and how that relates to the OUV of the property and provides an additional layer of protection.

**Although the mission refrains from giving recommendations on the draft map presented it is stressed that within the entire process of projecting the buffer zone the results of the on-going geophysical survey along the Highway route and the information from the Archaeological Map are to be reflected.**

The mission reminds the pending request of the DGA to the Ministry of the Sea regarding the direct protection of the maritime areas. Also the fact that three different municipalities are located around the archaeological area and its hinterland urges for a broad consultation process with the various stakeholders on public as well as private level.

Taking the complexity on the ground into account the mission, advises the State Party to foresee sufficient time for this process and to go into consultations with the World Heritage Centre and the advisory body ICOMOS on this matter.

As indicated by the State Party the boundary modification request is considered a key objective of the 2012-2014 Action Plan to be achieved as early as possible. A boundary modification request with rationale and plans accepted by all local stakeholders and well-coordinated with the advisory body can be considered a key benchmark for the final evaluation of the entire 2012-2014 Action Plan in front of the World Heritage Committee. However taking the required stakeholder involvement and required interpretation of scientific findings into account, the mission suggests considering the required time-frame for the elaboration and evaluation of the modification request.
3.1.2 Inventory and documentation

According to the statement of the DGA, the work on the archaeological map of Tyre has been resumed and this map is being now updated on a regular basis. The enhancement of documentation and inventory has been one key issue of the previous monitoring mission report in 2009 and mentioned several times by the World Heritage Committee. In the Action Plan 2012-2014, this issue marks the second objective (Key actions 2-7 Progress Report on Implement Actions 2009-2012) to be achieved and the State Party has demonstrated its commitment by allocating already the required resources. In light of the above-mentioned ongoing geophysical surveys, this work is to be considered as a key action also in relation to the justification of future boundary modification requests.

The mission recommends ensuring sufficient resources for these activities for the entire duration of the 2012-2014 Action Plan and for the time to come after.

Special mentioning here is the important cooperation with international teams that has been initiated in the last two years for systematic surveys on the main excavation areas and the maritime area (see Key Action 24/25 p. 118ff of the Progress Report on Implement Actions 2009-2012) and the related publication activities.

The mission acknowledges these achievements and encourages the State Party to continue these cooperation activities in the field of site documentation and inventory.

At the time of the mission, a draft of the Tyre Archaeological Map was presented that illustrates areas and type of survey and investigation in the last ten years by individual dots on a very large scale. It was discussed briefly with the GIS expert, Mr. Ghassan Ghattas, to indicate not only the type of investigation but also what results from the surveys could be gathered. An indication of the time-line of the investigations/survey results would be helpful to understand the distribution of archaeological finds better, indicated if necessary on separate maps.

(Note: after the finalization of this report an updated version of this map has been presented)

The mission suggests bringing together all existing knowledge on archaeological findings from different sources (historic sources, expert reports, and archaeological survey). The mission also suggests taking into account the information gathered from private development projects and filed during the official permit procedures.

The mission acknowledges the work on such a comprehensive digitized documentation system linked to the GIS databases requires a considerable amount of time and expert
resources and that the State Party has reserved this activity for a later stage (see Key Action 5, Progress Report 2009-12, p. 67).

The mission therefore recommends the State Party to consider the support of academic institutions in completing the digital record from publications and excavation reports as well as known information from development project dossiers (public/private within the framework of the 2012-2014 Action Plan.
3.2 Factors affecting the property

There are ongoing efforts of the Directorate General of Antiquities to improve the management system of the World Heritage property in Tyre and the mission takes note that the DGA, in close cooperation with the Municipality, is working thoroughly to rectify the overall situation.

The Mayor of Sour expressed his personal commitment to integrate World Heritage Site related aspects in his political agenda. Beside the desire to develop cultural tourism activities in Tyre the need for an improved planning mechanism related to the World Heritage property and the surrounding city was underlined. The Municipality intends to develop a long term Strategic Plan for Tyre/Sour to integrate environmental, cultural and social aspects into a long term planning and decision making process.

Support by other Ministerial sectors

The DGA stated that it is preparing an application to the President of the State to issue a formal protection decree for the maritime environment of Tyre in order to overrule for good the uncertainties resulting from unclear jurisdiction on municipal and ministerial levels. Furthermore the Ministry of Culture has renewed its application with the Ministry of Sea and Waters to issue a protection decree for the maritime environment down to a depth of 10m so far without response.

Areas non-aedificandi

Regarding the building ban issued by the Ministry of Urban planning in 2006 for a period of three years the DGA reassured to the mission that no further decree was issued since then to lift this ban therefore, according to the legal advice from the Ministry of Culture, this decree is to be considered as still in place. The DGA on behalf of the Ministry of Culture therefore does not permit any building activity on governmental owned land. According the DGA the procedure of providing building-permits based on the Urban Plan 2003 is regarded as sufficient to protect underground archaeological remains and alterations within the historic city centre.

However, it has been made clear that large parts of urbanized areas around the archaeological sites within the refugee camp area, are not governed by any regulations or government control.

The mission therefore notes that the current socio-cultural divide affecting the site might be addressed by activities initiated by the international community through UNRWA (United Nations Relief and Works Agency for Palestine Refugee).

Overall some of the factors affecting the property already mentioned in detail with the 2009 reactive monitoring mission prevail:

- The National South Highway project,
- The activities from the CHUD project.

3.2.1 National South Highway (Beirut-Sour) project

One major concern addressed by the mission has been the status of the implementation of the Highway project passing some kilometres to the east of the site. The work on the highway has been resumed recently. The route of the highway passes close to the eastern extent of the designated Archaeological areas (AR) named Tell el Maachouk. The highway path was changed once upon intervention of the DGA due to the existence of roman tombs at Ramali/ al-Jâroudiye (see reactive mission report 2009).
Further modifications to the project are justified only if physical evidence is given that indicate the requirements for actions.

The DGA explained that the so called South Highway project is implemented by the Council of Reconstruction (CDR) and it is considered one of the most important public infrastructure projects on local and national level. Since March 2012, works are taking place in the current Abbasiyeh – Burj el Chemali implementation section. Along the trace individual land plots are being cleared from vegetation once expropriation procedures have been accomplished successfully. According to the information of the DGA the process of expropriation is subject to the availability of funds and the prior clarification of property issues.

The mission was provided with a document (see Annex: The South Highway Zahrani-Sour-Cana Crossing Project. Cultural Heritage Component. DGA –Oct 2012) which explains the strategy of the Ministry of Culture to reduce the threats to the expected findings of archaeological remains along the route of the highway. The highway project will provide three entrances to the city of Sour: from the north the interchange at Abbassiyeh, from the south the interchange at Cana and from the middle a connection to the existing road into the city along Tell el Maachouk. The current working section starts from the northern interchange Abbassiyeh (Zone 2) continues southward (Zone 1) and extends around 400 after the exit at Tell el Maachouk (Zone 3) altogether around 3km (see map provided in Annex). The execution period for this project is foreseen (March 2012-March 2014). According the level of the terrain the northern area of the project will be filled, while at the southern area the ground has to be excavated down to 2.5m from the current surface. Additionally several underpasses and underground infrastructures might require individual deeper excavations down to a depth of around 4m. Since for the cleaning works a building permit is required for underpasses and canals, the DGA is aware of the progress of the works. The DGA explained that with the implementing authority CDR, an Archaeological Evaluation Procedure has been discussed to reduce the effect on potential archaeological remains (see document in Annex). A cost proposal has been transmitted to the CDR to ensure a geophysical survey and test excavation to take place parallel to the on-going works in Zone 2 and Zone 1. These areas have been expropriated almost entirely and determine therefore the final route of the highway. The DGA has agreed with the contractor on implementation of the works in Zone 1 and Zone 2 in which a ground survey will take place first. Zone 3 as well as the Zones 4 and 5 located further south (see p.6 of Cultural Heritage Component document) are supposed to become subject to a Heritage Impact Assessment prior to further implementation activities as soon as further funds are allocated.

Within the first implementation area, geophysical surveys and intrusive investigations are proposed for a limited surface area only and not for the entire extent of this zone. Intrusive investigations are planned according the developer’s excavation plan in order to confirm the readings from the geophysical survey. An area of around 3000m² is foreseen to be excavated extensively according the DGA’s document outline.

Since the works have started, the archaeological evaluation phases is planned to take place in parallel to the ongoing works. The DGA admits that such a procedure should have occurred at a much earlier stage. The DGA also made it clear that at the current stage no modification to the outline of the highway route is possible since expropriation procedures have almost been finalized. The DGA sees it role now to mitigate the effect of the highway on the archaeological remains. The DGA has clear policies regarding planning procedures for new development in classified areas of archaeological interest as well as an Archaeological Evaluation and Excavation Methodology to be applied within planning and development of infrastructure project (see Annex).
According to the cost proposal submitted, the geophysical survey proposed (20 working days) does not seem well balanced in terms of cost and time with the proposed test trenches and archaeological investigations which are to take place for a duration of 10 months.

Though the above mentioned procedures follow best practices and standards in urban archaeology context the mission raises concerns if the extraordinary workload and time pressure resulting from the well advanced progress of the implementation works can be handled by the staff resources allocated for this purpose. **Also the criteria that determine the surface area to be investigated and the reasons for doing so are not presented within this document.**

The mission visited a section currently under clearance where the approach and methodology of the DGA for evaluating the archaeological potential of the cleared areas was presented and geophysical prospection team in preparation to start the survey.

![Ongoing cleaning works along the highway route and preparation for geophysical survey](image)

**Fig. 6 Ongoing cleaning works along the highway route and preparation for geophysical survey**

The overall seriousness of the archaeological survey work also depends on the total dimension of surfaces that will be investigated. The mission therefore suggests that the **entire surface** along the highway route becomes subject to geophysical analysis as long as there is proof given that such an analysis is obsolete (e.g. due to heavy soil movements/ground fill from previous times). The mission also notes that the most crucial aspect in this procedure depends on the definition/evaluation of the watching brief in case archaeology of “importance” is discovered. *In-situ* preservation of remains and/or the integration into the highway environment by appropriate means should be considered the standard procedure here.

Following the idea of Key Action 28 (scientific cooperation) the mission suggests to consider the support of academic institutions during the survey and emergency excavation actions that will take
place along the highway route to ensure proper documentation of survey results and findings from the emergency excavations.

The mission reminded that no Heritage Impact Assessment has been carried out yet for the highway project. Furthermore it could not be clarified if an obligatory Environmental Impact Assessment has been elaborated for the route of the highway. However, besides the effects of the highway on the above ground remains and the known excavated archaeological sites the future traffic situation resulting from the connection with the city street network have to be included into such an Heritage impact assessment based on a comprehensive traffic plan and profound estimation on car traffic of the realized project.

Complementary to the envisaged ground survey project to be carried out by the CDR as implementing authority the mission suggests a traffic study within the requested heritage impact assessment in order to evaluate the results of expected traffic flows directly into the city centre passing by the World Heritage property and the known archaeological remains at Tell el Maachouk area.

Highway crossing at Tell el Maachouk

In particular the situation of the foreseen bridge/tunnel solution proposed by the plan at the area of Tell el Maachouk has raised questions. The dimension of this crossroads and the foreseen lanes in all directions cannot be fully understood from the documents presented.

Fig. 7 Crossing of the highway with city street network (left- AutoCAD drawing and right overlay with outdated topographic map from original stamped and validated building permit drawing from Ministry of Public Works of 2006 indicating the changed route and presented during the mission in 2009)

Technical drawings showing the elevations of the final design and the foreseen connection with the existing city network and the secondary city network planned for the future are necessary to evaluate the impact on the existing archaeological remains (Roman aqueduct). These remains have to be incorporated in such a scaled drawing with the extent of their real measurements.

The mission recommends to clearly indicate the existence of ALL archaeological remains into these plans including elevations and sections where required and to clarify the status of planned secondary city street network and roundabouts mentioned in the original drawing. The mission recommends therefore abandoning this exit from implementation since its harmful impact on the historical remains cannot be ruled out from the information available.
Roman aqueduct remains at Tell el Maachouk

The concerns raised during the reactive monitoring mission of 2009 regarding the part of the Roman aqueduct in direct vicinity of the highway trace still remain. However the impact of further housing encroachment directly on top of the aqueduct is far more dramatic as can be seen from the image comparison 2009 -2012. At each side of the building in the middle a further storey has been added. Although the arch construction does not show to be affected so far, it is not certain whether previous water conduct void on which the on-going walls are founded can sustain the load imposed from the houses. In case of structural failure of this “foundation” a total collapse of houses is to be expected in with direct threat to people living inside.

The site manager Mr Badawi reported that in an attempt to intervene into the illegal construction activities with the help of local police the situation escalated and led to heavy dispute in which two men were killed. The incident illustrates the societal challenges that have to be faced in the deeply disrupted social environment of these settlements and that have to be addressed before heritage preservation activities can be initiated.

Fig. 8 Situation at the remains of the Roman aqueduct (left 2009 – right 2012) at Tell el Maachouk

Fig. 9 Existing water canal close to the aqueduct at Tell elMaachouk area leading south to water spring in Ras-al Rachidiye
Under the current circumstances a controlled re-burying of the visible parts of the aqueduct (at least backfilling with earth of the voids below the arches and the open foundation) seems an appropriate solution.

The mission asked to see the next visible portion of the aqueduct which is to be known to reach far south as can be seen from the map of Renard (1873). The next portion located around 150m south from the foreseen highway crossroad was presented as part of the water canal system still in use today. According the statement of the DGA the water channel of today basically follows the historic water way which has been rebuilt and maintained over the centuries.

The mission suggested having the ancient course of the aqueduct properly traced based on historical and photographic sources and indicated on the Archaeological map together with associated information on approximate construction period and state of conservation.

Fig. 10 Ancient aqueduct near Hiram's Reservoir, Tyre (1905)
Library of Congress Prints and Photographs Division Washington, D.C,
Source: http://lcweb2.loc.gov/service/pnp/ppmsca/10600/10619r.jpg
3.2.2 Cultural Heritage and Urban Development Project – CHUD procedures and issues

The CHUD project presents a strategic approach to protect, preserve, enhance, and better present the country’s cultural heritage, both as a focus of national cultural identity, as well as an exceptional magnet for the cultural tourism industry. It is expected that cultural related services will be stipulated which lead to increased local development and revenues and thus improve the quality of life of the local residents in and around the targeted heritage sites.

The preparation of the CHUD project within CDR began in the late 1990’s. However, the beginning of site survey and assessment were conducted by consultants between 2001 and 2002 (Pierre El-Khoury for the historic city and ARS Progetti for the archaeological sites).

Urban Component

According to the oral report given on Monday 15 September by urban specialist Mr Nabil Itani of the CHUD project at the office of the DGA, the urban component despite many difficulties has led to measurable benefits. Valorisation of cultural heritage assets has taken place; the city upgrading component within the historic town of Sour/Tyre has led to improved quality of life. Some larger historic houses, half ruined before have been carefully restored and given to public use to the City Council. Incentives for private house owners led to careful repairs and new functions attributed to leisure and tourism activities.

Sustainability

However it is critically observed by the mission and also by the CHUD management, that the restoration efforts in public buildings can only be sustainable if the attributed use and function is ensured on behalf of the authorities. In the case of the historic building which has been restored in 2006 to become the submarine research centre no activity has taken place since then and no staff appointed to run it. The building has now been assigned to become the new office of the local DGA officer since the administrative building previously chosen for this purpose cannot be used because of vandalism after the restoration and lack of security (potentially a handover of this DGA building to the local administration under the jurisdiction of the Mayor is under discussion in order to ensure a social/cultural use). Since the implementation phase of the CHUD project started in 2002, after ten years many installations (lights, paths) are partly broken, also because the local authorities were not able to establish a fixed maintenance cycle.

Urban rehabilitation within the traditional fishing harbour

While the overall approach has been generally accepted for many years, individual interventions of the CHUD project recently have raised concerns from local civil society sector. The mission was therefore asked to comment on the new “Fishermen building” that is to substitute a former three-storey octagonal concrete structure within the traditional fishermen port and run by the fisherman association (see Key Action 22, Progress Report, p. 116f for details).

The CHUD project for many years has invested much in the fishing port which is located directly next to the commercial port area. Besides the urban upgrading component the CHUD project has a socio-economic component aimed at improving marketing and selling of products from the fishermen community. Until recently, no place existed to sell fish and therefore the new building has been designed in such a way as to accommodate a cooling facility and a fish-market area in order to provide the fishermen with a possibility to store and directly sell their products to customers. The design of the new building has been subject of heavy critique in 2012 therefore the mission was asked to reflect on the recently made design changes and comment on the situation during the site visit.
Though the area and the project are not connected to the World Heritage property the mission agreed to visit the harbour since it is related to the discussion on appropriate buffer zones for the site.

The proposed new design is a one storey cube structure with a roofed market sales area directed towards the south. The ground floor will be dedicated to the fish cooling and fish selling function while the previously foreseen second floor was dedicated to administrative use for the fishermen association which is discussed now to be placed in an existing building elsewhere in the harbour. Two separate one storey cubical structures attached are supposed to serve as gathering rooms. The materials proposed should combine wooden parts to reflect materials from the fisher boats and the quays as well as folded glass curtains to be able to close the roofed structure in wintertime.

The comments given by the mission are twofold concentrating on the foreseen function and on the materials proposed. On one hand the space foreseen for the cooling and storey facilities of fish was perceived to be rather small. Since the provision of such a place for direct marketing of fish is regarded to be a new business model for the majority of the fishermen the mission members could not understand what exactly would be the scale of activities to take place under the roofed area. As such it was recommended to consider sufficient solid and liquid waste management (water conducts/gullies
with sufficient dimensions, provisions for waste containers) in appropriate dimension/size taking special care on its outward appearance.

Furthermore the installation of a one storey glass curtain facade to close the roofed area in wintertime was discussed. The suggestion was given to take into consideration other type of materials such as wooden facade elements to correspond better with the harbour aesthetics. Following the mission, the World Heritage Centre addressed a letter to the Minister of Culture, requesting that the design of this building be carefully studied to this aim. The answer received stated that “the new plans should respect the historic environment of the port area in terms of scale and design, and at the same time, it should respond to the need of the fishermen community in terms of function”. The letter announced that the technical documents would be forwarded to the World Heritage Centre for consideration and review.

In general the CHUD activities in this area have improved the overall appearance of the fisher harbour. The provision of new storage facilities for the fishermen, the reorganization of parking places and the enlargement of the quays has provided more public space and better quality of life. Although some of the new storage buildings in the commercial port area do not harmonize that well in form and surface (shredded roofs, stone tiled surface) with the traditional workshop storages on the opposite site the notion of a traditional fishing harbour can be sensed much more than through the previous visit in 2009.

Since it is decided to convert the commercial port area into a tourist marina in the future the CHUD project should consider to revise its guidelines for materials and building techniques used in the harbour area and to propagate traditional building materials and forms.

Fig. 12 (above) Tyre traditional harbour with enlarged quays and new wooden boxes to store fisher nets and (below) view towards commercial port area with newly build shed-roof style storage and workshop rooms. The commercial port area is supposed to be converted into a marina in the future years.

The discussion about the intervention on the harbour revealed that the process of decision making following the rules for implementing World Bank funded projects on the ground is not streamlined with procedures resulting from the obligations of the State Party toward the World Heritage Convention.
In this context it was announced that the CHUD project is supposed to continue with new funding at least until 2017 including many projects from the very initial project ideas (Souq integration, parking and traffic management).

According to the CHUD management, a lesson learnt so far has been that the interventions of the CHUD project were focused from the beginning as small scale interventions while an overall strategic plan was not defined. Efforts are now being made to develop such a strategic plan for Tyre/Sour into which the CHUD activities are to be considered as individual actions within a comprehensive strategy.
4 ASSESSMENT OF THE STATE OF CONSERVATION OF THE SITE

4.1 General

The state of conservation of the site has been described in detail for the main excavated and restored archaeological elements within the reactive monitoring report of 2009. Since then some action has taken place within the Archaeological component of the CHUD project, mainly the improvement of site infrastructure service facilities while surface conservation of archaeological remains is the next step to follow. The State Party progress report has assessed the current state of conservation within chapter 2.4. in a self-critical and open manner. The State Party is aware on shortcomings and has developed the Action Plan 2012-2014 accordingly. The coming activities within the CHUD project are supposed to address individual issues directly. The following remarks are suggested to serve as guidance to develop an overall management strategy for the property based on many fruitful joint discussions on site.

Maintenance

Large parts of the excavated remains are covered from thick bushes and shrubs as already observed by the reactive monitoring mission in 2009. While during that mission the site was visited in early springtime, the aspect of fire prevention was stressed in a general way. During this field visit in September 2012 with temperatures still around 30°C some of the archaeological areas close to the Historic City showed traces of bush fires and litter pollution. According to the site manager, Mr Ali Badawi, some smaller fires occurred during the summer but could be extinguished quickly through the joint effort of the municipal fire department and local residents. Large parts of the excavated areas especially in vicinity to city encroachments show traces of general neglect leading to an overall devalorisation of the site.

The need for a fire prevention plan and access to enough water resources especially in the area far away from the sea or from a water supply network is an urgent issue.

Mr Badawi added that only for the daily maintenance and cleaning works, he would need around twenty labourers to ensure a regular clearing of vegetation growth and cleaning cycle. Some five workers currently the clearing of shrubs is concentrated on the archaeological areas with direct public access on a seasonal basis (around two times a year) which is considered insufficient. The municipality assists in cleaning of litter and ensures the removal of illegal garbage dumps occurring frequently around the site. The isolated excavation area close to the historic centre around the “Crusader basilica” seems to be a very problematic area.

The overall aspect of neglect and lack of security is also due to missing lights during night and the urban offside location next to graveyards and dead-end streets. The cultural path constructed directly along the excavation site by the CHUD project has been an effort to improve the situation. The lack of signage for the presentation of the site is noted critically by the State Party itself (see Progress Report
p. 51f), the wooden elements of the path need some repair and general maintenance. Furthermore the newly installed fences appear too weak to effectively restrict illegal access to this large site.

For improvement of the overall quality of this part of the property and particularly the excavation areas, the mission suggests to include a special component to the future phases of the CHUD project dedicated to ensure controlled access and feeling of ownership by the local population and nearby residents. This might be achieved by opening up some of the archaeological areas after a controlled backfilling of the excavation holes and the creation of a public archaeological garden in which the archaeological remains of monumental scale could be properly exhibited within a comprehensive presentation strategy connecting all the property from the island side to the necropolis of the Al-Bass area.

**Site Documentation**

Within the on-going CHUD programme for Tyre, the institutional enforcement component includes the updating of the archaeological map of Tyre and generation of detailed site maps. In this context the current situation on the ground has been documented in detail by means of stereoscopic analysis of airborne imagery and feature extraction after photogrammetric processing produced by the Italian consultant Planarch in the context of the coming conservation works.

![Fig. 13 Example of new 1:1500 site map derived from aerial imagery (taken from Progress Report p. 36)](image)

This map is to serve as base map for the coming conservation activities within the conservation project of CHUD. The result is a detailed map of the areas chosen for conservation down to accuracy of one decimetre. It is acknowledged that such high-level methods of documentation impose new challenges in terms of data management and integration into other digital representation systems (GIS; Computer Drawings, Digital images Databases). Consequently Key Action 5 of Progress Report states that digital inventory of documentation is to be realized at a later stage. The State Party might consider actively integrating research/academic institutions to this activity and to concentrate on the creation of practical base maps intended for in-house publications that can be used for future scientific research and management tasks at the property.

The mission recommends documenting the entire property with the same method and using the result of this aerial survey as a future base map for the World Heritage property and integrating it into the future management plan.
4.2 Infrastructure interventions

Regarding the state of conservation of the architectural remains, the observations of the 2009 reactive monitoring mission report still prevail.

The major issues can be summarized as follows:

- Structural weakness of walls and columns with respect to possible horizontal actions such as those produced by seismic events;
- Deterioration and decay of the stone walls, mosaics and mural paintings that in most cases are directly exposed to the atmospheric agents (open excavation site);
- Deterioration of previous conservation treatments (use of cement, oxidising iron);
- Lack of general maintenance due to insufficient basic staff resources.

The site is subject to some larger conservation and site management interventions with funds provided within the Archaeological component of the CHUD project. The final goal of the proposed works within the CHUD project is to provide suitable solutions to the above problems by testing pilot measures for the future maintenance of the site. Beside the proposed pilot treatment concerning the main monumental areas of the archaeological site, there are many other local areas (or spots) which require urgent, direct action for safety purposes which are not part of this project.

The Baalbek and Tyre Archaeological Project (BTAP) is divided in two phases.

BTAP phase 1

- Site infrastructure: Construction of storage buildings, laboratories, restrooms, fences and gates;
- Site presentation: Architectural works of museums and visitors’ centres;
- Conservation: Restoration works on painted surfaces, mosaics and wall structures;
- Strengthening of structures (seismic improvement only no structural upgrade, mainly for Baalbek).

BTAP phase 2

- Archaeological works and documentation: Assessment & mapping of the Conservation of archaeological areas. GIS;
- Conservation of surfaces and structures: Protection of archaeological layers and Backfilling. Structural strengthening of Jupiter and Bacchus Temples in Baalbek;
- Site presentation to visitors: Rehabilitation of tourist paths within sites. Finishing works for museums and visitors’ centres. Presentation of sites to visitors; explanatory Panels, brochures, pre-recorded wands; landscaping; lighting; etc.

Although scheduled for 2008, the surface conservation works within BTAP Phase 1 have been delayed due to the complicated contractual and procurement issues. Since 2009 some infrastructure activities have taken place on the site. An overview on the interventions is given in Fig. 15.

In this context, several buildings on the site are being renovated and refurbished. The general design of these plans have been elaborated by the supervising agency Ars Progetti already back in 2004 and are currently implemented by private contractors under supervision of Ars Progetti project team in close collaboration of the CHUD programme officer and the DGA.
### Reactive Monitoring Mission to Tyre (8-14 September 2012)

<table>
<thead>
<tr>
<th>Tyre Archeological Component</th>
<th>Projects to be Executed</th>
<th>Funding Sources</th>
<th>Budget Available</th>
<th>Consultant</th>
<th>Contractor</th>
<th>Implementation Period</th>
<th>Status</th>
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</thead>
<tbody>
<tr>
<td><strong>BTAP - Phase 1a:</strong></td>
<td>All Roads: visitor centre, site museum, storage rooms, police quarters, cafes, guest rooms and ticketing office; landscaping, fencing, all Hamra entrance exit, etc.</td>
<td>WB, GoL</td>
<td>2,300,000$</td>
<td>Ars Progetti</td>
<td>All Bureyan</td>
<td>2010-2011</td>
<td>Ongoing till end of 2012</td>
</tr>
<tr>
<td><strong>BTAP - Phase 1b:</strong></td>
<td>All Roads: Church of Patriarch, Monotoreal tomb, Church near the arch, and the Roman arch</td>
<td>WB, GoL</td>
<td>894,670$</td>
<td>Ars Progetti</td>
<td>Bousader / Eco joint venture</td>
<td>2010-2014</td>
<td>Waiting for the method statement to start implementation</td>
</tr>
<tr>
<td><strong>BTAP - Phase 2:</strong></td>
<td>All Roads: Palaestra, area, roman baths, and the Grande Almamore.</td>
<td>DGCS</td>
<td>1,990,000€</td>
<td>Plavarch</td>
<td>N/A</td>
<td>2012-2014</td>
<td>To be tendered</td>
</tr>
<tr>
<td><strong>BTAP - Phase 2:</strong></td>
<td>Site presentation and interpretation</td>
<td>DGCS</td>
<td>1,990,000€</td>
<td>Plavarch</td>
<td>N/A</td>
<td>2013-2014</td>
<td>To be tendered</td>
</tr>
</tbody>
</table>

WB = World Bank  
GoL = Government of Lebanon  
DGCS = General Directorate for Development and Cooperation—Italy Ministry of Foreign Affairs

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**Fig. 14** The four components of the BTAP activity for Tyre – implementation information as of Nov. 2012

**Fig. 15** Areas of interventions within BTAP Project Phase 1 (taken from Tender Documents, see Annex)
This preparatory design work has been commented on already during the 2009 reactive mission report. As it was already mentioned then, the final result depends a lot on decisions made during the implementation phase in regard to materials used for surfaces and constructions. As observed the procedures within the CHUD program follow a dynamic heavily influenced by contractual and procurement questions typical to the nature of World Bank funded projects. Aspects of aesthetics and the appearance of materials have to be taken care of in a very early stage of the planning process and must be explicitly translated into physical requirements and mentioned as such in the bidding documents. The selection of the implementing partner basically follows than commercial market principals so that the contract for implementation of the works is awarded to the most favourable offer.

The contractor then provides his Method Statement (MD) which has to be approved by the contracting agency formally. In order to achieve the desired quality of an initial design idea a continuous supervision on several steps of the entire procedure has to take place. It is an outcome of this mission to point out that the high expectations in quality to be achieved are not met in various aspects.

An example hereto has been the choice of stones for the new pathway at the entrance from the street to the City site excavation area. While some of the existing houses from the times of the early excavations have been demolished others are carefully refurbished (including repair of their historic window frames) to house new service functions for the site. The design drawings give detailed indications for greenery and stone surfaces of the new entrance pavement to correspond in colour and material with the main archaeological site in order to achieve a revaluation of the entrance area. Unfortunately the contractor acted differently and the new pathway has been realized with standard street pavement concrete pre-fabricated stones giving the entrance to the site the same aspect as the uncared streets surrounding the site.

Fig. 16 Example from BTAP tender documents for improvement of entrance at the city site

The site manager Mr Ali Badawi made it clear that the contractor had already been requested to change the material but only after he had finished the entire passageway. The fact that the site manager has so many obligations in overseeing on-going activities all over Tyre, the limited coordination with
the CHUD project management and the contractor failed to ensure the desired quality in the implementation of the works.

**Lack of coordination between the CHUD management and the DGA within the BTAP project activities at implementation level is to be considered a serious issue which is illustrated on the example on the re-arrangement of the museum area on the main Al-Bass site.**

![Initial design sketch for the refurbishment of site museum at Al-Bass/necropolis area with laboratory storage in the back side and additional service / cafeteria / police rooms on the right](image)

While the approach designed by the project team Ars Progetti has been known for several years, in general at the level of realization some shortcomings have been observed by the mission. Works on the museum area started in 2009 and are almost completed by now. The works on the museum amplification and its refurbishment have far progressed and careful choice of material and colours has been ensured in the design phase. During the excavations works for the foundations archaeologists were present on a permanent basis and well preserved marble artefacts, buried there from the times of military conflict in the area, were safely recovered. The presentation strategy and museographic concept for the museum has been discussed also during an international workshop held in 2011.

However critique on behalf of the mission was stated on the placement and design of a one storey construction to be used as police/guards house. The volume blocks considerably the view on the main attraction of the site, the restored hippodrome arena when following the access path from the museum.

According the arguments of the State Party the room block foreseen for the police replaces a same building that stood there previously. The initial design sketch (Fig. 18) shows the situation as an ensemble dominated by the museum and with smaller/modest service blocks around. Following the mission, the World Heritage Centre addressed a letter to the Minister of Culture, asking whether the building, only at its beginning, could be abandoned and the police station transferred elsewhere. The answer received stated that “the Ministry of Culture has officially informed the CDR on the need to halt the construction works on the already chosen location of the police station” [...] and that “discussions are currently underway in order to arrange for the relocation of this structure”. The letter announced that the technical documents would be forwarded to the World Heritage Centre.
Though being planned almost on the same spot as the previous buildings from the time of the excavation (now demolished) the new side service wing has been enlarged and expanded to fit today’s standards. As can be seen from the detailed tender dossier of 2008 (Fig. 19) the design of the police room has been modified/enlarged in comparison to the initial design idea.

Moreover the final height of the entire service wing appears to be considerably higher than illustrated in the initial design sketches (see Fig. 20) which from today’s perspective is to be criticized since it does not show the new installations in context of the hippodrome, the arch and the necropolis as main attractions of the entire site.

Fig. 18 Site plan for museum site from tender document (note the bigger room for police at right side)

Fig. 19 Detailed construction plan from tender document for service wing with police room box
Fig. 20 View on new service wing with police room from top of museum roof

Fig. 21 View on service wing/police room and hippodrome from end of museum path

As a result the nearby hippodrome area is not visible from the museum and appears even more confined by surrounding skyscrapers and the service facilities of the museum. The mission suggested demolishing the still unfinished block in order to open the space visually towards the archaeological site and placing the police room on different location close to the museum or storage rooms.

Fig. 22 View on service wing and police room from archaeological site, note the height of the construction
4.3 Surface Conservation

As stated already in the reactive mission report of 2009, the condition of exposed surfaces of excavated structures is alarming. Like many other open excavation sites in coastal areas, the exposed surfaces entail a considerable challenge for long term preservation.

From the exposed construction materials the condition of the white soft limestone is of great concern. The corners of the white limestone all over the site originally used for foundation/walls and once covered by earth or with plaster finish are washed away by weathering appearing today more than white cushions than stone blocks. The condition of the mosaics varies based on their location. Those close to the entrance at the city site are relatively good condition but many more lying remotely on the site can be considered at least partially or completely lost due to weathering, vegetation growth and irreversible old concrete restorations.

The surface conservation treatment within the BTAP activity is therefore an important step forwards considering the immense challenges at the site. As it is described by the CHUD management and the DGA, the interventions should serve as pilot project to determine best practises for a long term conservation of the entire site. The expected conservation work is to be considered to demand considerable skill levels both on the side of the contractor but also on the side of the supervising agency. One reason for the delay of the conservation works so far has been to find a conservation company that was able to demonstrate sufficient technical skills level as well as administrative capacity to cope with the procurement and implementation procedures of World Bank funded projects. The contracted company now consists out of a joint venture of Lebanese architectural company with an external conservator from Belgium executing the conservation works.

The mission asked the DGA to clarify the control mechanism for the methods applied and results of the works. A long discussion revealed that the mechanism of application and supervision are based on the standard World Bank project procedures implemented by the CDR. This means basically that the contractor defines his procedures with a Method Statement (MD) which is approved by the CDR and which is the basis for execution of the works. Formally the DGA has to approve the method statement but the DGA also relies on the comments of the supervising agency (Ars Progetti) ensuring the appropriateness of the Method Statement provided by the contractor prior to the works.

The mission suggested to the DGA to consider a component for an independent third party evaluation/comment on the proposed interventions prior to the start of the works and reminded that this is supposed to be the role of the Advisory Bodies in the World Heritage procedures. Furthermore the mission understood that there is no system for test-runs and monitoring foreseen to evaluate the efficiency of the surface conservation actions in the short and long-term.

Also it is noted by the mission that the accumulated knowledge on conservation practises on the site shall not rest solely with the contractor. The State Party shall ensure the broad dissemination of successful conservation methods applied.

The State Party made clear that also for the surface conservation activities within CHUD detailed tender documents were transmitted in 2008 to the World Heritage Centre but as the discussion revealed this information was delivered unaccompanied from any written comment and not in line with the regular reporting cycle dates. The DGA as well as the CDR highlighted that there is a need to improve the consultation process in the context of reporting to the World Heritage Committee. It has been suggested to develop a concept for improved communication with the World Heritage Centre and the Advisory Bodies for the entire duration of the BTAP activities.

