Terms of Reference

1. INTRODUCTION

These Terms of Reference are to give the multi-discipline design team an outline, the outputs and tasks of the assignment.

2. BACKGROUND

The Agreement of 21 March 2008 reached between Greek Cypriots and Turkish Cypriots under the auspices of the United Nations (UN), paved the way for the establishment of the Technical Committee on Cultural Heritage (TCCH), dedicated to the identification, promotion and protection of the rich and diverse cultural heritage of Cyprus. The TCCH is composed of an equal number of Greek Cypriot and Turkish Cypriot experts. The TCCH works to provide a mutually acceptable mechanism for the implementation of practical measures for the proper preservation, physical protection and restoration (including research, study and survey) of the immovable cultural heritage of Cyprus. The work of the TCCH is under auspices of the UN and it constitutes an important tool for building confidence between the Turkish Cypriots and the Greek Cypriots.

The TCCH is supported in its work by an Advisory Board (AB), which was established in 2009 and is composed of archaeologists, architects, engineers, historians and town planners from both communities.

In 2012, United Nations Development Programme (UNDP) initiated with the implementation of the European Union (EU) funded activity Support to Cultural Heritage Monuments of Great Importance for the communities in Cyprus – Phase 1 and since then it has continued with the successful implementation of the EU funded activities Support to Cultural Heritage Monuments of Great Importance in Cyprus – Phases 2, 3, 4, 5 and 6.

In November 2019, UNDP started the implementation of the new EU funded activity Support to Cultural Heritage Monuments of Great Importance in Cyprus – Phase 7.

3. REGULATORY FRAMEWORK

The sites are of great cultural and religious significance thus proposed interventions must be compliant with relevant international conservation standards of United Nations Educational, Scientific and Cultural Organization (UNESCO), International Council for Monuments and Sites (ICOMOS), International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) and International Union for Conservation of Nature (IUCN).

4. CONSERVATION PHILOSOPHY

The philosophy of intervention must predominantly include minimum interventions in order to achieve optimum conservation, structural consolidation/ stabilization and protection of the cultural heritage sites from further dereliction, deterioration and decay within a cost-effective approach and considering available budget limitations.

Stabilisation and protection of special features such as frescoes, paintings and plasters must be included.

There will not be any excavations in the site and in the plots and will not be a need for further investigations or tests of any sort. At the stage of condition assessment, designer can propose tests/investigations with rationale and justifications.

The general philosophy of conservation should aim towards:

- Optimum structural consolidation/ stabilization
- Minimum interventions necessary for the safeguarding of the values of the structures of the heritage site.
- Minimum intervention and reversibility must be the guidelines for any proposal.
- Cost effectiveness of interventions
- Safe accessibility of visitors to the sites including people with disabilities.

5. THE ASSIGNMENT

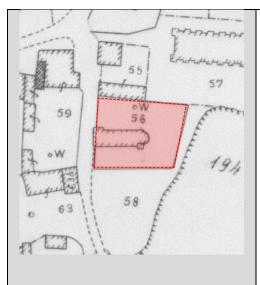
The objective of this assignment is to prepare conservation designs that will be used for the conservation works for the following churches/sites:

	Church/Site	Location		
1	Panagia Trapeza church	Acheritou/Guvercinlik		
2	Agia Marina church	Acheritou/Guvercinlik		
3	Profitis Elias church	Stylloi/Mutluyaka		

6. PRELIMINARY ASSESSMENTS

UNDP and TCCH through the means of visual assessment and in line with the conservation philosophy described above has identified the following priorities for the three sites:

philosophy described above has identified	I the following priorities for the three sites:			
SITE	PRIORITIES IDENTIFIED			
Panagia Trapeza church in	The main objective of the outputs is to conserve church			
Acheritou/Guvercinlik	and protect it against further deterioration.			
GPS identification : X: 35.13267, Y:	- General cleaning of the church and its plot			
33.85796 Cadastral Info: SHEET 33, PLAN	- Removal of vegetation in and within the plot			
01W1, Plot 44	- Repairs of roof and roof drainage system			
	- Rebuilding of missing parts of the church			
11////	- Replacing heavily decayed stones			
7-1-1	- Repointing of external surface			
Chrissobolilissa Chierch	- Closing of openings			
1	- Conservator's study on the Pantocrator frescoes in			
45 W	the 14th century and conservation and protection of			
43	the frescoes found in situ			
	- Fencing of the monument to prevent encroachment			
Agia Marina church in	- Cleaning of the church site of excessive vegetation,			
Acheritou/Guvercinlik	pruning of trees, removal of waste and other items			
GPS identification : X: 35.09989, Y: 33.86326	- New fence to prevent encroachment			
Cadastral Info:	- Cleaning of walls from biodegradation			
SHEET 33, PLAN 3114V01, Plot 56	- Consolidation of stone walls where necessary.			
	- Reinforcement of the church's foundation			
	- Removal of any vegetation/roots might have			
	penetrated to the roof fabric.			
	- The rainwater drainage system of the roof to be re-			
	established or an alternative rainwater drainage			
	system to be established.			



