

**REPORT ON THE JOINT WORLD HERITAGE CENTRE/ICOMOS
REACTIVE MONITORING MISSION TO
HATRA, IRAQ**

FROM 10 TO 16 JUNE 2023



Hatra, Temenos © ICOMOS / Y. Makaroun

ACKNOWLEDGEMENTS

The members of the joint World Heritage Centre/ICOMOS Reactive Monitoring mission to Hatra would like to extend sincere appreciation to the Iraqi authorities for kindly facilitating the mission, whose objectives could not have been achieved without their support and full involvement.

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Mission Representatives

May Shaer, UNESCO World Heritage Centre
Yasmine Makaroun, ICOMOS International

EXECUTIVE SUMMARY AND LIST OF RECOMMENDATIONS

The joint World Heritage Centre/ICOMOS Reactive Monitoring mission to Hatra was undertaken in conjunction with the Reactive Monitoring mission to Samarra Archaeological City, from 10 to 16 June 2023. The mission to Hatra was carried out in accordance with Decision **44 COM 7A.7** of the World Heritage Committee (Fuzhou/Online, 2021), with the main purpose of assessing the state of conservation of the property and incurred damage, and to discuss with the State Party the actions required to protect the property. The mission took into consideration its terms of reference and previous decisions of the World Heritage Committee. A site visit was conducted, and meetings were held with the authorities.

Accordingly, the mission conducted an **assessment of the overall state of conservation of the property, having particular regard to identified attributes of the property which support its Outstanding Universal Value**. A detailed inspection was carried out for the monuments located within the Temenos area, while an overall view of the whole property was undertaken.

The main issues that have impacted the property have been identified to be in relation to armed conflict, environmental factors, previous interventions and related conservation issues, protection, and site management.

Overall, it appears that the authenticity and integrity of the property have been retained to a large extent, and currently there are no major serious threats that may impact the key attributes that convey the Outstanding Universal Value (OUV) of the property. The main threat related to armed conflict, which had led to the inscription of the property on the List of World Heritage in Danger appears to be no longer present. Nevertheless, the property being vulnerable to environmental factors, and coupled with the lack of monitoring and maintenance processes for some time since at least the 1990s, these factors have led to degradation and structural stabilization issues, in some cases posing a risk of collapse, particularly at previously reconstructed elements.

In **assessing the actions and/or resources required to facilitate the protection, repair, rehabilitation and reconstruction of the important monuments**, the mission noted that while current resources are limited, through partnership projects, urgent protection and conservation needs at the property are being addressed, including those related to the ensuing impact of the conflict situation that prevailed between 2014 and 2017. Actions have yielded positive results in terms of documentation, assessments and stabilization work, in addition to ensuring the return of site management activities and capacity building in conservation techniques was carried out.

It would be important to build on the current momentum and ensure that damage and risks are comprehensively assessed and mapped, and that pilot interventions are monitored in terms of their efficacy. In order to ensure long-term protection, further assessment of risks is needed, in terms of the entire site, as well as individual monuments. As current resources are limited, through the preparation of a site management plan, a detailed assessment of the needed human and financial resources would be necessary to ensure adequate conservation and management.

With regard to the **progress and steps undertaken towards a comprehensive conservation and management plan for the property**, the mission was informed that following documentation, assessments and analytical studies, monument specific plans are being elaborated, in addition to a conservation plan for the Temenos area. The preparation of a site management plan remains essential and should address requirements for long-term management and conservation, visitor management, and the required human and financial resources. The elaboration of a strategy and resources for documentation management is necessary in order to rebuild the archives of the management unit, as an essential tool for monitoring, conservation and management.

The mission also carried out an **assessment of implemented actions and projects, as well as review of the identified threats, damage and proposed interventions, which would contribute to the finalization of the Desired state of conservation for removal of the property from the List of World Heritage in Danger (DSOCR) and corrective measures**. The main factor, related to the armed conflict situation that led to the inscription of the property on the List of World Heritage in Danger, seems to be no longer present, and several threats resulting from impact of the conflict have been already addressed, including in relation to site clearance, renovation of site management facilities and ensuring site protection, and recovery of vandalized and damaged statuary. In addition, documentation, damage assessments and diagnostic studies have been carried out, and stabilization works have been executed.

At the time of writing the report, a DSOCR and related corrective measures have not been adopted by the World Heritage Committee. Based on its assessment of threats and the actions already carried out, the mission provided **specific advice regarding the proposed DSOCR**

and potential corrective measures, with a DSCOR framework of five main points. At the same time, the mission has observed that a number of interventions that had been identified by the State Party as corrective measures contributing to the achievement of a DSOCR have been implemented, while others are underway. These activities may be considered as progress achieved towards removing the property from the List of World Heritage in Danger.

The mission also conducted **follow up with regard to boundary clarification**. The delineation of property boundaries is an essential requirement for effective protection, and it would be important that the State Party submits a boundary clarification as soon as possible. The establishment of a buffer zone would provide an additional layer of protection to the property, particularly in terms of protecting the surrounding cultural landscape in the wider setting.

Recommendations

Recommendation 1: Remedial actions addressing major impacts of the armed conflict on the property have been either carried out, in progress or planned. Nevertheless, it would be important to compile all related impacts, whether they are being addressed with remedial actions or not, within an overall damage and risk assessment as part of the elaboration of a comprehensive conservation plan for the whole property, including the excavated areas. The different types of assessed damage and related interventions should include the rationale for dealing with damage impacts, whether major or minor, and whether they are to be addressed within the short-, medium- or long-term approach. The issue of deciding on the preservation of traces of conflict requires attention and thorough debate with all stakeholders.

Recommendation 2: It would be important to finalize the conservation plan for the central Temenos area on the basis of a detailed damage assessment, understanding the morphology of deterioration, and scientific analyses, after which pilot interventions could be selected and monitored over time to assess the efficacy of any proposed actions. Investigations related to the water table are recommended, especially with the presence of large puddles of water during the winter season. This would contribute to addressing a main factor of decay, which is the rising damp phenomenon by capillarity.

Recommendation 3: The elaboration of a monitoring programme would be crucial in order to continuously assess the state of conservation of monuments and any proposed interventions, coupled with a capacity building programme in this regard.

Recommendation 4: Several important actions representing urgent priorities have been reported to the mission by the State Party, which comprise diagnostic studies, the elaboration of conservation/restoration plans specific to certain monuments, and the undertaking of urgent preventive measures. It is recommended that these efforts are pursued and that communication with the World Heritage Centre continues, by providing details of planned and ongoing projects, with the related Heritage Impact Assessments – prepared in line with the Guidance and Toolkit for Impact Assessments in a World Heritage Context – for technical review prior to implementation.

Recommendation 5: It is recommended that a comprehensive assessment of potential hazards is carried out, in order to ensure that all risks of sudden collapse are addressed – at least through temporary measures, such as propping, and limiting or preventing access to visitors. Potential hazards may be related to certain roofs and tops of walls, as well as walls that have serious deformation. Propping shall remain a limited temporary measure as the diagnostic and structural studies are carried out and a conservation plan is elaborated.

Recommendation 6: It is recommended that the State Party submits a boundary clarification, and considers the submission of a minor boundary modification proposal for an added

protection of the property, in line with paragraphs 163-164 of the Operational Guidelines. In addition, it would be essential to ensure that no encroachment occurs at the property, and to look into the possibility of removing any existing ones, in addition to establishing a programme for raising awareness and engagement of the nearby community, which may contribute to the long term protection of the property.

Recommendation 7: In terms of physical protection, it is recommended that all related information about the project for constructing a fence along the inner city wall and surveillance cameras be submitted to the World Heritage Centre prior to implementation to ensure mitigation of any potential impact on the OUV of the property. It would also be important to conduct an assessment of potential threats in the area between the inner and outer city walls, including potential illegal access and encroachment, and accordingly elaborate additional possible protection measures, including in relation to monitoring.

Recommendation 8: It is recommended that a site management plan is initiated that takes into consideration management and conservation requirements, in addition to a visitor management plan, comprising the needed visitor facilities, presentation and interpretation. The management plan should address the necessary human and financial resources that would be essential for adequate management, in addition to capacity building.

Recommendation 9: A strategy and resources for documentation management are essential in order to rebuild the archives of the management unit, as an important tool for monitoring, conservation and management. This comprises the gathering of any previous archival material, if available, as well as integrating all recent digital documentation carried out.

Recommendation 10: It is recommended to present to the World Heritage Committee for adoption a Desired State of Conservation for Removal from the List of World Heritage in Danger and corrective measures as follows (more details provided in Annex 6):

Desired State of Conservation for Removal from the List of World Heritage in Danger

- The removal of substantive threats arising from the conflict between 2014 and 2017.
- Improved site protection and accessibility of the site by the management team, with the reinstatement of site management facilities.
- Enhanced knowledge and skills with regard to conservation and management at the property.
- Threats to Hatra's archaeological heritage mitigated and damage incurred as a result of the conflict addressed.
- Damage resulting from conflict repaired.

Corrective measures

- Reinstating the management of the property by SBAH and ensuring its protection and accessibility for the local community and visitors:
- Enhancing capacities of professional staff of SBAH in heritage conservation and management:
- Undertaking site documentation, monitoring, and studies for adequate conservation and management.
- Repair of damage resulting from conflict:
- Assessing risks at monuments indirectly impacted by the conflict and addressing vulnerabilities, including through assessment, studies and urgent stabilization:

I. THE PROPERTY

Inscription History

Hatra was inscribed on the World Heritage List in 1985 as a cultural property under criteria (ii), (iii), (iv), and (vi). The inscribed property covers 323.75 ha, while a boundary clarification is pending submission by the State Party.

In 2015, the property was inscribed on the List of World Heritage in Danger due to the prevailing armed conflict (Decision **39 COM 7B.51**). At the time, the World Heritage Committee considered that the optimal conditions were not present anymore to ensure the conservation and protection of Outstanding Universal Value (OUV) of the property, as it had been threatened by both ascertained and potential danger.

Summary of the Retrospective Statement of Outstanding Universal Value

A retrospective Statement of Outstanding Universal Value has been elaborated and will be presented for adoption by the World Heritage Committee at its extended 45th session (Riyadh, 2023).

Below is a brief description of the significance of the property.

Brief Description

A large, fortified city under the influence of the Parthian Empire and capital of the first Arab Kingdom, Hatra withstood invasions by the Romans in A.D. 116 and 198 thanks to its high, thick walls reinforced by towers. The remains of the city, especially the temples where Hellenistic and Roman architecture blend with Eastern decorative features, attest to the greatness of its civilization.

Key Decisions of the World Heritage Committee

A limited number of decisions were taken concerning this property from the date of its inscription on the World Heritage List in 1985 to the date of its inscription on the List of World Heritage in Danger in 2015. The issue of looting was highlighted in 1995, whereby the Bureau, having been informed of looting of archaeological sites in Iraq, particularly at Hatra, recommended that the States Parties to the World Heritage Convention do their utmost to prevent the illicit traffic of archaeological objects and sculptures from this site (Decision **19 BUR VI.22**). In 2001, the Bureau took note of worrying information that the Secretariat had provided on the state of conservation of Hatra (Decision **25 BUR V.281**), which highlighted that the main factors affecting the property were the lack of maintenance, lack of trained personnel, and looting. Conservation problems were reported as being due to the extensive use of cement in past restoration works, which in the presence of raising damp from the water table produces salt efflorescence, damaging the original stones of the ancient buildings. In addition, the absence of a reliable survey of the site and its monuments and of regular monitoring prevented the definition of management and conservation plans.

Upon inscribing the property on the List of World Heritage in Danger in 2015 (Decision **39 COM 7B.51**), the Committee expressed its great concern about the absence of information on the state of conservation of the property and requested the State Party to keep the World Heritage Centre informed of the evolution of the situation on the ground. It considered that the optimal conditions were not present anymore to ensure the conservation and protection of the OUV of the property and that it was threatened by both ascertained and potential danger. At the time, the Committee also requested the State Party to develop a set of corrective measures and a timeframe for their implementation, as well as a Desired state of conservation for the removal of the property from the List of World Heritage in Danger (DSOCR), in close consultation with the World Heritage Centre and the Advisory Bodies. It further requested the

State Party, as soon as security conditions allow the responsible authorities to visit the site, to carry out a rapid assessment of the state of conservation of the property and to submit the results of this assessment to the World Heritage Centre, for review by the Advisory Bodies, prior to any action on the ground.

In 2016, the Committee encouraged the State Party to pursue its efforts to ensure the protection of the property, despite the impossible accessibility (Decision **40COM 7A.11**), and in 2017, it encouraged the State Party to continue to pursue these efforts, and in particular to start implementing urgently the priority actions outlined at the February 2017 International Coordination Conference on the Safeguarding of Cultural Heritage in Liberated Areas of Iraq (Decision **41COM 7A.34**). The Committee also encouraged the State Party to carry out a rapid emergency assessment of the damage incurred, before undertaking emergency actions and as soon as the situation allows. The Committee also launched an appeal to Member States of UNESCO to cooperate in the fight against the illicit trafficking of cultural heritage coming from Iraq as per the United Nations Security Council Resolutions 2199 of February 2015, 2253 of December 2015 and 2347 of March 2017, and called on the Member States to support emergency safeguarding measures, including through the UNESCO Heritage Emergency Fund. These requests were reiterated in the following sessions.

In 2018, the Committee underlined the need for a detailed damage assessment followed by a comprehensive project for the conservation and protection of the property (**42COM 7A.19**). The Committee also invited the State Party to inform it, through the World Heritage Centre, of any future plans for major restoration or new construction projects that may affect the OUV of the property, in accordance with Paragraph 172 of the *Operational Guidelines*, before making any decisions that would be difficult to reverse. In addition, the Committee requested the State Party to invite a joint World Heritage Centre/ICOMOS Reactive Monitoring mission to further assess damage and to discuss with the Iraqi authorities the short-, medium- and long-term goals and actions required to protect the property from further damage and looting, as well as a more complete and detailed damage assessment in support of a comprehensive project for the conservation and restoration of the property. This request was reiterated in the following two sessions.