(Note: A concept note was provided in November 2012 Baalbek Tyre Archaeological Project (BTAP) – Consultation and Communication Process and Preliminary Programme, see Annex)
**Damage Assessment and causes for deterioration**

Fig. 23 Example of damage assessment from BTAP tender documents (see Annex)

The mission notes the high quality of the plans and related reports established with the preparatory phase of the BTAP activities.

Intrinsic properties of Tyrian stones and the environmental parameters influencing decay phenomena have been studied in depth by the consultant in preparation of the BTAP Phase 1 project and the main causes of deterioration have been identified in detail. The principal cause of deterioration for all building materials in Tyre is salt-crystallisation of salts dissolved in sea-water. The archaeological remains suffer from being exposed to environmental agents with salt concentrating in the soil and the porous materials exposed to the winds. From the soil the salts migrate by capillary action to upper parts where they concentrate through water evaporation. The crystallisation produces damages to the surface materials such as powdering, exfoliation, flaking etc. For mosaics and mortars in walls an important role in deterioration is played by plants which grow with little control almost everywhere in the archaeological areas (CHUD 2008).

The mission notes that the damage assessment documentation prepared so far within the BTAP is a valuable contribution and should be incorporated in the future Management Plan for the site as a general methodology for documentation of the state of conservation of the World Heritage property. The mission also recommends that the State Party ensures that the complete technical manual of interventions within the BTAP will be of benefit after the completion of the pilot works (a copy of this manual should be deposited at specialised libraries nationally and internationally for reference to future generations).
The mission suggested using the methodology of the damage assessment to serve as guidelines and standard procedures for similar mappings to be undertaken at other relevant architectural elements at the site. Furthermore the standard for damage assessment introduced with the project at the World Heritage sites of Baalbek and Tyre should be considered by the DGA to be developed as general procedure guidelines to serve also other conservation projects in the country funded by external resources.

**Preservation and Presentation Strategy**

As internationally acknowledged through the Charter for the Protection and Management of the Archaeological Heritage (Lausanne 1990) presentation of archaeological heritage is an essential aspect of the public's appreciation of sites. It should be conceived as the popular interpretation of the current state of knowledge. Presentations should be updated frequently... The contributions of all periods to the significance of a site should be respected.

Conservation is too often asked to address the dual requirements of an archaeological site as a scientific document of the past and as a historic place in its context without explicit definition and identification of what is actually to be preserved. However primary conservation objective is the basic requirement to remove or mitigate the causes of deterioration of a site and to reduce effects and threats that are directly harnessing the physical remains. An exposed site will yield limited, certainly diminished archaeometric information, especially for fragile materials or features such as macro- and microstratigraphy, surface finishes and residue analysis to future generations. Therefore comprehensive sampling and documentation programs, instrumental recording and finally reburial maximize the preservation of the physical record both indirectly and directly in order to secure the scientific value of the site for the future. How legibility and authenticity of such structures and places are realized and ensured must be carefully considered and understood for effective conservation that considers the site as a whole. (Matero 2008).

**Fig. 24** The area of the “Bath” at the excavation site on the city site

The public interpretation of the archaeological site of Tyre has long been associated with the stabilization and displays of the exposed remains some of them in monumental form. Many of the re-assembly works undertaken at the time of excavations in Tyre are considered questionable and do not reflect neither the knowledge nor the conservation philosophy of today.

The proposed conservation actions within the BTAP component of CHUD take the existing presentation of the site as granted. Owing to the inevitable limitations of available resources any maintenance on a site such as Tyre has to be carried out on a selective basis. The BTAP activities are
understood to address the problems of a variety of individual archaeological elements and surfaces balancing between the visual attractions of the site and some minor/small elements of significance due to their architectonic and artistic features.

The mission recalls the findings of the reactive monitoring mission of 2009 and stresses that unfortunately the individual intervention of the BTAP conservation activities are not perceivable to contribute to a coherent conservation or presentation strategy for the site on the long term.

The mission recommends using the BTAP Phase 2 project period to investigate the matter of site presentation further and to balance conservation needs with the intention to open the site more for tourism.

The mission further encourages the State Party to continue its collaboration with international scientific institutions, including in the field of conservation technologies, to investigate remedial measures of surface conservation methods to exposed marbles and stones of the necropolis and to propagate the diffusion of this conservation and restoration knowledge into the national academic system to develop national capacities in this sector for the future.
5 CONCLUSIONS AND RECOMMENDATIONS

The State Party presented prior to the mission a “Progress Report on the Implemented Actions 2009-2012” including a two years Action Plan (2012-2014), which addresses almost all the issues raised by the 2009 reactive monitoring mission report. The State Party has demonstrated its ability to address the most urgent issues in an open and self-critical manner and has underlined its commitment to fulfil the obligation arising from the World Heritage Convention.

The mission strongly encourages the State Party to ensure the provision of sufficient resources to the DGA to fulfil its mandate as laid out in the own assessment and action plan. In this context the mission regrets that the newly created Centre for Maritime Archaeology could not be put into function due to the lack of staff to run it.

The mission notes that the building ban on public properties according to the information of the DGA is supposed to be still in place and that the DGA has renewed an application to the Ministry of Sea regarding a dedicated protection degree for the maritime areas along the coast of Tyre.

The DGA underlines that the current map depicting the World Heritage property available from the World Heritage Centre website does not reflect the view of the State Party regarding the extent of the World Heritage property. Therefore the State Party is in the progress of drafting a boundary modification request to meet the request of the Committee to clarify the extent of the inscribed property and its buffer zones. The mission recalls the previous recommendations that, according to the text of the nomination, all main archaeological features that are necessary for the understanding of ancient Tyre are to be regarded as essential attributes of the Outstanding Universal Value of the World Heritage property and should be respected at least within the buffer zones of the World Heritage property. Considering the complexity of the local circumstances and the overall dense security situation in the region, the State Party is advised to take the time deemed necessary to achieve a mutual understanding between local stakeholders of and around the property.

The mission stresses that this process should take into consideration the results of the on-going geophysical survey along the highway and the information reflected in the Archaeological map. The mission further suggests including the findings from regular private building permits/development projects into account for inclusion into the Archaeological map, if deemed necessary, with assistance from the academic sector.

The mission recommends that the entire route of the highway should be subject to detailed ground survey and that archaeological remains along the highway route should be depicted in maps of appropriate scale in order to analyse the potential impact/threat arising from the highway construction.

The visual impact from the final highway construction cannot be evaluated as long as there are no drawings prepared showing the elevation of the construction in relation to the existing topography and especially the relation to the remains of the roman aqueduct at Tell el Maachouk. The mission also reminds that no Environmental Impact Assessment (EIA) has been prepared for the highway construction project and that such an EIA should include a Heritage Impact Assessment which analysis the impact on archaeological remains along the highway route.

The mission is also concerned that the highway underpass/bridge crossing with the secondary city street network as depicted currently on the ground plan poses a direct threat to the remains of the roman aqueduct at Tell el Maachouk. The mission suggests having the archaeological remains and the route of the highway presented jointly on a topographical map giving indications of heights/elevations and to analyse the impact of the highway on the archaeological structures.
The mission is further concerned that the proposed underpass/bridge solution at Tell el Maachouk will lead to increased car traffic from this point into the city centre directly passing by the remains of El Bass site. The mission suggests having the general traffic situation analysed within the framework of the new Strategic Plan for the City of Sour and elaborating a traffic analysis showing the amount of cars today and after the construction of the highway so as to have the baseline information for the development of a comprehensive transit strategy.

The results of the Cultural Heritage and Urban Development (CHUD) project have been presented to the mission and positive as well as negative effects have been discussed. The urban component of the CHUD project has achieved valorisation of the historic city centre of Tyre/Sour for the rehabilitated areas within the old city centre. The mission critically observes that some of the public buildings restored and dedicated to the DGA to improve the management of the property have not been used due to lack of staff (new DGA office) and have been subject to vandalism and destruction leaving a troubled picture of the CHUD achievements. The interventions at the historic fishing harbour have led to some local dispute about the quality of the completed projects.

Although the harbour area is not part of the inscribed property, careful interventions here are to be regarded as supporting measures to the overall efforts of heritage preservation in Tyre. The mission visited the construction site of the new “fishermen” building that is to substitute a three storey octagonal concrete structure. The intended use as a fish market was discussed and the mission suggested considering sufficient solid and liquid waste management facilities and the visual integration into the entire setting as well as a more carefully designed building.

The mission visited the main excavation areas at the City site and the necropolis area at Al-Bass site and critically commented on the overall aspect of neglect due to insufficient harvesting and cleaning of the site.

The mission noted the progress within the archaeological component (BTAP) of the CHUD project (refurbishing of old site houses, entrance gates) and commented on the overall communication procedure between the State Party and the Committee in relation to the World Bank funded activities within the World Heritage property.

The mission noted the considerable progress made in the efforts to improve site documentation by undertaking new measurements on site as well as conducting new scientific explorations in order to clarify uncertainties related to the shape, function and documentation status on some of the archaeological elements. The collaboration with scientific institutions on national as well as international level is to be commended.

The mission commented critically on the progress of the infrastructure works at the museum on the El Bass site notably on the location of the police station/room directly connected to the museum service facilities. The overall arrangement of the entire service wing could have been arranged in a less intrusive way as there is sufficient space to the south-east of the museum building.

The mission underlines the need for an overall guiding concept for the presentation of the entire site in light of the commencing of further conservation intervention on the archaeological artefacts within the BTAP project. Although an enormous amount of efforts has been generated within the BTAP activities, an overall sense of lack of strategic and integrative planning is noted, overshadowing the individual notable achievements.

The lack of a comprehensive management plan, which combines the individual BTAP activities into a coherent conservation and mediation strategy can be strongly sensed in those areas where the site is to be linked with the surrounding urban fabric. The connection to the modern city, the point of entry and exit to the excavation site, are of greatest importance in order to communicate the potential and values.
of the property to the public. Design decisions on buildings and materials have to be carefully taken to underline the overall objective of valorisation of the cultural assets.

The mission further regrets that the individual restoration measures proposed by the consultant within the preparation of the BTAP Phase 1 project have not been included in an overall conservation plan for the property and have been commissioned for execution by a private contractor without prior evaluation through the existing processes of the World Heritage Convention. The State Party is asked to propose a mechanism to ensure a proper involvement of the World Heritage Committee and its Advisory Bodies prior to further interventions on the site.

The mission notes the high quality of the plans, reports and tender documents prepared for the BTAP project. The material should be synthesized with the on-going prospection results and the archaeological map. Together with the geomorphologic studies and scientific reports, all individual pieces of information should be recompiled and put together to serve as a core for a comprehensive management plan for the World Heritage site of Tyre at the end of the 2012-2014 Action Plan period.

Overall the mission highlights the measurable progress achieved since the last reactive monitoring mission in 2009 and encourages the State Party to continue the implementation of the 2012-2014 Action Plan and to ensure the necessary staff resources for this purpose.

The mission recommends:

**General**

1. As proposed with the 2009 report the mission recommends that the State Party together with the related United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) initiate projects for awareness rising and reconciliation activities addressed to youth, and aimed to bridge the socio cultural divide. UNESCO should consider linking activities with school children and youth organizations for awareness rising to promote the spirit of the Convention as an instrument for reconciliation, peace and cultural diversity among the different ethnic and religious groups in the region.

2. The mission recommends to the State Party to continue its fruitful collaboration with academic institutions for the scientific exploration of the site and to initiate a further dialogue (e.g. scientific workshops and symposia) with institutions and expert related to cultural heritage conservation in order to determine best practises for the future long-term preservation efforts at the site.

3. The mission recommends the State Party to develop its capacities further and to allocate appropriate resources within its administrative structure ensuring all aspects of documentation, preservation, monitoring and reporting on the long term.

4. The mission recommends to the State Party to implement its Documentation and Inventory activities as described in the 2012-2014 Action Plan by providing the sufficient staff resources
(topographic surveys, aerial photogrammetry, update of archaeological records, inclusion of all data in the Archaeological Map).

**Urban Zoning and Extent of the Site**

5. The mission recommends to the State Party to accept the proposal to establish a maritime protection zone around the seashores of Tyre and to clarify the status of the building ban on State owned properties.

6. The mission recommends to the State Party to draft a boundary modification request following the evaluation of the on-going geophysical prospection work and the information collected for the Archaeological Map of Tyre.

**Site maintenance and conservation**

7. The mission recommends that the State Party develop a conservation strategy for the site indicating short, middle and long term actions.

8. The mission recommends improving control of vegetation growth (by means of adequate herbicides or other harvesting methods) and developing a fire prevention plan within the overall management strategy for the site.

9. The mission recommends the creation of a drainage system/controlled conduct for rain water (especially in the necropolis) and the improved control of the sewage system, especially of the houses close to the necropolis.

10. The mission recommends the installation of a proper environmental and conservation treatment monitoring system for the interventions with the coming BTAP activities on the site both for the site of Al Bass and the City site and ensure accessibility to the data gathered.

11. The mission recommends establishing a recovery programme of all detached mosaics to be collected and put in protected shelters. These should be properly located (temporary lapidary / open air museum) avoiding prevailing winds and should be accessible for study.

12. The mission recommends the compilation of all technical reports elaborated during the BTAP conservation activities and their storing at different archives both nationally (CDR, DGA, site museum) and internationally (ICCROM, ICOMOS) to be accessible to future generations.
6 ANNEX I

6.1 Terms of reference

At its 35th session (UNESCO, Paris, 19 – 29 June 2011), the World Heritage Committee examined the state of conservation of Tyre (Lebanon) and reiterated "its request to the State Party to invite a joint World Heritage Centre/ICOMOS monitoring mission to the property to help the State Party develop a recovery programme to address the key issues identified by the 2009 report and the previous requests of the World Heritage Committee". This request for a mission was reiterated at the 36th session of the World Heritage Committee (Saint-Petersburg, 2012) in Decision 36 COM 7B.52.

It is requested that the report of the mission aiming at reviewing the state of conservation of the World Heritage property include, as appropriate:

(a) an indication of threats or significant improvement in the conservation of the property since the last report to the World Heritage Committee,

(b) any follow-up to previous decisions of the World Heritage Committee on the state of conservation of the property,

(c) information on any threat or damage to or loss of outstanding universal value, integrity and/or authenticity for which the property was inscribed on the World Heritage List."

6.2 Itinerary and programme

9th Sep 2012 arrival Beirut in the course of the day

10th Sep 2012 meeting in DGA (full day)
Meeting with Mr Assaad Seif, Head of the Scientific Departments, Coordinator of Archaeological Research and Excavations (de facto acting Director General DGA), Mr Nabil Itani (CHUD Team Leader), Mr Jean Yasmine (CHUD Cultural Heritage Specialist), Ms Maya Hmeidan (Heritage consultant), Mr Joseph Kreidi (UNESCO Beirut)

11th Sep 2012 travel to Tyre (site visit half day/ overnight stay in Tyre)
Site visit at Highway Route, Old Harbour and City Site
Meeting and Lunch with Mayor of Tyre Mr Hassan Dbouk

12th Sep 2012 site visit and return to Beirut (full day site visit / evening return to Beirut)
Site visit City Site and Al-Bass

13th Sept 2012 meetings at DGA and Ministry of Culture
Meeting at UNESCO Office and DGA
Afternoon meeting with Minister of Culture Mr Gaby Layoun

14th Sept 2012 Departure from Beirut
6.3 Composition of mission team

The mission members consisted of Ms Veronique Dauge – Chief Arab States Unit on behalf of the World Heritage Centre and of Mr Georgios Toubekis as ICOMOS expert. They were accompanied in meetings and on the property by Mr Joseph Kreidi from the UNESCO Beirut office.

The State Party mission members in Beirut and in Tyre were Mr Assaad Seif (Head of the Scientific Departments, Coordinator of Archaeological Research and Excavations) Mr Ali Badawi (Site Manager Tyre – DGA), Mr Jean Yasmine (CHUD Cultural Heritage Specialist), Ms Maya Hmeidan (Heritage consultant)

Presentations in Beirut included Mr Nabil Itani (CHUD Team Leader) and Mr George Ghattas (GIS Expert DGA)

6.4 Maps
6.4.1 Urban Zoning of Tyre (Map submitted in 2010 to World Heritage Centre)
6.4.2 Highway project: Implementing Zones and Area of planned excavation
6.4.3 Highway project: AUTOCAD drawing
6.4.4 Inscribed Building Consent Procedure

Chart 2: DGUs may be granted either unconditionally or subject to conditions. Consents may be refused if the proposed plans detriment the inscribed building/group of historic buildings' values. In case of total rejection of request, the DGA/representative is supposed to compensate the developer loss.
6.4.5 Planning procedure for new developments in the classified areas

[Diagram of planning procedure]

Diagram A: Planning permits procedures in the AAJ and the WH property. This procedure is also applied in areas with known potential but not identified as AAJ, such as in Abu Nasrid, Bunq el Chermah, etc.
6.5 Photographs

Fig. 1 Aspects of the traditional fishing harbour

Fig. 2 Aspects of the old city along the fishing harbour
Fig. 3 Aspects of the traditional fishing harbour
Fig. 4 DGA administrative building restored within CHUD and not in use (was supposed to become the office of DGA site manager)
Fig. 5-7 Views from Grand Alley at city site – detail view of mosaics
Fig. 8-10 View on “arena” area at city site – Detail of harvesting works
Fig. 11-12 View on ongoing excavations on city site Sector / -

Fig. 13  View on exposed areas in city site
Fig. 14  El-Bass site / fuel station on the limits of excavation area

Fig. 14  El-Bass site / view towards city centre
Fig. 15-16  El-Bass site / uncontrolled vegetation growth
Fig. 17 - 18  El-Bass site / monumental tomb chosen to be covered by protective shelter within BTAP Phase 1b
Fig. 19 El-Bass site / harvested areas along the main road

Fig. 20 El-Bass site / example of washed out soft lime stones
Fig. 21  El-Bass site / Columbarium chosen for surface treatment within BTAP Phase 1b

Fig. 22  El-Bass site / detail of detaching / flaking mural painting at columbarium
6.6 Bibliography

Ancient Harbour Research, topographical studies and archaeological excavations


Cultural Heritage Management


17. UNESCO Recommendation on International Principles Applicable to Archaeological Excavations, New Delhi 1956


Reports


4. Matero, Frank G., Heritage, Conservation, and Archaeology: An Introduction, American Institute for Archaeology, AIA site presentation program

5. Stanley-Price, Nicholas. Priority Actions for the immediate protection of the site of Tyre. A Report prepared for UNESCO in collaboration with the DGA, August 1997


13. Report Ars Projetti / CHUD, Baalbeck and Tyre archaeological study. Phase 1, 2001

15. CDR/CHUD Rapport Final, Jeanine Abdul Massih, Renforcement Institutionnel et Assistance Technique a la DGA, without date

16. CDR/CHUD BTAP Phase 1, Tender Documents, 2008

17. CDR/CHUD BTAP Phase 1, Explanatory Report, October 2008

18. Cultural Heritage and Urban Development (CHUD). Tyre Site. Explanatory Note by the Program Management Unit at the DGA, Jean Yasmine 23.02.2009

7 ANNEX II - Documents by State Party (separate files)

7.1 CHUD PowerPoint Presentation September 2012
7.2 DGA Progress Report 2009-2012 as of September 2012
7.3 DGA Action Plan 2012-2014 as of October 2012
7.5 CHUD (BTAP) – Consultation and Communication Process and Preliminary Program (DGA-CDR-WHC)
Cultural Heritage & Urban Development

DES PIERRES …ET DES HOMMES

OF STONE AND MEN
Cultural Heritage & Urban Development

DES PIERRES …ET DES HOMMES

OF STONE AND MEN
Sommaire de la présentation

1. CHUD: vision globale du projet
2. CHUD: le projet à Tyr
3. Le projet urbain
4. Le projet archéologique
5. Le renforcement institutionnel
6. Perspectives du projet à Tyr
7. L’action de l’AFD dans le CHUD
1- Patrimoine Culturel et Développement Urbain (CHUD) : les données

- Initiative du gouvernement Libanais
- Agence d’exécution : CDR
- Durée :
  - Phase 1: 2004-2009
  - Phase 2: 2010-2012
  - Phase 3: 2013-2015
- Soutien financier:
  - Banque Mondiale,
  - Agence Française de Développement
  - Coopération Italienne
- Cinq villes historiques: Baalbek, Byblos, Saida, Tripoli, Tyr.
- Deux sites archéologiques: Baalbek et Tyr
1-(CHUD) : Objectifs

- Créer les conditions favorables pour le développement de l’économie locale liée au patrimoine et l’amélioration de la qualité de vie dans les centres historiques de cinq villes secondaires
- Améliorer la conservation et la gestion du patrimoine culturel du Liban

Objectif auxiliaire

- Sensibiliser les populations locales à la valeur du patrimoine culturel comme ressource de développement durable
1-(CHUD) Les composantes

- **Composante Urbaine**: ~70 M$
  
  Réhabilitation des Centres Historiques de cinq Villes : Espaces publics, monuments, Infrastructures, ...

- **Composante Archéologique**: ~20 M$
  
  Conservation et gestion des sites archéologique

- **Renforcement Institutionnel**: ~6 M$
  
  CDR, DGA, DGU et Municipalités
1-(CHUD): Partenaires

- **CDR**: Agence gouvernemental d’exécution; gestion par le PMU
- **DGA**: Administration scientifique et technique; chargée du patrimoine archéologique, urbain et architectural
- **UNESCO / WHC**: Suivi scientifique: villes du patrimoine mondial (Baalbek, Byblos et Tyr)
- **Ministère de la Culture**: Initiateur du projet
- **Ministère de l’Intérieur et des Municipalités**: en charge des Municipalités
- **Ministère des travaux publics**: DGU lois de protection et codes du bâti
- **Ministère de Transport**: Ministère chargé de la protection de la côte
- **Ministère des Finances**: Ministère chargé de la planification budgétaire
- **Les Municipalités**: dans les cinq villes
- **Les Instituts de recherche et les Universités**: ex: IFPO, CNRS, etc.
- **Les ONG**: en charge de la préservation du patrimoine architectural et urbain
- **Les communautés locales**

... 

- **GESTION COMPLEXE!!**
2- Le CHUD à Tyr

action vi. the port
The action of rehabilitation and conserving the port includes a main perimeter that surrounds and contains the interior basin, the Interim’s syndicate building, the Captain Building, the naval workshops, the reservoirs and the walls of the Eastern façade. It is surrounded by the significant perimeter of the Souks, and more specifically the Mekkhah Square.

action ii. the gateway and parking boulevard
The restructuring of the gateway Banouba area will take place in the adjoining site, found recently due to the embankment work. It includes the edge of the current parking, the port and its constituencies and the historical facades. This action perimeter also pays attention to both, the entry to the old city (the gateway Banouba), and the connection with the Humman Square.

action iii. the hammer street
The rehabilitation area of Hayman street stretches between the Western side of the archeological hippodrome and the old gateway Banouba. It includes the facades and all the sites along its limits. It has two important areas to highlight; the Jaafarish school and its adjoining shops and, the archeological site of the Hayman fountain.

action iv. the humman square
The rehabilitation and upgrading of the Humman square will take place all along the small areas between the Jaafarish, the old city and the archeological site of the island city. The perimeter consists of small and wholesale trade shops that form the West and South façades of the Jaafarish. It is also the ancient and historical façade of the town that cease to exist now, due to the cluttering of the new buildings.

action v. the khan
Tyre holds two historical Khans inherited from the 17th century. Naturally, both are located in the old area of the souks, and close to the entrance of the city port. The first, Khan of Ashkar, is located at the entrance of the Souks. The second, Khan El Babah, is placed a little further inside the city and has taken shape owing to the inter-combination of the assorted buildings around the courtyard.

action vi. the cultural promenade
The action perimeter concerns the South façade of the historical city center. It represents the monuments, the palaces and the architecture heritage of Tyre that is worth preserving. The architectural history of these buildings is the reason to introduce cultural and educational programs. The deterioration of some of the buildings leads to the work of refurbishing and to-stop deterioration.

action vii. the coastline preservation
This action of protecting and refurbishing the coastal stretches from the Reef House in the South to the Commercial Port in the North. It involves the coastline perimeter. The latter includes the Southern "Corniche", the archeological sites (Island City and Egyptian Port), the rocky point and sandy beaches.
3- CHUD: Projet urbain

- Amélioration des Espaces Publics
- Création, équipement et gestion des Circuits Touristiques
- Conservation et réutilisation adaptée des Monuments et des Bâtiments Historiques
- Réhabilitation du parc immobilier Urbain Historique
- Protection de la côte et aménagement de Jardins Publics
- Gestion de l’Accès Véhiculaire aux centres historiques
- Création de zones de Stationnement et des Equipements touristique (ex. Centres d’accueil pour les visiteurs)
3- CHUD: Projet urbain; façade maritime
3- CHUD: Projet urbain; façade maritime
Avant les travaux
DES PIERRES...

...ET DES HOMMES

Après les travaux
3- CHUD: Projet urbain; Passage culturel
3- CHUD: Projet urbain; Passage culturel

Centre d'Archéologie Sous-marin
Administration DGA
Maison de Ville et Bibliothèque municipale (CLAC)
Bayt Mamlouk
Bayt Baroud
3- Passage Culturel: Centre d’archéologique sous-marine

Avant les travaux

Après les travaux
Avant les travaux

Après les travaux

DES PIERRES…

Block B
…ET DES HOMMES
3- Passage culturel: Administration DGA

Avant les travaux

Après les travaux
3- Passage culturel: Maison de ville

Avant les travaux

Beit El Mamlouk

Après les travaux
Beit El Mamlouk

Avant les travaux

Après les travaux
3- Passage culturel et archéologie

DES PIERRES...
…ET DES HOMMES
3- CHUD: Projet urbain; vieux port et marché

Photo CHUD - 2010
LE VIEUX PORT: DES PIERRES…
LE VIEUX PORT: … ET DES HOMMES
3- CHUD: Le Projet urbain; Vieux Port.

LE VIEUX PORT: ANIMATION MODELISEE DU PROJET
3- CHUD: Projet urbain: Vieux Port.

DES PIERRES...
3- CHUD: Projet urbain; Vieux Port.
Le syndicat des pêcheurs

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~ 1930 2010 2012

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Projet 2010

Projet 2012
3- CHUD: Projet urbain; Vieux Port.

DES PIERRES... ET DES HOMMES
3- CHUD: Projet urbain

- Place Bawwabah: accès à la vieille ville
- Rue Hamra: jonction entre les deux sites archéologiques
3- CHUD: Projet urbain; Place Bawwabah: accès à la vieille ville
3- CHUD: Projet urbain; jonction rue Hamra entre les deux sites archéologiques
4- Le CHUD à Tyr: Composante archéologique

Travaux conservation archéologiques
Entrées Sites
Mise en valeur des sites
Musée Bass

Baalbek & Tyre Archaeological Project (BTAP)

DES PIERRES... PRINCIPALEMENT DES PIERRES....
4- Le CHUD à Tyr: Composante archéologique

- BTAP1 Infrastructure et Conservation (WB & Liban)
- Inventaire et documentation (DGCS)
- BTAP2 Présentation et mise en valeur (DGCS)

Situation du projet en Juin 2012

- BTAP1 Travaux d’infrastructure culturelle en cours
- BTAP1 Travaux de conservation archéologique lancés
- Inventaire et documentation (UNESCO)
- BTAP2 Présentation et mise en valeur (appel d’offre)
Cultural Heritage and Urban Development Project (CHUD)
Baalbek and Tyre Archaeological Project - Phase 1

Package 1 - Infrastructure and landscaping

Republic of Lebanon
Ministry of Culture
Directorate General of Antiquities

Infrastructure and Landscaping
Tyre - City Site

Improvement of Visitors and Site Management Facilities

- New Ticket Office and Guards Room, Landmark, and the Site to Meet
- The entrance area will be completely refurbished. A new gate and a
  large atrium will include ticket areas on the site. The existing
  ticketing area located in the ticket office will be removed and the
  new ticketing area will be located behind the entrance to accommodate
  the new ticket office and the parking space. The
  new ticketing area will be integrated with the site and
  the existing ticketing area.
- New Visitors Center and DGA office
- New Visitor Center and DGA office

Primary Site

- The existing building will be partially demolished and the
  remaining structure will be reconstructed. The ground floor will accommodate
  the storage of the site. Two new entrances for the police and a visitor
  entrance for the ticketing area will be constructed. The
  new ticketing area will be integrated with the site and
  the existing ticketing area.

Secondary Site

- The restoration of new buildings and the rehabilitation of the existing
  area will be implemented to improve the security of the site.
- The construction of the site will be undertaken by the local authorities.

Building Locations

- The buildings will be located in the archaeological site.
- The existing buildings will be demolished to create
  a new entrance to the site and to provide a view
  towards the sea and to provide access to the site.

Legend

- New services entrances
- New building or installation
- New entrance
- New lower entrance
- New pedestrian path
- New service shop area
- New ticket office
- New ticketing area
- New visitor center
- New visitor center and DGA office

New Visitor Center and DGA Office

New Ticket Office and Guards Room, landscaping of the site entrance

Tyre City Site
4- Le CHUD à Tyr: Composante archéologique

Infrastructures culturelles

- Nouveaux accès aux sites et centres de visiteurs
- Musée du site Bass
- Nouveau dépôts des objets
- Inventaire des objets
- Projet d’aménagement muséographique
4- Le CHUD à Tyr: Composante archéologique

- Agrandissement du bâtiment du musée
- Récupération de matériel archéologique caché en 1977
4- Le CHUD à Tyr: Composante archéologique

- Nouveau dépôts des objets
- Inventaire des objets
4- Le CHUD à Tyr: Composante archéologique

- Musée du site Bass

DES PIERRES…POUR RACONTER L’HISTOIRE DES HOMMES

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4- Le CHUD à Tyr: Composante archéologique
Conservation archéologique

- Conservation des structures (arène, palestre, bains romains, arc romain, tombe monumentale, chapelle avec jardin),
- Conservation des surfaces (mosaïque grande allée, arc romain, tombe monumentale, chapelle avec jardin, columbarium, église à coté de l’arc).
4- Le CHUD à Tyr: Composante archéologique
Le prochain musée archéologique d’El-Bass

- Concept muséographique
- Choix des objets
- Conservation des objets
- Edition des textes
- Edition signalétique
- Panneaux et multimedia
- Films et modélisation
- Guide audio
DES PIERRES…POUR RACONTER L’HISTOIRE DES HOMMES
5- Le CHUD à Tyr: Le renforcement institutionnel

- Séminaire International « L’histoire de Tyr au regard de l’archéologie » en Octobre 2011,
5- Le CHUD à Tyr: Le renforcement institutionnel

- Assistance technique à la DGA,
- Achat d’équipements et de matériel (Bureaux et meubles; matériel informatique; voitures; matériel de plongée sous-marin; matériel topographique; etc.)
- Formation administrative, technique et scientifique des agents de la DGA (et d’autres acteurs de la protection du patrimoine culturel)

DES HOMMES... POUR RACONTER L’HISTOIRE DES PIERRES
5- Le CHUD à Tyr: Le renforcement institutionnel

- Etudes des sites de Tyr,
- Documentation des sites archéologiques,
- Préparation des rapports de délimitation et de gestion du site classé au titre du patrimoine mondial.

DES PIERRES...POUR RACONTER L'HISTOIRE DES HOMMES
5- Le CHUD à Tyr: Le renforcement institutionnel

DES HOMMES...POUR RACONTER L'HISTOIRE DES PIERRES

CHUD Project
Organization Chart

Team Leaders

Urban Specialist
Nabil Itani

Contract Manager
Maher Baker

Admin Assistant
Sonia A

PMU
Social Component ZF
Urban Component NI
TA to DGU NI
TA to Municipalities NI

TA to Tripoli
TA to Tyr
Operation & Management

MIU
Social Expert Byblos
Baalbek
Tripoli
Anne-Marie G.
Michel S.
Zeina F.

Social Expert Saida
Tyre

Architect
Expert in Urban
Historic
Architect
Expert
Archaeologist
Expert in Conservation

Engineer
Expert in Contracts

TA
RAI
Archeological Component

DGA Project Manager
Jean Yasmine

TA to DGA JY
Archeology Component JY

All sites

TA DGA Officer
Lina G.

Archeology
Lana S.

First Additional Data

Second Additional Data
6- Perspectives du projet à Tyr

- Nouveau plan de développement stratégique de la ville
- Délocalisation du sérail pour décongestionner la vieille ville
- Maintenance et gestion des projets réalisés: le vieux port, la nouvelle halle, les espaces publics, etc.
- Les bâtiments publics et sites à vocation archéologique: responsabilité de la DGA
- Future gestion et opération des musées
- Nécessité de créer de nouveaux cadres professionnels au sein de la municipalité et de la DGA
- Initier la participation du secteur privé dans les activités économiques à caractère touristique et culturel
7- L’action de l’AFD dans le CHUD

- **A TRIPOLI:**
  - Réhabilitation des espaces urbains autour du cours de Nahr Abu Ali.
  - Restauration et mise en valeur du château de St Gilles
  - Restauration de plusieurs monuments historiques et des souks de la vieille ville

- **A TYR:**
  - Réhabilitation du vieux port des pécheurs,
  - Réhabilitation de monuments historiques et des souks de la vieille ville ainsi que de la façade maritime

- **ASSISTANCE TECHNIQUE:**
  - Assistance technique à la DGA
  - Assistance technique aux municipalités de Tripoli et de Tyr
Merci pour votre attention
Tyre was inscribed on the World Heritage List since 1984 based on criteria (iii) and (vi). However, the nomination file identified a list of excavated monuments to be inscribed on this list rather than a clearly defined area. Today, the World Heritage file of Tyre still lacks the delineation of a precise property boundary, in addition to a comprehensive management plan. This document has been prepared by the Directorate General of Antiquities on behalf of the State Party in order to solve the discrepancy on Tyre World Heritage boundary and consequently, respond to the 35th and 36th World Heritage Committee decisions (June 2011 and June 2012).

This report has been prepared by Ms. Maya Hmeidan, a Heritage Management Consultant, in collaboration with Dr. Assaad Seif, Head of the Scientific Departments and Chief of Excavations at the Directorate General of Antiquities.