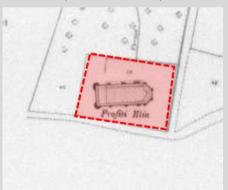
- Consolidation of the roof (internally and externally) to safeguard the structure.
- Consolidation and conservation of original plasters in the interior. Special attention should be given in the possible existence of the 18th century painted dedication cross in the south wall.
- Existing plasters to be assessed for the existence of frescoes. If frescoes are identified, to be conserved and protected.
- Cleaning of the stones in the interior from biodegradation.
- Treatment of rusted metal elements (mesh, nails, etc) on the masonry.
- Maintenance of the timber doors and windows
- Conservation of the timber lintels of the doors.
- Conservation of special elements
- Consolidation of the concrete iconostasis
- Belfry to be consolidated and conserved
- Configuration of the ground inclinations to keep rainwater away from the church

Profitis Elias church in Stylloi/Mutluyaka

GPS identification: X: 35.17124, Y:33.83252

Cadastral Info:

SHEET 23, PLAN 3122V01, Plot 295



Designs shall consider the following:

- Removal of the loose parts of stone cladding and concrete from the belfry and replacement of stone cladding of the same type and compatible colour.
- Treatment of the exposed corroded reinforcement.
- Structural consolidation of the stones and bell tower.
- Treatment of the roof & rooftiles, carved stone elements etc
- Removal of vegetation from the roof and the walls.
 Special care should be given to the removal of the roots.
- Rainwater drainage system of the roof should be reestablished if possible, or an alternative rainwater drainage system to be established.
- Structural state of the concrete women's gallery to be assessed and consolidation and conservation measures to be elaborated.
- Create safe access to all areas of the church.
- Cleaning of walls and stone elements from biodegradation.
- Cleaning of church and its courtyard considering the existence of cemetery in the courtyard.
- Repair and treatment of the cracks where needed
- Repair of openings to prevent unauthorized access to

the church
- Repair of the perimeter wall including metal railings.
- Repair of the mud brick structure in the courtyard.

7. OUTPUTS OF THE ASSIGNMENT

There will be 4 distinct outputs; 3 of which are in the designs phase and 1 in the works phase.

"Guidelines for Design Phase.pdf" is appended to the TOR to guide the design team in the preparation of the outputs.

OUTPUT-1: Historical analysis and Architectural Survey/Releve (measured drawings)

Consultants shall carry out a <u>historic analysis of the site</u> (all elements included in plot boundaries) in order to: (i) trace the original date of the construction of the site, and other important dates of the construction, (ii) trace and date later interventions on the building, (iii) historically support the building's analysis and conservation proposal/s, (iv) change of use over time, and (v) identify natural disasters/ phenomena that influenced the site historically (seismic, flood, landslide etc.). The historical analysis should be conducted through all available bibliographic and archival means. Oral testimonies could be taken into consideration. All information should be consistently and correctly referenced.

Furthermore, a complete architectural survey of the site and buildings/structures within the site including its boundary walls with detailed measurements should be conducted (plans, elevations, sections, plan of the wider area including structures in the vicinity) and details of special elements (i.e. frescoes), construction details etc. Surveys should be executed accurately and in detail containing graphical representation of all construction/structural details, details of special elements and materials, etc. in a variety of scales according to the needs of each drawing and detail. The consultants are responsible to ensure that all necessary measurements and important information (i.e. identification of materials) regarding the site are recorded. Measurements and surveys must be of non-invasive nature. Additionally, the full photographic documentation of the whole site is required.

If there is need to clear rubbish, remove items and gain access to higher elevations to better acquire measurements, this shall be under the responsibility of the consultant but not without prior notice to UNDP. In the case of areas which are difficult to access (due to safety, debris, vegetation etc.), these shall be arranged by the consultant in consultation with UNDP - cost reimbursable method will apply in this case.

DELIVERABLES:

OUTPUT-1 shall be submitted in two hard copies and one electronic copy. UNDP and TCCH/ AB will provide feedback on the submitted output. This feedback/approval will be provided by UNDP in maximum ONE (1) calendar week.

Drawings should be submitted in:

- AutoCAD drawing file format. Included in the electronic deliverable should be the .ctb file (which defines the plot style of the drawings).
- Each drawing should also be submitted in a separate pdf/jpg. Pdf/jpgs should be created directly from Autocad by choosing "print to pdf/jpg". They shouldn't be scanned from hard-copies to PDF/JPG format in scale.