At its 44th session, the Committee noted the State Party's efforts to keep the World Heritage Centre informed about the situation on the ground, welcomed the submitted 'Damage Assessment Report Status Study', took note of the documentation carried out, and urged the State Party to compile comprehensive information on the state of conservation of the property, particularly detailed assessment of the damage needed to facilitate the protection, repair, rehabilitation and reconstruction of the important monuments (Decision **44 COM 7A.7**). It reiterated its request that interventions be addressed within the framework of the overall assessment of damage and risks and a comprehensive conservation plan prepared in full consultation with the World Heritage Centre and the Advisory Bodies, and encouraged the elaboration of a set of correctives measures and the Desired state of conservation for the removal of the property from the List of World Heritage in Danger (DSOCR), as well as identification of means by which the state of conservation of the property can be verified.

II. SUMMARY OF THE NATIONAL MANAGEMENT SYSTEM FOR THE PRESERVATION AND MANAGEMENT OF THE WORLD HERITAGE PROPERTY

At the time of inscription of Hatra on the World Heritage List, Antiquities Law No. 59 of 1936, was the main legislation for heritage protection in Iraq. Since 2002, cultural heritage in Iraq has been protected under Law Number 55 for the Antiquities and Heritage of Iraq.

Article 2 of this law stipulates that the Antiquities Authority (State Board of Antiquities and Heritage (SBAH)) is mandated to:

- First, to designate sites that are rich in antiquities and cultural treasures as well as sites of historical significance.
- Second, to use the latest scientific and technical methods and means to search for antiquities.
- Third, to maintain the countries antiquities, its heritage, and its historical sites and to protect them from damage, harm and deterioration.
- Fourth, to build modern museums where antiquities and cultural heritage materials and models may be displayed, thereby enabling citizens and visitors to peruse them and learn about them.
- Fifth, to manufacture models of antiquities and cultural heritage materials and to produce for display, sale or exchange depictions of these antiques and cultural heritage materials in photographs, slides and films.
- Sixth, to conduct studies and research that highlight the antiquities and cultural heritage of Iraq.
- Seventh, to effect the temporary and occasional display of antiquities and cultural heritage materials or copies therefor in foreign museums, to enable foreigners to become acquainted with Iraq's ancient culture and civilization.
- Eighth, to educate specialist in antiquities and cultural heritage and to upgrade the efficiency of those specialists by means of training courses, academic scholarships, and fellowships.
- Ninth, to organize survey teams for the purpose of conducting comprehensive surveys of antiquities and cultural heritage buildings in Iraq.

The Antiquities and Heritage Law also contains the following articles:

- Article 6 (Second): The Antiquities Authority may evacuate persons and property from archeological and cultural heritage sites as well as from their no-use perimeters in case to threat to people and to the archeological and cultural heritage sites.
- Article 7: All historic and archaeological sites, including archeological hills and mounds, owned by public juristic persons, shall be registered under the name of the Ministry of Finance. Their use shall be designated and dedicated to serve the purposes of the Public Authority for Antiquities and Heritage.
- Article 8: Acting in coordination with relevant state agencies the Antiquities Authority shall conduct a comprehensive archeological survey of archeological and cultural heritage sites and buildings in Iraq. It shall pinpoint those sites and structures on survey maps and documents with fixed coordinates, and it shall incorporate them in its own basic design plans. It shall indicate how these sites are being used as archeological land and buildings and it shall send notice to that effect to the competent municipalities.
- Article 9 (Third): Agencies responsible for the preservation and maintenance of archeological sites, [cultural] heritage sites and historical sites shall obtain the written consent of the Antiquities Authority before making or altering any plans for locating general, industrial, agricultural, and housing projects at those sites. They shall also obtain a written consent from the Antiquates Authority before making or altering any plans for the construction, expansion, or beautification of cities and villages or for irrigation, [water] filtration, and or road construction projects at these sites.
- Article 9 (Fifth): Building permits shall not be issued for areas comprising archeological sites and for areas that are within one kilometer of such sites without the written consent of the Antiquities Authority...

Furthermore, Article 15 of the legislation prohibits the following:

- First, Trespassing on archeological, cultural heritage, historical sites.
- Second, Farming, residing, building a residence, or constructing any other structures on archeological and cultural heritage sites...

- *Third, Using archeological sites to deposit construction debris or refuse to erect buildings or burial structures or using them as quarries.*
- *Fourth, Uprooting trees and vegetation and removing structures from archeological sites or undertaking any work that will result in the changing of the features of the archeological site.*
- *Fifth, Establishing industries that pollute the environment or pose a threat to public health in areas that are less than three (3) kilometers away in all directions from archeological sites and cultural heritage buildings.*
- *Sixth, Tearing down an archeological or a cultural heritage building, disposing of its construction materials, or using it in such a way as to risk damaging it, harming it or altering its distinguishing features.*

The law also stipulates penalties for such illegal activities, which may imply an imprisonment for a term not more than 10 years, and the payment of a fine.

Moreover, the State Party has ratified the 1972 World Heritage Convention on 5 March 1974, as well as other UNESCO Culture Conventions as follows:

- 1954 Convention for the Protection of Cultural Property in the Event of Armed Conflict, and its First Protocol (21 December 1967)
- 1999 Second Protocol (6 April 2002)
- 1970 Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property (12 February 1973)
- 2003 Convention for the Safeguarding of the Intangible Cultural Heritage (6 January 2010)
- The 2005 Convention for the Protection and Promotion of the Diversity of Cultural Expressions (22 July 2013)

The State Board of Antiquities and Heritage (SBAH) is the authority responsible for the management of World Heritage sites in the country, and its International Organizations Department is responsible for the implementation of the 1972 Convention. It is represented on the ground by the World Heritage site managers, while the Directorate General of Investigations and Excavations is responsible for all activities at archeological sites.

In Hatra, currently, the site management team is composed of a site manager, in addition to a staff member of the Nineveh Inspectorate of Antiquities and Heritage, Hatra, who is also the in charge of communication with the local community, and two members of the Nineveh Inspectorate Office who have been assigned by SBAH to join the international team that is currently implementing a project funded by the International Alliance for the protection of Heritage in Conflict Areas (ALIPH). The site team is in charge of supervising maintenance, archaeological investigation and surveys. Coordination is undertaken with the scientific missions and technical support is provided by the team. The existing site management facilities comprise office space, in addition to facilities for the scientific missions, storage rooms and conservation laboratory, restrooms for visitors, two caravans on-site, and a partially covered visitor parking area of 60x80 m.

III. THE MISSION

Following the invitation by the State Party, the joint World Heritage Centre/ICOMOS Reactive Monitoring mission to Hatra was undertaken in accordance with Decision **44 COM 7A.7** of the World Heritage Committee (Fuzhou/Online, 2021). It was organized in conjunction with the joint World Heritage Centre/ICOMOS Reactive Monitoring mission to Samarra Archaeological City from 10 to 16 June 2023. The main purpose of the mission to Hatra was to assess the state of conservation of the property and the incurred damage, and to discuss with the State

Party the actions required to protect the property. Annex 1 comprises the full terms of reference of the mission and the complete decision of the World Heritage Committee.

The mission team was composed of May Shaer, representing the World Heritage Centre, and Yasmine Makaroun, representing ICOMOS International. The mission was accompanied by Junaid Sorosh-Wali, Chief of Culture at the UNESCO Office in Iraq throughout its duration.

The mission visited the property on 11 June 2023, in particular the Temenos area with its temples, located within Hatra's inner city wall, and carried out an assessment of the damage incurred at specific monuments and the actions undertaken. Due to time constraints, the mission was not able to inspect the city walls and internal ditch in detail, except for general views and a quick look at the level of the entrances, as well as the overall area from a high position. Similarly, the mission did not have an opportunity visit the new nearby town, which is located southeast of the property. During the site visit, a meeting was organized with Mr. Fadhil Mohamad Khadir, Site Manager of Hatra, with the participation of Mr. Mahmoud Abdallah Wardi and Mr. Rouwayed Mouafaq Mohamad. (Annex 3 comprises the itinerary and programme, and Annex 4 provides the list of people met).

On 12 June 2023, a meeting was held with H.E. Dr. Laith Majeed Hussein, Chairman of the State Board of Antiquities and Heritage, and was attended by team members of the International Organizations Department.

The terms of reference of the mission comprised the following (Annex 1):

- Assessment of the overall state of conservation of the property, having particular regard to identified attributes of the property which support its Outstanding Universal Value (OUV).
- Assessment of actions and/or resources required to facilitate the protection, repair, rehabilitation and reconstruction of the important monuments.
- Assessment of implemented actions and projects, as well as review of the identified threats, damage and proposed interventions, which would contribute to the finalization of the DSOCR and corrective measures.
- Specific advice regarding the proposed DSOCR and potential corrective measures.
- Progress and steps undertaken towards a comprehensive conservation and management plan for the property.
- Follow up and progress with regard to boundary clarification.

IV. ASSESSMENT OF THE STATE OF CONSERVATION OF THE PROPERTY

The inscription of the property on the List of World Heritage in Danger in 2015 was due to the prevailing armed conflict, whereby the Committee considered that the optimal conditions were not present anymore to ensure the conservation and protection of OUV of the property, as it had been threatened by both ascertained and potential danger. Factors affecting the property as identified in previous state of conservation reports have included destruction and damage resulting from armed conflict, illegal activities, and looting of Iraqi archaeological sites. Looting as a threat was previously highlighted by the Bureau in 1995 and 2002 (Decisions **19 BUR VI.22** and **25 BUR V.281**), when concerns were also raised with regard to lack of maintenance and trained personnel. Conservation issues were noted to be due to the use of cement in previous conservation work, exasperated by the presence of rising damp resulting in salt efflorescence. Reliable surveys and regular monitoring had not been undertaken, preventing the definition of management and conservation plans.

The mission took into consideration its terms of reference, addressing the assessment of the overall state of conservation of the property, the required actions to facilitate the protection and conservation of the property, and the actions already carried out. In addition, the mission reviewed identified threats and considered the interventions that could contribute to the

Desired state of conservation for the removal of the property from the List of World Heritage in Danger (DSCOR), with the related corrective measures. The main issues that have impacted the property, whether positively or negatively, have been identified in relation to armed conflict, environmental factors, previous interventions and related conservation issues, protection and site management. (Annex 7 comprises illustrative figures).

There has been ongoing cooperation between the State Board of Antiquities and Heritage and the International Association for Mediterranean and Oriental Studies (ISMEO), with the University of Padua and the University of Siena, in the implementation of a project for first-aid intervention at the property, with the funding provided by the International Alliance for the protection of Heritage in Conflict Areas (ALIPH). The Hatra Statuary Salvage Project (HaSSP) has also been carried out through the collaboration between SBAH and the Center for Ancient Mediterranean and Near Eastern Studies (CAMNES), and aims at creating a comprehensive database of both the complete statues and the fragments from Hatra.

Issue 1: Impact of Armed Conflict

Previous reports provided by the State Party have referred to damage incurred at the property between 2015 and 2017 as a result of armed conflict, including damage to the eastern wall of the Great Iwans, and several sculptural reliefs. In addition, the property was inaccessible to the site management team between 2014 and 2017, while site management facilities and storage rooms for archaeological artifacts were vandalized, all of which impeded adequate site protection, conservation and management, and contributing to increased vulnerability of the property.

The site visit carried out by the mission team, discussions with members of the site management team, and reports provided by the State Party, have allowed the mission to evaluate the current situation in terms of impact of the recent armed conflict and actions undertaken.

Through the HaSSP project, restoration work at affected statues has been carried out. In addition, the State Party, in collaboration with the team of experts from ISMEO, in charge of implementing the project for damage assessment and first aid intervention at Hatra with funding support from ALIPH, has been addressing threats and damage incurred at the property as a result of the armed conflict. In the framework of this project, several actions have been carried out, focused on responding to urgent needs in terms of protection, conservation, and management. A detailed drone survey was conducted, and a photogrammetric survey through 3D digital scanning was carried out, paving the ground for a 3D modelling of the main structures, all of which should inform a detailed condition assessment.

Site clearance from debris resulting from conflict was undertaken, the main lighting system has been rehabilitated, the main entrances and open wells have been closed off (Fig. 1), and assessment of damage was carried out, stone fragments were collected, documented and stored, first aid interventions were carried out, and reliefs that had been vandalized have been conserved. Some of the relief figures have been reinstated in their original place (Figs. 2-3).

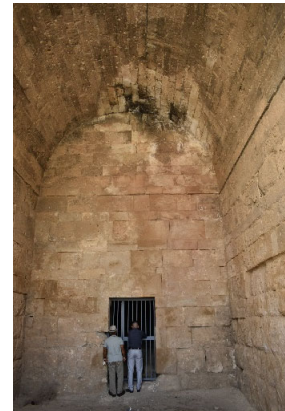


Figure 1: Installation of gates/closing off entrances © UNESCO / M.Shaer



Figures 2 and 3: Recovery of statuary figures in their original location © UNESCO / M. Shaer

Based on a damage assessment report by UNOSAT (dated 27 April 2017), possible direct damage where suspected along the northeast corner of the Temple of the Triad due to the presence of smoke, observed on the satellite image. During the mission, no traces of smoke were observed on the exterior elevations, while limited remains were found inside the northwest Iwan (Figs. 4-5).



Figures. 4 and 5: Exterior and interior of the Temple of the Triad © ICOMOS / Y. Makaroun

The Temple of Shahiru has been directly impacted by the partial destruction of the western peristyle (Fig. 6), the reported destruction of a female statue on the western side and numerous impacts of shrapnel/bullets. Except for the cleaning undertaken inside the rooms, no other actions have been undertaken yet. The reconstruction of the destroyed section of the peristyle is foreseen in October 2023.