DR. Seif and Ms. Hmeidan coordinated with all stakeholders involved in the direct or indirect management and enhancement of Tyre World Heritage Site:

- Archaeologist Mr. Ali Badawi and Archaeologist Mr. Nader Saklawi from the DGA Tyre office, responsible for the entire region of Tyre, including its World Heritage Site;
- Dr. Hani Kahwaji and Ms. Jiselle Rachid, responsible for the inventory of documentation and museum artefacts related to Tyre;
- Mr. Ghassan Ghattas, head of the GIS unit at the DGA;
- Mr. Selim Germanos, the IT officer at the DGA, responsible for the Tyre database preparation;
- The Municipality of Tyre, especially, the Mayor Mr. Hassan Dbouk and Ms. Sara Souki;
- The members of the Project Management Unit of the CHUD project at the Council for Development and Reconstruction, namely Dr. Jean Yasmine and Mr. Nabil Itani;
- Further coordination was held on site with the consultant and contractor of the CHUD project, Rafik el Khoury and Partners; mainly, the site Engineer Mr. Fakih representative of Rafik el Khoury Consultants and Engineer Mr. A. Mahmoudi from Madanat Contracting Company responsible for the implementation of phase two of the CHUD urban project.
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<tr>
<td>AFD</td>
<td>Agence Française de Développement</td>
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<tr>
<td>AUB</td>
<td>American University of Beirut</td>
</tr>
<tr>
<td>BAAL</td>
<td>Bulletin d’Archéologie et d’Architecture Libanaises</td>
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<tr>
<td>BTAP</td>
<td>Baalbeck and Tyre Archaeological Project</td>
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<tr>
<td>BZ</td>
<td>Buffer Zone</td>
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<tr>
<td>CDR</td>
<td>Council for Development and Reconstruction</td>
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<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
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<tr>
<td>CHUD</td>
<td>Cultural Heritage and Urban Development project</td>
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<tr>
<td>CoM</td>
<td>Council of Ministers</td>
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<td>DGA</td>
<td>Directorate General of Antiquities</td>
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<td>DGU</td>
<td>Directorate General of Urban Planning</td>
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<tr>
<td>GIS</td>
<td>Geographical Information System</td>
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<td>GoL</td>
<td>Government of Lebanon</td>
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<td>GPR</td>
<td>Ground Penetrating Radar</td>
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<td>IC</td>
<td>Italian Cooperation</td>
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<td>ICOMOS</td>
<td>International Council on Monuments and Sites</td>
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<tr>
<td>IFPO</td>
<td>Institute Français d’Archéologie Pays Oriental</td>
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<tr>
<td>LBZ</td>
<td>Land Buffer Zone</td>
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<tr>
<td>LWHS</td>
<td>Land World Heritage Site</td>
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<td>MA</td>
<td>Marine Archaeology Protection Area</td>
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<td>MB</td>
<td>Marine Buffer Protection Zone</td>
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<td>MBZ</td>
<td>Marine Buffer Zone</td>
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<td>MC</td>
<td>Coastal Protection Area</td>
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<td>ME</td>
<td>Marine Environment Protection Area</td>
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<td>MoA</td>
<td>Ministry of Agriculture</td>
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<td>Ministry of Environment</td>
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<td>Ministry of Finance</td>
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<tr>
<td>MoI&amp;M</td>
<td>Ministry of Interior and Municipalities</td>
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<td>MoT&amp;PW</td>
<td>Ministry of Transport and Public Works</td>
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<td>MoT</td>
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<td>MPZ</td>
<td>Marine Protection Zone</td>
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<td>MuT</td>
<td>Municipality of Tyre</td>
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<td>MWHS</td>
<td>Marine World Heritage Site</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>NGO</td>
<td>Non Governmental Organization</td>
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<tr>
<td>OUV</td>
<td>Outstanding Universal Value</td>
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<tr>
<td>PAD</td>
<td>Project Appraisal Document</td>
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<td>PMU</td>
<td>Project Management Unit</td>
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<td>SAC</td>
<td>Submarine Archaeology Center</td>
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<td>SWOT</td>
<td>Strengths, Weaknesses, Opportunities and Threats</td>
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<td>TA</td>
<td>Technical Assistance</td>
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<td>TAM</td>
<td>Tyre Archaeological Map</td>
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<td>UNDP</td>
<td>United Nation Development Program</td>
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<td>UNESCO</td>
<td>United Nations Educational and Cultural Organization</td>
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<tr>
<td>UNIFIL</td>
<td>United Nations Interim Force in Lebanon</td>
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<td>UNRWA</td>
<td>United Nations Relief and Works Agency</td>
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<td>USJ</td>
<td>University of Saint Joseph</td>
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<td>WB</td>
<td>World Bank</td>
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<td>WH</td>
<td>World Heritage</td>
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<td>WHC</td>
<td>World Heritage Center</td>
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<td>World Heritage List</td>
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Executive Summery

Tyre was inscribed on the World Heritage List since 1984 based on criteria (iii) and (vi). However, the nomination file identified a list of excavated monuments to be inscribed on this list rather than a clearly defined area. Today, the World Heritage file of Tyre still lacks the delineation of a precise property boundary, in addition to a comprehensive management plan. This document has been prepared by the Directorate General of Antiquities on behalf of the State Party in order to solve the discrepancy on Tyre World Heritage boundary and consequently, respond to the 35th and 36th World Heritage Committee decisions (June 2011 and June 2012).

Throughout this report, the State Party clarifies the issues and concerns raised by the WHC previous monitoring missions to Tyre, namely, the last joint UNESCO/ICOMOS Reactive Monitoring Mission of 2009. It presents an overall status update related to the diverse highlighted issues; such as, the highway development, the Marine Protection Zone and the moratorium request, etc. Furthermore, it states the different measures undertaken in response to these missions’ recommendations.

An assessment of the current management conditions was carried out in order to evaluate the key issues, in addition to the direct and indirect causes that hindered the earlier clarification of boundaries and the introduction of a comprehensive management plan. The lack of financial and human resources was highlighted as the main cause of this delay. The scarcity of the DGA staff has contributed to the shortage on many levels and it led to:

- Absence of a comprehensive documentary and inventory record
- Lack of constant monitoring and maintenance which led to the degradation of the site and its setting
- Inability to integrate previous survey results into the GIS and/or undertake further preventive survey and excavations in order to complete the Tyre archaeological and risk map
- Lack of strategic planning and coordination among stakeholders
- Lack of site documentation, research and studies that assist the formulation of conservation plans

Further constraints related to the complexity of delimiting a World Heritage boundary and its future management were highlighted. The assessment revealed that the WHS visual and physical integrity are threatened by the previous legal and illegal expansion, including the high rise buildings in the vicinity of the WHS, the proximity of Palestinian camps to the WHS and its
placement over areas with high archaeological potential. It, therefore, impedes proper management.

Taking into account the various management complexities and the difficulty of rectifying the urban situation while responding to the World Heritage requirements, the State Party undertook a series of measures. Above all, the DGA has developed a strategy and a short term action plan that deals with priority matters in order to enhance the overall management of this particular WHS.

The DGA Action Plan (2012-2014) identified a number of objectives along with a working program. To accomplish the set objectives, external funding provisions for specific jobs and assignments were identified as a short term practical solution. Accordingly, the State Party was able to:

- Prepare an inventory of Tyre’s special finds deposited since the 1950s at the National Museum storage area in Beirut
- Compile a digital inventory of documentation to be integrated into Tyre Archaeological Map Geodatabase
- Prepare a new project decree proposal to establish a Marine Protection Zone
- Submit a boundary modification request
- Prepare a comprehensive report on the WHS of Tyre to be submitted to the UNESCO World Heritage Center.

After consultations with various stakeholders, the State Party has drafted sensible WHS limits. The proposed WHS will include the Old City with its fishing and commercial ports, the City site and Al Bass sites, in addition to Hamra Street that will link all the parts of the WHS together. In order to better reflect the outstanding universal value of Tyre, a marine WHS was also established around the promontory.

The WHS will be surrounded by a wide area of different marine and land buffer zones. The localization of buffer zones to the south, east and north of the WHS will ensure the protection of the WHS integrity. In this sense, the new limits of Tyre WHS will not be affected by the future development of the planned Sarafand-Nakoura highway (2 km away from the WHS).

Nevertheless, in all cases, the DGA will shortly start the application of its preventive archaeology strategy along the highway trajectory before the work on the highway in Tyre starts. Therefore, the DGA will resume shortly the geophysical survey on the planned highway trajectory, followed by targeted excavations to verify the survey results and modify the route accordingly, if needed.
The drafting of the preliminary management plan will need additional resources not available at the moment. However, the short term Action Plan (2012-2014) has established a strategy and a management framework for the next few years until more funds are secured to perform this particular obligation.

The State Party has invited a joint WHC/ICOMOS reactive monitoring mission to evaluate the progress accomplished on ground. It has been agreed that the joint mission may take place during the month of September 2012 (9-13 September 2012). The UNESCO/ICOMOS experts will examine the efforts of the State Party to enhance the preservation of Tyre, in addition to the final draft of the boundary modification. The mission may recommend possible adjustments to be integrated in the preliminary draft at an early stage before its final submission to the WHC in February 2013.
Purpose of the Report

Following the recommendations issued during the 35th session of the World Heritage Center (WHC), namely Decision - 35 COM 7B.51-Tyre (Lebanon) (C299), June 2011, the State Party was requested to:

1. Submit a boundary modification request according to paragraphs 163-165 of the Operational Guidelines.
2. Invite a joint WHC/ICOMOS reactive monitoring mission to evaluate the progress accomplished at its 36th session.
3. Submit a report to the WHC by 1 February 2012 on the implementation of the above for examination at its 36th session in 2012.

The last paragraph highlighted the possibility of enlisting Tyre on the List of World Heritage in Danger in case of any potential threat to the Outstanding Universal Value (OUV). This fact has prompted the national authorities, Ministry of Culture (MoC) and the Directorate General of Antiquities (DGA), to undertake a series of actions that will hopefully be taken into consideration regarding the WHC future decisions. For this reason, the State Party has requested the extension of the above mentioned deadline for the preparation of a detailed progress report till May 2012, in order to have enough time and the needed resources to sort out the issue of the WHS boundaries and the Tyre Archaeological Map (TAM) once for all (correspondence letter - Ref: 501 - signed by the Minister of Culture, Mr. Gaby Layoun and sent to Mr. Kishore Rao, Director of the WHC on the 2nd of February 2012).

In light with the above, the DGA has requested from the Council for Development and Reconstruction (CDR) to recruit four qualified personnel within the framework of the Cultural Heritage and Urban Development project (CHUD) to assist the DGA in fulfilling this specific mission.

As a result of the delay in the recruitment process, the State Party has requested the extension of the deadline to present its detailed report. During this period, the World Heritage Committee has met at St. Petersburg in Russia (24 June - 6 July 2012). The 36th WH Committee Decisions were based on a summary of the different actions in the process of being implemented by the State Party. The recommendation of the 36th session can be summarized as follows:

- To secure the necessary resources to address holistically pressing concerns at the property and to prioritise the development of a management plan
- The need to finalize the process of definition of a buffer zone for the property development and to submit a request for minor boundary modification to this end

- The need to carry out Heritage Impact Assessment for projects in heritage areas and to submit these HIA along with the technical specifications for the redevelopment projects to the WHC for review by the Advisory Bodies prior to approval and implementation

- Organize the foreseen reactive monitoring mission to the property before the end of 2012

- Submit to the World Heritage Centre, by 1 February 2013, an updated report on the state of conservation of the property and the implementation of the above

The State Party has officially received the 36th session decisions on the 8th of August 2012, shortly after the finalization of this detailed report. Therefore, it was not possible to tackle and respond to all the issues raised in the 36th session. However, this report accommodates major recommendations of the 36th session, while the remaining issues will be dealt with in the next report to be submitted in February 2013.

Consequently, this report directly responds to the decisions of the 35th session and some of those issued during the 36th session. It clarifies the various undertakings by the State Party to accommodate major recommendations of previous reactive monitoring missions, specifically the last UNESCO/ICOMOS reactive monitoring mission to Tyre, held by Mr. Jean Marie Dentzer and Mr. Georgios Toubekis from 16-20 February 2009. Therefore, it states a preliminary action plan that the DGA recently adapted in order to keep Tyre a WHS for the enjoyment of current and future generations.
1. **Introduction**

Located 83 km south of Beirut, Tyre is a modern coastal town with an ancient heart. The modern town of Tyre (Sour) consists of two distinct archaeological sites (the City site and Al Bass site), the historic Medieval city, the old fishing port with some ancient maritime underwater installations, in addition to other remarkable excavated archaeological remains; such as, the Byzantine Basilica and ‘Hiram’ site (map 1, 2).

Tyre archaeological sites, namely the City site remains and that of Al Bass, have been inscribed on the World Heritage List (WHL) since 1984 on the basis of criteria (iii) and (vi) of the UNESCO World Heritage Convention and the nomination dossier (map 3). On one hand, Tyre is considered one of the earliest metropolises of Phoenicia and an important center for maritime and land commerce in the Eastern Mediterranean (criterion iii). On the other hand, its name is associated with the invention and production of purple die, with the Phoenician expansion and the founding of trade posts in the Mediterranean basin, in addition to the introduction of the alphabet to Greece by Cadmos (criterion vi).

1.1 **Historical Background**

1.1.1 The Inadequacy in Tyre World Heritage File

Tyre was excavated during the 1950s by Maurice Chehab, the General Director of Antiquities (1928 - 1988). At the time, Chehab followed an expropriation policy in order to gradually enlarge the field excavation areas, especially on the ancient island (City site). Nevertheless, the outbreak of the Civil War in Lebanon in 1975 interrupted his plans and excavations had to be suspended. In 1980, the Lebanese Government had sought the help of the UNESCO within the framework of the Hague Convention (1954) to assist in the protection of Tyre’s archaeological sites and its surroundings threatened by military operations in southern Lebanon.

Accordingly, in June 1982, the UNESCO launched an appeal for the end of military operations in the region of Tyre and for taking the necessary measures to safeguard this important cultural site. On the 3rd of February 1983, the State Party ratified the World Heritage Convention (Paris 1972) and by the end of the same year four World Heritage Site nominations were submitted for Anjar, Baalbeck, Byblos and Tyre.
Based on ICOMOS recommendations, Tyre was inscribed on the WHL in 1984 on the basis of criteria (iii) and (vi) of the UNESCO World Heritage Convention. Nevertheless, Tyre’s nomination file was missing fundamental clarifications that were required for any WHS; among which were a clear statement of outstanding universal value, a precise definition of boundaries and a comprehensive conservation and management plan for the inscribed site.

In 2009, the State Party had sent a draft statement of outstanding universal value (including the conditions of integrity and authenticity) as a response to the 32nd session decisions (July 2008). In 2010, the WHC approved the adoption of a retrospective Statement of Outstanding Universal Value for Tyre (Decision 34COM 8E). While the boundary definition and management plan for Tyre remain to be finalized.

1.1.2 The Inconsistency in the World Heritage Boundary Definition

Tyre was inscribed on the WHL based on a general list of archaeological remains discovered during Chehab’s excavations. The nomination file, dated 29 November 1983, identified two groups of archaeological remains without clear boundary delineation (map 3):

- The old city (City site), located in the south western part of the historic island and it includes the Phoenician wall, the colonnaded road, the arena, the residential quarter, the palestra, and the baths from the Romano-Byzantine period, in addition to the Crusader’s castle and cathedral.
- The Necropolis (Al Bass site), located on the mainland in the east and comprises mainly Romano-Byzantine remains; namely, the necropolis, the monumental arch, the paved road, the aqueduct and the hippodrome.

However, a letter sent from the State Party’s UNESCO delegation at the UNESCO Headquarters to the WHC, dating 18.09.1984, has led to several misunderstandings regarding the question of the world heritage boundaries of Tyre. This letter described the archaeological perimeter of the city of Tyre to be from the town of Sarafand in the north to Ras el Ain in the south, with the surrounding hills to the east as its eastern limits. According to (Toubekis & Dentzer, 2009:16), an annotated map at the WHC associated this message to the world heritage perimeter and raised doubts on the accuracy or validity of the above mentioned statement (map 4; appendix 2).
As a result, the WHC has continuously encouraged the State Party to modify the original nomination file (299) and resolve the inconsistency of the boundaries (since 2006). The report of the 2009 joint ICOMOS/UNESCO reactive monitoring mission to Tyre was unable to clarify the apparent contradictions in various pertinent documents and the State Party was also unable to provide a clear definition of the boundaries.

“Since no precise property boundary exists, it has to be assumed that the designated protected areas documented in the Urban Plan are to be considered essential components of the World Heritage Site. Among others, the physical remains of the aqueduct and the unearthed and still covered parts of the ancient Necropolis constitute important components expressing the Outstanding Universal Value of Tyre” (Toubekis & Dentzer, 2009: 7).

In 2009, the State Party has sent the latest 2003 urban plan and zoning of Tyre along with the World Heritage boundary files of Byblos, Qadisha Valley and Anjar to the WHC (map 5). Decision - 34COM 8D congratulated Lebanon for the excellent work accomplished in the clarification of the delimitation of their world heritage properties. But apparently, the areas designated as (AR) protected zones on this map were accepted as the limits of Tyre WHS, and accordingly the area of the World Heritage property mentioned on the UNESCO website was updated to read 154 hectares. Moreover, the published Statement of Integrity (2009) explicitly assimilated the zones protected by national legislation, as designated by the urban plan (AR), into the inscribed property until the exact boundaries are formally defined by the State Party (http://whc.unesco.org/en/list/299).

However, the decisions of the WHC 35th session requested the State Party to establish as soon as possible a buffer zone to protect the property from excessive development and to submit a request for boundary modification to this end according to paragraphs 163-165 of the Operational Guidelines (Decision - 35COM 7B.52, 2011).

Consequently, considerable confusion persists as a result of the delay in defining the precise boundaries of the inscribed World Heritage Property and its buffer zones. The State Party did not officially define any new boundary delimitation for Tyre yet; therefore, it is not possible, neither for the State Party nor the WHC, to consider the (AR) designated areas of the urban plan a valid or formal World Heritage boundary.
Map 1: Map of Lebanon showing the five major coastal cities, including Tyre (23 km from the southern borders and 83 km from Beirut).
Map 2: Tyre administrative district and cadastral zones. Tyre cadastral zone (Sour) is one of the 75 cadastral zones in Tyre administrative district.
Map 3: Map of Tyre World Heritage Property as per the original nomination file.
Map 4: Tyre and Sarafand cadastral zones belong to two different administrative districts. This map shows the location and distance between Sarafand and Tyre cadastral zones, including the City and Al Bass sites.
2. **Key Management Issues and Causes of Delay**

2.1 *The National and Local Management System*

During the long years of conflict (1975-1990s), the local and national authorities responsible for the safeguarding of Tyre were incapacitated to a certain extent which led to the escalation of many problems pertaining to the proper management of the site. This, in addition to other issues related to the administrative system, organizational structure, lack of human and financial resources and the current political situation have led the diverse UNESCO missions to continuously report the incapacity of the administration and the delay in undertaking actions on behalf of the State Party.

2.1.1 Lack of Human Resources and Other Institutional Constraints

Toubekis and Dentzer (2009: 22) have rightly explained the main constraints affecting the proper management of the cultural heritage assets to be due to the current staffing situation of the DGA. In fact, at the time of writing their report, the total staff of the DGA was made of one Director General, six persons for the Administrative Section (*Diwan*), three persons for the Museum Section, six persons for the Archaeological Excavations Section, and one architect for the Historic Monuments Section. Today, the situation is even worst, as the DGA has been without a Director General since April 2010. Currently, the responsibilities of the Director General have been assigned to the Head of the Archaeological Excavations Section. This single employee will have to coordinate the administrative work related to all of the DGA units. In addition to his own original responsibilities and duties, he has to coordinate with the Minister of Culture on all DGA related matters. This is basically the case of all the employees at the DGA; they are overloaded with daily routine administrative work to the extent that they don’t have a chance to think on a higher strategic level.

Since its inception, the DGA did not consider the inclusion of any management unit to look after Lebanon’s World Heritage Sites. Even the newly designed organizational structure (2008), failed to do so. Furthermore, the process of recruitment within the current structure and political circumstances has been paralyzed, leading to more shortage in the DGA personnel in all units. Consequently, resigned employees were not being replaced and current regional managers have become more and more overloaded with extra duties.
In principle, the management of national and international archaeological sites is the responsibility of the Archaeological Excavation Section. In addition to the coordinator of all archaeological excavations that takes place on the Lebanese Land (the Acting Director General), this section is made of 7 archaeologists (two archaeologists for the South Region, excluding Sidon (map 3); one archaeologist for the North Bekaa Region; one archaeologist for the Capital Beirut and West Bekaa region; two archaeologists for Mount Lebanon Region and Sidon; and one archaeologist for the North Region.

Consequently, these archaeologists are in charge of the World Heritage properties within their regions and act as site managers. The duties of the two archaeologists responsible for the whole southern administrative region can be summarized as follows:

- Coordinate all the archaeological excavations that take place in the region.
- Examine all development permits in the region and undertake watching briefs wherever needed.
- Coordinate with all the Municipalities of the south and other concerned stakeholders, especially in archaeologically rich areas.
- Monitor, report, and stop any illegal development in the region.
- Monitor and report the state of conservation of all archaeological sites.
- Follow up and supervise any conservation undertaking at archaeological sites.
- Document compilation of the archeologically related matters and activities.
- Management of all archaeological sites including the Tyre WHS.

It goes without saying that what these two archaeologists are doing is beyond the human capacity. Such a work load is normally divided on teams with different backgrounds, responsibilities and specialties. Therefore, it is natural that certain issues or requirements may be overlooked or neglected while responding to more urgent matters.

For this reason, the WHC had usually sent technical assistance and monitoring missions to do the job on behalf of the DGA. Due to the lack of human resources, the State Party could not respond properly and in a timely manner to the different recommendations resulting from the consecutive UNESCO reactive monitoring missions. With the issue of recruitment remains unsolved, the DGA has acquired over the years a collection of specialist reports full of repetitive recommendations without any tools for implementation.
2.1.2 Lack of Financial Resources

The DGA is a Directorate within the Ministry of Culture (MoC). Similar to other Administrative Directorates in the Lebanese Government, it does not directly benefit from its generated income. Instead the Treasury at the Ministry of Finance (MoF) dispenses annual budgets for each ministry. The annual budget dedicated for the DGA does not take into consideration the specificities of the DGA type of work in terms of scientific research and conservation requirements; therefore, it is very low against the allocated responsibilities.

Major maintenance and conservation requirements end up not being covered within the budget due to its high costs. Furthermore, the expenditure procedures in place are too long while the bidding process is very slow and impractical; especially when emergency interventions are required. This discourages the DGA available employees to apply for such a time consuming process given their work load.

Due to the lack of in house specialized and technical employees, the DGA has to refer to external outsourcing of specialists. Within the framework of this process a contractor or consultant needs 6 months after the submittal of invoice to receive his final payment, on condition that the project falls within the budget. This has discouraged external experts to deal with the DGA when jobs are internally funded. Consequently, the budget coverage is restricted mainly to the administrative operational needs of the DGA (payroll, office equipment, stationary, and other administrative daily expenses) with minimum maintenance intervention at Tyre and elsewhere in terms of weeding, fencing, and minimum required stabilization of structures. As a result, external funding and outsourcing are considered as the best practical means to ensure the proper protection of the site.

Furthermore, since the expenditure procedures did not evolve from the late 60s and the expenditure fees of heavy machinery for undertaking mechanical excavation works were not updated, the DGA could not cover the expenses of any preventive or research based excavations from its own budget. Consequently, no excavations are taking place by the DGA at the WHS site or in the region of Tyre other than the developer funded preventive excavations or externally funded targeted research excavations.
In this context, the WHS’s share of the annual DGA budget is restricted to salary payment for the site manager and available guards, in addition to regular maintenance activities. However, the local authority, represented by the Municipality of Tyre (MuT), is also responsible to spend on the maintenance of the WHS, since it receives fifty percent of the generated income through the sale of entry tickets. However, the fact that the number of visitors to Tyre WHS is very low compared to other WHS in Lebanon, such as Baalbeck and Byblos (figure 1), the MuT’s responsibility within the two archaeological sites remains limited to cleaning (garbage collection) and the monthly payment of salaries for two ticketing officers. Despite the limited budget and the low revenue generated by the WHS at Tyre, the laws in place do not allow the exercise of any commercial activity on archaeological sites.

![Figure 1: The number of visitors to Tyre, Sidon, Byblos and Baalbeck as per the yearly statistics of the Ministry of Tourism (2008-2011). According The MoT the entrance fees to Tyre archaeological sites vary from 6000 L.L or 4 $ per person/per site for foreigners, 3000 L.L or 2$ per person/per site for Lebanese citizens and 1000 L.L per Lebanese student /per site (MoT).]
Based on the above financial constraints, Tyre has been relying upon international financial support for main conservation and management projects. International funding of the World Bank (WB) and other governments, such as that of Italy (Italian Cooperation) and France (Agence Française de Developpment), contribute widely through the CHUD project for the enhancement of the cultural heritage (table 1, appendix 1). Other international institutions and nonprofit organizations have also contributed to the maintenance of Tyre’s outstanding value through limited projects; such as, the UNIFIL fencing project of Al Bass site in 2009.

<table>
<thead>
<tr>
<th>Tyre 1.5</th>
<th>Component Description of Projects as per PAD</th>
<th>Component Description of Projects according to the implementation process / New contract names</th>
<th>Funding Source</th>
<th>Project Cost USD (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5.1</td>
<td>Improvements to the Port waterfront, public spaces and historic buildings</td>
<td>Works Phase 2: Fishing Port area, waterfront, public spaces and historic buildings</td>
<td>AFD</td>
<td>3.753</td>
</tr>
<tr>
<td>1.5.2</td>
<td>Gateway and Bawabeh Square, commercial and parking facilities (study)</td>
<td>Works Phase 2: Bawabeh Square, Hamra street &amp; Jaafarieh square.</td>
<td>WB GoL</td>
<td>3.609</td>
</tr>
<tr>
<td>1.5.3</td>
<td>Hamra Street and Hammam Square, public space and street frontage improvements</td>
<td>Works Phase 1: Infrastructure Works</td>
<td>WB GoL</td>
<td>1.021</td>
</tr>
<tr>
<td>1.5.5</td>
<td>Cultural promenade at the interface of the archaeological and historical areas</td>
<td>Works Phase 1: Cultural path</td>
<td>WB GoL</td>
<td>1.655</td>
</tr>
<tr>
<td>1.5.6</td>
<td>Coastal protection and promenade</td>
<td>Works Phase 1: Coastline preservation</td>
<td>WB GoL</td>
<td>1.055</td>
</tr>
<tr>
<td>1.5.10</td>
<td>Detailed Engineering and Supervision services</td>
<td>Detailed Engineering and Supervision services</td>
<td>WB GoL AFD</td>
<td>0.672</td>
</tr>
<tr>
<td><strong>Sub total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>11.765</strong></td>
</tr>
</tbody>
</table>

Table 1: CHUD executed urban projects until January 2010. The table shows the actual implementation costs and the source of funding for each part of the project (CHUD-CDR).
2.1.3 Lack of Strategic Planning

Since the DGA is understaffed and the available employees are overloaded, the regional managers and the Director in charge have to deal with situations according to priority as they appear after consulting with the Minister of Culture, leaving minimal time for strategic planning at the management level.

For instance, although the CHUD project is a well planned initiative for the development of the country’s cultural heritage, but it focuses mainly at the enhancement of cultural tourism through its economic and social development objectives. In this sense, the improvement of the city of Tyre and its WHS is considered a means for that development. Consequently, the designed projects do not always properly respond to the benefit of heritage and the preservation of its outstanding values, as much as, it responds to the urban requirements of economic regeneration. This is partly due to the absence of a comprehensive conservation, management and maintenance strategies placed ahead of planning for the CHUD project and/or other projects.

2.1.4 Insufficient Level of Coordination and Communication among Stakeholders

The two archaeologists positioned at the DGA regional office in Tyre are mainly responsible to maintain effective coordination and communication with the local authority to ensure that the law is enforced and the archaeology is properly protected. Due to the work load, these archaeologists most of the times rely on informal communication with the MuT and other stakeholders. This kind of communication could be effective when related to general issues of maintenance, cleaning and weeding, etc. However, when it comes to illegal undertakings or more complicated issues, such as politically sensitive cases this form of communication proved ineffective. Although empowered by law, the MuT requires formal requests on behalf of the MoC in order to be in a better position to stop illegal developments and works around the Old City and its archaeology. However, the process of formal communication procedures is long and requires follow up on behalf of the regional office, an action that cannot happen in a timely manner. This is mainly due to the lack of human resources at the DGA main and regional offices.

The lack of coordination and communication is not only noticed between the regional and local heritage authorities, but also is highly evident in the communication between the DGA and other ministries and the rest of the local community.
As a result of the work pressure on the available staff, they do not have the time to communicate the diverse undertakings with other stakeholders including the NGOs and the local community. In parallel, these parties may refer to the media and/or the international community instead of the DGA to raise their concerns regarding the WHS and, at the same time, to exert extra pressure on the local and national authorities in order to prevent some developments. For example, being not well informed, some NGOs are becoming more of a threat due to their ability of mutilating and changing facts that are built on their limited knowledge of issues at stake. Instead of being a support for the DGA in terms of awareness raising, these NGOs are becoming an obstacle due to the lack of proper positive communication.

This deficiency in coordination and communication is quite visible in the delay or absence of responses between the different government departments who suffer similar shortfalls as the DGA, for example:

- In 1998, the Ministry of Environment (MoE) declared the area from the Rest House Resort in Tyre to Ras el Ain a nature reserve. In 2006, a management plan for the nature reserve was developed without consulting with the DGA despite existing and potential archaeology of the designated area.
- In 2008, the DGA has requested from the DGU an extension of the building moratorium for three extra years. No reply has been received yet.
- In 2002, the DGA has requested the feedback and opinion of the MoT&PW in the formal process to apply for a maritime protection zone decree. To date, this has not been received.
- During the month of April 2012, the DGA has requested an updated cadastral map for Tyre from the cadastral department under the MoF. To date, this has not been processed.

On the other hand, the relationship between the DGA and CDR, the implementing agency of the CHUD project, is quite acceptable due to the good level of communication and coordination maintained through the DGA Project Manager (appendix 1).
2.2 The Incomplete Archaeological Map of Tyre

Since 1996, the consecutive UNESCO missions have been calling for the establishment of an archaeological map for Tyre. This has been highlighted as a result of the future planning threat of some infrastructure and tourism development projects; such as the Saida – Nakoura highway project, the backfilling of the northern shoreline, and the development proposal for the enlargement of the commercial port to house a tourist marina (Bizri and Fonquernie, 1996; Karam, 1997; Stanely-Price, 1997; Droucourt, 1998). Consequently, various archaeological surveys took place by international and local teams to inform planning decisions, as well as, to complete the archaeological map of Tyre (Nara University of Japan, 1999; Japanese Archaeological Expedition, August – September 2001; DGA survey and mapping of underwater remains, 2001, 2004, and 2005, etc.).

The new urban plan designed for the city and its surroundings in 2003 created a real pressure on the heritage management authorities. Within this urban plan, many land portions owned by the government were to be freed, sectioned and sold for construction. Aware of these threats, the DGA aimed to carry out a wide range survey for the potential archaeological remains of Tyre and its surroundings in order to build up an archaeological risk map that will be the basis on which the decision making process is performed by the Lebanese Authorities (Seif, A., et al., 2009). To be able to do so, the DGA acquired a three year building moratorium on government public lands (2005-2008) from the Directorate General of Urban Planning (DGU).

Given the persistent threat of development over the highway area and the limited resources available for the DGA to survey all the free public lands, geophysical surveys along the proposed highway project and feasibility studies for the port project took priority due to the huge archaeological and environmental impact. The results of the impact assessments and the archaeological surveys were very useful. It indicated that the enlargement plans of the port should be halted and the highway plans should be amended (Ghattas, G., 2007; Seif, A., et al., 2009).

The initial highway design proposed an interchange that would have cut through and destroyed some tombs at Ramali in Burj el Chemali. Accordingly, the DGA asked the modification of the design in order to protect the discovered archaeology and divert the risk over major archaeological remains (figures 2-5).
Figure 2: The Saida – Nakoura highway plan before and after the modification of design.
In 2005, funds were secured from the WB within the framework of the CHUD project to undertake “Tyre Archaeological Mapping” project (TAM project). The aim was to create a GIS for Tyre and integrate all the results of the above surveys into a Geodatabase. The foundation of the TAM Geodatabase was laid in 2006, however, with the outbreak of July 2006 War, all survey activities, as well as, the integration of the data into the TAM Geodatabase had to discontinue.

For this reason, the 2006, 2007 and 2009 UNESCO missions recommended that the DGA geophysical prospection should continue and that preventive excavations should be carried out before the establishment of the final route. Due to the lack of resources and funding, the DGA was neither able to complete the data compilation and its integration into the TAM Geodatabase, nor the detailed geophysical survey. The TAM project was on hold before its arrival into a proper informative state and consequently, the State Party could not respond to the boundary modification request and that of a management plan earlier on.

Furthermore, the 2009 reactive monitoring mission further recommended that the State Party should ensure an extension of the three-year moratorium concerning constructions in the potential archaeological areas and complete the full documentation and survey of Tyre, then update archaeological records for the site on the GIS with available geographical data to enable effective management (Toubekis and Dentzer, 2009: 13, 69-70).

In fact, the DGA has requested from the DGU an extension of the building moratorium decree for three extra years in order to complete the above mentioned task. However, no official decree has been issued regarding this matter. This implies that the earlier moratorium decree remains operational until its official cancellation or amendment by the Council of Ministers (CoM). Therefore, there is no imminent threat of development on public properties for the time being.

The fact that the highway construction was not resumed since its modification and the building moratorium is still effective has allowed the DGA to assume its usual intervention strategy to protect and record the buried archeology elsewhere in areas with higher development pressure until a funding opportunity becomes available to continue the survey of public properties and integrate the results accordingly into the TAM Geodatabase.
Figures 3-4: The rock cut tombs at Ramali in Burj el Chemali (April 2012). After the diversion of the highway plan, the tombs were restored and prepared for visitors’ enjoyment by Nara University - Japan in collaboration with the DGA in 2007.

Figure 5: Lime stone quarry next to the rock cut tombs at Ramali (April 2012).
2.3 Urban Expansion and Development Pressures

The physical vestiges of ancient Tyre extend beyond the current boundaries of Al Bass and the City sites and outside the 2003 urban plan protected (AR) areas (appendix 3 and 4). These remains are complimentary aspects of the OUV; nevertheless, both, the exposed and buried remains are threatened by the previous uncontrolled urban development spanning over a long period of time.

- The placement of Palestinian refugee camps over areas with high archaeological potential and the absence of control

The administrative zone of Tyre is composed of 3 legal Palestinian camps established by UNRWA and twelve gatherings. Two camps are located in the cadastral zone of Tyre; Al Bass and Al Rashidieh refugee camps. These two camps, in addition to Burj el Chemali camp and the two gatherings of Jal el Baher in Abbassiyeh and Al Maachouk in Burj el Chemali are located in the vicinity of the WHS (map 6).

Al Bass and Al Rashidieh camps were originally built by the French during the 1930s for Armenian refugees. Then, they were used by the Palestinians from the early 1950s onwards before the initiation of any excavation. Over the years, these camps became poor cramped urban settlements; the number of refugees was incrementing while the surface area of the camps has not increased with population leading to the growth of camps vertically. According to UNRWA 2011 statistics, the number of registered refugees at Al Bass is around 10.559 and at Rashidieh camp is around 29.363 (http://www.unrwa.org/).

This population increase has offered little privacy to residents and exposed them to health hazards. Besides, the refugees living conditions are harsh; they suffer from social, political and economic exclusion. Indeed they are barred from owning property or practicing more than 30 professions, among which all liberal professions. A survey undertaken by the American University of Beirut (AUB) on behalf of UNRWA, evaluated the socio-economic conditions of Palestinian refugees in Lebanon (Chaaban, J., et al., 2010). According to this survey, two thirds of Palestinian refugees are poor, which equates to an estimated 160,000 individuals. The poverty rate is higher in camps than in gatherings, nearly three quarters of camp residents are poor while slightly more than half of gathering residents are poor. There are twice as many poor among Palestinian refugees and occurrence of extreme poverty
is four times higher as compared with the Lebanese population (ibid, 2010: xi-xii). Moreover, the Lebanese army controls access to Palestinian refugee camps, restricting refugees’ mobility. This exclusion has led that camps become enclaves outside the authority of the Lebanese State.

Incapacitated by the precarious living conditions for refugees living in or outside camps and the restricted access into these camps for security reasons, the local authorities are not exercising any form of control over illegal developments within the camps even if some of these developments are affecting the visual integrity of the adjacent WHS. Consequently, the responsible authorities cannot measure the degree of threat or damage resultant from any possible occurrence of clandestine excavations or destruction of the buried archaeology due to the absence of regular inspection by the DGA (figures 6-10).