• Drawings should follow the "GUIDELINES FOR DESIGN PHASE DOCUMENTS and DRAWINGS", which will be shared with the successful team after contract signature.

Minimum drawing requirements are: (i) plans for every floor level including roof, (ii) ceiling plan, (iii) all necessary sections in order to document all the interior elevations, and (iv) elevations of every facade of the building/s (including interior facades in the case of interior courtyards), (v) plan, facades, sections and details of perimeter walls and other elements in the limits of the plot, v) a plan documenting the different types of floors (material description etc.). Special elements should also be documented in detail in a larger design scale. All drawings should include measurements and description of building materials.

The photographic documentation must be submitted in:

- JPG format in appropriate size. Photos should be organized in subfolders according to the locations taken.
- A keymap of the monument with the location and direction of each photograph in AutoCAD drawing file format (including .ctb file), pdf/jpg format in scale (including north arrow) and hard copy.

Reports must be on A4 paper. Electronic copies of the reports should be submitted in word and pdf format. Narratives must be written in good English and must be proof-read before submission.

OUTPUT-1A: Final Architectural Survey/ Releve (measured drawings) and Historical Analysis

Based on the feedback obtained from UNDP/TCCH, the consultant shall submit a revised/modified version of this output. The final OUTPUT submission is required by the consultant ONE (1) calendar week upon receipt of the feedback by UNDP.

OUTPUT-2: Condition assessment of the site and Conservation recommendations

The design team is required condition assessments conduct a condition assessment of each of the sites and to elaborate intervention recommendations and rationale for the recommended interventions.

Condition assessment

In the framework of the condition assessment deterioration phenomena on the site and its structures should be fully documented and described, defining their location and degrees of severity. The condition of the site and its elements should be recorded on a full set of drawings with technical notes, accompanied also by a full list of the building pathologies (described and supported by photographs and other graphic means). The deterioration phenomena identified should be documented on the drawings in scale (surfaces affected by phenomena should be hatched accordingly, cracks should be documented in scale etc). The drawings should include legends explaining hatches and line colors used.

The consultants are expected at this stage to propose also any additional investigations and tests that are considered necessary for the consolidation of the monuments supported by a rational for the proposal. Upon approval of the proposal for additional investigations/testing by UNDP the implementation of the tests will be assigned based on a competitive process run by UNDP. Proposals for further investigations/tests submitted at later stages of the design process will not be accepted by UNDP.

A report by the conservator for the full description of the present condition of historic plasters and frescoes which exist on site, as well as remains of mosaics should be submitted. Condition

assessment and analysis of the pathology of the asset/s (description of damage and identification of the cause/s) should be included.

Conservation recommendations

The consultants must prepare conservation recommendations for the conservation of the sites. The interventions shall be consistent with the conservation philosophy and reflect the priorities identified within the framework of the respective preliminary assessments. Nevertheless, it is the designers' responsibility to identify further priorities for the conservation and structural consolidation of each of the sites based on their study and assessment of the sites. The significance of the site and its elements, their condition and the identified risks and threats must be taken into account.

Budget constraints for the works of each design shall be considered when elaborating recommendations;

Church/site	Location	Budget constraints (euro)	
Panagia Trapeza church	Acheritou/Guvercinlik	Euro 110,000 +/- %20	
Agia Marina church	Acheritou/Guvercinlik	Euro 80,000 +/- %20	
Profitis Elias church	Stylloi/Mutluyaka	Euro 170,000 +/- %20	

Descriptions of the interventions must be supported by a clearly explained rationale supplemented by photographs & sketches. The conservation recommendations should include also the conservator's recommendations for the conservation and safeguarding of the historic plasters, frescoes and mosaics. Recommendations should include proposed appropriate treatment methods and materials for treating any identified damage and for reducing or eliminating the causes of the damage. At this stage there is no need to prepare detailed implementation drawings, technical specifications and bills of quantities (which constitute part of Output 3A).

DETAILS OF DELIVERABLES:

OUTPUT-2 shall be submitted in two hard copies and <u>two</u> electronic copies (FLASHDISK). Drawings must be submitted in:

- AutoCAD drawing file format. Included in the electronic deliverable should be the .ctb file (which defines the plot style of the drawings).
- Pdf and Jpg format in scale (including north arrow). Each drawing should be on a separate pdf/jpg. Pdf/jpgs should be created directly from Autocad by choosing "print to pdf/jpg". They shouldn't be scanned from hard-copies to PDF/JPG format in scale.
- Hard copies of the drawings in scale (including north arrow).
- A list of all the drawings submitted, their scale, and what they present (a type of table of contents of drawings).
- Drawings should follow the "GUIDELINES FOR DESIGN PHASE DOCUMENTS and DRAWINGS", which will be shared with the successful team after contract signature.