Figure 6: Temple of Shahiru peristyle © ICOMOS / Y. Makaroun

The Great Iwans have mainly suffered from the deliberate destruction of statues, relief sculptures (heads, eagles) and direct bullet impact. Statues that used to be displayed in the

different rooms are currently stored in one room, in conditions that may not ensure long term preservation with potential impact from factors such as humidity, dust, and birds stains.

The Temple of Shamash was mainly affected by vandalism of the western iron gate and by extensive graffiti on interior walls. The gate replacement was completed by the ongoing project in April 2023.

The Ablutions Temple had reportedly witnessed vandalism of the altar stone elements. Except for cleaning, no actions are foreseen, according to information provided by the State Party. The Temple of Maren (Maran), or Hellenistic Temple, shows impact of numerous shrapnel/bullets, mainly on columns of the southern colonnade. No actions are foreseen in the short term as per information provided by the State Party.

Facilities and equipment of the SBAH had suffered from severe vandalism during the conflict situation. The main offices, accommodation for scientific expeditions and two storage rooms have been renovated, equipped, and currently function as a restoration laboratory/facility. This has allowed for the return of the site management staff.



Figure 7: Temple of Maren © UNESCO / M. Shaer

It is evident that the armed conflict during 2014 and 2017 had impacted the property, and while localized destruction had taken place, this has been already addressed to a large extent through documentation, assessment and conservation work. Upon visiting the site, only limited impact could be discernible, which does not detract from the overall integrity of specific monuments or the site as a whole, including at the Temenous area. For example, limited smoke remains can be found inside the Temple of the Triad, and the impact of bullets/ shrapnel at the Temple of Maren only become very evident upon close inspection (Fig. 7). At the same time damaged sculptural figures and reliefs have been recovered and reinstated in their original location, such as at the Great Iwan and the Temple of Allat. An inauguration ceremony was held in February 2022 to celebrate the restoration and the reinstatement of statues that had been vandalized. This presented a positive sign for all stakeholders, and in particular for the local community, that the property is on its way towards recovery.

One of the indirect impacts of the conflict was the inaccessibility of the site for a long period, particularly between 2014 and 2017, and consequently leading to the prolongation of a period of lack of maintenance that was already prevailing. Conservation issues exasperated by lack of maintenance are addressed below.

Recommendations

Remedial actions addressing major impacts of the armed conflict on the property have been either carried out, in progress or planned. Nevertheless, it would be important to compile all related impacts, whether they are being addressed with remedial actions or not, within an overall damage and risk assessment as part of the elaboration of a comprehensive conservation plan for the whole property, including the excavated areas. The different types of assessed damage and related interventions should include the rationale for dealing with damage impacts, whether major or minor, and whether they are to be addressed within the short-, medium- or long-term approach. The issue of deciding on the preservation of traces of conflict requires attention and thorough debate with all stakeholders.

Issue 2: Environmental Impacts and Lack of Maintenance

According to a State Party report provided in 2020, the property has been affected mainly by environmental factors impacting its monuments. While previous projects at the site had focused on archaeological excavation and reconstruction work, no previous conservation work was carried out to address the issue of environmental degradation. Environmental factors due to extreme climatic conditions, such as in relation to temperature, rain, wind, humidity and seasonal sandstorms, have greatly affected the monuments, leading to the weathering of stone masonry, aeolian processes, high moisture absorption due to rising damp phenomena, rainwater percolation and infiltration on top of walls, vegetation during wet seasons, and rusting of steel rods.

The ensuing effects of these factors are clearly visible through material disintegration, exfoliation of stone surfaces, cracks and collapses of stone fragments, loss of binder or building material, deformation of masonry, presence of salts, and deposits of thick layers of sand on floors surfaces. In some cases, the bulging of walls could be noted, posing high risk of collapse.

While tackling the issue of environmental degradation is complex and would need to be dealt within the framework of a long-term strategy, a number of actions have already been initiated. A conservation plan is being drafted for the Central Temenos with its monumental buildings, following structural and geophysical analyses, and a pilot project has been initiated at the Temple of Allat, to tackle the issue of erosion and deformation of alabaster floors tiles due to humidity. After covering cleaned floor surfaces of the two northern iwans with a layer of coarse sand over geotextile membrane (Fig. 8), this pilot action is currently being monitored in terms of its efficacy in reducing rising damp phenomena and desquamation – though no detailed information has been provided to the mission on the monitoring procedure. Access to these areas has been restricted by the erection of temporary fences with the use of metallic mesh and cables.



Figure 8: Temple of Allat, coarse sand laid over geotextile © UNESCO / M. Shaer

Moreover, a sloped roofing cover of a metallic galvanized sheet has been added recently above 'Room 8' of the Temenos, in order to protect and prevent further decay of the alabaster floor elements (Fig.9). This temporary measure should be assessed after the trial phase, for its effectiveness and its visual impact, ensuring that the roofing material will not lead to impacting climate conditions. A specific monitoring programme is needed.



Figure 9: Room 8, installation of a protective roof © UNESCO / M. Shaer

Recommendations

It would be important to finalize the conservation plan for the central Temenos area on the basis of a detailed damage assessment, understanding the morphology of deterioration, and scientific analyses, after which pilot interventions could be selected and monitored over time to assess the efficacy of any proposed actions. Investigations related to the water table are recommended, especially with the presence of large puddles of water during the winter season. This would contribute to addressing a main factor of decay, which is the rising damp phenomenon by capillarity.

Moreover, the elaboration of a monitoring programme would be crucial in order to continuously assess the state of conservation of monuments and any proposed interventions, coupled with a capacity building programme in this regard.

Issue 3: Previous Interventions and Related Conservation Issues

Almost all temples, and fortification walls and gates, of the Temenos were extensively reconstructed during the 1980s, prior to the inscription of the property on the World Heritage List in 1985. Based on information from the State Party, no works were undertaken at the property between the 1990s and 2007. Reconstruction projects were initiated again in 2007 and were implemented until 2013. During that period several site facilities were also constructed. A quick comparison with the status of the site in 1912, when major excavations were carried out by a German mission led by Walter Andrea, shows a large amount of archaeological reconstructions. Nevertheless, the property appears to have retained an overall relative visual and physical coherence in the treatment of major buildings and archaeological remains due to the use of similar building material, both in color and type, such as at the Temple of Maren and the Temple of Allat (Figs. 10-11).



Figure 10: Temple of Maren, previous reconstruction work © UNESCO / M. Shaer



Figure 11: Temple of Allat, previous reconstruction work © UNESCO / M. Shaer

The significant interventions that took place in the 1980s included extensive use of reinforced concrete to connect the rebuilt upper structures, which were not always similar to the original ones. Almost all roofs are covered by concrete screeds, and despite the extensive use of cement mortar for wall tops, there is a notable vegetation growth, allowing the infiltration of rainwater. The majority of previous interventions did not include surface treatment, except for the use of cement reinforced plaster in some areas (Great Iwans). The use of cement with reinforcement bars, has resulted in salt efflorescence and rusting, inducing heavy surface decay in some areas, and hence impacting the original surfaces.

Moreover, structural instability, posing serious risk of collapse has been observed at specific elements of various monuments, which are currently being addressed by the ongoing project. At the Temple of Samya, the displacement of structural elements was followed by the collapse of the keystone of the main arch (14 m high), which has raised serious concerns regarding the structural stability of this monument, and was the subject of a technical review by ICOMOS in 2022, which recommended a concept for temporary stabilization before conducting a detailed diagnostic study based on site inspection and archival research that will confirm the needed interventions. The upper structures of this monument had been reconstructed with the use of concrete. In the framework of the ongoing project, temporary propping was installed for stabilizing the arch (Fig. 12), while the report on structural studies and geophysical investigations is expected in August 2023, and the work is in progress for the elaboration of a restoration project.



Figure 12: Temple of Samya, installation of propping © ICOMOS / Y. Makaroun

The Temple of the Triad (Fig. 13), located at the southern side of the inner courtyard has two preserved vaults along its sides and remains of an upper floor vault above the western iwan, which presents serious cracks and detachment of the stone masonry. Based on published information, the situation does not seem to be recent, but the level of instability appears to have increased with time. The regular infiltration of rainwater has certainly contributed to the loss of material and the disconnection among its masonry elements. The risk of falling stone blocks or fragments of the internal masonry is high, and hence it is recommended to close the lower access of the temple to visitors, and ensure protection of the alabaster floor by backfilling. Temporary propping may be required while structural studies are performed. Detailed documentation of the original masonry, the outer stones and the sampling for material research and techniques used are also highly recommended. According to information from the State Party, the report on the diagnostic tests carried out is expected in August 2023, and work is in progress for the preparation of a restoration project.



Figures 13 and 14: Temple of the Triad (left), and Great Iwans (right) © ICOMOS / Y. Makaroun

Similarly, at the Temple of Allat, original remains of a vault along its upper floor are obviously unstable. There are several deformations, and the main crack of the east wall has been visible since the early 20th century. Field and laboratory diagnostic tests have been carried out and the related final report is expected in August 2023, while work is in progress for the preparation of a restoration project. Moreover, the lift crane that used to be situated for decades behind the western wall has been removed, in order to mitigate any associated risk to the

archaeological area and its visitors. This crane may have contributed to additional instability. Meanwhile, no onsite preventive measures could be noted while studies are being performed.

Moreover, the entrance of Temple 14 formed by two monolithic lintel blocks shows transversal cracks. The masonry wall behind the main entrance door also presents signs of instability. The mission was not able to assess the condition of this monument, but State Party has reported that the temple's entrance has been secured with steel supports.

For the Temple of Shamash, previous concrete reinforcement, along with major erosion of the masonry of the vaulted corridor walls around the main cella have been observed. Detailed documentation and investigations are needed to verify the current stability of these structures with their roofs.

Some temporary shoring with metal propping have been implemented for displaced lintels and inclined walls. These actions should be monitored in the short term, to be followed by permanent interventions in the medium term.

Finally, at the Great Iwans, the southern wall of the north Iwan shows a significant out of plumb (Fig.14), and requires appropriate structural investigation and monitoring.

Recommendations

Several important actions representing urgent priorities have been reported to the mission by the State Party, which comprise diagnostic studies, the elaboration of conservation/restoration plans specific to certain monuments, and the undertaking of urgent preventive measures. It is recommended that these efforts are pursued and that communication with the World Heritage Centre continues, by providing details of planned and ongoing projects with the related Heritage Impact Assessments – prepared in line with the Guidance and Toolkit for Impact Assessments in a World Heritage Context – for technical review prior to implementation.

In the meantime, it is recommended that a comprehensive assessment of potential hazards is carried out, in order to ensure that all risks of sudden collapse are addressed – at least through temporary measures, such as propping, and limiting or preventing access to visitors. Potential hazards may be related to certain roofs and tops of walls, as well as walls that have serious deformation. Propping shall remain a limited temporary measure as the diagnostic and structural studies are carried out and a conservation plan is elaborated.

Issue 4: Overall Site Protection

The property as inscribed in 1985 comprises the complete area of the ancient city with its circular shape, including its inner and outer walls (Fig. 15). In the framework of the Retrospective Inventory, launched in 2004 by UNESCO/World Heritage Centre, the property was among those identified as being in need of a boundary clarification. In 2019, the map submitted by the State Party for boundary clarification, also included a new delimitation of a buffer zone of 100 m running all around the property, which did not exist at the time of inscription. Noting that a modification or creation of a buffer zone for a property already inscribed on the World Heritage List is considered as a minor modification to the boundaries and shall be approved by the World Heritage Committee, the State Party has been encouraged to complete this minor boundary modification request in accordance with paragraphs 163-164 of the Operational Guidelines for the Implementation of the World Heritage Convention and submit a duly filled-in Annex 11 of the Operational Guidelines for the property.

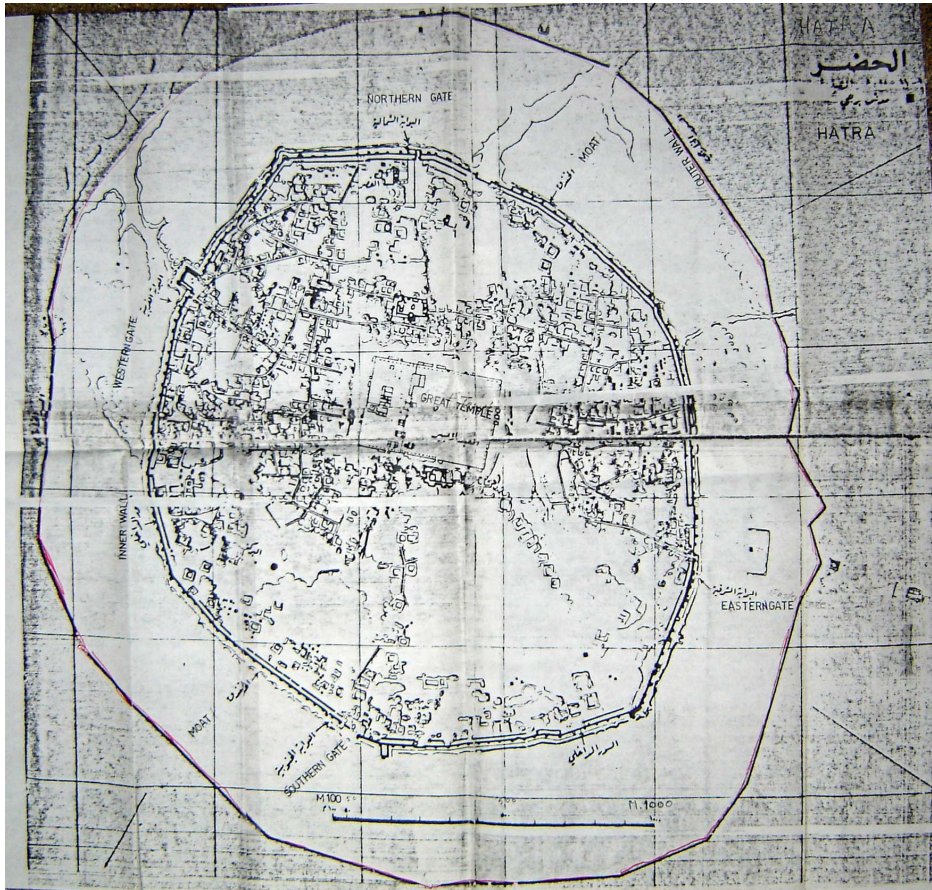


Figure 14: Hatra - Plan showing the boundaries proposed at the time of nomination