Figure 6: The Romano-Byzantine road at Al Bass Site and the Palestinian Refugees camp (April 2012).
Figures 7-8: The proximity of the Palestinian refugees’ buildings to the WHS at Al Bass camp. Notice the recent addition of extra floors over existing structures at Al Bass camp (April 2012).
Figure 9: The Roman Aqueduct at Al Rashidieh Refugee camp is still being used to water the neighboring banana plantations (April 2012).

Figure 10: The repair of the Roman Aqueduct by the addition of concrete canals at Al Rashidieh camp (April 2012).
 Apart from the complicated case of the Palestinian camps, lots of illegal developments took place during the long years of conflict (Civil War 1975-1990). Illegal practices are quite evident on private properties in the modern town of Tyre and over public properties in the area of Tell el Maachouk. Some of these developments act as visual eye sores that disconnect the two archaeological sites from each other and/or from their extension. While other developments are causing a major threat on the buried archaeology, as well as, exposed archaeological structures (figures 11-16).

Figure 11: Tell el Maachouk current urban condition (April 2012).
Figure 12: The remains of the Roman Aqueduct at Tell el Maachouk. The aqueduct serves as a foundation for illegal buildings on top. Despite the enormous load imposed by these constructions, the aqueduct is in good condition.
Despite the existing problems of urban sprawl and Palestinian camps, the 2003 urban plan of Tyre took into consideration the presence of buried archaeology, whereby, some areas were designated (AR) hoping that in the future a solution is found (appendix 3). Nevertheless, the urban plan disregarded some of the major recommendations of the DGA, of which, to designate all the zones in the immediate vicinity of the two archaeological sites as (A1) allowing a maximum of three floors to be built. Instead, the DGU adopted a middle range solution; these critical areas for the protection of the integrity of the WHS were designated (A2 and A3), allowing 5 floor buildings to replace the high rise buildings in the future (over 15 stories, especially west of the hippodrome).

The previous illegal urban expansion, mainly over public properties (D and AR designated lands), the proximity of Palestinian camps to the WHS and its placement over rich buried archaeological potential, in addition to the uncontrolled high rise developments in the modern town of Sour, increase the constraints related to delimiting a *non-aedificandi* buffer zone around the WHS and render the job of the boundary delimitation and its future management a complicated task.

![Figure 13: The high rise buildings to the south west of Al Bass site, with the remains of the aqueduct in the forefront (April 2012).](image)
Figure 14: The high rise buildings in the vicinity of the City site. The area behind the City site was designated (A1) on the urban plan after the erection of these high rise buildings.

Figure 15: An example of the illegal wooden cafés installed along the shoreline around the promontory (April 2012).
Figure 16: An illegal 10 storey building in the Old City of Tyre, built during the late 1980s. The local authorities stopped the development at a later stage and no permission was granted for the completion or use of the building in its present height (April 2012).
2.4 *Deficiency on the Site Management Level*

In addition to the above mentioned significant constraints, other factors contribute indirectly to the delay in formulating a management plan. The majority of which is related to the deficiency on the site management level and the huge amount of work and research needed to formulate a management and conservation plan given the present situation.

2.4.1 Lack of Comprehensive Site Documentation and Inventory

The last reactive monitoring mission to Tyre stated that the poor level of documentation of the site remains an obstacle for effective management at the local level. It further encouraged the support for the DGA to carry out comprehensive documentation of the archaeological remains of ancient Tyre including their scientific publication (Toubekis and Dentzer, 2009: 9).

The detailed documentation of the state of conservation, the extent and type of conservation or restoration works undertaken, the compilation of existing data and its integration into the TAM Geodatabase did not take place as planned. Consequently, it led to a delay in the management plan preparation. Furthermore, the delay in setting up a systematic and comprehensive Sites and Monuments Record (SMR) has caused a major hindrance in defining the perimeter of the World Heritage property and its buffer zones.

For the past few years, a considerable amount of documentation has been produced by the different scientific missions; such as, the Nara University of Japan in 2002 (Takase, et al., 2003) and the consultants of the CHUD project; ARS Progetti and Planarch, within the archaeological component of Baalbeck and Tyre Archaeological Project (figure 17). Nevertheless, the compilation of all known information and available documentation, in addition to the documentation of the state of conservation require a considerable amount of time and more staff and financial resources to be accomplished.
2.4.2 Lack of a Comprehensive Conservation Plan

The DGA, in collaboration with other institutions, have conducted significant conservation projects for the city. Nevertheless, the adopted approach was selective and based either on specific missions’ interests or targeted activities as per the identified priorities rather than following a holistic approach to conservation (figures 3-4; 18-20).
Moreover, some targeted structural and surface conservation activities will take place on Al Bass and the City sites within the framework of the CHUD project (appendix 5). However other archaeological monuments suffer from a variety of similar and other kind of problems that will not be addressed in the near future; such as previous inadequate protective measures and its negative effect on the visual and physical remains of the archaeological site (figures 21-24). This will pose additional challenge for the responsible authorities while setting the foundation of a management and conservation plan. Besides, the modified boundary and the addition of an official buffer zone will increase the problematic conservation areas that will need a thorough strategy for its management (such as ‘Hiram’ site).

Figure 18: The backfilled area of the Byzantine Basilica in the modern town of Tyre. The conservation and backfilling of the Basilica took place in 2003 (April 2012)
Figure 19: A funerary complex at Al Bass site looking south. This complex was restored in 2003 (April 2012).

Figure 20: The growth of weeds within the mosaic floor of the restored funerary complex at Al Bass site due to the lack of regular maintenance, looking south (April 2012).
Figures 21-22: Inappropriate conservation measures and the improper use of cement and iron bars in putting the columns together (April 2012).
Figure 23: The erosion of exposed stratigraphy along the northern edge of the Romano-Byzantine road (April 2012).

Figure 24: Absence of rain water drainage at the Romano-Byzantine Necropolis of Al Bass site (April 2012).
2.4.3 Absence of Constant Monitoring and Maintenance

Although effective protection measures have been adopted in the past, but the absence of constant and periodic monitoring and intervention has led to the site degradation. The lack of personnel and technical staff involved in the maintenance of the WHS is leading to decay (figures 25-45). Since 2009, the number of site guards decreased from 21 to 9 guards on both sites (3 shifts per day: 8-14, 14-20, and 20-8). Those site guards were providing a good level of protection by advising visitors to stay away from fragile remains. Given the fact that maintenance is not systematically practiced, but rather according to emergency conditions; therefore, decay is proceeding at a faster pace than the repair work possible under the present circumstances. On the other hand, cleaning is more systematic, although some peripheral areas in Al Bass and City sites are informal garbage dumps.

One of the two regional DGA archaeologists, responsible for the entire district of Tyre, is solely in charge of the cadastral zone of Tyre including the WHS. This archaeologist and site manager often needs to supervise development works and urban excavations in the district outside of Tyre, away from the site. In this sense, the monitoring on the CHUD activities in and outside of the sites is minimal. However, a good level of communication and coordination is maintained between the Project Management Unit (PMU) at CDR and the DGA through the DGA project Manager.

![Image](image_url)

Figure 25: The Submarine Archaeology Center becomes a playground for children in the afternoon when the DGA employees working hours terminate (April 2012).
Figures 26-28: The current status of the DGA administrative building. Since its restoration in 2009, the building was not used by the DGA. Due to the absence of proper fencing from the Old City side, the property has become a playground for children. Notice the garbage thrown at the peripheries of the Medieval Cathedral site (April 2012).
Figures 29-31: Systematic cutting and removal of fences around Al Bass site due to the absence of monitoring (June 2012).
Figure 32: The 2009 UNIFIL funded fencing project at Al Bass site. With the absence of monitoring at the time of implementation, the fences were not properly fixed which jeopardizes its longer term viability (April 2012).

Figure 33: The Medieval Cathedral status in April 2012. The site was sprayed by the MuT with herbicides; however, there has been a delay in the actual weeding of the site which may expose the area to the threat of fire anytime if left for a longer period (April 2012).
Figures 34-35: Previously conserved mosaic floors at the Green Team Bath, Al Bass site (April 2012).

Figure 36: Previously conserved mosaic floors at the City site (April 2012).
Figures 37-38: Al Mubarkeh Tower was restored in 2006 and it was not maintained or monitored since that date. The tower has lost its interpretation panel and it was not replaced or even reported to the DGA (June 2012).

Figures 39-40: Illegal works at the DGA expropriated building (parcel no. 111 - Al Itihad School). The building has been illegally occupied by some families. Recently, works of opening a door providing access into Al Bass site was undergoing without the knowledge of the DGA (April 2012).
Figures 41-43: Painting works at the Old City were undertaken without the approval of the DGA. The work involved the exposure of sand stones by removing the old plaster from parts of the external walls while painting the other parts with different colors (April 2012).
Figure 44: The Maronite Church at the Old City. Hellenistic remains were integrated underground in the church crypt, with glass tiles providing day light (April 2012).

Figure 45: The Hellenistic remains at the Maronite Church can be visited by the public; however, due to the absence of proper ventilation, the remains suffer from high humidity (April 2012).
In this regard, another issue needs to be addressed; the absence of long term sustainable solutions in terms of maintenance on the urban level. Infrastructure and urban development projects are being implemented by the CHUD. After the finalization of these projects, the maintenance of public areas becomes the responsibility of the MuT. Contractors have to deliver an operation and maintenance manual for the MuT as per their contracts with CDR. However, the MuT also suffers from lack of human and financial resources. While the CHUD provides some tools for maintaining some public area, gardens for example, it cannot provide long term human resources to operate those tools, thus returning to a vicious circle of future degradation (figures 46-50). In this sense, future planning should seek better solutions that fits the locals’ level of awareness and enhances the Old City at the same time while engaging the local community.

The planning of the New Market at Bawabeh square is the only project that has given considerations to the future operation and daily maintenance of the Souk after the implementation phase. According to the Urban Specialist at CHUD - PMU, the users of the market agreed to contribute a certain fee to the daily maintenance operations of the Souk.

Figure 46: The public toilets at Bawabeh Square. These toilets were installed by the CHUD project few years back. Although the MuT undertakes daily cleaning, the area is in need of more periodic cleaning and monitoring throughout the day (April 2012).
Figure 47: The temporary market (souk) at the Bawabeh Square (April 2012).

Figure 48: The 3D design of the New Market (souk) at Bawabeh Square (CHUD - CDR).
The wooden path needs regular maintenance due to the high humidity level that causes the peeling of the paint of the wooden rails. In addition, the designed ground lighting system has been totally removed and never replaced since the end of the CHUD project.
2.4.4 Lack of Research and Studies

Proper management needs appropriate research on many levels; archaeological, historical, and socio-economic, etc. Maurice Chehab excavation of the 1950s and his own publications provide a valuable source of information about the archaeology of Tyre. However, given the old methods of excavations, we lack important information about the stratigraphy of the site. Limited excavations and research studies have been undertaken on the archaeological sites after the civil war; such as, the sounding done before the Civil War by P. Bikai at the City site, west of the Crusader’s Cathedral; the French mission of P.L. Gatier at the City Site; and the work done on the Roman hippodrome by the H. Kahwaji. However, further research at the site has high potential of offering new data that might challenge earlier interpretations and dating.

Furthermore, if the Old City of Tyre is to be included within the new boundaries, then lots of studies and surveys are needed to inform management strategies while taking the needs of residents into consideration; socio-economic studies on the city level and a comprehensive and updated survey and assessment of standing buildings in the Old City. Currently, the only survey of the Old City historic buildings is that of Pierre el Khoury buildings survey (2002) made to lay down the Old City Building Code. This survey and few socio-economic studies done by several institutions (UNRWA, UNDP, Caritas, etc.) are the only available material. The preliminary management plan will have to rely on this available data until further research and studies are initiated.

2.4.5 Visitor Management Concerns and Lack of Interpretation

At present, the archaeological sites at Tyre lack proper visitor facilities and informative interpretation. Some public access provisions, educational and visitor facilities, safety and protection measure were addressed within the framework of the CHUD project (BTAP). However, these are more focused on the Al Bass and City archaeological sites (appendix 5). The measures exclude other archaeological exposed areas, as well as, the Old City (figures 51-55). The work will involve the development of fencing, gates, visitor centers, ticketing offices, parking area, site museum, storage area, toilets, and new police buildings. Furthermore, an interpretation plan (BTAP 2) was prepared along with a designed cultural path within each site, educating and directing visitors. The assessment of these developments will have to be undertaken after the completion of the project.
The modification of the WHS boundaries of Tyre poses an extra challenge in terms of presentation and interpretation, especially that the interpretation plans were placed ahead of the boundary modification.

There is no doubt of the positive impact of the CHUD activities on the urban level, in terms of raising the number of visitors to the city. However, the increase in the visitors to the Old City and its archaeological sites will need to be taken into consideration in the management plan as it will raise more issues to be dealt with in the future.

Figure 51: The cultural path was developed along the medieval part of the City site and the Old City without any kind of interpretation (CHUD - CDR).
Figures 52-53: “Hiram” archaeological site. The site is not open for public, visitors can see it through the fences while walking from the City to Al Bass site or vice versa. The site present condition, lack of interpretation and absence of weeding, the site cannot be understood (June 2012).
Figure 54: The design of the new Al Bass Museum complex in 3D view (CHUD - CDR).

Figure 55: The museum exhibition plans of the ground floor (CHUD - CDR).
2.4.6 Environmental Threats

The authorities are aware of the available environmental threats (erosion, earthquakes, and pollution, etc.), but there are no plans for risk preparedness yet due to the lack of financial resources (figures 56-57). The major causes of archaeological structural degradation were addressed by the CHUD project (BTAP). This will minimize the expenses related to its future maintenance (figure 58).

The future management plan will have to take into consideration existing and potential environmental threats that might threaten the OUV of the WHS and prepare a strategy for risk preparedness. The DGA personnel is capable of implementing a risk preparedness action plan for Tyre once funding is ensured, especially after the 3D laser scanning training and joint project to prepare a risk preparedness strategy for Baalbeck in cooperation with the Lemaire Institute for Conservation.

Figures 56-57: The City sewage flowing north of the commercial port. This sewage will continue to flow directly into the sea until the finalization of the main sewage treatment station at Mhaileeb (April 2012).
Figure 58: Mapping the surface degradation of the Colombarium at Al Bass Necropolis (CHUD- CDR).
2.5 Other Influential Factors

2.5.1 Insufficient Level of Cultural Awareness and Education

The low level of cultural awareness and education threatens the WHS in many ways; unaware of the values of the site and their role in protecting it, the locals contribute to the degradation of the World Heritage property. The uncontrolled movements and free access into the archaeological sites increase the site erosion and degradation due to the low level of awareness (figure 59, 62).

The underwater archaeologist, I. Noureddine, have reported recently to the DGA the disturbance of the underwater Phoenician jetty at the northern harbor by treasure hunters. Luckily, this jetty was already surveyed by I. Noureddine before its disturbance in 2001 (Noureddine and El-Helou, 2005: 111-126). However, few uncontrolled treasure hunting activities still take place at the marine bottom (figures 60 - 61).

Figure 59: The City site direct exit to the beach installed into the Sea Wall by the CHUD project. The gate was broken by the locals to provide free access (June 2012).
Figure 60: A local from Tyre treasure hunting west of the City site at the foot of the Sea wall (June 2012).

Figure 61: A local from Tyre spear fishing west of the fishing port (April 2012).
2.5.2 Lack of Training and Heritage Practitioners

There is a need for training of young professionals in the fields of heritage site management. Until last year, the important aspects of management were not part of the curriculum for graduating archaeologists and at the same time, there has been no separate heritage management specialty. Recently, the higher education system was enhanced and new subjects were introduced; such as, heritage and site management, as well as, WH management issues. Nevertheless, the number of registered students is reducing at an alarming rate. The last UNESCO/ICOMOS reactive monitoring mission has already reported the above problem by stating:

“While the lack of staffing resources within the Ministry of Culture would require more committed professionals to be engaged over the long term, the reality is exactly the opposite, as the subject of archaeology is threatened with extinction at the large universities of the country” (Toubekis and Dentzer, 2009: 49).
2.5.3 Political Instability in the South

The southern region of Lebanon has a long lasting reputation of instability. The region has been subject to many assaults since the early 1980s. The presence of the UNIFIL in the region reflects the dense security situation in the south of the country. In 2006, Tyre was heavily affected by air bomb assaults and a bomb strike was reported in close proximity to the archaeological remains.

The feeling of insecurity is affecting the number of foreign visitors to the archaeological sites of Tyre. According to the MoT statistics 2008-2011 (figures 1, 63), the WHS of Tyre received (6,449) visitors in 2008. The number of visitors increased to (10,592) in 2009, and to (15,725) in 2010, then it decreased to (10,143) in 2011. At its highest, the number of visitors to Tyre did not exceed the minimum visitor number achieved at the partially preserved Crusader Castle in Sidon (32,389 visitors in 2008).

Although, this small castle does not carry a World Heritage designation, yet it receives more visitors per year than Tyre. The reason may be due to the fact that Sidon is closer to Beirut (45 km only); while Tyre is double that distance and closer to the southern border (only 23 km away from the occupied part of Palestine; map 1) and usually foreign embassies discourage their citizens from going that close.

![Figure 63: The number of visitors to Tyre and Sidon (2008-2011), according to the MoT statistics (MoT).](image-url)
3. **Actions Taken by the State Party**

Since the last joint ICOMOS/UNESCO reactive monitoring mission to Tyre (16-20 February 2009), the State Party undertook a series of actions and measures in order to enhance the conservation and management of Tyre WHS and its environs.

Primarily, the DGA has developed a strategy and an action plan that will pave the way forward for a better management of Tyre WHS. The major concern was to eliminate the main reason behind the delay to respond to the 35th committee decisions by providing the most essential means for the plan’s implementation; financial and human resources.

Despite all the difficulties and constraints (limited human resources, lack of data, and the restriction on time), the State Party succeeded to accomplish the assigned tasks to a reasonable extent, in addition to other achievements already planned within the framework of the CHUD project.

### 3.1 DGA Action Plan for Tyre WHS

The State Party has developed a short term action plan (2012-2014) for the management of Tyre WHS (appendix 6). The plan considers the issues to be addressed, the objectives to be reached and the methods to be used to achieve it. The defined objectives are SMART (specific, measured, agreed, realistic and time tabled). The process involves three stages; planning, action, and review. This process allows the application of the most relevant measures in relation to the set objectives.

The plan tackles the most urgent issues; therefore, it is not constant. The plan will be reviewed and adjusted along the way and mainly, after the approval of the WHC on the modified boundary request.

### 3.2 DGA Objectives and the Corresponding Actions

The Action Plan (2012 – 2014) identified 12 major objectives with a work program for the achievement of the stated objectives. To achieve the set objectives, the DGA identified *external funding and outsourcing for specific jobs and assignments* as a short term practical solution to overcome the recruitment problem, as well as, the shortage in achieving minimum maintenance for the WHS.
With the availability of funds, the DGA will be able to assign joint external-internal working groups to achieve each objective or set of objectives as per the plan’s defined actions.

3.2.1 Strengthen the Human and Financial Capacities of the DGA

Key Action 1: External funding provisions

- External funding provision for short-term recruitment

After the identification of the most pressing needs, an outsourcing recruitment plan was placed by the DGA in collaboration with the CDR. Whereby; funds were secured from the AFD within the framework of the CHUD project to recruit three experts capable of responding to the requests of the 35th Committee Decisions of the WHC.

More funds were also secured by CDR from the Italian Cooperation (IC) for the recruitment of two specialized staff in order to operate the Submarine Archaeology Center (SAC) and another two employees to create an inventory of the on-site stored archaeological objects on behalf of the DGA. Both contracts will be valid for a period of 2 years, hoping that in the future the DGA integrates those recruits within its administrative team.

- External funding provision to implement the last phase of the CHUD project

During the year 2012, the State Party was able to secure additional funding from the WB and AFD in order to launch the implementation of the 3rd phase of the CHUD project as described in the PAD and therefore, complete the whole CHUD project in Tyre (appendix 5).

- External funding provisions for better site management

The WB has already funded the procurement of furniture and IT equipments for the SAC and the DGA administrative buildings at Tyre, in addition to the purchase of two cars to be used by the DGA staff. Last month, the submarine diving equipments for the SAC were purchased and stored temporarily at Al Bass storage area (appendix 5; figures 64-66).
Key Action 2: Contractual outsourcing for specific jobs

- With the provision of additional funds for the implementation of the 3rd phase of the CHUD project, the Project Management Unit (PMU) and the MuT Technical Assistance unit will remain operational until the end of the CHUD project in 2016. The PMU has been established since 2005 within the CDR to implement the CHUD project in Tyre, while the MuT – TA unit was established in 2006 and today, it is responsible for operating social and cultural activities at the City House - Beit el Mamluk (appendix 1).

- In collaboration with the UNESCO Regional Office in Beirut, the DGA and CDR are currently preparing a contract for the recruitment of two experts to do the inventory of the onsite stored archaeological objects and another two experts with the necessary skills to undertake survey, documentation and research of Tyre’s underwater heritage and operate the SAC. The recruitment plan will take another 2-3 months to be finalized.

- Earlier this year, a consultancy contract was requested by the MoC under the DGA Technical Assistance program of the CHUD project to respond to the Decisions of the 35th session of the WHC.

  The DGA specified the required number, experience and skills of the needed experts and the CDR undertook the recruitment procedures accordingly. However, the available funding from the AFD necessitated the recruitment of three instead of four experts requested by the DGA to perform the below assigned jobs.
Missions and Responsibilities

The recruited experts have to work in close collaboration with the DGA staff, under the supervision of the Director in Charge, Dr. A. Seif. Below is a summary of main tasks and responsibilities assigned by the DGA for each team member:

a. An inventory of archaeological material
   In collaboration with Mrs. A.M. Afiech, Head of Museums Department at the DGA, the first expert has to create an updated systematic inventory for all Tyre small finds stored at the National Museum. The aim is to check on their state of conservation and select the suitable material for museum display at a later stage. This undertaking will enable the DGA to assess the type, chronology, and importance of the archaeological sites from where these finds were retrieved. Consequently, a better boundary delineation and management plan would be drafted.

b. An inventory of documentation
   The second expert’s mission is to compile all the documentation related to Tyre, from historical and travelers’ accounts to old maps and photos, in addition to all the studies, research and publications of the different archeological and survey missions that have worked in Tyre. The ultimate aim from this compilation of data is 1st, to create a central database for Tyre, and 2nd, to perform the data entry on the TAM Geodatabase with the assistance of Mr. G. Ghattas, Head of the GIS unit at the DGA.

   The above created database will assist in setting the WHS boundaries and buffer zones, as well as, the Marine Protection Zone (MPZ). Furthermore, it will pave the way for a preliminary management plan in the future.

c. A boundary modification request and report preparation for the WHC
   The third expert has to work in close collaboration with Dr. A. Seif, Head of the Scientific Departments and Coordinator of the Archeological Research and Excavations at the DGA. They both need to coordinate with the rest of the team members and all the concerned stakeholders in order to:

   ▪ Prepare and submit a new amended request for the MPZ to the CoM. The new request will take into consideration the latest underwater and geo-morphological research results to ensure the maximum protection of areas with high archaeological potential.
- Prepare and submit a World Heritage Boundary Modification request. The delimitation of the new request will have to rely on the latest updated compiled data and documentation.

- Submit an exhaustive report concerning the state of conservation of the WHS of Tyre and the actions undertaken by the State Party in order to enhance the protection and management of Tyre WHS.

- Establish a communication and coordination network with all the involved stakeholders to set the foundation for the preparation of a preliminary management plan.

The contracts of the recruited experts were designed in a way that ensures the fulfillment of the above stated objectives while keeping in mind the probable need to adjust the boundaries at a later stage. Therefore, the 1st contract ends by June 2012, the 2nd contract ends by September 2012, and the 3rd one will last until February 2013.

**Key Action 3: Increase the number of contractual and/or permanent WHS employees**

- The DGA has opened a recruitment opportunity based on yearly renewable special contracts for site guards and/or technicians. The salaries of the recruited staff will be covered by the DGA annual budget.

  The selection process is at its final stages and shortly the City and Al Bass sites will receive 21 additional employees capable of providing proper protection and minimum maintenance of remains over three shifts during the day.

- The MoC has recently requested the approval of the Council of Ministers on the contractual hiring of around 34 persons between architects and archaeologists for the DGA. The Council of Ministers approved the recruitment request on the 12th of July 2012 (Decision 34/2012). The DGA is currently working on the implementation of this decision and the criteria for selection. The need for more employees to manage the WHS of Tyre will be taken into consideration.
3.2.2 Enhance Documentation and Inventory

**Key Action 4: Compile an inventory of documentation**

Each archaeological site, and more especially, WHS, should have all the documentation material compiled and available for use by researchers, as well as, site managers to inform future research and management. In fact, study and research papers, project reports, and publications related to the history and archaeology of Tyre were dispersed at different locations.

This part of the job involved the following steps:

- Consulting the archives department at the DGA, the regional archaeologists of the southern region, including the site manager at Tyre, the CDR and the CHUD consultant studies and surveys, the different university libraries and online scientific resources.
- Organizing all the old maps, photos, research documents, UNESCO and specialists reports, magazine and newspaper articles, in addition to all specialists’ surveys, especially those undertaken within the framework of the CHUD project in one database.
- Producing a preliminary record of all the compiled documentation.

A considerable amount of work has been done to produce this preliminary documentation record and work is still progressing in that direction. This record has to be updated continuously by the DGA staff.

**Key Action 5: Create a digital inventory of documentation**

During the compilation of documentation material, the State Party has worked on completing the digital record for all the existing and compiled publications and reports. The digitized material will be linked to the GIS database at a later stage.

**Key Action 6: Update the old special finds records**

The special finds retrieved from different excavations at Tyre, mainly, the City and Al Bass sites since the 1950s, are currently stored at the National Museum/DGA warehouses in Beirut; these include the special jewelry finds, metal objects, ceramic and glass objects. During the past three months, the State Party has finalized the update of the jewelry record, and currently, work is progressing on the inventory list of metal objects.
In this context, the old inventory lists were checked and cross checked with the corresponding item in order to detect its availability and/or absence from the stores. Then, these old records were updated with all the missing information and description of items in order to create a consistent and systematic record. And finally, a new photographic record was created for all checked objects documenting its state of conservation.

**Key Action 7: Create an inventory of on-site stored archaeological objects**

The State Party intends to recruit two employees in order to undertake the inventory of the available archaeological finds at Tyre (key action 2). At the time being, the DGA in collaboration with the UNESCO regional office in Beirut are preparing the contracts and the work on the inventory will start at the beginning of 2013 until 2015. The DGA future plan is to integrate these two contractual employees into its permanent team after the end of their contracts.

### 3.2.3 Complete the Archaeological Map of Tyre

**Key Action 8: Verify previous geophysical survey results**

The DGA has carried out some geophysical evaluations in the modern town of Sour and along the highway trajectory (2004-2005). The archaeological potential of the surveyed areas was defined and entered on a Risk Map layer within the GIS. Since no funds were available at the time to confirm the geophysical results by test trenching, preventive excavations funded by developers were seen as the best means to verify the previous geophysical results; accordingly, lots of work has been done in this sense. For example, the geophysical survey on parcels 2234, 2238, 2239 in the modern town of Tyre (Field A) revealed interesting GPR signatures which was associated with archaeological remains at a depth of 1.5 to 4.5 m (Ghattas, 2007: 38). Results were not checked at the time; however, when the owner applied for a development permit he was informed of the possible presence of archaeological remains on his plot and excavation proceeded to verify the GPR results (figures 67-69).

The same strategy will be soon applied when the work on the planned Saida-Nakoura highway is resumed. The DGA has put forward an intervention strategy that will verify the 2005-2006 geophysical survey results before the contractor initiate his work.
Figure 67: Areas of geophysical survey in the modern town of Sour undertaken by DGA in 2005. ‘Field A’ is located west of the Hippodrome (Ghattas, 2007: 6).

Figure 68: The GPR signature indicating potential presence of archaeological remains at parcel 2239 at a depth of 2.75 m in ‘Field A’ (Ghattas, 2007: 38).

Figure 69: Parcel 2239 during excavations. The presence of a structure (wall) was verified. Excavations revealed the presence of an Industrial area for glass making in addition to an Islamic cemetery.
Key Action 9: Geophysical survey and test trenching to complete the risk map

The highway project was recently resumed. In May 2012, the contractor started to clear the fields and prepare the ground for mechanical excavation and backfilling where needed. As planned, the DGA will shortly apply its intervention strategy along the planned highway route before any excavation by the contractor takes place (figures 70-74; maps 7-8).

It has been agreed that the DGA will resume detailed geophysical survey, followed by test trenching in the affected areas within a month. The DGA will monitor all phases of the project’s implementation and will proceed in taking the necessary action or mitigation strategy accordingly. These interventions and the resultant recorded data will eventually be integrated into the TAM.

Figure 70: The highway working area along the modified path (---). The contractor started clearing the highlighted area in front of the northern interchange in Abbassiyé towards the south. The first step involves mechanical excavations for a tunnel and a water channel at the indicated locations (yellow arrows).
Map 7: The highway plan provided by the Contractor (Al Itihad contracting).
Map 8: The highway profile showing the areas to be filled and/or excavated (Al Itihad contracting).
Figures 71-73: Clearance work at the highway trajectory in Abbassiye; area indicated in figure 70 (June 2012).

Figure 74: The Qasmiyeh water canal is a modern concrete channel used for irrigation. According to the plans, this canal will be replaced (June 2012).
Key Action 10: Integration of relevant data and documentation into the GIS database

Within the CHUD project, the DGA managed to set up a basic Geographical Information System which comprised various base maps; a topographical base map (dating 1964), IKONOS satellite Imagery (2005) and the zoning scheme of the Urban Plan (2003). These have been used as base maps for the TAM in 2005. The results of geophysical surveys undertaken by the DGA-UNESCO in 2005 and 2006, as well as, the Japanese survey results and other surveys were incorporated into the TAM with the precise extension of the areas of prospection indicating the methodology used, in addition to, the detailed outline of the planned highway project (figure 75; map 9; appendix 4).

Currently, the DGA is working on sorting out the compiled database. The existing archaeological database, plans and maps of excavations, reports, publications and historical images, in addition to the inventory of listed buildings and monuments, etc. are in the process of being integrated into the GIS database to further complement the TAM project.

This phase is expected to be realized by the end of this year, whereby a comprehensive archaeological map indicating the physical remains and designated protection zones and other relative management information will be produced, this system will ultimately enhance the management of the WHS and its buffer zones.

Until the completion of the risk map and/or archaeological map, the State Party considers the entire cadastral zone of Tyre and its environs an area of high archaeological potential unless proven otherwise by further research or excavation.
Figure 75: Distribution of archaeological surveys by type. It includes the DGA and Japanese field walking surveys, the DGA underwater and geophysical surveys, in addition to the French – Lebanese (CEDRE) geomorphological coring undertaken by Morhange and Marinner.
Map 9: Distribution of archaeological works by type. It includes all kinds of investigation activities and surveys undertaken by the different local and international teams, in addition to an indication of excavated areas and areas with high known potential.
3.2.4 Establish a Marine Protection Zone (MPZ)

**Key Action 11: Submit a marine protection decree project proposal**

Since no reply was received from the MoT&PW concerning an earlier marine protection decree request, a new modified one was prepared by the DGA. This time, the request will be submitted to the CoM directly. Currently, the MPZ proposal is being processed at the DGA legal department for the approval of the Minister of Culture before its submission to the CoM.

The modified proposal took into consideration the latest underwater and geomorphological research results to ensure the maximum protection of areas with high underwater archaeological potential; consequently, it accommodated the latest UNESCO/ICOMOS mission’s recommendations related to this issue (Toubekis and Dentzer, 2009: 35-36, 67, 70).

According to the proposal (table 2; map 11), four protection zones were identified:

a. **Marine Archaeology Protection Area (MA):**

   This area extends around the peninsula engulfing the Old City marine limits according to the Old City Urban Plan of 2007. It starts from the commercial port in the north until the end of the City site, adjacent to the Islamic College in the south. It is an area with high underwater archaeological potential; the drowned southern basin has yielded extensive archaeological material pertaining to a submerged urban quarter still active during the late Roman period (El Amouri et al., 2005) and the northern basin has revealed a Phoenician jetty, in addition to other remains from the classical and medieval periods (Noureddine and El Helou, 2005; Noureddine, 2008) (figures 76-78, map 10).

   For this reason, the DGA suggests maximum protection measures, prohibiting all kinds of marine activities, except swimming and line fishing. As well, the approval of the DGA is required before any marine installation or development in the water or on the shoreline of this area.
b. Marine Buffer Protection Zone (MB):

This area extends around the (MA) area up to 10 meters depth. It provides a buffer protection zone for the underwater archaeology at the MA area and, at the same time, it may itself be of high archaeological potential due to our knowledge that part of the Phoenician island was submerged in water after the rise of the sea level in classical times. Therefore, the DGA suggests the prevention of any underwater activity in this area until its survey is completed, including diving and net fishing. According to the proposed decree, the DGA has to approve all kinds of marine installations and/or activities in this area.

c. Coastal Protection Area (MC):

A total area of 182.05 meters extends along the shoreline to the north and south of the peninsula. It widens up to 5 meters depth into the sea, from Baqbour in the north (Abassiyeh cadastral zone) until the commercial port in the south and from the Islamic College in the north to the beginning of the nature reserve or the (MD) area. Diving and net fishing will be restricted in this area; furthermore, all kinds of marine installations, developments, and/or underwater activities will need the prior approval of the DGA.

d. Marine Environment Protection Area (ME):

This area extends along the coast starting at the end of (MC) zone in the north to Ras el Ain in the south. This area is already subject to the protection of the MoE, which strictly prohibits swimming. In addition to this, the DGA suggests the prevention of any form of diving or net fishing in this area due to the probable underwater archaeological potential. Furthermore, the DGA stipulates the prior approval of both, the DGA and the MoE, on all kinds of activities in this area.
Figure 76: Aerial photo of Tyre’s southern promontory and outlay of its drowned parts according to archaeological data from El Amouri et al. (2005) and Poidebard (1939), (Marriner, Morahange and Carayon, 2007: 18)

Map 10: General map of the surveyed area at the northern harbor, west of the current fishing port. The survey revealed two large masonry walls running east-west, parallel to each other and to the modern jetty, another wall running north-south and connecting the two parallel walls from their eastern extremities. It also revealed two walls running north-south, a number of columns and masonry blocks scattered alongside the alignment of the modern jetty. In addition to a number of underwater deposits of large size that could cover archaeological features like shipwrecks, and constructions, scattered deposits of ceramics and other artifacts (Noureddine and Helou, 2005: 114).
Figure 77: Aerial photos of the peninsula showing areas of rich underwater archaeological potential in need of protection as per Marriner and Morhange studies (Marriner and Morhange, 2008: 433).

<table>
<thead>
<tr>
<th>MPZ</th>
<th>AREA (ha)</th>
<th>Distance (m)</th>
<th>Average Depth (m)</th>
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<tbody>
<tr>
<td>MA</td>
<td>175.26</td>
<td>Min. 173 Max. 1,610</td>
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<tr>
<td>MB</td>
<td>271.01</td>
<td>Min. 105 Max. 1,115</td>
<td>10</td>
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<tr>
<td>MC (north)</td>
<td>128.02</td>
<td>Min. 155 Max. 540</td>
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</tr>
<tr>
<td>MC (south)</td>
<td>54.03</td>
<td>Min. 233 Max. 370</td>
<td>5</td>
</tr>
<tr>
<td>MD</td>
<td>168.82</td>
<td>Min. 320 Max. 623</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 2: Marine Protection Zones Description; area, distance in to the sea and average depth.
Map 11: Marine Protection Zone decree proposal.
3.2.5 Modify the WH Property and Define a Buffer Zone

**Key action 12:** Prepare and submit a boundary modification draft request

In line with the State Party’s efforts to update Tyre’s World Heritage file (299), and following the WHC continuous decisions since 2006, namely its 35th Decision of 2011 (30COM 7B.52), and the recommendations of the 2009 joint ICOMOS/UNESCO reactive monitoring mission to Tyre, the DGA has prepared a draft proposal for boundary modification to resolve the discrepancy related to this particular WHS. In order to so, the DGA undertook a general value and condition assessment to define a strategy for the modification, followed by a SWOT analysis:

A. **General WHS value assessment: the associated values vis-à-vis the inscribed property**

According to articles 99 and 100 of the Operational Guidelines for the implementation of the World Heritage Convention, the delineation of boundaries is an essential requirement. Boundaries should be drawn to include all those areas and attributes which are direct tangible expression of the OUV, as well as, those areas which in light of future research possibilities offer potential to contribute and enhance understanding (WHC, 2011: 25).

The State Party acknowledges the fact that neither the current World Heritage designated sites as per the original nomination file (map 3) nor the accepted AR area as per the 2003 urban plan (appendix 3) embody the actual overall outstanding universal value of Tyre. Recent historic and scientific research demonstrates that Al Bass and the City sites display only a small portion of the history and archaeology of this important metropolis, especially its relation to the sea, which was its raison d’être, in the first place.

According to Toubekis and Dentzer (2009: 6), “the World Heritage Site of Ancient Tyre is a large and complex property of urban dimensions, of which great parts lie buried below the remains of the historic centre and modern town of Soûr (South Lebanon)....”. Based on this knowledge, the international attention was not only confined within the inscribed archaeological sites and its immediate vicinity, but extended all over the region of Tyre due to the belief that Tyre’s buried history is as important as its exposed parts.
According to the retrospective statement of outstanding universal value (2010), Tyre is
inscribed on the WHL due to its outstanding universal value as a Phoenician metropolis
and its fame as a maritime and land commercial center during the Phoenician period
(criterion iii). Nevertheless, none of its tangible inscribed remains date back to this
particular period (except the 5th century Phoenician wall under the palestra on the City
site). Despite its location over the possible Phoenician part of the metropolis, the
essential attributes of the outstanding universal value are not properly reflected
through the key imposing ruins of the Romano-Byzantine and Medieval times of the
current WH property (neither the initial boundary inscription nor the one accepted as
per the urban plan of 2003).

Having said this, it does not mean that the ruins of Al Bass and the City sites do not
possess any outstanding value. Their value stem from their ability to convey the
significance of Tyre as a powerful port city from the Roman period to the Medieval
period. But it, simply, does not fully encompass the Phoenician and Hellenistic
island/mainland settlements which according to latest underwater and land surveys and
excavations could be present anywhere on the coast from Baqbuq in the north to Ras
el Ain in the south, up to Tell el Maachouk and Burj el Chemali in the east or submerged
to the north and south of the peninsula (maps 10, 12-19; appendix 4).

If the OUV is about the continuity of this important maritime settlement from the
Phoenician to Medieval times, then, the Phoenician and the Hellenistic periods are
underrepresented within the current limits of the WH property. In this case, the State
Party will take this inadequacy into consideration while adjusting the boundaries.

Nevertheless, based on the current condition assessment (section 2), the socio-political
and urban contexts impose major restrictions related to the feasibility of including a
wider boundary within the modified limits. Therefore, the State Party has to adopt a
sensible policy in modifying the boundaries that is determined by the context and the
means and resources that are realistically available to enhance it. Accordingly, the
modification has to be moderated among the condition of the site and the
administrative and management contexts, based on a realistic vision for its protection.
Map 12: The reconstructed limit of the ancient northern harbor and the ancient causeway according to the French mission coring survey (Marinner, Morhange and Carayon, 2007: 5).

Map 13: Geomorphological scheme of the Tyre Tombolo according to the Spanish Geomorphological study (Carmona and Ruiz, 2004: 209).
Maps 14-16: Paleogeographical evolution of the Tyrian littoral. Paleogeography of Tyre around 8000 BP (relative sea level -7 to ≈ 1m); Paleogeography of Tyre around 6000 BP (relative sea level -5 to ≈1m); and Paleogeography of Tyre around 4000 BP (relative sea level -4.5 to ≈1m), (Marriner, Morhange and Carayon, 2007: 13).

Maps 17-19: Paleogeographical evolution of the Tyrian littoral. Paleogeography of Tyre around 3000 BP (relative sea level -4 to ≈1m); Paleogeography of Tyre around 330 BC (relative sea level -3 to ≈1m); Paleogeography of Tyre today (Marriner, Morhange and Carayon, 2007: 13).
B. Adopting a strategy

The State Party adopted the following strategy for the redefinition of the WHS boundaries and its buffer zones:

General guidelines
- Fair representation of all historical periods in the World Heritage property.
- Delineate a boundary that might not increase the management burden on local and national authorities given the current administrative situation and resources, while keeping in mind the future opportunities of change and enhancement of the administrative and management systems.
- Respond, as much as possible, to the different recommendations of the WHC concerning the boundaries, while taking the specificity and complexity of the local context into consideration.

World Heritage Site
- Avoid having dispersed parcels of World Heritage Sites in order to reduce, as much as possible the future management conflicts within the property’s main boundaries and ensure its integrity preservation.
- Delineate essential and highly representative components of the Outstanding Universal Value and not necessarily the extension of the WHS archaeological features of one period.

World Heritage Buffer Zones
- Include other main known archaeological elements and/or known areas with high archaeological and research potential in the buffer zone in order to exert more urban and development control over these areas.
- Define and group different buffer zones according to common and close attributes or SWOTs; strengths, weaknesses, opportunities, and threats.
- Adopt different protection approaches and levels of control that correspond to the current status of each defined area of influence or buffer zone; preservation of the current state and prevention of further degradation of the urban environment, law enforcement, extra control over developments, archaeological impact assessment, etc.
C. Analysis of SWOTs

To set the new boundaries, the whole cadastral area of Tyre and its environs was reevaluated based on three main elements: recent research results and the archaeological importance and potential, the actual local context and urban fabric, in addition to the possibility of controlling and/or managing change according to the urban plan of 2003 and other laws in place.

The SWOT analysis was used as a tool for this evaluation (appendix 7); whereby, the 2003 urban plan and the aerial photos of 2005 and 2010 were overlaid in order to do the assessment. Each urban zone was assessed based on the above and below ground SWOTs. Then, areas with close and common attributes were grouped together, either to be added to the WH boundary, or to form a common buffer zone with similar management implications.

Common strengths and opportunities:

- Visual integrity: preserved and/or potential preservation
- Buried archaeology: high, medium, or low potential, in addition to the possible extension of the current WHS.
- Presence of archaeological remains (excavated remains, surveyed underwater remains, and standing structures)
- Underwater/drowned archaeology: high, medium, or low potential
- Future survey and research: high, medium, or low potential

Common weaknesses and threats:

- Existing/potential urban threat on the visual integrity
- Existing urban threat on the exposed/known archaeology
- Existing urban threat on the potential archaeology
- Probable urban threat on the potential and exposed archaeology
- Probable development threat on the potential and known underwater archaeology
- Existing/potential human threat on underwater remains
- Irreversible urban setting

D. Submission of a boundary modification draft request

In line with the specified strategy and based on the assessment and analysis of SWOTs, the State Party has put forward a draft proposal for the boundary modification to finally resolve the discrepancy related to this particular WHS (maps 20-24; table 3).
The World Heritage Property of Tyre will be amended to include a land and marine protected boundaries:

1- **World Heritage Land Boundaries:**

Other than the actual excavated limits of Al Bass and the City sites, the new boundary will be extended to include the Old City with its cemeteries, the old fishing port and the commercial harbor, in addition to Hamra Street. This narrow street will connect the eastern and western parts of the WHS together. The designated AR areas extending to the north (Al Bass Camp) and east of Al Bass archaeological site towards Tell el Maachouk are to be excluded from the WH property (appendix 3).

2- **World Heritage Marine Boundaries:**

This area corresponds to the MA protected area as per the MPZ decree proposal (map 11); therefore, it extends around the peninsula engulfing the Old City marine limits, from the commercial port in the north until the end of the City site, adjacent to the Islamic College in the south. The area is very rich in underwater archaeological remains. As well, it offers a high potential of locating Phoenician and Hellenistic marine installations or other submerged parts of the island (figures 76-77).

3- **World Heritage Buffer Zones:**

The WH property will be modified to include an area of 1,065.74 hectares of Land Buffer Zone (LBZ) and an area of 621.88 hectares of Marine Buffer Zone (MBZ). The land protection area is divided into 5 buffer zones, extending to the south, east and north of the WHS proposed boundary. While the marine protection area will extend from Ras el Ain in the south to Al Baqbuq in the north corresponding to the MB, MC and ME marine protected areas as per the MPZ decree proposal (maps 11, 20, 24).

BZ1: The area is characterized by preserved buried archaeological potential and the possible extension of Al Bass site from the south and east. As well, the area provides a long term potential preservation of the WHS visual integrity as no urban threat is foreseen.

BZ2: This area is characterized by preserved buried archaeological potential, and high urban threat. Its immediate location overlooking the WHS poses a high visual influence with a medium risk of encroachment from Al Bass camp side and few illegal high rise buildings.
BZ3: This area is characterized by partially preserved archaeological deposits, high urban threat and immediate negative influence on the visual and physical integrity of the WHS due to the high rise buildings, especially west of the Roman hippodrome).

BZ4: This buffer zone is characterized by high archaeological potential with maximum urban threat on buried and exposed archaeology located over government public lands, including the Palestinian camps of Al Rashidieh and Al Bass, in addition to the gatherings of Jal el Baher and Tell el Maachouk.

BZ5: It is an area with high archeological potential, highly preserved archaeological deposits, and low urban threat.

BZ6: This buffer zone includes medium underwater archeological potential, moderate development threat, and high human threat as a result of illegal marine activities (boat anchorage and pillaging).

The proposed boundary modification will be discussed with the reactive monitoring mission upon its visit to Tyre (expected September 2012). The final draft of the boundary modification will be sent by the DGA to the Secretariat of the WHC for review before final submission on the 1st of February 2013 to be examined in the 37th session of the WHC.

<table>
<thead>
<tr>
<th>World Heritage Property</th>
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<th>Total Area (ha)</th>
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<tr>
<td>Land WHS</td>
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<tr>
<td>Marine BZ6</td>
<td>621.88</td>
<td>621.88</td>
</tr>
</tbody>
</table>

Table 3: The detailed areas of each zone of the WH property.
Map 20: The proposed boundaries of the World Heritage Property after modification.
Map 21: Land and Marine boundary of the modified WHS.
Map 22: Eastern part of the WHS. This map illustrates the urban designation of the WHS as per the urban plan 2003. It further indicates the ownership status of the proposed property.
Map 23: Western Part of the WHS. This map illustrates the urban designation of the WHS as the urban plan 2003. It further indicates the ownership status of the proposed property.
Map 24: Land buffer zones (BZ1-BZ5) along with its corresponding land use designation as per the urban plan of 2003.
3.2.6 Balance Socio-economic Urban Regeneration against Conservation and Management Needs of the WHS

**Key Action 13:** Enhance the urban setting

The State Party has undertaken several rehabilitation measures through the CHUD project since 2001 (Tyre urban component) to revitalize the historic core of Tyre (map 25). A set of pilot projects were foreseen in the development scenario, of which few amendments were applied (appendices 1, 5). The 1st phase of the CHUD urban project was completed between 2007 and 2011. The work included major infrastructure works, landscaping and improvement of public spaces and pedestrian zones. This is in addition to the development of the cultural path and the rehabilitation of four public structures.

Work on the implementation of the 2nd phase of the project is progressing; mainly, the rehabilitation of the fishing port area (syndicate building and fishermen facilities, and the elevations of the water front), in addition to the improvement works at Bawabeh and Jaafariah squares including the development of a new commercial souk and parking facility at Bawabeh square (figures 78-81).

In April 2012, more funds were secured to launch the 3rd phase of the urban project as described in the PAD. The work is comprised of the restoration and rehabilitation of the old “serial” building and the old souks (figure 82), in addition to the continuation of the coastline protection and landscaping which was partially implemented in 2008. The implementation of this phase will start after the preparation of design. The whole CHUD project in Tyre is expected to be accomplished by 2016.

It is important to note that a new traffic scheme was developed in collaboration with the MuT in order to minimize congestion within the Old City and to improve the quality of pedestrian zones. In line with this plan the administrative functions that used to take place at the old “serial” building will be moved elsewhere to reduce vehicular pressure from the port area. This old building will be rehabilitated to house another cultural or social function.

Figure 78: The new fishermen syndicate building is under construction (June 2012)
Figures 79-80: Rehabilitation of the old port pontoons and the public spaces surrounding the old port (CHUD – CDR).

Figure 81: 3D view of the public space surrounding the Bawwabeh square near the new market (CHUD – CDR).
Key Action 14: Promote WHS conservation

Within the framework of the CHUD project, the Italian consultants, ARS Progetti and Planarch, undertook structural and surface analysis of risk and deterioration factors in order to assess the current condition of the archaeological structures. Consequently, several conservation actions were recommended (maps 26-27; figure 83).

Given the available funds, the intervention measures were decided upon by the DGA and CDR according to the highlighted urgent priorities. Although, these conservation projects are not comprehensive; nevertheless, they serve as pilot treatments until further funds are generated.

The proposed interventions included the following measures; prevention from threats, remedial action against degradation, and restoration. These are divided into structural as well as, surface conservation measures. The archaeological conservation works are
expected to commence on both sites by September 2012 and they are scheduled to be executed by the end of 2014 (appendix 5).

- **Structural conservation:** It includes the consolidation and stabilization measures required to ensure the stability of structures and the safety of visitors. The chosen monuments are the palestra, the arena, and the Roman bath at the City site, in addition to the Roman arch, the monumental tomb, and the church with garden at Al Bass site.

- **Surface conservation:** the 1\(^{st}\) phase of the project (BTAP1) includes measures to stop most serious deterioration processes of the Mosaics at the City site grand allee, in addition to the Roman arch, the monumental tomb, the church with garden, the church near the arch, and the columbarium at Al Bass site. Moreover, further conservation measures will be executed during the 2\(^{nd}\) phase of the project (BTAP2). These will include the surface conservation of the City site latrina, Bath, and palestra, in addition to Apollo shrine and the Blue Team bath at Al Bass site.

Map 26: Risk map and physical decays of the Blue team bath in addition to the conservation measures proposed by the Italian Consultant, Planarch (CHUD – CDR).
Map 27: Location of surface conservation measures (in green) and structural conservation measures (-----) at Al Bass and City sites planned by the Italian consultant A.R.S Progetti (CHUD – CDR).
Figure 83: Sample of the structural proposed consolidation works in the palestra - City site. The new works include the construction of new masonry foundations at both sides supporting the protruding edges of existing columns; execution of a proper supporting backfilling on both sides able to constrain the lower portion of masonry. The new structures will be properly connected to the existing ones (CHUD – CDR).
Key Action 15: Leverage the standards of conservation practice

Due to the lack of resources, the DGA is only supervising restoration works that take place at Tyre. Most local consultants and contractors are unaware of the international standards and charters pertaining to archaeological approaches in the conservation of remains and/or standing structures. Therefore, they tend to apply an architectural approach to the conservation of historic structures and/or archaeological remains. With the DGA supervisory role, it tries to adjust most rehabilitation and restoration plans of historic buildings, as close as possible, to the required standards. The DGA encourages the application of most internationally recognizable conservation practices in the urban contexts. It supports the application of the adaptive reuse strategy for historic buildings as a middle ground solution.

On the other hand, the DGA usually does not allow any conservation of archaeological remains to be undertaken except by experienced conservators after thorough studies. Throughout the CHUD project, the DGA demanded the proper study and documentation of the actual status of remains before any intervention and it has worked with CDR to ensure that the contractors implementing the plans are reliable in terms of expertise in the conservation field. In this sense the archaeological conservation works of BTAP1 has been awarded to the firm JESCO in JV with Atelier Jean-Loup Bouvier.

Although the ultimate aim of the CHUD project is to enhance cultural tourism, nevertheless, the values of the archeological and historic resources of Tyre were given consideration in planning. The project’s integration strategy of the archaeological remains and the Old City, as well as, the undertaken rehabilitation measures contributed widely to the enhancement and maintenance of the outstanding value of the WHS and rendered the addition of the Old City and its ports to the modified boundaries a more feasible one. However, more attention should be given to the authenticity of historic buildings in any intended conservation action, especially that the Old City is proposed to become part of the World Heritage property. For this purpose, the DGA will give more consideration to the study and design proposals before giving its approval on the conservation plan of the “Serial” building and the Old Souks in order to avoid conjectural restoration and ensure authenticity, knowing that in the future a conservation strategy and guidelines should be adopted. Furthermore, the DGA intends to consult with the UNESCO – WHC advisory bodies for their feedback pertaining to such activities.
Key Action 16: Improve WHS presentation and interpretation

Within the framework of the CHUD project (Baalbeck and Tyre Archaeological project - BTAP), the State Party intends to improve the WHS presentation and interpretation. Under the scientific supervision of DGA, the Italian consultant (ARS Progetti) undertook a detailed assessment in 2008 and accordingly, several measures were agreed upon concerning the infrastructure, landscaping and visitor facilities on both the City and Al Bass sites (appendix 5).

Phase one of this component (BTAP1) includes the protection of the WHS by ensuring proper boundary walls and fencing, in addition to the re-arrangement and improvement of the entrance areas, including the ticketing offices and the addition of a secondary entrance/exit at Al Bass site. This phase will also include the measures necessary to enhance the visitor experience through the establishment of a visitor center on each site and the enlargement of the old museum at Al Bass site to become a complex housing a site museum, a visitor center, DGA offices, onsite storage rooms, a small laboratory, police quarter, and public toilets. The above mentioned cultural infrastructure work is currently progressing and it is scheduled to be finalized by the end of 2012 (figures 84-90).

Following the finalization of the cultural infrastructure preparatory works on Al Bass and the City sites, phase two of this project will start (BTAP2). This phase focuses on the development of two cultural paths with appropriate direction signage and interpretation panels at selected areas (maps 28; figure 55). This phase also includes the refurbishment of the visitor centers and Al Bass Museum with the needed facilities, installations and equipments, in addition to showcases and panels. These enhancements will protect archaeology, enhance the visitors’ educational experience and elongate his stay on site. Tender documents for phase two have been finalized in 2011. Invitation for bids is scheduled for July 2012. This phase is expected to be finalized by the end of 2014.
Figures 86-90: Infrastructure works at the old museum building. This small structure was built before the war to become a site museum. Today, the structure is being developed and enlarged according to ARS Progetti’s plans to become two floors site museum with additional storage facilities. The above pictures show the retrieval of archaeological material buried by M. Chehab in 1977 during the war under the current museum and its storage in the new storage facility (CHUD – CDR).
Map 28: City site interpretation plan and cultural path by the Italian Consultant, Planarch (CHUD – CDR).
Key Action 17: Implement a periodic monitoring program

Aware of the shortage in staff and their incapability of monitoring the various areas of the WHS and its setting, the DGA has relied on the external expert’s continuous need to visit Tyre while working on its WH file from March 2012 till February 2013. Consequently, a program of 3 visits per month was developed for the expert, starting March 2012 until February 2013. In collaboration with the site manager, the expert has to report on the state of conservation of the WHS and its setting to the Head of the Archaeological Excavation Section at the DGA office in Beirut. They are supposed to officially inform the DGA on the need to rectify issues. Furthermore, the expert has to assist the site manager in the monitoring and reporting on the CHUD project implementation.

Coordination is maintained among all parties in order to set issues right. Throughout this process, several feedbacks were given to the site manager, many of which were dealt with in collaboration with the MuT and other concerned parties; such as:

- The growth of weeds inside the WHS (figures 20,24,33-34,62,94)
- Garbage accumulation on the peripheries of the City site and the Old City (figures 26-27,62)
- Broken site fences and gates in need to be fixed (figures 29-31,59)
- Deficiency in earlier fencing (figures 32,62)
- The need to increase the number of security police until the finalization of the new Al Bass entrance at Hamra Street
- The prevention of residents’ passage through the site
- The illegal works at DGA building (parcel 111) on site (figures 39-40)
- The disappearance of Al Mubarkeh Tower Signage (figures 37-38)
- Illegal removal of plaster and painting works at the Old City (figures 41-43)
- Illegal placement of wooden telephone posts (figure 91)
- The need for ventilation due to high humidity at the underground displayed archaeology of the Maronite Church (figures 44-45)
- Illegal wooden kiosks at the shoreline (figures 15, 93)
- The decay of the DGA administrative building (figures 26-28)
- The case of Khan el Achkar restoration by the South Council (figure 92)
- The case of the illegal tall building at the Old City (figure 16)
- Maintenance need at the cultural path (figures 49-50)
Figure 91: The wooden telephone posts left unused facing the SAC (April 2012).

Figure 92: Khan el Achkar in the Old City (April 2012). This khan was supposed to be restored by the South Council after funds were secured from AFD. Till present no action has been taken.

Figure 93: The wooden kiosks at the promontory’s shoreline (April 2012).
Key Action 18: Promote the WHS to visitors

It becomes quite obvious when the number of visitors at Tyre is compared with other World Heritage or national heritage sites, that the economic and touristic values of Tyre are not properly exploited to the advantage of the site (enhancement and maintenance of the outstanding universal value) or the local community (figures 1,63).

The State Party, represented by the MuT and University of Saint Joseph (USJ), is one of the participating countries in the MARE NOSTRUM initiative. The aims of the project are to raise public awareness, promote the tangible and intangible cultural heritage in a communicative and educational effective way and enhance the economic and tourism development.

The work plans involve four themes; participatory planning, past into present heritage, heritage trails, and sustainable tourism. It addresses different target groups who might benefit from the project and results. Students, craftsmen, tour guides and tour operators were involved during the actions’ implementation through different initiatives.
and specific interventions. Within the framework of this project, the following activities took place to promote Tyre:

- The Mut has worked with the Lebanese International University and the Lebanese Islamic University students in order to develop six heritage trails for Tyre. Currently, the Mut is working on the branding and interpretation of the trail (figure 95). The trail will have interpretation panels about the city in general and other targeted/themed heritage panels for specific monuments within the city.

- The USJ held “Train the trainers” workshop in collaboration with the MoT on the 24th of May 2012. The workshop’s aim was to spread knowledge and raise awareness among the local guides, tour operator and public actors. The workshop was followed by a visit to Tyre to introduce the Heritage Trail to participants (figures 96-99). The training workshop provided the participants with the necessary data to promote tourism of quality in Tyre.

- The Mut and USJ presented a synthesis of the results and exposed the products of the project in Tyre at the 8th Mare Nostrum Transnational Meeting in Rhodes (28-30 June 2012). This participation indirectly contributes to the promotion of Tyre to other participating Mediterranean countries.

The DGA has recently established contact with the TA-MuT, responsible for this project, in order to coordinate on matters related to the interpretation of the city. Through MARE NOSTRUM project, the DGA will try to fill the interpretation gaps to achieve a balanced and equal interpretation covering all aspects of the WHS and its setting. The DGA will encourage the coverage of topics not dealt with in the interpretation strategy of the archaeological sites and its museum developed within CHUD project and, at the same time, will try to communicate the diverse values of Tyre based on accurate and up-to-date interpretation.

Through the various measures of the CHUD project and MARE NOSTRUM, the State Party is going to leverage the economic potential of Tyre in order to achieve both socio-economic regeneration and conservation aims.
Figure 95: The Heritage Trail of Tyre was developed by the Municipality of Tyre within the framework of MARE NOSTRUM (MuT).

Figures 96-97: ‘Train the Trainers’ workshop at the Ministry of Tourism on the 26th of May 2012 (Syndicate of Tourist Guides).
3.2.7 Enforce the Application of the Archaeology and Urban Laws

**Key Action 19:** Urge relevant authorities to enforce the application of law

The MuT is the local guardian of the WHS. However, due to political and socio-economic pressures, the role of the MuT, sometimes, fails to be properly exerted. The position of the MuT was further enhanced and its role was empowered through official correspondence and requests on behalf of the Minister of Culture:

- Correspondence letters (Ref: 2385 & 2387) signed by the Minister of culture, Mr. Gaby Layoun and sent to the MuT and Ministry of Interior and Municipalities (MoI&M) on the 15th of May 2012 requesting more control over illegal developments in the city and the abolishment of all illegal measures.

- Another official request was sent to the South Council and the Mohafez (governor) of the South to take the necessary actions and vacate the illegally residing families in one of the DGA properties next to Al Bass site (parcel number 111, the old Itihad School), (correspondence letters - Ref: 2679 and 2680 signed by the Minister of culture, Mr. Gaby Layoun on the 5th of June 2012).
During a coordination meeting held at the MuT in April 2012, the DGA has requested the removal of the illegally placed unused telephone wooden posts at the Old City, facing the SAC. The municipality contacted immediately the concerned department who promised the removal of the wooden posts.

In addition, the DGA Regional office has communicated with the residing family at Al Itihad School and asked to halt all kinds of work in the building and the closure of the door that leads into Al Bass site (figures 100-101).

**Figure 100: Al Itihad building in April 2012.**  
**Figure 101: Al Itihad building in May 2012.**

**Key Action 20: Enforce the Old City Building Code**

The Old City Building Code (decision no. 28 dated 7/7/2007), necessitates that any kind of development activity within the Old City requires the DGA prior approval. Empowered by this Code, the DGA policy is to maintain the Old City fabric in its present condition by preventing further deterioration until the establishment of maintenance and conservation guidelines for old buildings.

In line with this policy and based on the Old City Building Code, the DGA has requested from the MuT to halt a private initiative of “enhancing” one of the Old City alleyways
without the approval of the DGA (correspondence letter - Ref: 2386 - signed by the Minister of culture, Mr. Gaby Layoun and sent to the MuT on the 15\textsuperscript{th} of May 2012).

This initiative involved the exposure of sand stones by removing the old plaster from parts of the external walls and painting the other parts (figures 41-43,102). While this undertaking might be appealing to many people, it however, increases erosion of exposed sandstone due to the city’s proximity to the sea.

Figure 102: Painting the Old City (April 2012).

3.2.8 Enhance the Level of Coordination Among Stakeholders

Key Action 21: Hold regular meetings with stakeholders

The DGA has worked on reclaiming its position back as the main heritage management player and decision maker responsible for bringing dialogue and coordination into a higher level. For this purpose, the DGA has held several communication and coordination meetings with major stakeholders since the initiation of the Action Plan (2012-2014):
- All concerned stakeholders involved in the enhancement, management and protection of Tyre’s WHS were contacted in order to collect all data useful for the report preparation, as well as, to accommodate their diverse concerns and views in the proposed boundary and its future management.

- The problems faced by the MuT in the management of the city in general, and the Old City and its archaeology in particular, were widely discussed with the Mayor of Tyre and other members of the Municipality.

- Continuous and regular contact with the CDR, mainly members of the CHUD project, was maintained in order to stay updated on the different undertakings of the project and the development of works, in addition to future development plans.

- On-site meetings in Tyre with the consultant and contractors responsible for the implementation of the CHUD project - phase two of the urban component - in order to follow up on the implementation process and consequently, report the DGA feedback to the CHUD management.

- Meeting the CEO of the commercial port of Tyre in order to discuss the future development proposal of the commercial port into a tourist port and assess the feasibility of their concerns with respect to the WHS and other values.

- Consultations with the Ministries of Environment and Agriculture concerning the diverse laws and regulations in place that might affect or benefit the WHS.

- Coordination meetings with the contracting company responsible for the execution of the Sarafand – Nakoura highway; 1st meeting was held on the 13th of June, followed by a joint site visit on the 16th of June 2012. The contractors were informed about the DGA scope of work and its planned intervention strategy. Both parties agreed that survey and excavation works should fit into the contractor’s schedule of work, yet they should precede any planned intervention on behalf of the contractor.
Key Action 22: Consult and engage stakeholders

*The fishermen syndicate building*

One of the major reasons for the delay in the delivery of the 2\textsuperscript{nd} phase of the CHUD project is the several modifications in designs that are taking place during the implementation phase, in order to respond and accommodate the various stakeholders’ concerns. Among these modifications, the one related to the fishermen syndicate building at the old port.

The initial agreement between the fishermen and the CDR states that the fishermen would agree on the destruction of the old syndicate building (built in the 1980s), while the CHUD project guarantees its replacement in the same location, yet with a more sensitive and practical design that blends with its environment. The first design of the new building reduced the height from 3 to 2 stories, while ensuring enough space to accommodate the syndicate offices, the auction hall and the fish sales area, in addition to a small café and a technical zone that would house an electrical transformer (figures 103-108).

Following some remarks from various local NGOs, coordination meetings with the municipality, the CDR and the syndicate were held. It was agreed to minimize the impact of the new construction to one third of its initial area while maintaining the exact location. Therefore, the new design was amended to become a light, transparent, one storey structure housing the fishermen auction hall with a smaller sales zone and a café for the fishermen.

Despite the concern of some NGO’s, the DGA agreed and supported the idea of keeping the structure in its original position due to the fact that this area has been traditionally used by fishermen as a fish market since the 19\textsuperscript{th} century. However, the DGA will follow up the final design of the building with CDR to ensure that a balance is maintained between the needs of the fishermen, the NGOs concerns and the values of the WHS.
Figure 103: The old syndicate building of the 1930’s used as a fish market. Photo taken by Poidebard (Oriental Library – University of Saint Joseph)

Figure 104: The fishermen Syndicate during the 1980’s. The building was developed to become a three storey building (CHUD- CDR).

Figure 105: The old syndicate during destruction (CHUD - CDR).

Figure 106: The first syndicate building design before modifications (CHUD – CDR).

Figure 107: The foreseen syndicate project design after the modifications. The new structure’s maximum height is 4.26 m (CHUD – CDR).
Figure 108: The foreseen syndicate project design after the modifications. The new structure will house the auction area, a freezing room, a bar, and the syndicate office with a meeting room (CHUD – CDR).
3.2.9 Prepare a Preliminary Management Plan

**Key Action 23: Compile the necessary database to set up a management plan**

The need for a management plan has been continuously highlighted by the WHC. The State Party has also acknowledged that need and has continuously worked on the preparation of a management plan. However, management plans need proper human and financial resources to implement. The lack of such resources has led the State Party to adopt a more realistic short term Action Plan (2012-2014) until the preparation phase is completed.

The DGA has gathered all the available socio-economic and cultural data to prepare the foundation for a preliminary management plan. These data will enhance our understanding of the specificity of the available problems and its implications on the failure of the current management system. After finalizing the boundaries draft, work on the definition of a statement of significance for the modified WHS will be the second step after understanding the values of the site in order to set a preliminary management plan. The drafted plan might not be ready by the end of this year, yet a management framework and strategy will be established until more funds are secured to perform this particular obligation. The presence of such a management strategy and the clear definition of values will assist the CHUD and other projects in directing development plans to the benefit of the WHS.

This plan has to address the main management and administrative issues and concerns, and highlight the major problems hindering the proper management (existing management regimes, traditional management, conflict of interest, lack of coordination...), then set future management opportunities based on a priority approach: short, medium and long term measures.

3.2.10 Encourage Scientific Research, Studies and Publications

**Key Action 24: Facilitate the work of scientific missions**

Encouraging the work of foreign and local scientific missions has been the strategy of the DGA over years. As a result, Spanish, French and Japanese missions are still working on studying the material of their research.
The French team headed by P.L. Gatier has been working since 2009 on the City site. The Romano-Byzantine bath complex including the palestra and the arena were surveyed. Additional archaeological research and soundings were undertaken in the City site and around the Crusaders cathedral. These soundings and surveys allowed the reinterpretation and understanding of the archaeology and history of this specific area. This year Gatier’s mission will resume work during the month of October 2012; more detailed survey and archaeological soundings will be carried out in the residential quarter west of the arena.

The Spanish team headed by M.E. Aubet is still studying the material retrieved from the Phoenician Necropolis excavations at Al-Bass.

The Nara University team headed by Y. Nishyama is still working on the conservation and restoration of the wall paintings of the hypogeum excavated by the same mission in 2002 in Ramali - Burj el Chamali.

The submarine archaeological project, headed by M.S. Alvares from the Fine Arts Royal Academy of Saint Isabelle – Andalusia investigating a ship wreck in Tyre.

The AUB Museum at the American University in Beirut will undertake a targeted excavation at the Romano-Byzantine residential quarter west of the arena in the City Site during the months of August and September 2012. The aim is to investigate earlier periods and reconsider the site stratigraphy and evolution.

The CNRSL conducted a bathymetry survey along the Lebanese coast. Nevertheless, a 500 meters strip from the shoreline towards the territorial water was not included within the framework of the project. This year, the CNRSL and DGA will continue the detailed mapping of Tyre’s waterfronts concentrating on the 500 meters strip along the shoreline. Within the framework of this project, targeted areas specified by the DGA will be surveyed in collaboration with the Center of Geophysics at the CNRSL. The activities will include, the updating of the existing GIS map already having the locations and coordinates of the previously surveyed archaeological features in addition to the Geophysical survey of new areas.
**Key Action 25:** Share and disseminate up to date scientific information

- An international seminar on the history of Tyre “L’histoire de Tyr au Temoignage de l’Archeologie” was held at the SAC in Tyre from the 3rd to the 4th of October 2011 (figure 109). The Seminar was organized by the CDR and DGA in collaboration with the Institut Français du Proche-Orient (IFPO), the UNESCO Regional Office in Beirut, the Cultural Mission of the French Embassy, the Italian Cooperation, and the MuT.

  The aim of this seminar was to exchange the latest research results among the diverse researchers and ultimately gather the various archaeological research results in one publication to be available for the wider public. A total of thirty Lebanese and foreign experts presented the result of their work at Tyre. The proceedings of this seminar were published in the Bulletin d’Archeologie et d’Architecture Libanaises special series (BAAL, HS. VIII) by the end of July 2012.

  The seminar opened new horizons for the development of the cultural and historic resources of the city. Among these, better insights in setting up the foreseen archaeological museum at Al-Bass site and the formulation of a comprehensive interpretation strategy that will include up to date information about the evolution of this important metropolis.

- The DGA edited throughout the last twelve years many publications dedicated to the archaeology and history of Tyre in BAAL. The BAAL special series nos. I, II, and III were entirely dedicated to Tyre; the Phoenician Cemetery of Tyre Al-Bass (2004), La Mobilité des Paysages Portuaires du Liban (2005), Inscriptions Grecques et Latines de Tyr (2006). The DGA also published individual articles on Tyre within other BAAL publications (see bibliography).

  In addition to the proceedings of the International Seminar, the DGA has recently published the work of the French Archaeological Mission at the City site in BAAL 14 by the end of June 2012.