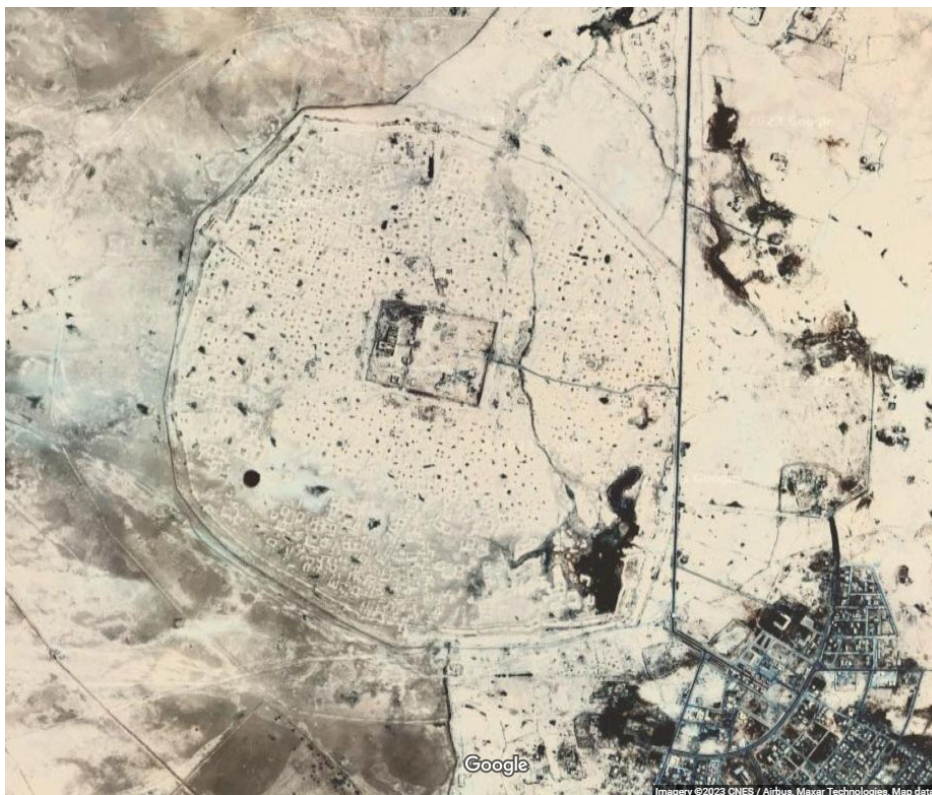


Figure 15: Aerial view of Hatra. Imagery ©2023 CNES / Airbus, Maxar Technologies, Map data ©2023

The delineation of property boundaries is an essential requirement for effective protection, and the establishment of a buffer zone would provide an additional layer of protection, particularly in terms of protecting the surrounding cultural landscape in the wider setting.

Currently, a major road crosses the property along its eastern part and runs adjacent to the inner wall. This road is important for the modern town that lies towards the southeast of the property, and it is the main artery to access the property, leading the visitor to the Eastern Gate, towards the central Temenos area. Some potential encroachments could be noted in the recent aerial image of 2023 (Fig.15), but this needs to be accurately assessed on updated maps of boundary clarification.

Moreover, while factors that were identified previously as affecting the property have comprised illegal activities and looting, according to the State Party, the site is currently protected, and as also reported in its state of conservation report, the issue of major looting of archaeological sites is now resolved.

The mission was also informed that a BRC fence is being planned along the inner wall, which would contribute to site protection, in addition to the installation of cameras. Moreover, the property currently benefits from the presence of onsite security personnel and there appears to be continuous monitoring. There is a specific Hatra antiquities police force comprised of 12 personnel, organized in two shifts to ensure the security and the safety of the site and visitors, along with a security force situated at the entrance of the archaeological city. Public accessibility is now possible, and the property has been able to receive local and international visitors.

Overall, it appears that the property's core area has been respected, with limited potential encroachment that currently does not present serious negative impacts. Nevertheless, it would be important to carefully monitor the situation and ensure that no encroachment takes place.

Recommendations

It is recommended that the State Party submits a boundary clarification, and considers the submission of a minor boundary modification proposal for an added protection of the property, in line with paragraphs 163-164 of the Operational Guidelines. In addition, it would be essential to ensure that no encroachment occurs at the property, and to look into the possibility of removing any existing ones, in addition to establishing a programme for raising awareness and engagement of the nearby community, which may contribute to the long term protection of the property.

In terms of physical protection, it is recommended that all related information about the project for constructing a fence along the inner city wall and surveillance cameras be submitted to the World Heritage Centre prior to implementation to ensure mitigation of any potential impact on the OUV of the property. It would also be important to conduct an assessment of potential threats in the area between the inner and outer city walls, including potential illegal access and encroachment, and accordingly elaborate additional possible protection measures, including in relation to monitoring.

Issue 5: Site Management

The property has an onsite management team, composed of a site manager, in addition to a staff member of the Nineveh Inspectorate of Antiquities and Heritage, Hatra, who is also the in charge of communication with the local community, and two members of the Nineveh Inspectorate who have been assigned by SBAH to join the team of ISMEO, for the implementation of the project funded by ALIPH. The site team is in charge of supervising maintenance, archaeological investigation and surveys. Coordination is undertaken with the scientific missions and technical support is provided by the site management team.

The existing facilities located inside the Temenos area are single floor buildings constructed in the 1980s/1990s, providing office space for the site management team and the Hatra antiquities police, in addition to facilities for the scientific missions, a storage room and conservation laboratory, restrooms for visitors, two caravans on-site, and a partially covered visitor parking area of 60x80 m. The existing infrastructure and facilities within the Temenos area are almost 75% renovated. Solar panels and a laboratory for the conservation of archaeological artefacts were added by the ongoing project for first-aid interventions in Hatra. Apart from this project and its related activities, current resources seem to be limited in terms of budget, personnel and facilities to ensure long term adequate site management. Nevertheless, it seems that there is currently a positive momentum achieved with the current project, which has allowed the return of conservation and management activities at the property. Capacity building activities have been carried out, mainly with regard to basic conservation interventions.

Moreover, with the return of visitors, on average, the site receives between 65 and 80 individuals each month, according to SBAH records. As the site opens up more to visitors, those numbers are expected to increase, yet visitor requirements have not been addressed adequately. The establishment of a comprehensive management plan is needed at this stage, building on the ongoing momentum in terms of conservation, management and tourism activities at the property.

Recommendations

It is recommended that a site management plan is initiated that takes into consideration management and conservation requirements, in addition to a visitor management plan, comprising the needed visitor facilities, presentation and interpretation. The management plan should address the necessary human and financial resources that would be essential for adequate management, in addition to capacity building.

Moreover, a strategy and resources for documentation management are essential in order to rebuild the archives of the management unit, as an important tool for monitoring, conservation and management. This comprises the gathering of any previous archival material, if available, as well as integrating all recent digital documentation carried out.

Issue 6: Establishment of the Desired state of conservation for removal of the property from the List of World Heritage in Danger and corrective measures

When the property was inscribed in 2015 on the List of World Heritage in Danger, a "Desired state of conservation for the removal of the property from the List of World Heritage in Danger" (DSOCR), and a programme for corrective measures, was not developed, in line with paragraph 183 of the Operational Guidelines. At the time, State Party representatives were not able to access the property, and the Committee expressed concern about the absence of information on its state of conservation and requested the State Party to keep the World Heritage Centre informed of the situation on the ground. The Committee considered that the optimal conditions were not present anymore to ensure the conservation and protection of OUV of the property, as it had been threatened by both ascertained and potential danger. It requested the State Party to develop a set of corrective measures and a timeframe for their implementation, as well as a DSOCR as soon as feasible, in close consultation with the World Heritage Centre and the Advisory Bodies. The committee also requested, as soon as conditions allow, to carry out a rapid assessment of the state of conservation of the property and to submit it to the World Heritage Centre for review by the Advisory bodies, prior to any action on the ground.

In 2022, the World Heritage Centre, in close collaboration with ICOMOS, initiated with the State Party a process for the elaboration of the DSOCR remotely through online meetings.

During those meeting the methodology for developing a DSOCR was clarified, and several exchanges took place to arrive at a better understanding with regard to the threats the property has been facing, primarily those that resulted in the inscription of the property on the List of World Heritage in Danger, and the measures undertaken or are underway to address those threats. The State Party had identified a number of these measures as priority actions that would contribute to the establishment of a DSCOR and related corrective measures.

During the mission, the team addressed the assessment of implemented projects and actions, as well as identified threats, damage and proposed interventions, which would contribute to the finalization of the DSOCR.

Threats that the property has faced as a result of the prevailing conflict between 2014 and 2017, whether direct or indirect ones, can be summarized to be in relation to the lack of protection and management capacity; inaccessibility of the site by the management authorities and damage to site management facilities; direct damage incurred on specific monuments; and lack of monitoring, documentation and maintenance work.

Recommendations with regard to DSOCR may comprise the following:

- The removal of substantive threats arising from the conflict between 2014 and 2017.
- Improved site protection and accessibility of the site by the management team, with the reinstatement of site management facilities.
- Enhanced knowledge and skills with regard to conservation and management at the property.
- Threats to Hatra's archaeological heritage mitigated and damage incurred as a result of the conflict adequately addressed.
- Damage resulting from conflict repaired.

The main factor, related to the armed conflict situation that led to the inscription of the property on the List of World Heritage in Danger, seems to be no longer present, while, as mentioned above in 'Issue 1', several threats resulting from impact of the conflict have been addressed. Notably, overall site clearance from debris has been carried out, while fragments of vandalized statues and reliefs have been recovered and an inventory for restoration and reinstatement of remains has been prepared. Burnt wall surfaces have been cleaned, and digital documentation has been carried out, along with some detailed damage assessments and diagnostic studies. Stabilization work has been conducted, and site-specific conservation/restoration plans are underway. Site management facilities have been renovated and accessibility to the site by the management team and visitors has been ensured. Site security has been reinstated, and a BRC fence all around the inner city wall is being planned, in addition to the installation of surveillance cameras.

Recommendations

It is recommended to present to the World Heritage Committee for adoption a Desired State of Conservation for Removal from the List of World Heritage in Danger and corrective measures as follows (Annex 6):

Desired State of Conservation for Removal from the List of World Heritage in Danger

- The removal of substantive threats arising from the conflict between 2014 and 2017.
- Improved site protection and accessibility of the site by the management team, with the reinstatement of site management facilities.
- Enhanced knowledge and skills with regard to conservation and management at the property.
- Threats to Hatra's archaeological heritage mitigated and damage incurred as a result of the conflict addressed.
- Damage resulting from conflict repaired.

Corrective measures

- Reinstating the management of the property by SBAH and ensuring its protection and accessibility for the local community and visitors:
 - Rehabilitation of site management and security facilities, restoration of the lighting system, closure of vulnerable entrances, and rehabilitation of basic public facilities.
 - Site clearance of the Temenos area, with rubble and debris removed, unexploded ordinance cleared, open wells/cisterns closed off.
 - Installation of a fence along the inner city wall.
 - Installation of cameras to reinforce security of the site.
- Enhancing capacities of professional staff of SBAH in heritage conservation and management:
 - Training in stone conservation and restoration for first-aid intervention and conservation of the built heritage in Hatra.
 - Training in photogrammetry and Geographic Information Systems.
 - Training in archaeological surveys and damage assessment.
 - Enhancing of skills of the site security team.
- Undertaking site documentation, monitoring, and studies for adequate conservation and management.
 - Site survey and documentation, in addition to a 3D textured model of the central Temenos.
 - Preliminary damage assessment.
- Repair of damage resulting from conflict:
 - Collecting, cleaning, securing, restoring and inventorying fragments of sculptural and architectural decoration.
 - Carrying out conservation/restoration on vandalized artefacts, and restoring reliefs back to their original location.
- Assessing risks at monuments indirectly impacted by the conflict and addressing vulnerabilities, including through assessment, studies and urgent stabilization:
 - Carrying out damage assessment and diagnostic studies at monuments where risks have been identified.
 - Implementing temporary propping (Temple of Samya, Temple 14).
 - Implementing temporary roofing (Room 8)
 - Priority interventions at the Temple of Shahiru and Temple of Allat.
 - Drafting of a Conservation Plan for the central Temenos, as well as plans for the execution of restoration at the Temples of Samya, the Triad and Allat.

V. CONCLUSIONS AND RECOMMENDATIONS

At present, it appears that the authenticity and integrity of the property has been retained and there are no major threats that may impact the key attributes that convey the OUV of the property. The main threat related to the armed conflict, which led to the inscription of the property on the List of World Heritage in Danger appears to be no longer present. Through partnership projects, the State Party has been addressing the ensuing impact of that conflict situation on the property, yielding positive results in terms of undertaking documentation, assessment and stabilization work, in addition to ensuring the return of site management activities.

The main temples within the Temenos enclosure have retained their significance despite the lack of maintenance. The enclosure of the Temenos has been impacted by the addition of new materials, either cement blocks or metallic roofing sheets, while modern construction and prefabricated units are installed in courtyards and at entrances. The inner city and the city walls remain mostly untouched but are suffering from weathering and open excavations. On

the whole, the property and its attributes have retained their significance despite the potential pressure on its wider context.