- In collaboration with the CNRS - Lebanon, the DGA has prepared a publication concerning the 2005-2006 geophysical survey and its results. It will be published shortly in the Remote Sensing Atlas of Lebanon.
Key Action 26: Endorse publications and research

The DGA policy supports and facilitates the work of any interested candidate to perform studies, research or publications on Tyre, be it within the framework of a higher educational degree (MA or PHD studies) or other research and publication endeavor. In line with this policy, the DGA has promoted and supported the work of many students on a higher research level, among which two PHD recent studies. The first PHD was finished on 2011 by Patricia Antaki-Maason on the urban topography of Tyre during the Crusader period, “Tyr a L’époque des Croisades. Topographie urbaine d’une ville majeure de Terre Sainte” at the University of Poitiers. Another PHD was done by Hani Kahwaji on the Roman Hippodrome at Al Bass site. The PHD is titled “L'hippodrome Romain de Tyr: Etude d'architecture et d'archéologie” and it will be published by the University of Bordeaux (Ausonius) during the last quarter of 2012.
Also, the DGA provides access to information, as well as, study materials for MA students. Two registered MA students are currently working on Tyre; the first MA is titled “Settlement Patterns in the Region of Tyre” and the second “Les Bijoux de la Necropole Romano-Byzantine de Tyr: Typologie, Technique, et Style”.

Below is a list of recent journal articles and books published on Tyre over the past two years:


This in addition to the latest publication (May 2012) produced by the MoC-DGA, Embassy of Italy and the Italian Embassy of Foreign Affairs on the restoration of the Roman frescos of the “Tomb of Tyre” displayed at the National Museum in Beirut.
3.2.11 Build DGA human capacity

**Key Action 27: Promote training**

- In cooperation with the Lemaire Institute for Conservation (University of Leuven), the DGA has done special training sessions on laser scanning during summer 2009. This was followed by a joint project to prepare a risk preparedness strategy for Baalbeck through the use of laser scanning technologies.

- In May 2010, the SAC in Tyre housed the “Mosaikon” regional workshop and training program on mosaics restoration. It was organized by ICCROM and the Getty Institute in collaboration with the DGA. In addition to DGA employees, external local experts participated in the event.

- Since March 2012, the DGA employees have been undergoing a special training program designed within the framework of the CHUD program. Funded by AFD, the program is implemented in collaboration with the IFPO. It is designed to cover a wide scope of topics related to different fields of specialty in archaeology, including site management and value based approaches to heritage management. The DGA and CDR opened this training opportunity to all heritage practitioners and students in and outside the administration (table 4; figure 110).

- The DGA coordinates with local universities, mainly the Lebanese University, in order to ensure fieldwork training opportunities for students studying archaeology and at the same time, to build local fieldwork teams. The DGA supports undergraduate and graduate archaeology students by providing a working opportunity within its preventive or rescue digs (figure 111).
Figure 110: Underwater Archaeologist, Mr. I. Noureddine, giving a course on Submarine Archaeology at the SAC in Tyre on the 28th of May 2012.

Figure 111: Lebanese University graduates and trainees undertaking archaeological Excavation at Jal el Baher under the scientific supervision of the regional DGA archaeologist, Mr. Badwi (April 2012).
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<td>19-21 March</td>
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<td>Evelyne Chantriaux</td>
<td>Approche de la conservation et de la restauration des mosaïques et des pavements antiques</td>
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Table 4: Training program already implemented from March – June 2012 within the framework of the CHUD project – Institutional strengthening component (CHUD – CDR).
3.2.12 Enhance the Level of Cultural Awareness

**Key Action 28: Increase educational and cultural activities**

After its rehabilitation, Beit el Mamluk was used by the Municipality as the City House. It is currently operating as a cultural center by the TA - MuT staff working within the CHUD program. The center is hosting and organizing many activities, mainly dedicated to raising socio-cultural and environmental awareness. The cultural center hosted an exhibition on submarine archaeology through the old aerial imagery of Poidebard within the framework of the International Seminar on Tyre during the month of October 2011. At the same time, another exhibition was organized at the SAC; the exhibition displayed new aerial photos of Tyre taken for the CHUD project, in addition to 19 posters prepared by the diverse researchers who worked at Tyre. The exhibited materials were left in place for the benefit of the locals and visitors of Tyre (figures 112-114).

Another two exhibitions were held from 22-29 January 2012 at Beit el Mamluk within the framework of MARE NOSTRUM activities; MARE NOSTRUM poster exhibition and Melkart Market. The Market was visited by school children, local cultural organizations, women organizations and hundreds of citizens. It was organized around several themes; local Tyre handicraft, regional fishing techniques, and the work of the school for children with special needs of Tyre, in addition to the local gastronomy, music, religious songs and dance.

An awareness raising campaign for school children was also organized by the MuT within the framework of MARE NOSTRUM. A school workshop was held at the ancient Evangelic College in Tyre on December 4, 2011. It involved around fifty children and their teachers of the public elementary school of Tyre. A documentary film "Jarjara" was displayed on the life of fishermen and evolution of handicraft art in Tyre.

The DGA is collaborating with TA-MuT staff in order to assess the possibility of designing a special program to introduce the values of the WHS to the locals in general, and the residents of the Old City in particular, in order to engage them in its protection and maintenance.
Figure 112: Aerial photo taken in 2010 by CHUD project and exhibited at the SAC (CHUD-CDR)

Figure 113: Beit el Mamluk - City House during Poidebard’s exhibition in October 2011 (CHUD -CHUD)
Known as the "Mameluk House", the historical building G has been built in 3 phases and date back at least to the XVI century.

The ground floor, built in stone crossed vaults around a courtyard connects different buildings, partly ruined showing many connections to the urban settlement. The first floor, built in the early XX century is a typical central hall house with fancy paintings and pitched roof with stone balcony.

Strong and severe deformations have been seen in the preliminary survey and the structural diagnosis identified settlement problems, soil movements, weakness in load distribution, slab settlement at first floor from water infiltration, deformation of roof structure linked to all building movements.

These major problems could not be solved by in situ consolidation without an extensive budget. A decision was taken, with the authorities in charge, to dismantle partially the first floor and to reinforce the existing structure by:

- Soil reinforcement by construction of a cyclopean wall along southern side
- Vaults consolidation by injection and blind wall walls reconstruction
- Insertion of concrete tie beams under new partitions at first floor and new slab over vaults and wood existing preserved deck
- Construction of new stone masonry walls with concrete tie beams
- Construction of new steel truss as support for a pitched roof similar to existing

All finishing works have been conducted so as extend the life of this building as new except for the reinsertion of walls and ceiling paintings, fully documented for a later intervention.

Figure 114: Beit el Mamluk poster displayed at the SAC poster exhibition during the International Seminar in October 2011 (CHUD- CDR).
WP3: “PAST-INTO-PRESENT” HERITAGE:
the awareness-raising and appropriation process involving
the Mediterranean communities along the Phoenician routes

Branding the Handicraft Trail
An internal competition between 17 students
from the graphic design department of the
ALBA university took place in order to vote
the melkart logo for handicraft.

Pamphlet for Handicraft
The pamphlet aims at offering a tourist
product that gathers and enhances the
traditional handicraft, know-how and
cultural elements that show the belonging
of these handicraft and know-how to a
common Mediterranean culture.

Competition in universities
International Concept and Design Competition
for students in Architecture related to the physical design of the Heri-
tage trail in the 6 cities.

Competition and workshops in schools
Students from schools will be asked to report on
traditional activities in the 6 port-cities through
artistic works (photos, paintings, models...) using
traditional techniques inspired from the local
handicraft.

Presentations for stakeholders
The PPT will be used during presentations
with stakeholders which aim is to present
the various actions of the project (vademecum,
handicraft pamphlet, heritage trail...)

2 exhibitions: “in the square”
After each competition’s deliberations, all
selected projects will be gathered and displayed
on exhibition panels which will be used for the
6 exhibitions which will take place in the 6 cities.

Photo exhibition on port activities

Figure 115: MARE NOSTRUM activities for raising awareness in Tyre (http://www.eh4-
marenostrum.net/; accessed 12 June 2102).
Figure 116: MARE NOSTRUM results of the participatory planning process for sustainable tourism development of Tyre (http://www.eh4-marenostrum.net/; accessed 12 June 2012).
Conclusion

Throughout this document the State Party followed a self-critical approach in the definition of key management issues and the discussion pertaining to the delay in responding promptly to the WHC various recommendations; especially those related to the adjustment of the WH boundaries and the adoption of a comprehensive management plan for Tyre.

The State Party considers the non-dynamic and outdated administrative system as a blockage to the proper management of the WHS. It has been highlighted as a major cause behind:

- The dispensing of available expertise outside the administration and the inability to attract new expertise for longer periods.
- The incapacity and/or delay in expenditure on management, conservation and maintenance of the WHS from the DGA budget.
- The continuous pressure on existing staff and their delay in performing their duties.
- The degradation of the WHS.

Another detrimental key factor that affects the WHS state of conservation is the previously uncontrolled urban expansion and the huge development pressure. This, in addition to the lack of financial and human resources render the job of enhancing the WHS of Tyre a complicated one. Until the adoption of the new administrative structure by the Parliament, the staffing situation will be worsening. To overcome this problem, external funding and outsourcing for specific jobs and assignments are seen as a short term practical solution.

Despite all the available complications, the State Party has adopted a priority based approach in identifying its management objectives and the set of urgent measures necessary to resolve the historic inconsistency in the boundary definition. To do so, the DGA has developed a short term action plan (2012-2014) with 12 major objectives; among which, the compilation of documentation and inventory of material, resuming the geophysical survey and test trenching to complement the TAM, the integration of all the compiled data on the TAM Geodatabase, and the modification of the WH boundary of Tyre. These objectives respond directly to the several missions recommendations, at the same time, it responds to the 35th and 36th WHC committee decisions of delimiting a precise boundary.

The State Party, represented by the DGA and other stakeholders; mainly the CDR and the MuT, was able to initiate a short term action plan (DGA Action Plan 2012-2014). In addition to the achievements that fall within the framework of the CHUD project in terms of urban regeneration, site conservation and site management, the State Party has moved considerable steps forward and achieved the following:
In collaboration with the CDR, the DGA was able to secure funds for the recruitment of 7 external experts; four experts dedicated to the compilation of documentation and inventory, two experts to operate the SAC and undertake underwater research and studies, and one expert to prepare the boundary modification request and state of conservation report for the WHC. Three out of seven experts were already recruited since March 2012.

- The creation of a preliminary digital record of all the available compiled documentation.
- The creation of a systematic inventory record for all the small finds artefacts stored at the National Museum.
- The Integration of some data and survey results into the TAM Geodatabase.
- The preparation of a new MPZ project decree proposal.
- The submission of a modified boundary draft request.
- The preparation of a comprehensive report on the state of conservation of Tyre WHS.

The State Party is currently working to:

- Recruit 21 extra site guards to ensure the protection of remains at the WHS.
- Recruit four experts to join the DGA team for a period of two years; two experts to undertake the inventory of onsite material and another two experts to operate the SAC.
- Re-initiate survey and excavations along the highway trajectory.
- Integrate the remaining data and new survey results into the TAM Geodatabase.
- Sanction the MPZ decree proposal by the CoM.
- Get the approval of the WHC on the proposed WHS boundaries.
- Exert more control over illegal measures at the proposed boundaries and enforce the application of law.
- Continue the compilation of mandatory data for a more comprehensive management plan.
- Identify additional sources of funding to undertake more surveys and research studies.
- Create consistent communication and coordination links among major stakeholders.

In conclusion, this document reveals the intention and willingness of the State Party to react positively towards the safeguarding of its heritage. It further demonstrates its capability to act accordingly once the financial constraints are waived. However, the State Party recognizes the ultimate need for permanent WH site managers and/or a WH unit to operate respective WH sites. Thus, the need of more sustainable solutions to solve the recruitment and management issues remains a long term aspiration in need for consideration.
Notes

1. Since 2007 efforts have been intensified to create new posts for the management and conservation of cultural heritage within the Ministry of Culture. A revision of the national cultural policy and a new structure for the Directorate of Antiquities is under parliamentary discussion.

2. Any activity that costs over 2000$ is subject to the bidding procedure. This procedure usually takes over 3 months from the evaluation of needs phase to the intervention phase.

3. The heavy machinery equipment fees are usually assigned by the Ministry of Transport and Public Works for all works undertaken by other ministries.

4. The Laser Scanning project was followed by a joint publication in 2011; Seif, A., & Quintero, M.S., 2011, Protecting Baalbeck’s Integrity: a proposal for an integrated risk preparedness strategy, DGA and UNESCO, Beirut and Lemaire International Center for Conservation, and University college St. Lieven, Leuven.

5. The delimitation of the marine boundaries was originally laid according to the Bathymetric Map of the 1960s; 5 and 10 meters lines were drawn, and then the lines were partially adjusted for better presentation. Therefore, the 5 meters delineated areas may include small patches of 10 m depth and vice versa. However, it is important to note that the protection decree does not depend on the depth as much as it relies on the annotated distance from the shoreline, since depth is variable.

6. MARE NOSTRUM: a Heritage Trail along the Phoenician maritime routes and historic port-cities of the Mediterranean Sea, financed by European funds under the Programme Euromed Heritage IV. For more information about MARE NOSTRUM and its diverse actions in Tyre and elsewhere, please refer to this website (http://www.eh4-marenostrum.net/)
The Cultural Heritage and Urban Development (CHUD) Project is an initiative undertaken by the Lebanese Government with the support of the World Bank in order to protect, rehabilitate, and revitalize major historic cities. The CHUD project presents, a strategic approach to protect, preserve, enhance, and better present the country’s cultural heritage as a focus of national cultural identity, as well as an exceptional magnet for the cultural tourism industry. Hence, through the implementation of the CHUD project, the Lebanese Government seeks to enhance the diversity and quality of the cultural infrastructure of heritage cities, as well as, the cultural related services, in order to increase spending and to capture more revenue within the country. Furthermore, the project aims at improving the quality of life of the local residents in and around the targeted heritage sites.

The CHUD project is being implemented through the Council for Development and Reconstruction in five historic cities; three of the five cities are listed as World Heritage Sites; Baalbek, Tyre and Byblos. In Tyre, the CHUD project has three main components: (a) rehabilitation of the historic city center and urban infrastructure improvements; (b) archeological sites’ conservation and management; and (c) institutional strengthening of the DGA, DGU and MuT. The foreseen urban measures to be implemented in the Old City of Tyre and its three phases of implementation are displayed below.

The parties involved in the funding of the various components in Tyre are:

a- The World Bank and the Agence Française de Développement for the urban component
b- The World Bank and the Italian Cooperation for the archaeological component
c- The World Bank, the Agence Française de Développement and the Italian Cooperation for the institutional component
Map 29: Urban conservation and design studies for Tyre Old City by Rafik el Khoury and Partners (CHUD - CDR).
Figure 117: CHUD project Organization Chart – May 2012 (CHUD – CDR).
Delegation Permanente du Liban
Aupres de l'UNESCO
PARIS

N° 446/84-SM

Paris, le 18 septembre 1984

19 SEP 1984

Madame,

J’ai l’honneur de porter à votre connaissance que, mon gouvernement, par câble reçu en date du 18 septembre 1984, informe le Comité du Patrimoine Mondial que le périmètre archéologique de la ville de Tyr est limité comme suit:

au nord par la ville de Sarafand, au sud par Ras Ain, à l’est par les collines environnantes, et à l’ouest par la mer.

Quant à l’inscription des autres sites libanais sur la liste du Patrimoine Mondial, le Ministère à Beyrouth ne manquera pas d’envoyer les documents nécessaires, et ce, dans les meilleurs délais.

Je vous prie d’agréer, Madame, les assurances de ma parfaite considération.

William HAMIE
Délégué Permanent a.i.

Anne RAID:
Division du Patrimoine Culturel
CLT/CH
Bât. B:2, 26
UNESCO
Map 30: Archaeology of the Region of Tyre- Scale: 1:50,000; red annotations by WHC (Toubekis and Dentzer 2009: 17).
<table>
<thead>
<tr>
<th>Zone</th>
<th>Description</th>
<th>Superficie totale de la zone</th>
<th>Superficie minimale du terrain pour lotissement</th>
<th>Superficie minimale de terrain constructible</th>
<th>Coefficient d’occupation du sol</th>
<th>Nombre d’étage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Ancienne ville Habitation, tourisme et commerce. Soumise à l’approbation de la DGA et la DGU.</td>
<td>20.3 ha</td>
<td>250 m²</td>
<td>150 m²</td>
<td>30%</td>
<td>2</td>
</tr>
<tr>
<td>AR</td>
<td>Archéologique - Zone classée Patrimoine Mondiale</td>
<td>148.2 ha</td>
<td>Zone expropriée ou en cours d’expropriation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARG</td>
<td>Jardins dans la zone archéologique</td>
<td>5.6 ha</td>
<td>Zone expropriée ou en cours d’expropriation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A1</td>
<td>Nouvelle ville Habitation et commerce. Soumise à l’approbation de la DGA et la DGU.</td>
<td>7.6 ha</td>
<td>600 m²</td>
<td>300 m²</td>
<td>40%</td>
<td>3</td>
</tr>
<tr>
<td>A2</td>
<td>Nouvelle ville Habitation et commerce</td>
<td>22.3 ha</td>
<td>600 m²</td>
<td>300 m²</td>
<td>40%</td>
<td>5</td>
</tr>
<tr>
<td>A3</td>
<td>Nouvelle ville Commerce</td>
<td>17.8 ha</td>
<td>800 m²</td>
<td>600 m²</td>
<td>50%</td>
<td>5</td>
</tr>
<tr>
<td>B1</td>
<td>Aabassieh - Habitation</td>
<td>161.7 ha</td>
<td>1,200 m²</td>
<td>500 m²</td>
<td>30%</td>
<td>3</td>
</tr>
<tr>
<td>B2</td>
<td>Aabassieh - Extension habitation et commerce</td>
<td>63.3 ha</td>
<td>1,200 m²</td>
<td>400 m²</td>
<td>30%</td>
<td>4</td>
</tr>
<tr>
<td>C</td>
<td>Aabassieh - Commerce</td>
<td>24.6 ha</td>
<td>1,000 m²</td>
<td>800 m²</td>
<td>50%</td>
<td>5</td>
</tr>
<tr>
<td>CM</td>
<td>Cimetières</td>
<td>15.8 ha</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D1</td>
<td>Lotissement propriété de l’État : quartiers résidentiels et établissements</td>
<td>55.3 ha</td>
<td>5,000 m²</td>
<td>_</td>
<td>35%</td>
<td>3</td>
</tr>
<tr>
<td>D2</td>
<td>Lotissement propriété de l’État : complexes résidentiels et établissements</td>
<td>86 ha</td>
<td>1,0000 m²</td>
<td>_</td>
<td>35%</td>
<td>4</td>
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<tr>
<td>E1</td>
<td>Touristique, plages -propriétés privées</td>
<td>14 ha</td>
<td>2,000 m²</td>
<td>800 m²</td>
<td>20%</td>
<td>1</td>
</tr>
<tr>
<td>E2a</td>
<td>Touristique, propriété de l’Etat, complexes touristiques privés</td>
<td>37.4 ha</td>
<td>10,000 m²</td>
<td>10,000 m²</td>
<td>25%</td>
<td>3</td>
</tr>
<tr>
<td>E2b</td>
<td>Touristique, propriétés privées - habitation et tourisme</td>
<td>4,000 m²</td>
<td>3,000 m²</td>
<td></td>
<td>25%</td>
<td>3</td>
</tr>
<tr>
<td>E2c</td>
<td>Touristique, propriétés privées - habitation et tourisme</td>
<td>1,500 m²</td>
<td>1,000 m²</td>
<td></td>
<td>25%</td>
<td>2</td>
</tr>
<tr>
<td>F1</td>
<td>Industrielle (extérieure)</td>
<td>23 ha</td>
<td>3,000 m²</td>
<td>1,500 m²</td>
<td>40%</td>
<td>3</td>
</tr>
<tr>
<td>F2</td>
<td>Industrielle (intérieure)</td>
<td>10.9 ha</td>
<td>2,000 m²</td>
<td>1,000 m²</td>
<td>40%</td>
<td>3</td>
</tr>
<tr>
<td>G</td>
<td>Jardins</td>
<td>30 ha</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>Agricole</td>
<td>366.2 ha</td>
<td>5,000 m²</td>
<td>1,500 m²</td>
<td>5%</td>
<td>2</td>
</tr>
<tr>
<td>M</td>
<td>Militaire</td>
<td>11 ha</td>
<td></td>
<td></td>
<td>35%</td>
<td>3</td>
</tr>
<tr>
<td>P</td>
<td>Plages, propriétés publiques maritimes</td>
<td>79.4 ha</td>
<td>Interdiction de construire (décret n° 4028 du 4/3/1966)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P1</td>
<td>Réserve naturelle et réserve côtière (loi 78/98)</td>
<td>177.6 ha</td>
<td>Permission strictement réservée aux structures légères destinées à la gestion de la réserve</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 4

Distribution of archaeological sites by period, including actual and potential sites
## Appendix 5

### Summary of the various CHUD projects

<table>
<thead>
<tr>
<th></th>
<th>Tyre urban projects as per PAD</th>
<th>Tyre urban executed projects</th>
<th>Status</th>
<th>Funding source</th>
<th>Implementation date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5.1</td>
<td>Improvements to the Port waterfront, public spaces and historic buildings</td>
<td>Works Phase 2: Fishing Port area, waterfront, public spaces and historic buildings. Improvement of public space and pedestrian zones</td>
<td>Ongoing</td>
<td>AFD</td>
<td>2009-2013</td>
</tr>
<tr>
<td>1.5.2</td>
<td>Gateway and Bawabeh Square, commercial and parking facilities</td>
<td>Works Phase 2: Bawabeh Square, Hamra street &amp; Jaafarieh square. Improvement of public space and pedestrian zones</td>
<td>Ongoing</td>
<td>WB GoL</td>
<td>2009-2012</td>
</tr>
<tr>
<td>1.5.3</td>
<td>Hamra Street and Hammam Square, public space and street frontage improvements</td>
<td>Works Phase 1: Infrastructure Works; improvement of public space and pedestrian zones</td>
<td>Ongoing</td>
<td>WB GoL</td>
<td>2009-2012</td>
</tr>
<tr>
<td>1.5.4</td>
<td>The Khans, adaptive re-use of historical buildings</td>
<td>Not Implemented (Khan el Achkar)</td>
<td>Preparation of Design</td>
<td>AFD</td>
<td>2014-2016</td>
</tr>
<tr>
<td>1.5.5</td>
<td>Cultural promenade at the interface of the archaeological and historical areas</td>
<td>Works Phase 1: Cultural path including rehabilitation and reuse of three major historical buildings.</td>
<td>Completed</td>
<td>WB GoL</td>
<td>2005-2008</td>
</tr>
<tr>
<td>1.5.6</td>
<td>Coastal protection and promenade</td>
<td>Works Phase 1: Coastline preservation including new sewer line and improvement of pedestrian zones</td>
<td>Completed</td>
<td>WB GoL</td>
<td>2005-2008</td>
</tr>
<tr>
<td>1.5.7</td>
<td>Support to housing rehabilitation</td>
<td>Not Implemented</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5.8</td>
<td>Support to cultural tourism, private sector participation and communication</td>
<td>Support to cultural tourism, private sector participation and communication</td>
<td>Under Preparation</td>
<td>WB</td>
<td>2012-2016</td>
</tr>
<tr>
<td>1.5.9</td>
<td>Operational plans for historic buildings (Khans)</td>
<td>Not Implemented</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5.10</td>
<td>Operational plan for Mamlouk house</td>
<td>Works Phase 1: In cultural path; Mamluk house, Submarine Archaeological Centre and DGA Administrative building</td>
<td>Completed</td>
<td>WB AFD</td>
<td>2008-2011</td>
</tr>
<tr>
<td>1.5.11</td>
<td>Detailed Engineering and Supervision services</td>
<td>Detailed Engineering and Supervision services</td>
<td>Ongoing</td>
<td>GoL WB AFD</td>
<td>2002-2012</td>
</tr>
<tr>
<td>2.2</td>
<td>Tyre archaeological projects as per PAD</td>
<td>Tyre archaeological executed project</td>
<td>Status</td>
<td>Funding source</td>
<td>Implementation date</td>
</tr>
<tr>
<td>-----</td>
<td>----------------------------------------</td>
<td>-------------------------------------</td>
<td>--------</td>
<td>----------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>2.2.1</td>
<td>Research and documentation</td>
<td>Preliminary study and project appraisal</td>
<td>Completed</td>
<td>DGCS</td>
<td>2001-2002</td>
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<tr>
<td>2.2.1</td>
<td></td>
<td>Preparation of detailed documentation of 1st phase works</td>
<td>Completed</td>
<td>DGCS</td>
<td>2008-2009</td>
</tr>
<tr>
<td>2.2.1</td>
<td></td>
<td>Preparation of detailed documentation for the 2nd phase including 1/250 mapping and detailed GIS on archaeological sites</td>
<td>Completed</td>
<td>DGCS</td>
<td>2010-2012</td>
</tr>
<tr>
<td>2.2.2</td>
<td>Protection of surfaces and structures</td>
<td>Works Phase 1: Church with garden, Colombarium, Monumental tomb, Church near the arch, Roman arch, Palestra consolidation, Arena consolidation, City site roman baths, Grande Allee mosaics.</td>
<td>Ongoing</td>
<td>WB GoL</td>
<td>2012-2014</td>
</tr>
<tr>
<td>2.2.2</td>
<td></td>
<td>Works Phase 2: City site roman baths, latrine, and palestra</td>
<td>To be tendered</td>
<td>DGCS</td>
<td>2012-2014</td>
</tr>
<tr>
<td>2.2.2</td>
<td></td>
<td>Works Phase 2: Al Bass site Apollo shrine, Blue team (Beneton) bath and the Crusader chapel</td>
<td>To be tendered</td>
<td>DGCS</td>
<td>2012-2014</td>
</tr>
<tr>
<td>2.2.3</td>
<td>Site presentation to visitors</td>
<td>Works Phase 1: Al Bass site visitor centre and site Museum</td>
<td>Ongoing</td>
<td>WB GoL</td>
<td>2010-2012</td>
</tr>
<tr>
<td>2.2.3</td>
<td></td>
<td>Works Phase 1: City site visitor centre</td>
<td>Ongoing</td>
<td>WB GoL</td>
<td>2008-2012</td>
</tr>
<tr>
<td>2.2.3</td>
<td></td>
<td>Works Phase 2: City site interpretation of the Roman bath, latrina, palestra</td>
<td>To be tendered</td>
<td>DGCS</td>
<td>2012-2014</td>
</tr>
<tr>
<td>2.2.3</td>
<td></td>
<td>Works Phase 2: Al Bass and City site tourist paths interpretation</td>
<td>To be tendered</td>
<td>DGCS</td>
<td>2012-2014</td>
</tr>
<tr>
<td>2.2.3</td>
<td></td>
<td>Works Phase 2: Museogrophy of Al Bass Museum</td>
<td></td>
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<tr>
<td>2.2.4</td>
<td>Site management</td>
<td>Works Phase 1: Site fencing and improvement of site entrances</td>
<td>Completed</td>
<td>WB GoL</td>
<td>2005-2008</td>
</tr>
<tr>
<td>2.2.4</td>
<td></td>
<td>Works Phase 1: Al Bass Museum complex</td>
<td>Ongoing</td>
<td>WB GoL</td>
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</tr>
<tr>
<td>2.2.4</td>
<td></td>
<td>Works Phase 1: Al Bass Hamra entrance</td>
<td>Ongoing</td>
<td>WB GoL</td>
<td></td>
</tr>
<tr>
<td>2.2.4</td>
<td></td>
<td>Works Phase 2: Museum and storage operations</td>
<td>To be tendered</td>
<td>DGCS</td>
<td>2012-2014</td>
</tr>
<tr>
<td>2.3</td>
<td>Detailed studies and design</td>
<td>BTAP Phase 1 Design</td>
<td>Completed</td>
<td>DGCS</td>
<td>2005-2008</td>
</tr>
<tr>
<td>2.3</td>
<td></td>
<td>BTAP Phase 1 Works supervision</td>
<td>Ongoing</td>
<td>DGCS</td>
<td>2010-2012</td>
</tr>
<tr>
<td>2.3</td>
<td></td>
<td>BTAP Phase 1 Works supervision</td>
<td>Ongoing</td>
<td>WB</td>
<td>2012-2014</td>
</tr>
<tr>
<td>2.3</td>
<td></td>
<td>BTAP Phase 2 Design</td>
<td>Completed</td>
<td>DGCS</td>
<td>2010-2012</td>
</tr>
<tr>
<td>2.3</td>
<td></td>
<td>BTAP Phase 2 Works supervision</td>
<td>Ongoing</td>
<td>DGCS</td>
<td>2012-2014</td>
</tr>
<tr>
<td>2.5</td>
<td>Tyre inland areas archaeological mapping</td>
<td>Tyre Archaeological Mapping (TAM) project</td>
<td>Completed</td>
<td>WB</td>
<td>2005-2006</td>
</tr>
<tr>
<td>3</td>
<td>Institutional Strengthening as per PAD</td>
<td>Institutional Strengthening executed project</td>
<td>Status</td>
<td>Funding source</td>
<td>Implementation date</td>
</tr>
<tr>
<td>-----</td>
<td>-------------------------------------</td>
<td>---------------------------------------------</td>
<td>--------------</td>
<td>----------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>3.1.1 Municipal Implementation unit within Tyre Municipality</td>
<td>Recruitment of one municipal engineer (successively Dima Jawad, Adnan Khanfour and Manal Hilany)</td>
<td>Ongoing</td>
<td>WB GoL</td>
<td>2005-2016</td>
<td></td>
</tr>
<tr>
<td>3.1.2 Municipal Technical Assistance</td>
<td>Recruitment of three municipal staff (one architect, one Public Relation staff and one social scientist; Cherif Bitar, Ashraf Saffieddine and Sarah Al-Souki)</td>
<td>Ongoing</td>
<td>AFD</td>
<td>2006-2016</td>
<td></td>
</tr>
<tr>
<td>3.1.3 Introduction of GIS within Municipality</td>
<td>Preparation of Tyre Municipal GIS within technical assistance for the Municipality</td>
<td>Ongoing</td>
<td>AFD</td>
<td>2010-2014</td>
<td></td>
</tr>
<tr>
<td>3.2.2 Technical Assistance to DGA (Capacity building)</td>
<td>International seminar of Tyre Submarine archaeological equipments Technical training on submarine archaeological diving and other conservation management issues in Tyre</td>
<td>Completed</td>
<td>AFD GoL UNESCO</td>
<td>2011-2012</td>
<td></td>
</tr>
<tr>
<td>3.2.3 UNESCO advisory services to DGA</td>
<td>Inventory of archaeological objects in Tyre storages Inventory of submarine archaeology and operation of Submarine Archaeology Center Organizing an International seminar on CHUD lessons learned</td>
<td>Preparation</td>
<td>IC</td>
<td>2013-2015</td>
<td></td>
</tr>
<tr>
<td>3.2.4 Equipment for the DGA</td>
<td>Two cars for use of DGA staff in Lebanon (including Tyre) PCs and IT equipments for DGA (including Tyre) Furnishing Submarine Archaeological Centre and DGA Administrative building in Tyre</td>
<td>Completed</td>
<td>WB</td>
<td>2009-2012</td>
<td></td>
</tr>
<tr>
<td>3.3.1 Technical Assistance to Directorate General of Urban Planning for historical city centre management</td>
<td>TA DGU; GIS for the regional Tyre Urban Planning office</td>
<td>Ongoing</td>
<td>IC</td>
<td>2011-2013</td>
<td></td>
</tr>
<tr>
<td>3.4.1 Project Management Unit PMU within CDR</td>
<td>Recruitment of 5 staff within CDR (an urban planner architect, a contract manager, a DGA project manager, a procurement specialist, and a social scientist)</td>
<td>On going</td>
<td>GoL WB</td>
<td>2005-2016</td>
<td></td>
</tr>
<tr>
<td>3.4.2 EMP - Environment Management Plan</td>
<td>Private Consultant monitoring EMP in Tyre</td>
<td>Ongoing</td>
<td>WB</td>
<td>2009-2016</td>
<td></td>
</tr>
</tbody>
</table>
## Appendix 6

### DGA Action Plan 2012-2014

<table>
<thead>
<tr>
<th>DGA Objectives</th>
<th>Key Actions</th>
<th>Main Players</th>
<th>Estimated Time</th>
<th>Implementation</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strengthen the human and financial capacities of the DGA</td>
<td>1</td>
<td>Identify and exploit external and internal sources of funding</td>
<td>MoC – DGA, International institutions, NGOs, embassies, local and national sponsors and donors, etc.</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>Outsourcing for specific jobs and assignments</td>
<td>External local experts</td>
<td>2 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>Increase the number of contractual or permanent WHS site employees</td>
<td>DGA</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Enhance documentation and inventory</td>
<td>2</td>
<td>Short-term outsourcing</td>
<td>Two local experts</td>
<td>1 year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>Compile an inventory of documentation</td>
<td>External expert</td>
<td>6 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>Create a digital inventory of existing and compiled documentary material</td>
<td>DGA staff in collaboration with the external expert</td>
<td>6 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>Update the old special finds records and document the state of conservation of special finds</td>
<td>External expert</td>
<td>6 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>Create an inventory of on-site stored archaeological objects</td>
<td>DGA, CDR and UNESCO</td>
<td>2 years</td>
</tr>
<tr>
<td>3</td>
<td>Complete the archaeological map of Tyre</td>
<td>8</td>
<td>Verify previous geophysical survey results</td>
<td>DGA</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
<td>Geophysical Survey and test trenching to complete the risk map</td>
<td>DGA, CDR, DGU, MuT, Joint survey missions, and International institutions</td>
<td>2 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td>Integration of all relevant data and documentation into the GIS database</td>
<td>DGA – GIS unit</td>
<td>3 years</td>
</tr>
<tr>
<td>DGA Objectives</td>
<td>Key Actions</td>
<td>Main Players</td>
<td>Estimated Time</td>
<td>Implementation</td>
<td>Status</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Establish a Marine Protected Zone (MPZ)</td>
<td>11</td>
<td>Submit a marine protection decree project proposal and sanction the MPZ decree</td>
<td>MoC - DGA, MoA, MuT &amp; PW, and the CoM.</td>
<td>End of 2012</td>
<td>Proposal is finalized (June 2012) and needs the Minister of Culture review and signature before submission</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Prepare and submit a boundary modification request</td>
<td>MoC-DGA</td>
<td>May 2012</td>
<td>General WHS value assessment, Adopt a Strategy, SWOT analysis, Submit a preliminary draft of WH boundary</td>
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<td>MoC – DGA, UNESCO-WHC</td>
<td>September 2012-1 Feb. 2013</td>
<td>Submit the final draft of the boundary modification request</td>
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<td>UNESCO-WHC</td>
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<td>Get approval of the WHC on the boundary modification request</td>
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<td>Balance socio-economic urban regeneration against conservation and management needs of the WHS</td>
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<td>Enhance the urban setting</td>
<td>DGA, MuT, CDR, and DGU</td>
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<td>CHUD urban project: Phase II</td>
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<td>2014-2016</td>
<td>CHUD urban project: Phase III</td>
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<td>Promote WHS conservation</td>
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<td>DGA, MuT, CDR, NGO’s, International organizations and institutions</td>
<td>2012-2014</td>
<td>CHUD project: BTAP- Phases I &amp; II</td>
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<td>Leverage the standards of conservation practice</td>
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<td>DGA, MuT, CDR and private consultants and owners</td>
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<td>Archaeological integration project at parcel # 1097</td>
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<td>2012 - 2014</td>
<td>Strict application of necessary studies before intervention</td>
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<td>The choice of expertise in the conservation field</td>
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<td>Improve WHS presentation and interpretation</td>
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<td>MARE NOSTRUM branding and interpretation of the Heritage Trail</td>
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<td>Implement a periodic monitoring program</td>
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<td>DGA</td>
<td>2012-2014</td>
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<td>Promote the WHS to visitors</td>
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<td>7 Enforce the application of the Archaeology and</td>
<td>19 Urge relevant authorities and stakeholders to ensure the application</td>
<td>DGA, MuT, CDR, MoI&amp;M and the General Police</td>
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<td>Several formal and informal requests and meetings were held with many stakeholders to ensure the application of law</td>
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<td>20 Enforce the Old City Building Code to maintain the old city fabric in</td>
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<td>its present condition by preventing further deterioration</td>
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<td>8 Enhance the level of coordination among</td>
<td>21 Hold coordination meetings with partners</td>
<td>DGA, MuT, CDR, DGU, MuT&amp;PW, MoE, MoA, etc</td>
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<td>Several meetings were held between March-June 2012</td>
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<td>stakeholders</td>
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<td>22 Consult and engage stakeholders</td>
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<td>Change of development plans of the Fishermen Syndicate building</td>
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<td>9 Prepare a preliminary management plan</td>
<td>23 Compile the necessary database to set up a management plan</td>
<td>DGA, MuT, CDR, DGU, MuT&amp;PW, MoE, MoA, etc</td>
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<td>Compilation of available studies; Caritas social studies, PEK surveys in the Old City, and the Italian consultants onsite archaeological surveys</td>
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<td>undertake new surveys and studies</td>
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<td>Define the fundamental values of the WH resource and produce a statement of cultural significance</td>
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<td>Set management objectives and actions</td>
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<td>Update the plan based on new studies and surveys</td>
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<td>10 Encourage research scientific studies and</td>
<td>24 Facilitate the work of scientific missions</td>
<td>MoC-DGA, MuT, CDR, local and international institutions and universities</td>
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<td>The French Mission will continue in Oct 2012</td>
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<td>CNRSL will conduct a bathymetry survey</td>
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<td>25 Share and disseminate up to date scientific information</td>
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<td>BAAL Publications H.S 8 and issue no. 14</td>
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<td>Operation plan for the Submarine Archaeological Center (SAC)</td>
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<td>26 Endorse publications and research</td>
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<td>11 Build DGA human capacity</td>
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<td>Fieldwork training for undergraduate and graduate archaeology students</td>
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<td>12 Enhance the Level of Cultural Awareness</td>
<td>28 Increase educational and cultural activities and programs</td>
<td>DGA, MuT, CDR, local and international organizations, NGOs</td>
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<td>Exhibitions by TA - MuT</td>
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<td>Diffuse the described values to inhabitants, authorities and users</td>
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<td>Enhance the educational use of the WHS by school children</td>
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### SWOT Analysis

#### Strengths & Opportunities (S/O)

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<td>Medium Term Potential Preservation</td>
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<td>S/O.10</td>
<td>Potential extension of Al Bass and/or City sites</td>
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<td>Weaknesses &amp; Threats (W/T)</td>
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<td>Potential Urban/Development Threat: (visual integrity, exposed/known archaeology, buried archaeology and underwater archaeology)</td>
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<td>Human threat: Treasure hunting of underwater archaeology</td>
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Ozhan, E., 1993, Coastal Erosion and Other Problems Encountered in the Coastal Zone of Tyre, Consultant report for the World Heritage Center, UNESCO.
Articles


Books


<table>
<thead>
<tr>
<th>Objective</th>
<th>Activity according to priority</th>
<th>Estimated time</th>
<th>Follow up action</th>
<th>Budget Available</th>
<th>Implementation period</th>
<th>Status</th>
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<td>A- Strengthen the human and financial capacities of the DGA</td>
<td>1- Outsourcing for specific jobs and assignments related to the management of Tyre WHS</td>
<td>2012</td>
<td>a- External funding provision for short term recruitment of 3 experts to respond to the 35th WH Committee decisions</td>
<td>AFD (42,000 $)</td>
<td>1st contract: Documentation March - June 2012</td>
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<td>2013</td>
<td>b- Funding provision for four contractual archaeologists for a period of 18 months each (2 underwater archaeologists and two for onsite inventory)</td>
<td>IC (146,000 $)</td>
<td>2nd contract: Inventory March – Sept. 2012</td>
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<td>2012-2014</td>
<td>c- Recruitment of external local experts for other management urgent issues until DGA recruitment process is operational</td>
<td>N/A</td>
<td>3rd Contract: Reporting to WHC and boundary modification March – February 2013</td>
<td>On going</td>
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<tr>
<td>2- Increase the number of DGA contractual and/or permanent WH site employees</td>
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<td>2012-2014</td>
<td>d- Contractual recruitment of 21 guards dedicated for Tyre WHS</td>
<td>Included within the DGA annual budget</td>
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<td>On going (selection phase)</td>
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<td></td>
<td>e- Contractual recruitment of a WHS management team</td>
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<td>f- Provision of staff for the Museum and other on site facilities provided by the CHUD project</td>
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</table>

- AFD: Arab Fund for Economic Development
- IC: International Cooperation
- MuT: Ministry of Tourism
- CDR: Cultural Development and Reconstruction
- WHC: World Heritage Centre
- CD: Cultural Development
- MoT: Ministry of Tourism
- NGOs: Non-Governmental Organizations
<table>
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<tr>
<th>20121008-DGA-ActionPlan2012-2014.docx</th>
<th>B- Enhance documentation and inventory</th>
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<td>3- Compile an inventory of documentation</td>
<td>2012-2013</td>
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<tr>
<td>a- Compile the documentation by external expert</td>
<td>AFD (c.f. Activity 1; action a)</td>
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<td>b- Create a digital inventory of existing and compiled documentary material</td>
<td>DGA</td>
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<td>c- Organize the compiled material in one easy to use database</td>
<td>DGA</td>
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<td>4- Organize and update the inventory of archaeological objects</td>
<td>2012-2013</td>
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<td>d- Update the old special finds records and document the state of conservation of Tyre special finds stored at the National Museum</td>
<td>AFD (c.f. Activity 1; action a)</td>
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<td>e- Create an inventory of on-site stored archaeological objects</td>
<td>IC (c.f. Activity 1; action b)</td>
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<td>5- Create a preliminary archaeological map for Tyre</td>
<td>2012-2013</td>
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<td>a- Integration of previous and current survey results and relevant data into the GIS database</td>
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<tr>
<td>b- Preventive excavations</td>
<td>Developer funded</td>
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<td>c- Intrusive investigations along the highway trajectory (Abbassiyeh - Burj el Chemali section)</td>
<td>CDR - DGA</td>
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<td>6- Verify previous geophysical survey results</td>
<td>2012-2014</td>
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<tr>
<td>d- Highway investigations</td>
<td>CDR - DGA</td>
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<tr>
<td>e- Investigations on Public properties (D)</td>
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<tr>
<td>f- Integration of the above mentioned survey results (actions c, d, e) and relevant data into the GIS database</td>
<td>DGA – GIS unit</td>
</tr>
<tr>
<td>D - Define the boundaries of the WH property and delineate a buffer zone</td>
<td>8 - Prepare and submit a boundary modification request</td>
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<tr>
<td>---------------------------------------------------------------</td>
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<tr>
<td></td>
<td>b - Submit the final request of the boundary modification to the WHC</td>
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<tr>
<td>E - Provide legal protection for the WH property and its proposed Buffer Zone</td>
<td>9 - Establish a Marine Protection Zone (MPZ)</td>
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<td>10 - Transfer the legal ownership of the WH property to the MoC-DGA</td>
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<td></td>
<td>11 - Establish an act to legally protect the site with its approved boundaries</td>
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<tr>
<td>F - Prepare a WHS management plan</td>
<td>12 - Develop a management plan that sets the future strategy for site conservation and management with short, medium and long term objectives.</td>
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<td></td>
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<tr>
<td>13-</td>
<td>Promote WHS conservation and maintenance</td>
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<td></td>
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<tr>
<td>2012</td>
<td>c- Archaeological integration of remains into new development (mitigation strategies at parcel no.1097)</td>
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<tr>
<td>2012-2014</td>
<td>d- CHUD urban project: Phase III (rehabilitation of the Old Serail and Souks of the Old City)</td>
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<td>14-</td>
<td>Implement a regular monitoring plan and periodic reporting program to the WHC</td>
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<tr>
<td>2012-2014</td>
<td>b- CHUD project: WHS Site presentation to visitors² (museum displays, visitor centers, cultural paths and interpretation panels, etc)</td>
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¹ For more details related to the CHUD – Tyre archaeological Component, refer to the respective table below.
² For more details related to the CHUD – Tyre archaeological Component, refer to the respective table below.
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<tr>
<td>16- Promote the WHS and its Outstanding values to domestic and international visitors</td>
<td>2012</td>
<td>c- Mare Nostrum branding and interpretation of the Heritage Trail</td>
<td>Euromed and Municipality of Tyre</td>
<td>till end of 2012</td>
<td>On going</td>
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<td></td>
<td>2012-2014</td>
<td>d- Update the brochures produced by the MoT to incorporate the WH status and values of the site</td>
<td>Ministry of Tourism and DGA</td>
<td>2013</td>
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<td></td>
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<td>e- Assist the MuT and MoT to establish communication links with travel agencies, tourist guides, hotels to promote Tyre to visitors</td>
<td>DGA, MuT, MoT</td>
<td>2012-2014</td>
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<td>17- Enhance the urban setting</td>
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<td>WB (3,600,000 $)</td>
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<td>18- Facilitate the work of scientific missions</td>
<td>2012- 2014</td>
<td>a- AUB targeted excavations at the City Site</td>
<td>American University of Beirut</td>
<td>1 September - 30 September 2012</td>
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<td>b- The French Mission at the City Site headed by P.L. Gatier</td>
<td>Lyon II University</td>
<td>1 October – 30 October 2012</td>
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<td>c- CNRSL bathymetry and Geoarchaeological survey</td>
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<td>19- Share and disseminate up to date scientific information</td>
<td>2012</td>
<td>d- BAAL Publications; H.S 8 &amp; issue no.14</td>
<td>DGA</td>
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H- Encourage research scientific studies and Publications
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<th>Enhance the Level of Cultural Awareness</th>
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<td>Increase educational and cultural activities and programs</td>
<td>2012-2014</td>
<td>DGA, NGOs, MuT, local and UNESCO</td>
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<td>a-</td>
<td>Organize exhibitions and activities by MuT in collaboration with the DGA and NGOs to diffuse the WHS outstanding values to inhabitants and visitors</td>
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<td>Enhance the educational use of the WHS by school children</td>
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Abbreviations

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<td>AFD</td>
<td>Agence Francaise de Developpement</td>
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<td>American University of Beirut</td>
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<td>BAAL</td>
<td>Bulletin d'Archéologie et d'Architecture Libanaises</td>
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<td>BTAP</td>
<td>Baalbeck and Tyre Archaeological Project</td>
</tr>
<tr>
<td>CDR</td>
<td>Council for Development and Reconstruction</td>
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<tr>
<td>CHUD</td>
<td>Cultural Heritage and Urban Development project</td>
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<tr>
<td>CNRSL</td>
<td>Centre Nationale de Recherche Scientifique - Liban</td>
</tr>
<tr>
<td>CoM</td>
<td>Council of Ministers</td>
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<tr>
<td>DGA</td>
<td>Directorate General of Antiquities</td>
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<td>GIS</td>
<td>Geographical Information System</td>
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<tr>
<td>GoL</td>
<td>Government of Lebanon</td>
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<td>IC</td>
<td>Italian Cooperation</td>
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<td>ICOMOS</td>
<td>International Council on Monuments and Sites</td>
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<td>Ministry of Culture</td>
</tr>
<tr>
<td>MoT</td>
<td>Ministry of Tourism</td>
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<td>MPZ</td>
<td>Marine Protection Zone</td>
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<td>MuT</td>
<td>Municipality of Tyre</td>
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<td>NGO</td>
<td>Non Governmental Organization</td>
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<td>OUV</td>
<td>Outstanding Universal Value</td>
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<td>TAM</td>
<td>Tyre Archaeological Map</td>
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<td>UNESCO</td>
<td>United Nations Educational and Cultural Organization</td>
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<td>WB</td>
<td>World Bank</td>
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<td>WH</td>
<td>World Heritage</td>
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<td>WHC</td>
<td>World Heritage Center</td>
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<td>Tyre Archaeological Component</td>
<td>Projects to be executed</td>
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<td>Infrastructure for site</td>
<td>Al Bass Site:</td>
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<td>presentation and interpretation</td>
<td>visitor centre, site Museum, storage rooms, police quarter, café, guards room and ticketing office, landscaping, fencing, Al Hamra entrance/exit, etc.</td>
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<td>The City site:</td>
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<td>visitor centre, guards room and ticketing office, landscaping, etc.</td>
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<td><strong>BTAP - Phase 1:</strong></td>
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<td>Protection of surfaces and</td>
<td>Al Bass Site:</td>
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<tr>
<td>structures</td>
<td>Church with garden, Colombarium, Monumental tomb, Church near the arch, and the Roman arch.</td>
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<td>The City site:</td>
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<td>Palestra, Arena, roman baths, and the Grande Allee mosaics.</td>
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<td><strong>BTAP - Phase 2:</strong></td>
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<td>Protection of surfaces and</td>
<td>City site roman baths, latrine, and palestra</td>
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<td>Al Bass site Apollo shrine, Blue team (Benetton) bath and the Crusader chapel</td>
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<td><strong>BTAP - Phase 2:</strong></td>
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<td>site presentation and</td>
<td>City site interpretation of the Roman bath, latrina, palestra</td>
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<tr>
<td>interpretation</td>
<td>Al Bass and City site tourist paths interpretation</td>
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<td>Museography of Al Bass Museum</td>
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The South Highway
Zahrani-Sour-Cana Crossing Project
CULTURAL HERITAGE COMPONENT

ARCHAEOLOGICAL EVALUATION PROCEDURES
Abbassiyeh – Burj el Chemali Highway Project
Preliminary Approach and Methodology of Work

DGA - October 2012
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1. Circumstances of the Project

The Council for Development and Reconstruction (CDR) has worked since 1992 on activating the two main axes in Lebanon: the coastal expressway and Beirut-Syrian border road. Several projects have been executed along the two axes and the CDR intends to complete the remaining projects on those two axes in order to guarantee an effective, fast and secure transportation.

The South Highway project is part of this coastal expressway. After the execution of phase 2 of Zahrani-Sour-Cana crossing section of the highway (al Bablieh - Abou el Aswad), CONSEN Consulting Engineers and CET - Al Itihad contractors were appointed by the CDR for the implementation of Abbassiyeh – Burj el Chemali section of this highway. However, the notice to commence ground preparation and excavation works was given to the contractor prior to the archaeological evaluation phase.

Since March 2012, clearance of land and excavation works started at the expropriated part of the tendered area. This is when the Directorate General of Antiquities was prompted to establish contact with the responsible parties in order to monitor the excavation works. Several coordination meetings were held with the Consultant and the CDR in order to establish a framework for future cooperation and mitigate the development threat over the potential archaeology in the area.

2. Project Description

The highway project will provide 3 entrances to the city of Tyre; from the north through the development of an interchange at Abbassiyeh, from the south through the Cana interchange and from the middle through an exit connected to the existing road along Tell el Maachouk. The tendered project is app. 3 km long; it starts app. 200 m before the northern interchange at Abbassiyeh and extends app. 400 m after the exit of Tell el Maachouk. The execution period for this project is 2 years (March 2012 - March 2014).

Due to the complications on ground, the contractor started the execution of the project at the least problematic area. This area is located to the south of the northern interchange and extends app. 1.2 km southward (zone 1). The execution at the remaining areas will follow later.
In order to level the ground, the northern part of the project area will be filled, while its southern half will be partially excavated. The depth of excavation at this area will vary from 0.5m to 2.5m. In addition to the leveling of the ground surface, further excavation for two underpasses and the underground infrastructure works (i.e. manholes) at different locations will take place. Since the planned highway will lead to the blockage of the current Qasmiyeh canal, additional excavation works will be needed to relocate the canal. For this purpose, a 2.5 meters ditch will be dug from the proposed highway level.

Furthermore, subject to budget availability, there will be a high possibility of excavating up to a depth of 4 m in order to fix the sewage network that extends from Burj el Chemali camp under the planned highway path (zone 3).

3. DGA Approach

In general, the Directorate General of Antiquities’ duty is to assess and identify the potential impacts of developments on the archaeological resources prior to development works during the archaeological evaluation phase. This evaluation phase may employ intrusive evaluation excavations; such as, soundings and test trenches, and/or non intrusive techniques; such as, geophysical surveys and field walking.

Since the implementation of this part of the highway will undoubtedly impact the archaeological resources likely to be encountered at the various locations subject to development, especially at Burj el Chemali in the vicinity of Tell el Maachouk, the Directorate General of Antiquities needs to assess the potential impact on these resources prior and during the development works. The fact that development works have already started, the archaeological evaluation phase will have to take place simultaneously during the execution of excavation works for the development for a variety of reasons:

- The project has already been tendered and works has already started since March 2012.
- The type of land use; either agricultural or built areas, prevents the application of geophysical methods and excavations before the expropriation and clearance of the land.
- The limited budget available for archaeological evaluation.

Consequently, the archaeological evaluation will have to be divided into phases according to the practicality on ground, logistics, the need of the contractor to clear some areas ahead of others and so forth.
Special methods and techniques in archaeological investigation and recording will be used in order to maximize the gathering of information pertaining to the nature and significance of the archaeology encountered, building an accurate record of the archaeological features, allowing for sound interpretation and guiding the strategy for reducing or mitigating damage on the archaeological resources within the project’s limits. These methods are relevant to archaeological investigations in an urban context or associated with development works.

4. Scope of works

Recent archaeological discoveries in the area proved the existence of important archaeological stratigraphy going back to the Phoenician, Romano-byzantine, Medieval and Ottoman periods. The type of stratigraphy consists mainly of quarries, burial grounds including rock-cut tombs, different types of sarcophagi, ravine accumulations, palaeo-sols, pathways, roads, canalizations, and occupation levels; especially in the vicinity of Tell el Maachouk and Ramali. The earlier discovery of the rock cut tombs and quarry at Ramali has led to the modification of the highway path.

At the moment, this kind of modification is impossible, especially where expropriation already occurred. However, the highway to be developed will undoubtedly affect the archaeological resources; therefore, a plan should be adopted to mitigate the impact of development on the archaeological resources.
In order to set up a coherent strategy to minimize the impact of development on the archaeological resources, the archaeological evaluation phase and targeted excavations should take place simultaneously with the watching brief during development works at zone 1. However, the archaeological evaluation phase should precede development works at the remaining areas (zone 2), immediately after the expropriation of land is completed. Eventually, a proper mitigation plan would be produced according to the results of the investigations.

**Based on our knowledge of the rich archaeological potential at Burj el Chemali and due to the limited budget and time that could be available at this stage for archaeological investigations, the DGA suggests that development proceeds north towards Abbassiyeh instead of Tell el Maachouk area.**

Accordingly, two main zones of investigations are proposed for the current archaeological evaluation plan:

**Zone 1:** The area extends 1.2 km (S-N) southward from the south of the northern interchange at Abbassiyeh. It includes two underpasses and the renovation of the Qasmieh canal.

**Zone 2:** The area extends around 800 m to the north of Zone 1. It includes the interchange of Abbassiyeh.

The DGA will apply non intrusive and intrusive investigation activities, including a full time watching brief, in order to assess the archaeological potential within the project’s limits, especially at areas where excavation will occur. The aim of the archaeological investigations to be undertaken is to collect a maximum of scientific information allowing the reconstruction of the palaeo-environment and the settlement patterns during the ancient times.

The archaeological investigations will be divided into 3 phases:

4.1 Phase one: Non intrusive investigations

**Geophysical Survey**

A resistivity survey will be undertaken at selected locations (annex 1). High resolution 3D resistivity imaging and 2D pseudo-section resistivity sounding will be able to reveal voids in the ground (tombs) and structures if existent. This method will also aid the understanding of the sedimentology and the taphonomy of the area. For better results, the areas to be surveyed need to be cleared from vegetation or any other kind of

---

1 A number of trenches are needed to be combined with the geophysical survey in order to relate the stratigraphy of the surveyed area to the survey data. This trenching will be included in phase two of the intrusive investigations.
obstructions. The survey should take place anytime during October or November this year or during the spring of 2013. A total of 20 workings days are needed to complete this survey given that no rain was encountered. To complete the survey, the contractor needs to provide 3 unskilled workers for the whole period of the survey, in addition to a surveyor for 4 days only. Other tools may be required from the contractor; such as, iron pegs and extra batteries, in addition to some machinery for land clearance.

All the other expenses related to the daily fees of the geophysist and the needed survey equipment, in addition to its transportation from and to the working site will be covered by the Directorate General of Antiquities.

4.2 Phase two: Intrusive investigations

Phase 2.a: Test trenches and soundings

A number of trenches will be necessary for the archaeological assessment. The location of these trenches will be chosen according to the developer’s excavation plan; such as, the location of the relocated canal. An estimation of mechanical trenching and manual excavation in m³ may reach to 3,000 m³ at both zones. It will take around 5-6 months to finish the excavation and recording of the soundings with the help of 16 workers (an estimate of 8 skilled and 8 unskilled workers). The time may vary according to the presence or absence of archaeological remains.

Phase 2.b: Archaeological excavation at zone 1

There might be a need to do intensive excavations at a specified location in zone 1, if the geophysical survey gave positive anomalies. The potential area measures around 3000 m², with a team of 7-8 archaeologists and 16 workers, the area can be manually excavated over a period that varies from 4 - 6 months, depending on the type of archaeological findings.

The time frame allocated for the archaeological investigations at both zones range between six months and 10 months depending on the type of encountered archaeology. An evaluation report will be produced for each sector within the zones to give way for development. It is important to note that archaeological investigations will not obstruct development works. On the Contrary, it will be in symbioses with the developer’s activities. However, an extra six months may be needed to complete the archaeological work in case of unforeseen circumstances.
Area to be excavated
5. Methodology of work

The methodology proposed for the implementation of the archaeological evaluation phase is based on international standards in archaeological work, as well as on new advances developed locally which reflect requirements of the Lebanese Department of Antiquities vis-à-vis fieldwork in the country.

The archaeological team should be fully trained and experienced in Single Context Excavation, urban and rescue excavations according to the standard methodologies and techniques of excavation covered by the Museum of London Archaeological Service (MOLAS). Also, the team should have a wide experience in prehistoric excavations and has already worked in a geo-archaeological and a multidisciplinary research group.

5.1 Site Set-up and Survey

Excavation trenches and soundings opened at the various locations have to be referenced according to a local site grid tied to the national grid using stereographic projection onto a GIS based environment. The grid have to be surveyed using a total station machine and will be checked on a weekly basis for accuracy. An EDM machine will be used for continuous recording of find locations within the trenches.

Watching brief findings also have to be surveyed and introduced onto the GIS overall site plan.

5.2 The Evaluation trenches and soundings

In coordination with the General Directorate of Antiquities (DGA), the contractor and the archaeology team would decide the location and number of test pits and soundings to be conducted in each sector, these evaluation trenches should be chosen in a way to be representative to the archaeological resources with minimal hindrance to the development works. Nevertheless, partial blocking of the roads under investigation could occur. The test trenches are conducted by experienced labors and archaeologists with the assistance of a toothless bucket mechanical excavator (Poclain).

The Archaeology team will bear in mind the need to respect, as much as, possible the requirements of the construction schedule and will therefore do its best to use advanced techniques and methods to speed up recording and the collection of finds and data.
• If no archaeology was encountered on site, the monitoring report will be drafted and submitted to the Client and the DGA at the end of digging for construction works.

• Once archaeological deposits are encountered, a sufficient representative sample and archaeological record will be recovered to allow the drafting of a summary report detailing the nature, type, extension and importance of the archaeological remains encountered. This report will empower the Client, DGA and Contractor’s decision vis-à-vis the archaeological resources to be dealt with during the development phase.

• If the archaeological remains are not of demonstrable importance, fast recording and excavation will be undertaken during development works; liaison with the Client and DGA will be established in order to coordinate the removal of archaeology. Finds treatment and processing procedures will be applied. At the outset of monitoring, the final report of the work will be drafted.

• If the archaeology encountered proves to be of demonstrable importance, cleaning and recording will proceed, a summary report to the Client and DGA will be drafted in order to empower DGA’s decision regarding the future of the remains.

• If the DGA sees it best to excavate and remove the archaeological remains encountered on site, a program of excavation will be drafted with costing and a timetable.
  - If excavation is feasible within the available resources, the work will be implemented, proper excavation and recording will take place prior to the removal of remains. Finds’ treatment and processing procedures will apply. A final report will be drafted and presented to the Client and DGA at the outset of works.
  - If excavation is not feasible within the available resources, a discussion with the Client, DGA and Contractor will be undertaken in order to account for extra budget.

• If the DGA opts for preservation in situ, a backfilling strategy and conservation proposal will be drafted specifying the required budget for conducting this operation.

5.3 Excavation techniques

Excavation techniques will be geared towards the maximum collection of archaeological information and artifacts and will therefore make use of advanced methods of excavation and recording developed for works conducted at similar projects in Lebanon and abroad. Although archaeological procedures are in accordance with the practice and spirit of the principles of archaeological stratigraphy, as outlined in the Museum of London Archaeological Site Manual (MOLAS 1993, 1994), Finds Procedures Manual (MOLAS 1994) and the Guidelines for the preparation of Archaeological Archives
(Museum of London 1994), special methods developed to fit the nature and character of the archaeology in Lebanon, as well as, the requirements of the work will also be used.

All methods used comply with international standards and with local Lebanese legislation and rules and regulations enforced by the DGA. In fact, these methods have already been used on DGA accredited projects in Lebanon.

The various standards developed for these purposes have been automated via computer hardware and software. The use of advanced equipment for surveying and recording will not only speed-up the recording of the raw data and its processing, but will also reduce error and generate readily available digital data materials.

5.4 Recording standards

Standard, detailed and effective recording techniques have been developed in accordance with MOLAS’ Archaeological Site Manual, as well as, with the Archaeological Data Services (ADS) and IFA standards in archaeology.

Through the use of combined standard recording techniques and direct acquisition of data in digital format via digital photogrammetry or EDM surface scanning substantial improvements can be achieved in accuracy of the archaeological record, reduction of efforts and time spent on site. These factors have, needless to say, a great bearing on the implementation of the evaluation works as well as on reducing hindrance to construction schedules.

5.5 Integrated data management system

As mentioned in the previous section, a complete system of integrated data management has been previously used and tested on similar projects. The system will feed into a global relational database. It will generate the relevant information for the production of all reports and inventories.

The data referred to will include written, graphic, electronic and photographic records using pro forma sheets relevant to the respective work. The recording system is already available and the associated relational database is structured to meet the need to ensure consistency in description, interpretation and recording.

5.6 Finds processing and inventory

The primary objective of finds’ processing is that the materials and artifacts excavated and discovered during archaeological work, be processed and stored in manners that ensure their preservation and usefulness for analysis. Finds processing have to be set-up in ways that will allow complete processing of the materials as they are checked in. For
that purpose, DGA usually requires a special finds’ processing unit FPU (to be established on site or in the nearby area) and will be responsible for checking in all finds for all locations.

The FPU will provide all archaeologists and the DGA with basic inventories needed for the more detailed analysis of fieldwork, thus faster decision making for best fit scenarios.

According to international standards, artifacts have to be bagged and labeled on site and then sent to the FPU.

FPU staff has to organize the samples, artifacts and records in an appropriate manner using an established relational database prepared by DGA so that they can be readily used for analysis. The relational database will allow on-going feedback and the integration of diverse information from field notes, mapping and artifact analysis.

The basic inventory, processing and first level analysis will keep pace with excavation work. It consists of a basic cataloging of the collection, brief description including the identification of artifact type, date and state of preservation. Artifacts that require urgent conservation and first aid will be sent to the DGA for primary treatment.

The FPU is considered as an integrated part of the archaeological team, and the preliminary treatment of finds is necessary for a better and faster decision making for best-fit scenarios on the excavation sites.

The FPU includes according to the needs, in addition to the FPU archaeologists, specialists in finds (Pottery, lithics, bones, etc...) these specialists’ tasks are to prepare the proper reports regarding the archaeological finds. These reports will be the base elements for decision-making and policy making for the excavations. Those specialists will be the main reliable scientific party for the DGA to decide which approach and decision to take regarding the preservation in situ or the removal of archaeological features discovered during excavations.

5.7 Policy making and consultation with the DGA

According to the Consultant’s TOR and the Lebanese Law of Antiquities, consultation and liaison with the Client and the DGA are important procedures which apply in many instances and which guarantee a sound flow of work.

*Articles 9, 10 and 11 of the legislation state that “the accidental discovery of archaeological remains, whether movable or non-movable should be made known to the administrative authorities within a limit of 24 hours and without delays.”*
The archaeological remains under discussion are then the property of the state unless otherwise established.

Other instances where liaison and consultation are necessary relate to:

- Relations with the press and public media. In this case, DGA's regulation regarding the dissemination of information should be applied. These regulations are organized by article 14 of the DGA’s standard TOR for archaeological work whereby: “La deuxième partie s’engage à ne faire aucune déclaration concernant les travaux et découvertes archéologiques aux moyens d'information et est tenue par les mêmes réserves auxquelles sont tenues les personnes travaillant dans les services publics. A cet effet, un porte-parole sera désigné par la Direction Générale des Antiquités qui, seul, sera habilité à donner de telles informations.”

- Opening the site to the public will also be subject to DGA approval.

- Explaining special approaches and methodologies envisaged for excavation works on site. (Conform to Articles 4 and 5 of the DGA’s standard TOR document).

- The removal and dismounting of structures on site must receive prior approval by the DGA (Conform to Article 6 of the DGA’s standard TOR document).

The Client and the DGA will be constantly held informed about the progress of work and the rate of discoveries through progress reports and regular consultation.

5.8 Contingency plans

There will be cases where additional expertise and special expenditure will be needed to deal with extreme cases of in-situ conservation, backfilling, consolidation, environmental sampling and special sample recovery procedures or expensive in situ treatment of special artefacts. Additionally, where excavation size and scale stretch beyond evaluation trenches and watching brief procedures (i.e., due to DGA demand for example), special briefs and budgets must be made available for the completion of the work if this becomes part of the archaeology team assignment. In this case, the archaeology team will use all available and necessary expertise to provide the Client and DGA with an estimate of the projected efforts and costs necessary.

5.9 The Staff

The project’s staff consists of professionals undertaking various jobs to fulfill the needed archaeological tasks. The DGA will provide the Geophysist for the resistivity survey, while the archaeological team for the evaluation phase will have to be covered within the budget.
The team will include one Project Coordinator, one Site Coordinator, one Area Supervisor, two Senior Archaeologists, one Archaeologist, one Assistant Archaeologist, one FPU Officer and one Draftsman. Also, 1 surveyor will be needed if not provided by contractor.

The Specialists that could be needed on request are: pottery specialist, coin specialist, glass specialist, bone/special finds specialist, geomorphology specialist, micro morphologist, etc...

The Contractor has to provide, in addition to the surveyor, a number of workers with various skills according to the needs of the site. The Contractor has to equip the working team with adequate tools and approved mechanized equipment and hard tools.

5.10 Reporting

In addition to the Memos, minutes of meetings and targeted reports that have to be sent to the Client and DGA, the results of the archaeological evaluation will be compiled and disseminated to the DGA and to the Client according to the nature of the works.

An archaeological evaluation report indicating the archaeological potential should be produced 4 weeks after the completion of the field works in each sector.

6. Budgeting and Timing

This section will include a list of the needed arrangements to be done on site i.e. facilities and storage area, tools and equipments etc.

It also includes all the archaeological works, including global estimations (Time and Budget) for each phase.

Workers will be recruited on site according to the needs of the archaeology team and will be paid directly by the Contactor.

Specialized equipments i.e. Air compressed hammer, water pumps, big wooden boxes, electrical generator, lights, etc. will be provided by the Contractor when needed.

6.1 Equipments, Tools and Stationary

The archaeology team will acquire all the stationary and light tools necessary to conduct the excavation works and will present the necessary bills to the Client/Contractor.

All excavation and transportation machines (Poclain, Trucks, Pickup, bobcats, etc.) will be the responsibility of the Contractor.
A tentative list of tools and equipments is presented hereafter (for more details refer to annex 2):

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special equipments (digital cameras, level, computer and accessories, etc.)</td>
<td>5500 $</td>
</tr>
<tr>
<td>Tools for fieldworks (trowels, shovels, etc.)</td>
<td>2500 $</td>
</tr>
<tr>
<td>Tools for finds processing &amp; Archiving</td>
<td>4500 $</td>
</tr>
<tr>
<td>Stationary and Office equipment (planning sheets, context sheets, labels, etc.)</td>
<td>4500 $</td>
</tr>
<tr>
<td>Consumables</td>
<td>3000 $</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20,000 $</strong></td>
</tr>
</tbody>
</table>

6.2 *Security and Insurance*

All open trenches with ongoing archaeological excavations have to be respectively shored and secured by the Contractor.

The Contactor must assure the insurance coverage of all team members including Employers Liability Insurance (or equivalent), Public Liability Insurance (or equivalent), and Professional Indemnity Insurance (or equivalent).

6.3 *FPU & facilities*

The FPU facilities have to be provided by the Contractor. It consists of a closed sheltered working space of about 60m² for finds’ processing and temporary storage.

Also needed during work, one modular site office with 2 WCs for the archaeology team and workers.

6.4 *Staff Fees*

The below table presents the fees of the archaeology team members.

The contractor will provide the workers according to the needs of the site. The average number of workers with various skills is 16 workers. Additionally, 2 workers may be permanently needed at the FPU.
<table>
<thead>
<tr>
<th>Grade</th>
<th>Title</th>
<th>Required staff</th>
<th>Monthly fees $</th>
<th>Duration in month</th>
<th>Total $</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1</td>
<td>Assistant Archaeologist, Assistant Technician</td>
<td>1</td>
<td>900</td>
<td>10</td>
<td>9000</td>
</tr>
<tr>
<td>G2</td>
<td>Archaeologist, Field Technician, FPU Agent</td>
<td>2</td>
<td>1200</td>
<td>10</td>
<td>24000</td>
</tr>
<tr>
<td>G3</td>
<td>Senior Archaeologist, Senior FPU Agent</td>
<td>2</td>
<td>1500</td>
<td>10</td>
<td>30000</td>
</tr>
<tr>
<td>G4</td>
<td>Area Supervisor, FPU Supervisor</td>
<td>1</td>
<td>1750</td>
<td>10</td>
<td>17500</td>
</tr>
<tr>
<td>G5</td>
<td>Site Coordinator, Specialist</td>
<td>1</td>
<td>2000</td>
<td>10</td>
<td>20000</td>
</tr>
<tr>
<td>G6</td>
<td>Project Coordinator, Expert</td>
<td>1</td>
<td>2500</td>
<td>10</td>
<td>25000</td>
</tr>
<tr>
<td></td>
<td>Expert</td>
<td>4</td>
<td>2500</td>
<td>2</td>
<td>20000</td>
</tr>
<tr>
<td>G4</td>
<td>Draftsman</td>
<td>1</td>
<td>1750</td>
<td>4</td>
<td>7000</td>
</tr>
<tr>
<td></td>
<td><strong>Grand Total</strong></td>
<td><strong>13</strong></td>
<td></td>
<td></td>
<td><strong>152500</strong></td>
</tr>
</tbody>
</table>

*If the contractor does not provide the surveyor, the team will ask for surveying services that usually costs around 125$ a day. An additional sum of 50 $ should be added as transportation expenses.*
7. Summary and Conclusion

As a result of the development of the Abbassieh – Burj el Chemali project, the DGA intends to undertake some archaeological investigations and targeted recording at the most affected areas of the project. Archaeological investigations will include non intrusive methods, such as geophysical survey, as well as, intrusive investigations, such as test trenches and targeted excavations. Below is a summary of the preliminary budget and time table for the mentioned works. The budget and time table were planned according to the preliminary desktop assessment. However, these may change if archaeology was encountered.