At the time of writing the report, a DSOCR and corrective measures have not been adopted by the World Heritage Committee. Nevertheless, the mission observed that a number of corrective measures that had been identified by the State Party have been implemented, while others are underway, all of which may be considered as progress achieved towards removing the property from the List of World Heritage in Danger.

Response to the Mission Terms of Reference

The mission has addressed the items outlined in its Terms of Reference, as follows:

- **Assessment of the overall state of conservation of the property, having particular regard to identified attributes of the property which support its Outstanding Universal Value**

The mission had an overview of the state of conservation of the property, particularly accessing the monuments located within the Temenos area. While the direct threat resulting from the conflict between 2014 and 2017 is no longer present, it could be noted that the property is vulnerable to environmental factors, and coupled with the lack of monitoring and maintenance processes for some time, these factors have led to degradation and structural stabilization issues, in some cases posing a risk of collapse, particularly at previously reconstructed elements. Several actions have been carried out to assess and address such risks, yet it would be important to carry out a complete damage assessment, establish a monitoring programme and prepare a comprehensive conservation plan for the whole property. In terms of protection, the mission was informed that risks related to illegal activities, including looting, have been effectively mitigated, while additional measures are planned, such as fencing and the installation of surveillance cameras. It would be important to ensure that no encroachment on the property takes place.

- **Assessment of actions and/or resources required to facilitate the protection, repair, rehabilitation and reconstruction of the important monuments**

A number of actions have been carried out, whether aimed at addressing impacts related to the conflict situation, or in terms of urgent priority needs, especially with regard to mitigating risk of collapse, such as at the Temple of Samya. In addition, overall site clearing has been undertaken, and site surveys and documentation have been carried out. It would be important to build on the current momentum and ensure that damage and risks are comprehensively assessed and mapped, and that pilot interventions are monitored in terms of their efficacy. In order to ensure long-term protection, further assessment of risks is needed, in terms of the whole site, including the area between the two city walls, as well as individual monuments.

Current resources are limited, and capacity building has been carried out. Nevertheless, as part of the preparation of a site management plan, a detailed assessment of the needed human and financial resources would be necessary to ensure adequate conservation and management.

- **Assessment of implemented actions and projects, as well as review of the identified threats, damage and proposed interventions, which would contribute to the finalization of the DSOCR and corrective measures**

The mission addressed the assessment of implemented projects and actions, as well as identified threats, damage and interventions, which would contribute to the finalization of the DSOCR. The main factor, related to the armed conflict situation that led to the inscription of the property on the List of World Heritage in Danger, seems to be no longer present, and

several threats resulting from impact of the conflict have been already addressed, including in relation to site clearance, renovation of site management facilities and ensuring site protection, and recovery of vandalized and damaged statuary, such as at the Great Iwan and the Temple of Allat. In addition, documentation damage assessments and diagnostic studies have been carried out for the Temple of Samya, the Temple of the Triad and the Temple of Allat, and stabilization works have been executed.

- **Specific advice regarding the proposed DSOCR and potential corrective measures**

The mission has reviewed threats and actions undertaken and has advised on a DSCOR framework. The State Party has established a set of proposed corrective measures with timeframe for implementation, most of which have been implemented or are in progress as observed by the mission and according to information provided by the State Party.

- **Progress and steps undertaken towards a comprehensive conservation and management plan for the property**

The mission noted that following the documentation, assessments and analytical studies carried out, monument specific plans are being elaborated, in addition to a conservation plan for the Temenos area. While all of this work is crucial at this stage, it would be important to initiate the preparation of a site management plan that addresses the requirements for long-term management and conservation, visitor management, in addition to the necessary human and financial resources that would be essential for adequate management, and capacity building.

The mission also noted the absence of documentation and archival material at the site management premises. As an essential tool for monitoring, conservation and management, it would be important to have sufficient information available for the site management team, including the necessary documentation and archival material.

- **Follow up and progress with regard to boundary clarification.**

The mission carried out a discussion with the State Party as regards the submission of a boundary clarification, in addition to the requirements for the submission of a minor boundary modification proposal. The delineation of property boundaries is an essential requirement for effective protection, and it would be important that the State Party submits a clarification as soon as possible. The establishment of a buffer zone would provide an additional layer of protection to the property, particularly in terms of protecting the surrounding cultural landscape in the wider setting.

Recommendations

The mission recommends the following:

Recommendation 1: Remedial actions addressing major impacts of the armed conflict on the property have been either carried out, in progress or planned. Nevertheless, it would be important to compile all related impacts, whether they are being addressed with remedial actions or not, within an overall damage and risk assessment as part of the elaboration of a comprehensive conservation plan for the whole property, including the excavated areas. The different types of assessed damage and related interventions should include the rationale for dealing with damage impacts, whether major or minor, and whether they are to be addressed within the short-, medium- or long-term approach. The issue of deciding on the preservation of traces of conflict requires attention and thorough debate with all stakeholders.

Recommendation 2: It would be important to finalize the conservation plan for the central Temenos area on the basis of a detailed damage assessment, understanding the morphology

of deterioration, and scientific analyses, after which pilot interventions could be selected and monitored over time to assess the efficacy of any proposed actions. Investigations related to the water table are recommended, especially with the presence of large puddles of water during the winter season. This would contribute to addressing a main factor of decay, which is the rising damp phenomenon by capillarity.

Recommendation 3: The elaboration of a monitoring programme would be crucial in order to continuously assess the state of conservation of monuments and any proposed interventions, coupled with a capacity building programme in this regard.

Recommendation 4: Several important actions representing urgent priorities have been reported to the mission by the State Party, which comprise diagnostic studies, the elaboration of conservation/restoration plans specific to certain monuments, and the undertaking of urgent preventive measures. It is recommended that these efforts are pursued and that communication with the World Heritage Centre continues, by providing details of planned and ongoing projects, with the related Heritage Impact Assessments – prepared in line with the Guidance and Toolkit for Impact Assessments in a World Heritage Context – for technical review prior to implementation.

Recommendation 5: It is recommended that a comprehensive assessment of potential hazards is carried out, in order to ensure that all risks of sudden collapse are addressed – at least through temporary measures, such as propping, and limiting or preventing access to visitors. Potential hazards may be related to certain roofs and tops of walls, as well as walls that have serious deformation. Propping shall remain a limited temporary measure as the diagnostic and structural studies are carried out and a conservation plan is elaborated.

Recommendation 6: It is recommended that the State Party submits a boundary clarification, and considers the submission of a minor boundary modification proposal for an added protection of the property, in line with paragraphs 163-164 of the Operational Guidelines. In addition, it would be essential to ensure that no encroachment occurs at the property, and to look into the possibility of removing any existing ones, in addition to establishing a programme for raising awareness and engagement of the nearby community, which may contribute to the long term protection of the property.

Recommendation 7: In terms of physical protection, it is recommended that all related information about the project for constructing a fence along the inner city wall and surveillance cameras be submitted to the World Heritage Centre prior to implementation to ensure mitigation of any potential impact on the OUV of the property. It would also be important to conduct an assessment of potential threats in the area between the inner and outer city walls, including potential illegal access and encroachment, and accordingly elaborate additional possible protection measures, including in relation to monitoring.

Recommendation 8: It is recommended that a site management plan is initiated that takes into consideration management and conservation requirements, in addition to a visitor management plan, comprising the needed visitor facilities, presentation and interpretation. The management plan should address the necessary human and financial resources that would be essential for adequate management, in addition to capacity building.

Recommendation 9: A strategy and resources for documentation management are essential in order to rebuild the archives of the management unit, as an important tool for monitoring, conservation and management. This comprises the gathering of any previous archival material, if available, as well as integrating all recent digital documentation carried out.

Recommendation 10: It is recommended to present to the World Heritage Committee for adoption a Desired State of Conservation for Removal from the List of World Heritage in Danger and corrective measures as follows (more details provided in Annex 6):

Desired State of Conservation for Removal from the List of World Heritage in Danger

- The removal of substantive threats arising from the conflict between 2014 and 2017.
- Improved site protection and accessibility of the site by the management team, with the reinstatement of site management facilities.
- Enhanced knowledge and skills with regard to conservation and management at the property.
- Threats to Hatra's archaeological heritage mitigated and damage incurred as a result of the conflict addressed.
- Damage resulting from conflict repaired.

Corrective measures

- Reinstating the management of the property by SBAH and ensuring its protection and accessibility for the local community and visitors:
- Enhancing capacities of professional staff of SBAH in heritage conservation and management:
- Undertaking site documentation, monitoring, and studies for adequate conservation and management.
- Repair of damage incurred as a result of the conflict:
- Assessing risks at monuments indirectly impacted by the conflict and addressing vulnerabilities, including through assessment, studies and urgent stabilization:

VI. ANNEXES

- Annex 1: Terms of Reference of the Mission (including World Heritage Committee decision(s) requesting the mission to be carried out)
- Annex 2: Composition of Mission Team
- Annex 3: Itinerary and Programme of the Mission
- Annex 4: List of People Met
- Annex 5: National Management System
- Annex 6: Framework for a Desired state of conservation for removal of the property from the List of World Heritage in Danger and corrective measures
- Annex 7: Figures/Photos

ANNEX 1: Terms of Reference of the Mission (including World Heritage Committee decision(s) requesting the mission to be carried out)

TERMS OF REFERENCE
Joint World Heritage Centre/ICOMOS Reactive Monitoring Missions
Hatra and Samarra Archeological City
(Iraq)

10-16 June 2023

At its extended 44th session (Fuzhou/online, 2021), the World Heritage Committee requested the State Party of Iraq to invite a Joint World Heritage Centre/ICOMOS Reactive Monitoring missions to Hatra and Samarra Archeological City (Decisions **44 COM 7A.7** and **44 COM 7A.8**) (Annex I). The Committee requested that the joint missions assist the State Party in assessing damage at the properties, the identification of corrective measures, and the development of a Desired state of conservation for the removal of the property from the List of World Heritage in Danger (DSOCR), as well as to discuss with the authorities the goals and actions required to protect the property, in order to implement corrective measures and achieve the DSOCR.

For Hatra, work on the elaboration of the Desired state of conservation for the removal of the property from the List of World Heritage in Danger (DSOCR) and related corrective measures has progressed through collaboration between the State Party, the World Heritage Centre, and ICOMOS. Reports have been provided by the State Party on ongoing documentation, assessment and priority interventions, all of which contribute towards the establishment of the DSCOR.

As regards Samarra Archaeological City, the State Party has been submitting information about ongoing and planned projects at the property, for which the respective technical review have been undertaken by ICOMOS, in addition to identifying some priority projects for implementation.

As regards Hatra, the mission will, in particular, address the following:

1. Assessment of the overall state of conservation of the property, having particular regard to identified attributes of the property which support its Outstanding Universal Value (OUV).
2. Assessment of actions and/or resources required to facilitate the protection, repair, rehabilitation and reconstruction of the important monuments.
3. Assessment of implemented actions and projects, as well as review of the identified threats, damage and proposed interventions, which would contribute to the finalization of the DSOCR and corrective measures.
4. Specific advice regarding the proposed DSOCR and potential corrective measures.
5. Progress and steps undertaken towards a comprehensive conservation and management plan for the property.
6. Follow up and progress with regard to boundary clarification.
7. Any other matter that may be relevant.

As regards Samarra Archaeological City, the mission will, in particular, address the following:

1. Assessment of the overall state of conservation of the property, having particular regard to identified attributes of the property which support its Outstanding Universal Value (OUV).

2. Review any condition or impact assessments that have been already carried out, as well as intervention measures undertaken to mitigate the impact of prevailing threats and improve the conservation of the property.
3. Development of a Desired state of conservation for the removal of the property from the List of World Heritage in Danger (DSOCR) and the identification of corrective measures to achieve the DSO CR.
4. Steps needed to develop comprehensive conservation and management plans.
5. Discuss overall strategic aims for the property in relation to balancing conservation with the need for the property to be better integrated with, and provide benefits to, local communities;
6. Assess recent developments, reports, and projects concerning the property and its buffer zone such as interventions at the Great Mosque, Spiral Minaret, and Caliphate Palace, the condition of the Asheq palace and proposed intervention work, ongoing and planned projects in the buffer zone, and others as deemed necessary.
7. Any other matter that may be relevant.

The mission will be carried out by May Shaer, representing the UNESCO World Heritage Centre, and Yasmine Makaroun representing ICOMOS.

The State Party will facilitate the necessary field visits and access to key locations, as well as meetings with stakeholders, including the Ministry of Culture, Tourism and Antiquities, the State Board of Antiquities and Heritage, and other authorities and stakeholders involved in the management of the property, including the local communities.

In order to enable the preparation of the mission, it would be necessary that the following items are provided to the World Heritage Centre and ICOMOS as soon as possible:

1. Background information, documentation and recent report about the two properties, including high resolutions maps.
2. Information on all emergency intervention measures, undertaken or planned at the two properties.
3. The most-recent damage assessment reports for both properties, including available photographic surveys, drawings, graphics and quantitative data.
4. Information on any planned conservation or development projects or other potential interventions at the two properties or buffer zone.
5. A brief outline of the statutory protection available to the properties, and the current management arrangements, including resources and personnel.
6. Current documents (draft or final as available) pertaining to the proposed DSO CR and potential corrective measures to support the removal of the properties from the List of World Heritage in Danger.

Please note that additional information may be requested during or following the mission.

Based on the results of the above-mentioned reviews, assessments and discussions with the State Party representatives, authorities and stakeholders, the mission will prepare a concise report on the findings and recommendations as soon as possible after the completion of the mission, following the standard format (Annex II), for review by the World Heritage Committee. The recommendations will be provided with the mission report, and not during the course of the mission.