- The total estimate for the geophysical survey on both zones might not exceed 2000 $, this budget includes the needed labor (3 workers) for a period of 20 working days, a surveyor for 4 working days, and some needed material. However, it excludes the clearance of land which is already going to be executed within the framework of the highway project (annex 1). It also excludes the equipment rental fees, the geophysist charges and his accommodations and transportation expenses. These expenses will be covered by the DGA.
- The total estimate for the archaeological evaluation phase (test trenching and excavations) is 10 months. Consequently, the total fees of the Archaeology team with the experts including the final reporting will be: 152,500 $
- The needed equipments are estimated to around a rough figure of 20,000 $
- The total Budget for phase one - geophysical survey – is 2000 $ only.
- The total Budget for phase two - archaeological evaluation - with the needed tools and equipments for a total of 10 months will be: 152,500 + 20,000 = 172,500 $ (One hundred seventy two thousand and five hundred US dollars only).

The above total excludes the workers fees, insurance for the working teams, site office and furniture, in addition to mechanical excavations fees and so forth.

As mentioned above, the results of the archaeological evaluation phase would decide the best approach to mitigate the impact of development on the archaeological resources; the archaeology team budget and timing would be presented accordingly. The reservation of a provisional sum that would cover the expenses of the archaeology team and labors for additional 2 months would be appropriate in case archaeology was encountered.
<table>
<thead>
<tr>
<th>Map</th>
<th>Area</th>
<th>Arch. Sites in the close vicinity</th>
<th>Pot. finds</th>
<th>Method</th>
<th>Working days</th>
<th>Nbr of workers / day</th>
<th>Needed specialists</th>
<th>Needed material</th>
<th>Conditions</th>
<th>Best season for the geophysical survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone 2</td>
<td>Byzantine Roman</td>
<td>Yes</td>
<td>High-resolution 3D resistivity imaging</td>
<td>13</td>
<td>3</td>
<td>Topographer for 3 day</td>
<td>Three 12V 40Ah batteries</td>
<td>100 pegs</td>
<td>Removal of vegetation and constructed features</td>
<td>October/November</td>
</tr>
<tr>
<td>Zone 1a</td>
<td>Byzantine Roman</td>
<td>yes</td>
<td>High-resolution 3D resistivity imaging</td>
<td>7</td>
<td>3</td>
<td>Topographer for one day</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>October/November</td>
</tr>
<tr>
<td>Zone 1b</td>
<td>No</td>
<td>Yes</td>
<td>None</td>
<td>0</td>
<td>0</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>
The CHUD project

BAALBECK AND TYRE ARCHAEOLOGICAL PROJECT - BTAP

Consultation and Communication Process and Preliminary Program

(DGA - CDR – WHC)

Beirut, November 2012
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<thead>
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<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTAP</td>
<td>Baalbeck and Tyre Archaeological Project</td>
</tr>
<tr>
<td>CDR</td>
<td>Council for Development and Reconstruction</td>
</tr>
<tr>
<td>CHUD</td>
<td>Cultural Heritage and Urban Development project</td>
</tr>
<tr>
<td>DGA</td>
<td>Directorate General of Antiquities</td>
</tr>
<tr>
<td>FD</td>
<td>Final Design</td>
</tr>
<tr>
<td>GoL</td>
<td>Government of Lebanon</td>
</tr>
<tr>
<td>IC</td>
<td>Italian Cooperation</td>
</tr>
<tr>
<td>ICOMOS</td>
<td>International Council on Monuments and Sites</td>
</tr>
<tr>
<td>MS</td>
<td>Method Statement</td>
</tr>
<tr>
<td>NTC</td>
<td>Notice to Commence</td>
</tr>
<tr>
<td>OUV</td>
<td>Outstanding Universal Value</td>
</tr>
<tr>
<td>PD</td>
<td>Preliminary Design</td>
</tr>
<tr>
<td>PMU</td>
<td>Project Management Unit</td>
</tr>
<tr>
<td>RFP</td>
<td>Request for Proposal</td>
</tr>
<tr>
<td>TD</td>
<td>Tender Documents</td>
</tr>
<tr>
<td>TOR</td>
<td>Terms of Reference</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational and Cultural Organization</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
</tr>
<tr>
<td>WHC</td>
<td>World Heritage Center</td>
</tr>
<tr>
<td>WHL</td>
<td>World Heritage List</td>
</tr>
<tr>
<td>WHS</td>
<td>World Heritage Site</td>
</tr>
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Executive Summary

Following the joint UNESCO – ICOMOS mission to the WHS of Tyre, 10-13 September 2012, it was agreed on the need to enhance and formalize the process of communication and consultation between the WHC, DGA and CDR on the interventions/actions related to the CHUD project within the World Heritage Sites of Tyre and Baalbeck.

The WHC, represented by Mrs Veronique Dauge, has expressed concerns regarding the lack of updates and detailed reporting on the activities related to the CHUD project within the WHS of Tyre. She highlighted the need to work on a regular reporting plan concerning the CHUD activities on site, in order for the WHC to follow up the progress of implementation as part of the WHC monitoring process of the state of conservation of these WH properties.

Another major concern, particularly related to the CHUD conservation interventions (BTAP1 and BTAP 2 – Protection of surfaces and structures) was raised during the mission. The mission has insisted on the necessity to include/allow a certain form of consultancy with the UNESCO advisory bodies due to the critical type of interventions directly affecting the integrity/authenticity of the archaeological remains.

The DGA has taken these concerns into consideration and consequently, several coordination meetings between the DGA, CDR and the CHUD Project Management were held for the last two months. Eventually, the DGA and CDR have worked out a reactive reporting plan, specifically applicable during the remaining phases of the Baalbeck and Tyre Archaeological Project. Moreover, the two parties have worked out a recovery consultation plan for the actions to be implemented within the CHUD project.

At the same time, the DGA is working on a general framework and a standard process of communication and early consultation to be applied and respected by all concerned parties for all kinds of future interventions by CDR on or around any of the five World Heritage Sites in Lebanon.
1. Introduction

The process of conservation and restoration of monuments and archaeological remains is a highly specialized operation which entitles a multidisciplinary cooperation. For this reason, the DGA has initially highlighted the need for relevant expertise in the consultant’s profile. Accordingly, the CDR has chosen two of the well known Italian Consultants in the field of Conservation and presentation of archaeological contexts (Ars Progetti and Planarch).

Consequently, the chosen BTAP measures and the respective planned techniques and materials to be used are expected to be in compliance with the international standards and ICOMOS Charters.

Knowing the current methodology of the project’s execution within the CDR, whereby, the execution body (contractor) is different from the planning body (consultant), there are some practical and technical issues, particular to the local context (site-specific) that need to be taken into consideration while executing such projects:

- Compatibility of Materials in the local context: Despite the fact that the suggested materials and techniques might have been previously used and tested elsewhere, this does not mean that they will be compatible with the local weather of Tyre or that of Baalbeck.
- Some problems are case specific and general procedures cannot be applied even if internationally accepted. Therefore, onsite prior testing of materials and techniques should be taken into consideration.
- The planner (consultant) is not the one who executes the work: There is a risk that the implementation does not correspond with the detailed design intended by the consultant. Therefore, direct supervision of the consultant during the implementation phase is of paramount importance.
- Tyre and Baalbeck archaeological heritage is of Outstanding Universal Value, therefore, the integrity and authenticity of remains cannot be jeopardized by any kind of excessive or irreversible conservation measure. At the same time, its archaeological and historic values cannot be overran by touristic or educational purposes.

Based on the above, the DGA, CDR and WHC have agreed on the urgent need to create a certain mechanism for the exchange of information and expertise with professionals in the field of conservation and management of the archaeological heritage, such as ICOMOS experts.
This document aims at clarifying the applicable methodology in place for undertaking such projects by CDR and the steps to be adopted in order to ensure the proper application of the planned conservation measures according to the international standards, while ensuring timely reporting to the World Heritage Center and Committee. It further drafts a preliminary plan for the type of cooperation and consultation with the international experts.

2. Current Methodology for Baalbeck and Tyre Archaeological Project

2.1 Background

The Baalbeck and Tyre Archaeological Project (BTAP) is part of the World Bank supported Cultural Heritage and Urban Development project (CHUD). The aim of this project is the enhancement of conservation and presentation of the two above mentioned archaeological sites.

The BTAP is divided into two phases; phase one (BTAP1) is funded by the World Bank (WB) and the Government of Lebanon (GoL) and phase two (BTAP2) is funded by the Italian Cooperation (IC). Each phase is divided into two components1 (table 1):

<table>
<thead>
<tr>
<th>Phase One - BTAP 1 for Tyre</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BTAP 1.a - Infrastructure for Site Presentation and Interpretation</strong></td>
</tr>
<tr>
<td>This component includes the development of the appropriate infrastructure at Tyre archaeological sites, Al Bass and the City sites, for cultural tourism and visitor management purposes. In addition to the development of the educational venues, visitor centers and a site museum, other facilities were foreseen for the enhancement of the site and its values; such as the development of storage areas, police quarter and guards and ticketing quarter, a bookshop and a café, etc.</td>
</tr>
<tr>
<td><strong>BTAP 1.b - Protection of Structures and Surfaces</strong></td>
</tr>
<tr>
<td>This component includes the conservation of selected archaeological structures at Al Bass and the City sites. The conservation interventions include the consolidation and stabilization of the arena, palestra, baths, arch, monumental tomb, church with garden, and the colonnaded street.</td>
</tr>
</tbody>
</table>

1 The above description of the BTAP components is limited to Tyre in this document. The details for Baalbeck will be forwarded in a separate document once it is agreed on the overall general framework for the future implementation of the BTAP.
It will also include the surface conservation of the mosaics of the colonnaded street, the arch, the monumental tomb, the church with garden and the columbarium.

**Phase 2 - BTAP 2 for Tyre**

**BTAP 2.a - Protection of Surfaces and Structures**

Further surface conservation measures will be executed during this phase. These include the latrine, baths, and palestra at the city site and Appollo shrine, blue team bath and the crusader chapel at Al Bass site.

Other protection measures, such as backfilling and prevention of access to delicate remains shall be executed during this phase in order to enhance the presentation of the site and at the same time protect the remains.

**BTAP 2.b - Site Presentation and Interpretation**

This component includes the circulation paths for Al Bass and the City sites in addition to the interpretation of selected monuments, as well as, the museography of Al Bass museum.
<table>
<thead>
<tr>
<th>Tyre Archaeological Component</th>
<th>Projects to be executed</th>
<th>Funding source</th>
<th>Budget available</th>
<th>Consultant</th>
<th>Contactor</th>
<th>Implementation period</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BTAP - Phase 1.a:</strong> Infrastructure for site presentation and interpretation</td>
<td>Al Bass Site: visitor centre, site Museum, storage rooms, police quarter, café, guards room and ticketing office, landscaping, fencing, Al Hamra entrance/exit, etc. The City site: visitor centre, guards room and ticketing office, landscaping, etc.</td>
<td>WB and GoL</td>
<td>2,200,000 $</td>
<td>Ars Progetti</td>
<td>Al Bonyan</td>
<td>2008-2012</td>
<td>Ongoing (till end of 2012)</td>
</tr>
<tr>
<td><strong>BTAP - Phase 1.b:</strong> Protection of surfaces and structures</td>
<td>Al Bass Site: Church with garden, Columbarium, Monumental tomb, Church near the arch, and the Roman arch. The City site: Palestra, Arena, roman baths, and the Grande Allee mosaics.</td>
<td>WB and GoL</td>
<td>891,670 $</td>
<td>Ars Progetti</td>
<td>Bouvier-Jesco joint venture</td>
<td>2013-2015 (two years)</td>
<td>Waiting for the method statement to start implementation of conservation works</td>
</tr>
<tr>
<td><strong>BTAP - Phase 2.a:</strong> Protection of surfaces and structures</td>
<td>City site roman baths, latrine, and palestra</td>
<td>IC</td>
<td>1,900,000 €</td>
<td>Planarch</td>
<td>N/A</td>
<td>2013-2015 (two years)</td>
<td>To be tendered</td>
</tr>
<tr>
<td><strong>BTAP - Phase 2.b:</strong> Site presentation and interpretation</td>
<td>City site interpretation of the Roman bath, latrina, palestra</td>
<td>IC</td>
<td>1,900,000 €</td>
<td>Planarch</td>
<td></td>
<td>2013-2015 (two years)</td>
<td>To be tendered</td>
</tr>
</tbody>
</table>

Table 1: The four components of the Tyre Archaeological Project, including the budget available for each component and the implementation progress (Nov 2012).
2.2 The General DGA–CDR Methodology for the Projects’ Preparation and Implementation

The DGA is the responsible agency for the safeguarding and management of all archaeological sites on the Lebanese grounds. However, due to the shortage of in house conservation specialists and other financial complications, the DGA has referred to the CDR for the implementation of a large scale presentation and interpretation project at Baalbeck and Tyre. This project involves a number of conservation measures that needs particular expertise.

Although this project involves intervention at archaeologically sensitive areas, the BTAP has followed the general CDR methodology applied for any development project with minor modifications. It generally followed the CDR procurement system as the implementing agency (chart 1). In order to realize this project through the CDR, the defined project underwent a series of steps before its final implementation:

- The DGA identifies the general needs for a project and accordingly, submit a request for the CDR. This request should include the general Terms of Reference (TOR) and the required skills for the needed consultant (phase 1: project definition). Although, the CDR will undertake the selection process of the consultant; nevertheless, the DGA will assist the CDR in the technical evaluation of the consultants’ proposals (phase 2), due to the specialized skills required for such projects.

- The selected consultant undertakes a general condition assessment and then proposes the needed conservation measures according to its priority. The DGA and CDR choose the appropriate measures to be applied vis-à-vis the available budget and conservation needs. Accordingly, the consultant prepares the preliminary design (PD). After the approval of the DGA and CDR, the consultant prepares the final design (FD) of the agreed on measures and finally, the tender documents (TD) specifying the scope of works, the specifications, the material to be used and quantities, etc. Consultation and continuous coordination are maintained between the consultant, DGA and CDR during the whole process of this phase (phase 3).

- When the CDR board approves the tender documents (TD), the CDR invites the contractors for bidding and eventually, chooses the best offer according to the TD. The DGA’s role is limited to be being part of the committee that selects the contractor at the last step of the process\(^2\) (phase 4.C).

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\(^2\) The consultant specifies in the tender documents the qualifications, expertise, and specifications of the contractor (criteria for application). However, the DGA can express the need for a contractor with specific experience as a condition in the Consultant’s TOR. Moreover, the DGA can also request in the TOR that the consultant is supposed to supervise the contractor’s work during the implementation of the project.
When the consultant gives the Notice to Commence (NTC) for the chosen contractor, the contractor prepares a detailed work plan and Method Statement (MS) within two months. This MS must be approved by the consultant and then by the CDR before the implementation of works (phase 5). The DGA, through the respective site managers for Baalbeck and Tyre, monitors the implementation of works and follow up the progress. The DGA may request the adjustment of the MS if deemed necessary during implementation.

When works are completed, the CDR does a provisional handing over for the DGA, as well as, a snag list prepared by the consultant. This list is checked by a CDR-DGA committee to verify the end result of the project. The contractor is supposed to deliver the project according to the MS before the final handing over to DGA (phase 6).

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3 Usually all these approvals occur through the assigned DGA project manager, Mr. Jean Yasmine and the CDR.
Chart 1: CDR methodology and process of work for the CHUD project - BTAP 1 and BTAP 2

**Phase 1: Project Definition**
- A. DGA to define the project according to the need
- B. DGA to submit the Consultant’s TOR for the CDR

**Phase 2: Selection of Consultant**
- A. The CDR to complete the TOR & RFP with other legal and financial documents
- B. The CDR to submit the complete RFP to the CDR board
- C. Consultants are invited by CDR to submit their proposals
- D. Technical evaluation of proposals by DGA & CDR
- E. Financial evaluation by CDR
- F. Selection of the consultant according to the best offer by CDR

**Phase 3: Preparation of Tender Documents (TD)**
- A. CDR to prepare the consultant’s contracts
- B. Consultant to undertake an assessment of current conditions and propose priority measures
- C. Consultant to prepare the Preliminary Design after the consultation with the DGA and CDR on the proposed measures
- D. Consultant to prepare the Final Design after the DGA and CDR approval on PD
- E. Consultant to prepare the Tender Documents after the DGA and CDR approval on the FD
- F. TD to be sent to the legal department at the CDR
- G. TD to be sent to the CDR board

**Phase 4: Selection of the Contractor**
- A. CDR to invite contractors for bidding
- B. Contractors to submit their offers to CDR
- C. CDR-DGA committee to evaluate the offers and select the best contractor’s offer

**Phase 5: Implementation of Works**
- A. CDR to prepare contracts
- B. Consultant to give the Notice to Commence for the contractor
- C. Contractor to prepare the detailed Method Statement
- D. Consultant to approve the Method Statement
- E. CDR to approve the Method Statement
- F. Contractor to adjust the Method Statement – if needed
- G. Contractor to implement the Method Statement

**Phase 6: Project Operation**
- A. Provisional handing over by CDR to DGA
- B. Consultant to prepare a Snag List for CDR
- C. CDR-DGA committee to approve or adjust the Snag List
- D. Final handing over by CDR to DGA

Continuous monitoring by DGA site managers during phase 5.G
2.3 DGA-WHC Reporting

Due to the fact that Baalbeck and Tyre are inscribed on the WHL, the DGA is supposed to forward regular reports and updates on any intervention that might affect the OUV. According to article 169 of the Operational Guidelines, “... the States Parties shall submit by 1st February to the Committee through the Secretariat, specific reports and impact studies each time exceptional circumstances occur or work is undertaken which may have an effect on the state of conservation of the property”.

Consequently, the DGA has regularly sent to the WHC documents, reports and updates related to the CHUD project and its stages of development (Annex 1-2). However, during the UNESCO-ICOMOS mission of 2012 to Tyre and after having a closer look on the proposed interventions, the state of conservation of the site and the outcomes of the implemented part of BTAP 1.a, the mission have realized the complexity of works and the variety of delicate conservation interventions. Consequently, the mission has advised the State Party to initiate closer consultations with the WHC and its advisory bodies to ensure better results, especially on actions related to the conservation of structures and surfaces (BTAP 1.b and BTAP 2.a). Moreover, the mission has requested more detailed future reporting on the proposed actions.

3. The Enhancement of the BTAP Methodology

Given the fact that the conservation components of Baalbeck and Tyre Archaeological Project have completed the preparation of tender documents (phase 3) and are about to reach the phase of implementation, it will be impossible to change the overall planned actions (table 2). However, consultations are still feasible, especially on issues related to the technical application of the chosen conservation measures.

| BTAP 1.a | **End of Phase 5.G:** Two months before provisional handing over |
| BTAP 1.b | **End of Phase 5.A:** Contractor is waiting for the NTC from the Consultant |
| BTAP 2.a | **End of Phase 3.G:** Tender documents are waiting the approval of the CDR board |

Table 2: The current status of development for each phase of the BTAP project (Nov 2012)

After many coordination meetings with the CDR, the DGA was able to accommodate the WHC concerns into the overall methodology of the DGA-CDR project’s progress:
a. Introduce additional steps into the overall progress of BTAP - phase 5 while taking into consideration the time schedule of delivery for the project by the contractors and consultants. These introduced steps will allow the consultation with international experts and the integration of their recommendations into the Method statement of the BTAP.

b. Ensure the extra supervision over the implementation of works by the contractor. The CDR is discussing with the respective consultants the possibility of allocating an expert to be present during the application of critical conservation measures.

c. Increase the reactive reporting on CHUD activities to the WHC.

d. Formulate a formal systematic methodology for any future project implemented by CDR within or around a World Heritage Site; whereby the consultation with the WHC and its advisory bodies could occur at an early stage of the project’s preparation. This methodology will involve further control over future projects at early phases of preparation and later during the implementation of works.

3.1 The General Framework for the BTAP Process – Phase 5

The DGA, in collaboration with CDR, has introduced some additional steps within Phase 5 (Implementation of Works) in order to ensure the proper implementation of the conservation measures (chart 2). Some of the major adjustments to the old methodology are:

- The introduction of a testing period for specific actions of BTAP 1 and BTAP 2 (phase 5 – C.1): This testing period is best done while the contractor is preparing the Method Statement, directly after the NTC is given by the consultant. This is an essential step that compliments the MS preparation. This testing period could occur any time before the due date of the MS finalization.

- The introduction of a consultation period with the UNESCO Advisory Bodies: Once the MS is approved by the respective consultant, the CDR will forward the MS to the DGA. The DGA will forward the detailed work plan for the assigned experts for feedback. A maximum period of one month will be given to the experts to review the material and finalize their reports. The DGA will review the experts’ reports and forward the recommendations to the CDR in order to adjust the MS accordingly.

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4 In this case, the contractor has two months to complete the tests and the method statement once the consultant has issued his NTC.
• **DGA approval on the Method Statement:** Generally the DGA did not interfere in the details of the work plan of the contractor. For general infrastructure and development issues (BTAP 1.a), the DGA site manager used to directly coordinate with the CDR and contractor for onsite mock ups or minor amendments of the MS. However, the BTAP 1.b and BTAP 2.a & 2.b will involve structural strengthening and consolidation of archaeological remains, as well as, surface restoration of mural paintings and other stone treatments etc. Therefore, it will be necessary at this stage to do a final review of the MS by the DGA before the contractor starts the official implementation of works (phase 5.G).

• **Evaluation and supervision during implementation:** The DGA, CDR and UNESCO office – Beirut, will be organizing two workshops at the beginning of the implementation of works period. The 1st workshop to be held during phase 5.G for BTAP 1.b and the second will be held during phase 5.G of BTAP 2. The aim of the two workshops is to evaluate the tests results and assess the viability of the approved methods and conservation techniques and the compatibility of the materials used.

The conclusions of the two workshops will be used to amend the materials and techniques to the benefit of the archaeology and the project itself. For this reason, the participants should include all the involved stakeholders from DGA, CDR, UNESCO-WHC, International experts, the consultants and the contractors of the diverse components.

A third workshop may also take place upon the finalization of the BTAP project, under the wide title of *Lessons Learned* from the whole CHUD project, including the BTAP. This workshop will assess the results of the conservation efforts of BTAP and will build on its outcomes in order to enhance the overall future conservation practices. This will pave the way for new conservation approaches better adapted to the local context to be applied by the DGA at the national level.
Phase 5
Implementation of Works

A. CDR to prepare contracts of the chosen contractor

B. Consultant to give the Notice to Commence for the contractor

C. Contractor to prepare the detailed Method Statement

D. Consultant to approve the Method Statement

E. CDR to forward the Method Statement to DGA for approval

E.1 DGA to forward the MS to the experts’ for review and recommendations

E.2 DGA to forward the Experts’ Reports for the WHC and CDR

F. Contractor to adjust the Method Statement according to the recommendations

F.1 DGA to give final approval on Method Statement after adjustment

G. Contractor to implement the Method Statement

G.1 International Workshop to be held during implementation

G.2 Workshop results to be accommodated in the MS

Chart 2: The amended flowchart of the BTAP implementation phase (phase 5). The adjusted methodology of the project’s implementation is applicable on both Baalbeck and Tyre projects.
3.2 BTAP Work Plan 2012 – 2015

The several consultations with the CDR have led to put forward a preliminary work plan and time table (table 3; chart 3). The timetable is arranged according to the schedule of implementation of each phase of the BTAP. Since the NTC is about to be given for the contactor in order to start the MS preparation for BTAP 1.b, therefore the feedback from the UNESCO advisory bodies is primarily required by mid March 2013. The DGA will soon establish contact with qualified experts and the UNESCO WHC in order to do the necessary arrangements for the advisory services before and during the workshops\(^5\).

While planning the working program, the time constraints associated with the addition of extra steps within BTAP - phase 5, as well as, the consultation needs were taken into consideration. Therefore, the above additional steps were smoothly integrated into the old process in order not to block or excessively exceed the duration assigned for each step within phase 5\(^6\). Practically, the duration from the Notice To Commence (phase 5.B) till the implementation of works (phase 5.G) was supposed to be finalized in a maximum duration of 5-6 months. Thus, the adjustments according to the new BTAP framework had to stick to this time frame. Consequently, the involved parties must stick as much as possible to this time schedule, especially for the BTAP 1.b.

\(^5\) The DGA will forward the details of the consultation services and workshops once finalized.

\(^6\) Two years are assigned to finalize BTAP implementation phase once the NTC is given by the Consultant. This allows the integration of the above mentioned steps.
<table>
<thead>
<tr>
<th>Time frame</th>
<th>Activity as per priority</th>
<th>Deadline</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>The consultant (Ars Progetti) to notify the contractor (Bouvier-Jesco) to commence preparation of the detailed work plan and Method Statement for BTAP 1: Protection of surfaces and structures</td>
<td>End of Dec 2012</td>
<td>A conservation expert should be provided by the consultant for the supervision of the method statement preparation</td>
</tr>
<tr>
<td>Jan</td>
<td>DGA to forward a summary of CHUD actions of BTAP 1 and BTAP 2 to the WHC and the pre-assigned experts for review and feedback</td>
<td>End of Jan 2013</td>
<td>One month testing period for the materials and actions specified by the Consultant according to the TD.</td>
</tr>
<tr>
<td>Feb</td>
<td>CDR to submit Method statement for DGA approval</td>
<td>End of Feb 2013</td>
<td>DGA will not give its final approval on the Method Statement until the receipt of the experts’ feedback on the MS documents.</td>
</tr>
<tr>
<td>March</td>
<td>DGA to forward the Method Statement to the WHC and the concerned experts for feedback</td>
<td>1st week of March</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>DGA to receive the WHC and experts’ feedback on the planned actions before the 1st workshop</td>
<td>End of March 2013</td>
<td>The experts should submit their reports one month after the receipt of the MS documents from DGA.</td>
</tr>
<tr>
<td>April</td>
<td>DGA to inform CDR if implementation can proceed with/without adjustments</td>
<td>Mid April 2013</td>
<td>A formal letter of recommendations to be sent by the WHC to DGA based on the experts’ feedback.</td>
</tr>
<tr>
<td></td>
<td>Contractor to adjust the method statement according to the experts recommendations (if needed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DGA to officially approve final Method Statement</td>
<td>End of April 2013</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Contractor (Bouvier-Jesco) to begin the implementation of works for BTAP 1 according to the final Method Statement</td>
<td>May 2013</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>CDR will finalize the selection of BTAP 2 contractor</td>
<td>End of June 2013</td>
<td>The chosen contractor for BTAP 2 (if known) should attend the forthcoming workshop with Planarch.</td>
</tr>
</tbody>
</table>
## 2013

### July

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>1st workshop:</strong> CHUD-DGA-WHC and International experts in addition to the involved consultants and contractors.</td>
<td>Mid July 2013</td>
</tr>
<tr>
<td></td>
<td>Bouvier- Jesco to adjust the Method Statement of BTAP 1 according to the final recommendations of the WHC and experts</td>
<td>End of July 2013</td>
</tr>
</tbody>
</table>

### August

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The consultant (Planarch) to notify the chosen contactor to commence preparation of the detailed work plan and Method Statement for BTAP 2: Protection of surfaces and structures, as well as, site presentation and interpretation</td>
<td>Mid September 2013</td>
</tr>
</tbody>
</table>

### September

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid Sept – Mid Oct 2013</td>
<td>Testing phase – BTAP 2</td>
<td>One month testing period for the materials and actions specified by the Consultant according to the tender documents.</td>
</tr>
</tbody>
</table>

### November

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CDR to submit BTAP 2 Method Statement for DGA</td>
<td>Mid Nov 2013</td>
</tr>
<tr>
<td></td>
<td>DGA to forward BTAP 2 - Method Statement to the WHC and the concerned experts for feedback before the 2nd workshop</td>
<td>End of Nov 2013</td>
</tr>
</tbody>
</table>

### December

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DGA to receive the WHC and experts’ feedback on the planned actions before the implementation starts.</td>
<td>Mid Dec 2013</td>
</tr>
<tr>
<td></td>
<td>DGA to inform CDR if implementation can proceed with/without adjustments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contractor to adjust the method statement according to the experts recommendations (if needed)</td>
<td>End of Dec 2013</td>
</tr>
<tr>
<td></td>
<td>DGA to give <strong>official</strong> approval on the final Method Statement</td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>Month</td>
<td>Event Description</td>
</tr>
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<td>------</td>
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<td>--------------------</td>
</tr>
<tr>
<td>2014</td>
<td>Jan</td>
<td>The Contractor of BTAP 2 to begin the implementation of works according to the final Method Statement</td>
</tr>
<tr>
<td></td>
<td>Feb</td>
<td></td>
</tr>
<tr>
<td></td>
<td>March</td>
<td>2nd workshop: CHUD-DGA-WHC and international experts in addition to the involved consultants and contractors.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DGA to forward final recommendations of the workshop for CDR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The contractor to adjust the Method Statement of BTAP 2 according to the final recommendations of the international experts</td>
</tr>
<tr>
<td></td>
<td>April</td>
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<td>March</td>
<td>3rd workshop: CHUD-DGA-WHC and international experts in addition to the involved consultants and contractors.</td>
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Table 3: BTAP work plan 2012-2015.
3.3 DGA – WHC Reactive Reporting

In addition to the general periodic yearly reports that are usually sent to the WHC, the DGA will introduce a number of specific reports focusing only on the BTAP activities, the consultation process with UNESCO advisory bodies and the progress of implementation.

During the implementation period of the BTAP (2013-2015), the WHC will receive three periodic reports and 5 specific BTAP reports. The periodic reports will stick to the date assigned by the WHC, 1st of February of 2013, 2014 and 2015. On the contrary, the specific BTAP reports will follow the BTAP activities timeline (Chart 4). Consequently, the WHC will be kept updated in the following manner:

Specific report one: this report will include the Method Statement documents along with the experts’ reports of BTAP 1.b upon its finalization (expected end of March 2013).

Specific report two: this report is concerned with the outcomes and recommendations of the 1st workshop (expected mid July 2013).
Specific report three: this report will include the Method Statement documents along with the experts’ reports of BTAP 2.a and 2.b upon its finalization (expected end of December 2013).

Specific report four: this report is concerned with the outcomes and recommendations of the 2nd workshop (expected March 2014).

Specific report five: this report will summarize the outcomes of the whole BTAP project and the recommendations of the 3rd workshop (expected March 2015).

Moreover, the 1st periodic report of February 2013 will include a detailed explanation on the BTAP planned conservation actions. The focus will be on the techniques and materials to be used and the rationale behind using each. The specific aim and strategy adopted for each action should be understood prior to the receipt of the detailed Method Statement.
**Chart 4: Reactive Reporting Schedule to the WHC**

Periodic reporting schedule between the DGA and the WHC on the various activities related to the CHUD project: BTAP 1 and BTAP 2

- **1 December 2012**
  - NTC for BTAP 1

- **1 January - 31 January 2013**
  - Testing period - BTAP 1

- **16 February 2013**
  - MS for BTAP 1

- **21 February - 21 March 2013**
  - Experts' review and recommendations on the MS - BTAP 1

- **8 April 2013**
  - Adjustment of MS - BTAP 1

- **20 April 2013**
  - DGA final approval on MS – BTAP 1

- **1 August - 31 August 2013**
  - BTAP 1 - Implementation of works

- **1 February 2013**
  - Periodic report 1: WHC to receive a general progress report including BTAP 1 and BTAP 2

- **1 January - 31 January 2013**
  - Testing period - BTAP 1

- **15 February 2013**
  - MS for BTAP 2

- **25 March 2013**
  - Experts' review and recommendations on the MS - BTAP 2

- **20 April 2013**
  - DGA final approval on MS – BTAP 2

- **1 February - 30 June 2014**
  - BTAP 2 - Implementation of works

- **1 February 2013**
  - Specific report 1: WHC to receive MS - BTAP 1 and Experts' recommendations

- **25 March 2013**
  - Specific report 2: WHC to receive MS - BTAP 2 and Experts' recommendations

- **8 April 2013**
  - Adjustment of MS - BTAP 1

- **21 February - 21 March 2013**
  - Experts' review and recommendations on the MS - BTAP 1

- **1 May - 30 June 2014**
  - BTAP 2 - Implementation of works

- **15 July 2013**
  - Specific report 2: WHC to be informed about the final results of the 1st workshop

- **1 February 2015**
  - Periodic report 3: WHC to receive a general progress report including BTAP 1 and BTAP 2

- **1 March - 7 March 2015**
  - 2nd workshop

- **25 March 2015**
  - Experts' review and recommendations on the MS - BTAP 2

- **16 April 2015**
  - Adjustment of MS - BTAP 2

- **21 April - 21 May 2015**
  - Experts' review and recommendations on the MS - BTAP 2

- **1 May - 30 June 2015**
  - BTAP 2 - Implementation of works

- **15 July 2013**
  - Specific report 3: WHC to receive MS - BTAP 2 and Experts' recommendations

- **20 April 2013**
  - DGA final approval on MS – BTAP 1

- **1 February - 30 June 2014**
  - BTAP 2 - Implementation of works

- **1 March - 7 March 2015**
  - 2nd workshop

- **8 April 2013**
  - Adjustment of MS - BTAP 1

- **21 February - 21 March 2013**
  - Experts' review and recommendations on the MS - BTAP 1

- **1 May - 30 June 2014**
  - BTAP 2 - Implementation of works

- **15 July 2013**
  - Specific report 4: WHC to be informed about the final results of the 2nd workshop

- **1 May - 30 June 2015**
  - BTAP 2 - Implementation of works

- **1 October 2015**
  - Specific report 5: WHC to be informed about the final results of the 3rd workshop

**BTAP Actions**

- **Phase 1**
- **Phase 2**

**WHC Reporting Schedule**
Conclusion

The DGA and CDR have tried to accommodate the WHC’s concerns in all the best possible means available given the project’s deadlines and budget. Nevertheless, it is worth mentioning that the process of consultation and feedback will definitely delay the implementation of the project. The integration of additional steps into the time schedule of the project’s implementation phase needs a maximum of two extra months to be realized before the actual implementation of each component (phase 5.G). Therefore, the process from the consultant’s NTC - Phase 5.B until the DGA’s official approval - end of phase 5.F1 will require 4-5 months instead of 2-3 months. Consequently, it will be of paramount importance that all the involved parties commit and adhere to the time frame available for the application of each step.

The DGA is working on the preparation of the Terms of Reference for the UNESCO Advisory Bodies’ Consultancy Services in order for the CDR to prepare the respective contracts, so that the application of the above work plan proceeds accordingly.