Previous World Heritage Committee Decision

Decision: **44 COM 7A.7**

Hatra (Iraq)

The World Heritage Committee,

1. Having examined Document WHC/21/44.COM/7A,
2. Recalling Decisions **43 COM 7A.19** and **43 COM 7A.21** adopted at its 43rd session (Baku, 2019),
3. Taking into account Decision **44 COM 7A.9**, on the World Heritage properties of Iraq,
4. Notes the State Party's efforts to keep the World Heritage Centre informed about the situation on the ground, welcomes the submitted 'Damage Assessment Report Status Study', takes note of the documentation carried out, and urges the State Party to compile comprehensive information on the state of conservation of the property, particularly detailed assessment of the damage needed to facilitate the protection, repair, rehabilitation and reconstruction of the important monuments;
5. Requests the State Party to submit all assessments it has undertaken, and to carry out a more detailed damage assessment, including systematic photographic surveys, drawings, graphics and quantitative data, as well as identification of potential risks to the property, prior to taking any action on the ground, and to submit this assessment for review by the World Heritage Centre and the Advisory Bodies;
6. Reiterates its request that interventions be addressed within the framework of the overall assessment of damage and risks and a comprehensive conservation plan prepared in full consultation with the World Heritage Centre and the Advisory Bodies;
7. Encourages the World Heritage Centre, the Advisory Bodies and the State Party to collaborate and to draw upon the Damage Assessment Report Status Study in order to progress the elaboration of a set of correctives measures and the Desired state of conservation for the removal of the property from the List of World Heritage in Danger (DSOCR), as well as identification of means by which the state of conservation of the property can be verified;
8. Also reiterates its request to the State Party to invite a joint World Heritage Centre/ICOMOS Reactive Monitoring mission, once security conditions permit, to assist in assessing damage at the property, and discuss with the State Party authorities the short-, medium- and long-term goals and actions required to protect the property, in order to implement corrective measures and achieve the DSOCR;
9. Reiterates its appeal to all Member States of UNESCO to cooperate in the fight against the illicit trafficking of cultural heritage coming from Iraq as per the United Nations Security Council Resolutions 2199 of February 2015, 2253 of December 2015 and 2347 of March 2017;
10. Calls again on all States Parties to support emergency safeguarding measures, including through the UNESCO Heritage Emergency Fund;
11. Also requests the State Party to submit to the World Heritage Centre, by 1 February 2022, 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 45th session;
12. **Decides to retain Hatra (Iraq) on the List of World Heritage in Danger.**

ANNEX 2: Composition of Mission Team

The mission team was composed of the following members:

- May Shaer, Head of Unit, Arab States, UNESCO World Heritage Centre (Paris)
- Yasmine Makaroun, Expert of ICOMOS International

The mission was accompanied by Junaid Sorosh-Wali, Chief of Culture, UNESCO Office in Iraq.

ANNEX 3: Itinerary and Programme of the Mission

Programme of the Reactive Monitoring Mission to Hatra and Samarra Archaeological City, Iraq (10-16 June 2021)

Saturday, 10 June 2023

Arrival in Erbil

Sunday, 11 June 2023

8:00 – 18:30 Hatra site visit and onsite meeting onsite

23:00 Departure to Baghdad: 23:00

Monday, 12 June 2023

10:00 – 13:00 Meeting with the Chairman of SBAH

Tuesday, 13 June 2023

7:30 – 18:30 Samarra Archaeological City site visit and onsite meetings

Wednesday, 14 June 2023

7:30 – 18:30 Samarra Archaeological City site visit and onsite meetings

Thursday, 15 June 2023

11:00 – 13:00 Meeting with Director General of the Directorate of Conservation and Preservation and the Director of the Excavations Department, SBAH

Friday, 16 June 2023

Departure from Baghdad

ANNEX 4: List of People Met

People Met in the Framework of the Reactive Monitoring Mission to Hatra

- H.E. Dr. Laith Majeed Hussein, Chairman, State Board of Antiquities and Heritage (SBAH)
- Eng. Ayad Hassan Hamzeh, Director General, Directorate of Conservation and Preservation, SBAH
- Dr. Suhad Mohamad Suhail, Director of Excavations Department, Investigations and Excavations Directorate, SBAH
- Ms. Zouhour Abbas Lafta, Director of Translation Section, International Organizations Department, SBAH
- Ms. Ferial Hatem, Director of Documentation and Follow-up Section, International Organizations Department, SBAH
- Mr. Fadhil Mohamad Khadir, Site Manager of Hatra, Nineveh Inspector of Antiquities and Heritage, SBAH, Nineveh Governorate.
- Mr. Mahmoud Abdallah Wardi, Nineveh Inspectorate of Antiquities and Heritage – Hatra site
- Mr. Rouwayed Mouafaq Mohamad, Former Hatra site manager and member of the ISMEO team for Hatra project

ANNEX 5: National Management System

The State Board of Antiquities and Heritage (SBAH) is the national authority responsible for managing heritage sites and museums of Iraq. Its mandate is stipulated under Law Number 55 of 2002 for the Antiquities and Heritage of Iraq.

The Headquarters of SBAH are located in Baghdad, within a precinct that also includes a Library, and the Iraq Museum. SBAH is presided by a Chairman (Dr. Laith Majeed Hussein) and comprises the following Departments:

- Investigations and Excavations Directorate
- Heritage Directorate
- Museums Directorate
- Manuscripts Directorate
- Researches and Studies Directorate
- Conservation and Preservation Directorate
- Administration

SBAH has branches in the various provinces of Iraq, which have been established under Investigations and Excavations Directorate:

- Al-Anbar – SBAH Inspectorate Ramadi
- Babylon – SBAH Inspectorate Hillah
- Basra – SBAH Inspectorate Basra
- Dhi Qar – SBAH Inspectorate Nasiriyah
- Diyala – SBAH Inspectorate Baqubah
- Halabja – SBAH Inspectorate Helebce
- Karbala – SBAH Inspectorate Karbala
- Kirkuk – SBAH Inspectorate Kirkuk
- Maysan – SBAH Inspectorate Amarah
- Muthanna – SBAH Inspectorate Samawah
- Najaf – SBAH Inspectorate Najaf
- Ninawa – SBAH Inspectorate Mosul
- Al-Qadisiyah – SBAH Inspectorate Al-Diwaniyah
- Salahaddin – SBAH Inspectorate Tikrit
- Wasit – SBAH Inspectorate Kut

(<https://sbah.gov.iq/>)

ANNEX 6: Framework for a Desired state of conservation for removal of the property from the List of World Heritage in Danger and corrective measures

Desired State of Conservation for Removal from the List of World Heritage in Danger:

- The removal of substantive threats arising from the conflict between 2014 and 2017.
- Improved site protection and accessibility of the site by the management team, with the reinstatement of site management facilities.
- Enhanced knowledge and skills with regard to conservation and management at the property.
- Threats to Hatra's archaeological heritage mitigated and damage incurred as a result of the conflict addressed.
- Damage resulting from conflict repaired.

Corrective measures

- Reinstating the management of the property by SBAH and ensuring its protection and accessibility for the local community and visitors:
 - Rehabilitation of site management and security facilities, restoration of the lighting system, closure of vulnerable entrances, and rehabilitation of basic public facilities.
 - Site clearance of the Temenos area, with rubble and debris removed, unexploded ordinance cleared, open wells/cisterns closed off.
 - Installation of a fence along the inner city wall.
 - Installation of cameras to reinforce security of the site.
- Enhancing capacities of professional staff of SBAH in heritage conservation and management:
 - Training in stone conservation and restoration for first-aid intervention and conservation of the built heritage in Hatra.
 - Training in photogrammetry and Geographic Information Systems.
 - Training in archaeological surveys and damage assessment.
 - Enhancing of skills of the site security team.
- Undertaking site documentation, monitoring, and studies for adequate conservation and management.
 - Site survey and documentation, in addition to a 3D textured model of the central Temenos.
 - Preliminary damage assessment.
- Repair of damage resulting from conflict:
 - Collecting, cleaning, securing, restoring and inventorying fragments of sculptural and architectural decoration.
 - Carrying out conservation/restoration on vandalized artefacts, and restoring reliefs back to their original location.
- Assessing risks at monuments indirectly impacted by the conflict and addressing vulnerabilities, including through assessment, studies and urgent stabilization:
 - Carrying out damage assessment and diagnostic studies at monuments where risks have been identified.
 - Implementing temporary propping (Temple of Samya, Temple 14).
 - Implementing temporary roofing (Room 8)
 - Priority interventions at the Temple of Shahiru and Temple of Allat.

- Drafting of a Conservation Plan for the central Temenos, as well as plans for the execution of restoration at the Temples of Samya, the Triad and Allat.

C. Proposed Timeframe for implementation of the corrective measures

The remaining corrective measures required to remove the property from the List of World Heritage in Danger, can be implemented within a **timeframe of 1 year**.

ANNEX 7: Figures/Photos

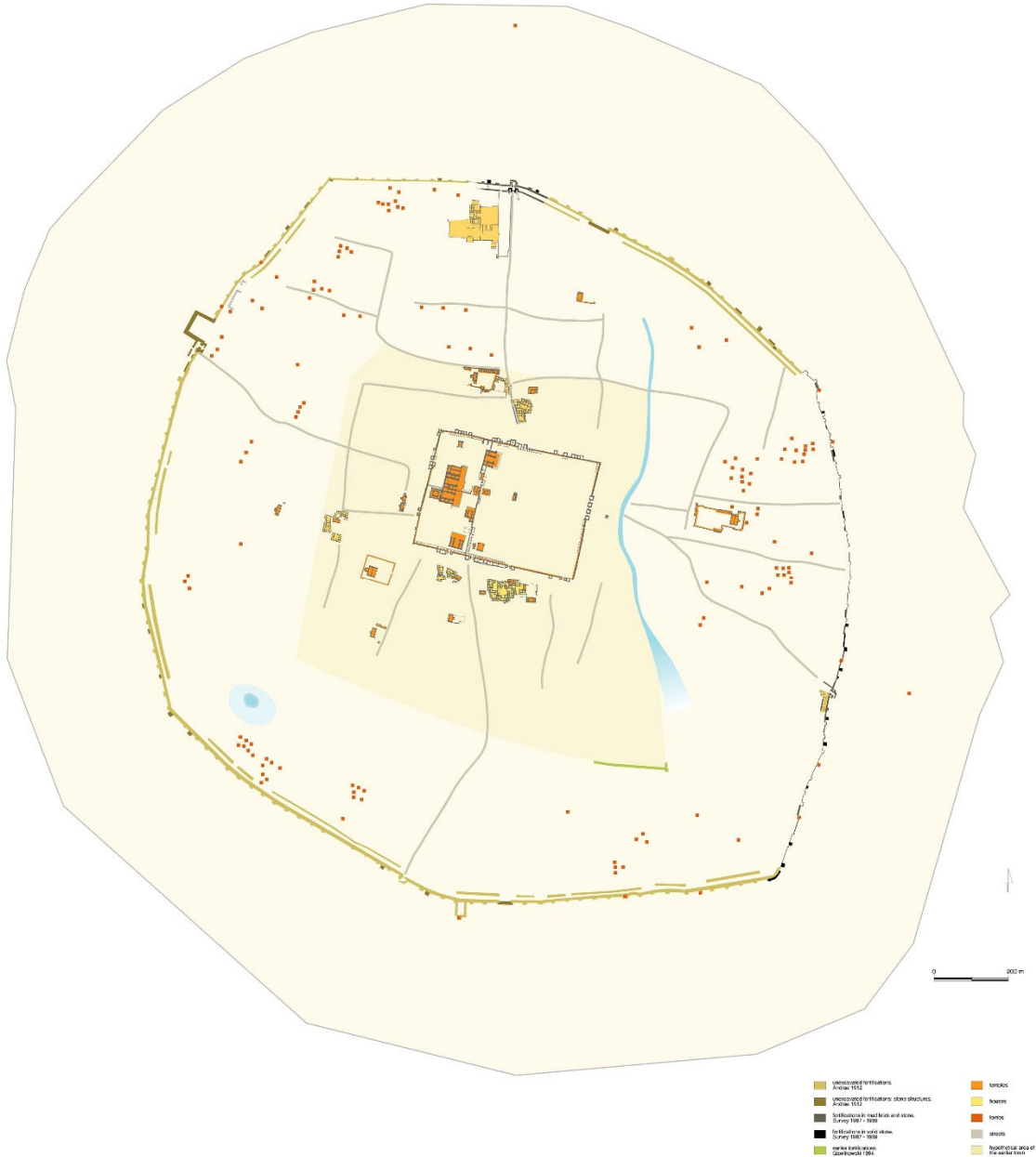


Figure 1: Hatra city plan (Source: Hatra – Italian Archaeological Expedition. <https://hatrasite.com/progetti-projects/>)

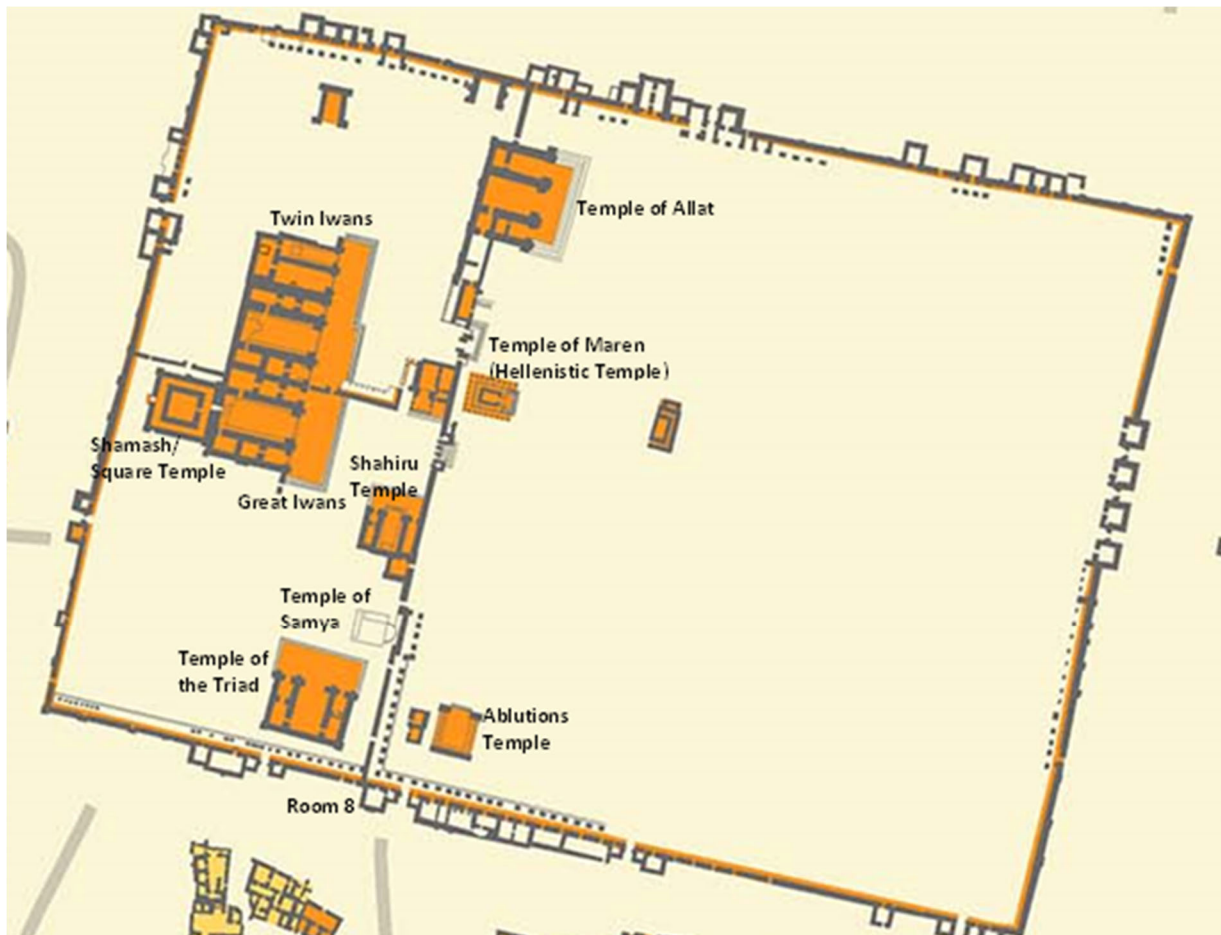


Figure 2: Close up view of the Temenos with names of monuments (After: Hatra – Italian Archaeological Expedition. <https://hatrasite.com/progetti-projects/>)

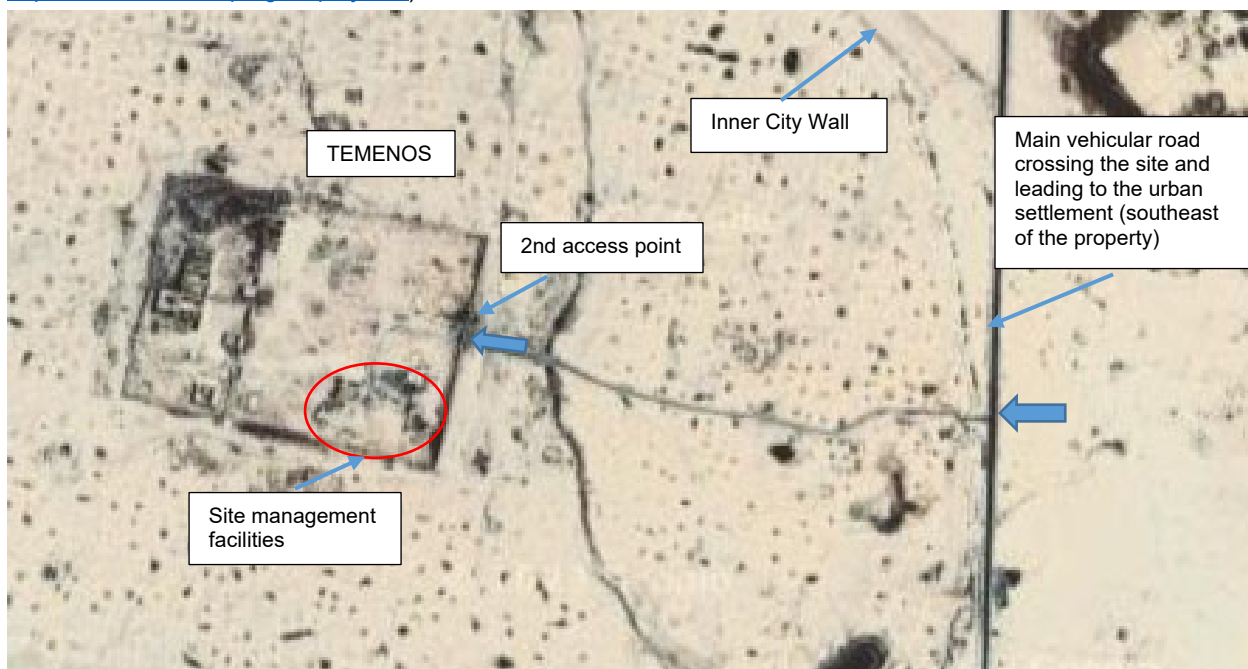


Figure 3: Location map based on Google Imagery ©2023 CNES / Airbus, Maxar Technologies, Map data ©2023



Figure 4: Rural vernacular settlement in the surroundings (mostly abandoned) ©ICOMOS/Y.Makaroun



Figure 5: View on the site from the surroundings ©ICOMOS/Y.Makaroun



Figure 6: View on the fortifications and gates of the inner city ©ICOMOS/Y.Makaroun



Figure 7: View of the outer city wall, considered as the limit of the site ©ICOMOS/Y.Makaroun



Figures 8-9: Views of the outer city wall ©ICOMOS/Y.Makaroun



Figure 10: Main sign on the access road ©ICOMOS/Y.Makaroun



Figure 11: First entrance gate ©ICOMOS/Y.Makaroun



Figure 12: Archaeological structures in the city area ©ICOMOS/Y.Makaroun



Figure 13: Main access panels to the Temenos ©ICOMOS/Y.Makaroun



Figure 14: Covered visitor parking outside the Temenos ©ICOMOS/Y.Makaroun



Figure 15: Renovated facilities (offices, technical facilities) ©ICOMOS/Y.Makaroun



Figure 16: Facilities renovated to serve as a site restoration laboratory ©UNESCO/M.Shaer



Figure 17: Stone sculptures storage ©ICOMOS/Y.Makaroun



Figure 18: Site laboratory for stone restoration ©ICOMOS/Y.Makaroun



Figure 19: Meeting with site management team ©ICOMOS/Y.Makaroun



Figure 20: Mission members and site management team ©UNESCO/J.Sorosh



Figure 21: Storage ©ICOMOS/Y.Makaroun



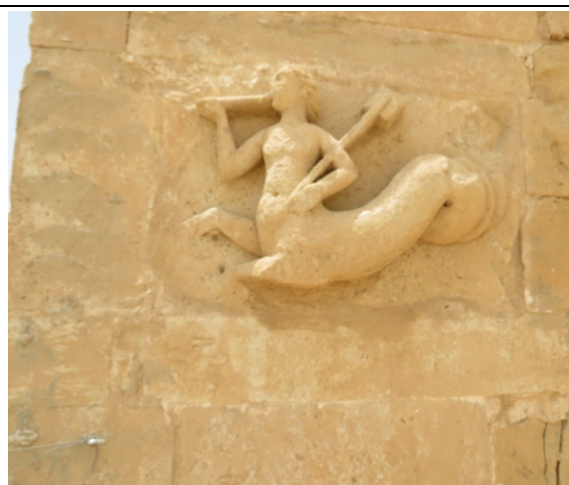
Figure 22: Service buildings (water tanks; restrooms) ©ICOMOS/Y.Makaroun



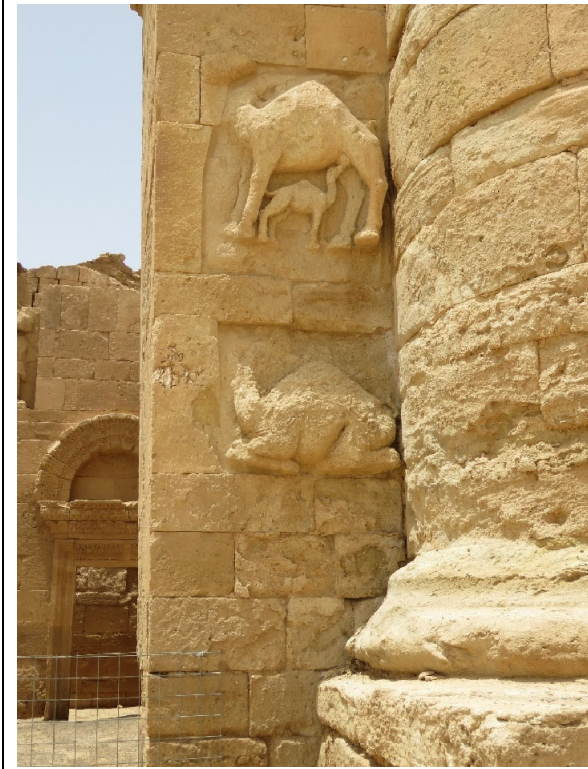
Figure 23: View of the main monuments from inside the Temenos ©UNESCO/M.Shaer



Figure 24: Installation of gates/closing off main entrances ©UNESCO/M.Shaer









Figures 25 - 26: Restored sculptural figures and reliefs ©UNESCO/M.Shaer



Figures 27-29: Restored sculptural figures and reliefs ©UNESCO/M.Shaer




	<p>TEMENOS MAIN COURTYARD</p> <p>Figure 30: Central Gate, main courtyard, west elevation ©ICOMOS/Y.Makaroun</p>
	<p>Figure 31: Southwest inner corner, main courtyard ©ICOMOS/Y.Makaroun</p>
	<p>Figure 32: Northeast inner corner, main courtyard ©ICOMOS/Y.Makaroun</p>



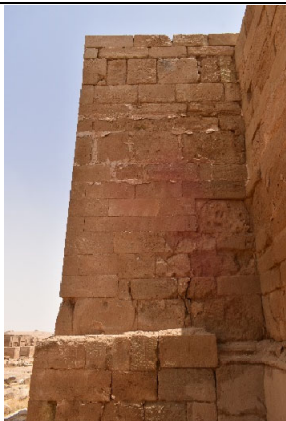

		<p>TEMENOS INNER COURTYARD</p> <p>Figure 33: Southern elevation Shahiru temple ©ICOMOS/Y.Makaroun</p>
		<p>Figure 34: Lapidarium SE area inner courtyard ©ICOMOS/Y.Makaroun</p>
		<p>Figure 35: View from Triad Temple roof ©ICOMOS/Y.Makaroun</p>
		<p>Figure 36: Northern Temenos walls ©ICOMOS/Y.Makaroun</p>




	<p>TEMPLE OF THE TRIAD</p> <p>Figure 37: Main North Elevation ©ICOMOS/Y.Makaroun</p>
	<p>Figure 38: Central iwan ©ICOMOS/Y.Makaroun</p>
	<p>Figure 39: Northwest iwan ©ICOMOS/Y.Makaroun</p> <p>Figure 40: Outer west elevation ©ICOMOS/Y.Makaroun</p>




	<p>TEMPLE OF THE TRIAD Remains of upper Floor structures</p> <p>Figure 41: East elevation ©ICOMOS/Y.Makaroun</p>
	<p>Figure 42: Southeast elevation ©ICOMOS/Y.Makaroun</p>
	<p>Figure 43: South elevation ©ICOMOS/Y.Makaroun</p> <p>Figure 44: Northwest corner ©ICOMOS/Y.Makaroun</p>

	<p>TEMPLE OF ALLAT</p> <p>Figure 45: West iwan elevation ©ICOMOS/Y.Makaroun</p>
	<p>Figure 46: Inner elevations ©ICOMOS/Y.Makaroun</p> <p>Figure 47: Northeast corner/column ©ICOMOS/Y.Makaroun</p>
	<p>Figure 48: Decayed stone surface along the east elevation ©ICOMOS/Y.Makaroun</p>



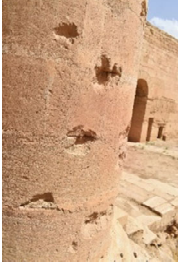
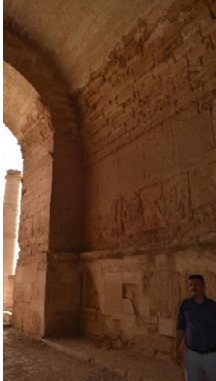


	<p>TEMPLE OF ALLAT Central Iwan</p> <p>Figure 49: Exterior elevation ©ICOMOS/Y.Makaroun</p>
	<p>Figure 50: Inner elevations ©ICOMOS/Y.Makaroun</p>
	<p>Figure 51: Semi-columns on both sides ©ICOMOS/Y.Makaroun</p>



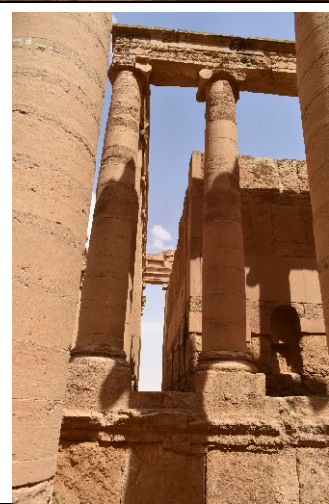
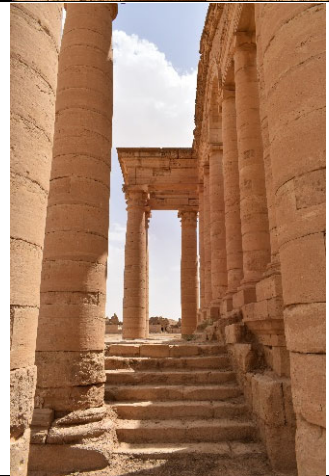


	<p>TEMPLE OF ALLAT East iwan</p> <p>Figure 52: Inner elevations with altar remains © ICOMOS/Y.Makaroun</p>
	<p>Figure 53: Inner North elevation ©ICOMOS/Y.Makaroun</p>
 	<p>Figure 54: Side North corner ©ICOMOS/Y.Makaroun</p> <p>Figure 55: Alabaster threshold /Floors backfilled ©ICOMOS/Y.Makaroun</p>



	<p>TEMPLE OF ALLAT Outer elevations</p>
	<p>Figure 57: Western elevation (concrete structures in the inner courtyard) ©ICOMOS/Y.Makaroun</p>
	<p>Figure 58: Western elevation (frontal) ©ICOMOS/Y.Makaroun</p>

	<p>TEMPLE OF SAMYA</p> <p>Figure 59: NW Elevations ©ICOMOS/Y.Makaroun</p>
	<p>Figure 60: Northern elevation with propping of the central vault ©ICOMOS/Y.Makaroun</p>
	<p>Figure 61: Close view of the propping of the central arch intrados ©ICOMOS/Y.Makaroun</p>

		<p>TEMPLE OF SAMYA</p> <p>Figure 62: Fallen keystone of the main arch ©ICOMOS/Y.Makaroun</p>
		<p>Figure 63: SE internal corner of central iwan ©ICOMOS/Y.Makaroun</p> <p>Figure 64: West side iwan ©ICOMOS/Y.Makaroun</p>
		<p>Figure 65: South elevation ©ICOMOS/Y.Makaroun</p> <p>Figure 66: South elevation entrance ©ICOMOS/Y.Makaroun</p>
		<p>Figure 67: Decayed sculpted stones ©ICOMOS/Y.Makaroun</p>

	<p>SHAHIRA/SHAHIRU TEMPLE</p> <p>Figure 68: Main southern elevation with colonnade ©ICOMOS/Y.Makaroun</p>
 	<p>Figure 69: Southeast entrance corner ©ICOMOS/Y.Makaroun</p> <p>Figure 70: Bullet Impact on columns surfaces ©ICOMOS/Y.Makaroun</p>
  	<p>Figure 71: Intrados of main entrance barrel vault ©ICOMOS/Y.Makaroun</p> <p>Figure 72: Internal vaulted side room fully reconstructed in the 1980s ©ICOMOS/Y.Makaroun</p> <p>Figure 73: Underground tomb covered with stone slabs ©ICOMOS/Y.Makaroun</p>
	<p>Figure 74: Damaged peristyle by recent armed conflict ©ICOMOS/Y.Makaroun</p>

	<p>TEMPLE OF MAREN (MARAN)</p> <p>Figure 75: Main southern peristyle colonnade with bullet impact ©ICOMOS/Y.Makaroun</p>
 	<p>Figures 76-77: Temple of Maren ©ICOMOS/Y.Makaroun</p>
 	<p>Figures 78-79: Temple of Maren ©ICOMOS/Y.Makaroun</p>
 	<p>Figures 80-81: Temple of Maren ©ICOMOS/Y.Makaroun</p>

	<p>ABLUTIONS TEMPLE</p> <p>Figure 82: Top view from East ©ICOMOS/Y.Makaroun</p>
	<p>Figure 83: Main North elevation ©ICOMOS/Y.Makaroun</p>


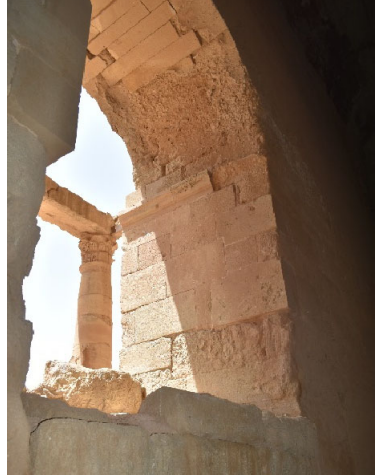

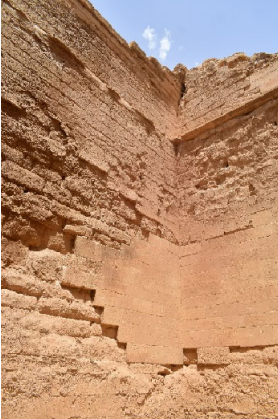


ROOM 8


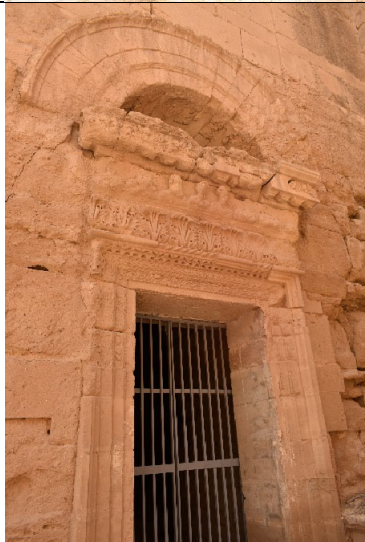


Figure 84: Southern view
©ICOMOS/Y.Makaroun


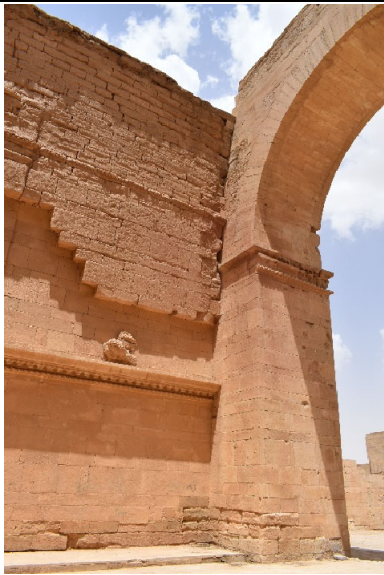
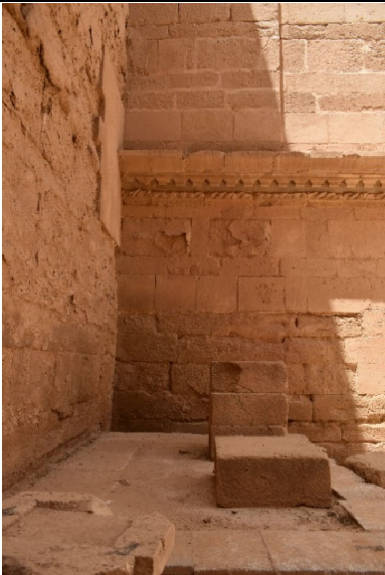
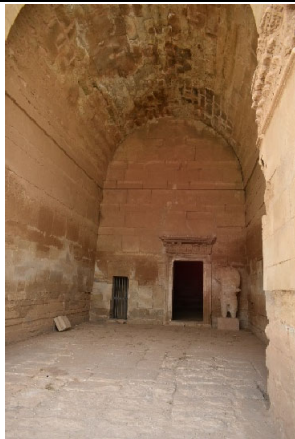





Figure 85: View of Room 8 with shelter, adjacent to the Temenos wall and open excavation areas beyond
©UNESCO/M.Shaer

		<p>SHAMASH / SQUARE TEMPLE</p> <p>Figure 86: Inner vaulted corridor ©ICOMOS/Y.Makaroun</p> <p>Figure 87: Previous interventions with recent graffiti ©ICOMOS/Y.Makaroun</p>
		<p>Figure 88: Eastern opening Shamash Temple ©ICOMOS/Y.Makaroun</p>
		<p>Figure 89: Southeast corner of cella ©ICOMOS/Y.Makaroun</p> <p>Figure 90: Southwest upper corner of cella ©ICOMOS/Y.Makaroun</p>

	<p>GREAT IWANS /TWIN IWANS</p> <p>Figure 91: Main East elevation South Iwan ©ICOMOS/Y.Makaroun</p>
	<p>Figure 92: External Northern Elevation ©ICOMOS/Y.Makaroun</p>
	<p>Figure 93: External Southern elevation (Great Iwans) ©ICOMOS/Y.Makaroun</p>

	<p>GREAT IWANS SOUTHERN IWAN</p> <p>Figure 94: Internal elevations ©ICOMOS/Y.Makaroun</p>
 	<p>Figure 95: Side storage room ©ICOMOS/Y.Makaroun</p> <p>Figure 96: Side arch pillar, ©ICOMOS/Y.Makaroun</p>
	<p>Figure 97: Internal Southern elevation ©ICOMOS/Y.Makaroun</p>

	<p>GREAT IWANS NORTHERN IWAN</p>
 	<p>Figure 99: Interiorsouthwest corner ©ICOMOS/Y.Makaroun</p> <p>Figure 100: Altar ©ICOMOS/Y.Makaroun</p>
  	<p>Figure 101: Side cella with access to Shamash Cella ©ICOMOS/Y.Makaroun</p> <p>Figure 102: Side cella with access to roof ©ICOMOS/Y.Makaroun</p> <p>Figure 103: Side cella with niche and statues ©ICOMOS/Y.Makaroun</p>

	<p>TWIN IWANS</p> <p>Figure 104: Cella with altar ©ICOMOS/Y.Makaroun</p>
 	<p>Figure 105: Internal corner ©ICOMOS/Y.Makaroun</p> <p>Figure 106: Side internal elevation ©ICOMOS/Y.Makaroun</p>

VIEWS FROM THE TEMENOS TOWARDS THE INNER CITY WALL



Figure 107: Excavation areas in the inner city ©ICOMOS/Y.Makaroun



Figure 108: View from the Northern side ©ICOMOS/Y.Makaroun

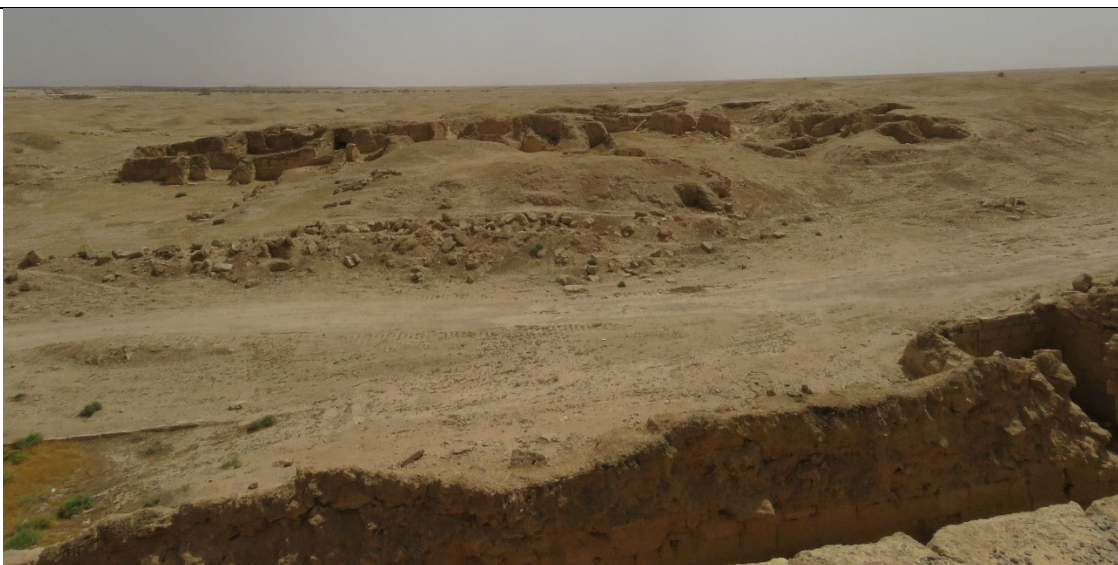


Figure 109: View from the Temenos toward the excavated area ©UNESCO/M.Shaer

PREVIOUS RESTORATION/RECONSTRUCTION INTERVENTIONS



Figure 110: Temple of Maren (Maran) ©UNESCO/M.Shaer



Figure 111: Temple of Allat ©UNESCO/M.Shaer



Figures 112-113: Restoration/reconstruction of entrances ©UNESCO/M.Shaer

PHENOMENA OF DAMAGE AND DETERIORATION AND DAMAGE



Figure 114: Temple of Allat, upper floor damage ©ICOMOS/Y.Makaroun



Figure 115: Deep masonry erosion ©ICOMOS/Y.Makaroun

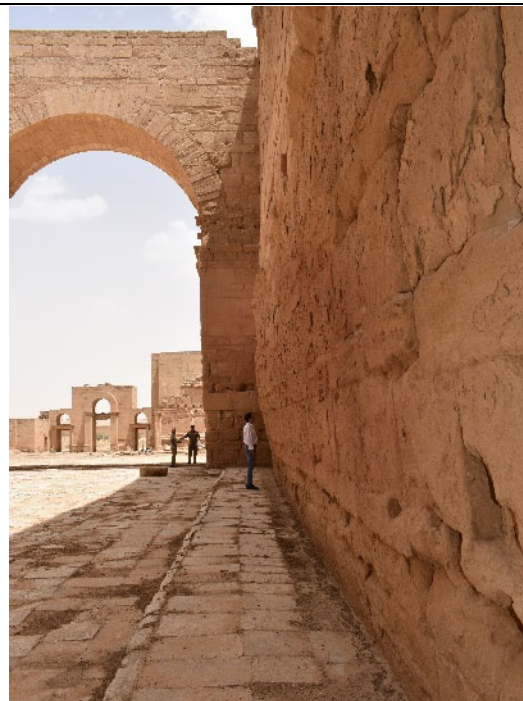


Fig 116: Bulging wall (Northern Great Iwans) ©ICOMOS/Y.Makaroun



Fig 117: Erosion of original stone masonry adjacent to next to a previous modern intervention ©UNESCO/M.Shaer

STONE SURFACE DECAY



Figure 117: stone masonry from various monuments © ICOMOS/Y.Makaroun 2023