The photographic documentation must be submitted in:

- JPG format but each photo shouldn't be a heavy document. Photos should be organized in subfolders according to the locations taken.
- A keymap of the monument with the location and direction of each photograph in AutoCAD drawing file format (including .ctb file), pdf/jpg format in scale (including north arrow) and hard copy. Hard copies of the reports must be submitted in A4 paper size except only if considered necessary

to print in A3 size. Electronic copies of the reports should be submitted in word and pdf format. Narratives must be written in good English and must be proof-read before submission.

Presentation to Stakeholders

Design team will present Output 2 in a PowerPoint presentation at a stakeholders' meeting which will be arranged by UNDP. The Output and presentation material must be provided at least 3 days before the presentation to UNDP.

According to the provided feedback the consultants should proceed accordingly to all necessary modifications of the submitted outputs.

This feedback/approval will be given in maximum ONE (1) calendar week.

OUTPUT-2A: Final Condition assessment and Conservation recommendations

Based on the feedback obtained from UNDP/TCCH, the consultant shall submit a revised/modified version of this output. The final OUTPUT submission is required by the consultants <u>ONE (1) calendar</u> week upon receipt of the feedback by UNDP.

OUTPUT-3: Conservation designs in draft format

Based on the feedback obtained from the previous output and in line with the identified priorities for each site, draft conservation designs will be elaborated that will include, inter alia, the following:

- Proposed interventions drawings & details; All proposed actions should be clearly illustrated in a set of architectural drawings. The proposal drawings should illustrate the desired result of the proposed interventions. Within this framework the exact position, dimensions and materials of proposed new elements should be illustrated. Estimated timeframe for implementation of the proposed conservation works should be provided.
- Particular specifications; All interventions proposed in the designs must be described with the required materials and results. Descriptions must be very specific and to the point and should avoid generic descriptions.
- Bill of quantities/cost estimates; Bills of quantities will be compiled using the same alphanumeric sequences used in the Particular Specifications. Provisional quantities and provisional sums should not be used in the bills of quantities, except if absolutely necessary. Estimates are to be elaborated using current market prices.
 - All submitted documents should be cross-referenced. The overall consistency between the drawings, the Particular Specifications and the BoQ is the responsibility of the design team.
- Maintenance Plan;
 - The designers will have to propose a precautionary maintenance plan with a set schedule for the preservation of the good state of the site and all structures on site. The schedule should propose: actions, frequency of actions, and monitoring inspections. Templates used for inspection/inspection checklists with detailed lists of maintenance categories and works per recurrence should also be submitted.

DETAILS OF DELIVERABLES: OUTPUT-3 shall be submitted in <u>two</u> hard copies in scale and <u>two</u> electronic copies in FLASHDISK (excluding the priced BoQ). The priced BoQ will be submitted separately in one hardcopy and one copy electronic copy (FLASHDISC).

1. **Drawings** must be submitted in AutoCAD drawing file format (including the .ctb plot style file), PDF and JPG format in scale (each drawing should be on a separate pdf/jpg and pdf/jpgs should be created directly from Autocad by choosing "print to pdf/jpg", not scanned from hard-copies to

PDF/JPG format in scale), and hard-copies of the drawings in scale.

- 2. **Technical specifications** should be submitted in Word. Narratives must be written in good English and must be proof-read before submission. In the case of proposed interventions that require the involvement of a conservator and / or archaeologist technical specifications must state clearly whether specific works should be done "by" the conservator/archaeologist or only "In the presence of a conservator / archaeologist...".
- 3. **Bills** of **quantities** and estimates shall be in Excel. The Final priced and blank BOQ will be printed only once in hardcopy and one copy electronic copy (FLASHDISC).
- 4. The timeline of works must be in the form of an excel spreadsheet.
- 5. **Maintenance schedule and related documents should be submitted in** in word and excel format electronically and printed in A4 paper size or A3 paper size if considered necessary.

Presentation to Stakeholders

Design team will present Output 3 in a PowerPoint presentation at a stakeholders' meeting which will be arranged by UNDP. The Output and presentation material must be provided at least 3 working days before the presentation to UNDP.

UNDP and stakeholders shall provide feedback to the submitted Output 3 not later than TWO (2) calendar weeks from the date of submitting the Output A.

OUTPUT-3A: Conservation designs in final format

Based on the feedback obtained from UNDP the design team shall submit a final revised/modified version of this output. The final OUTPUT submission is required in <u>TWO (2) calendar weeks from</u> receipt of the feedback from UNDP.

DELIVERABLES:

OUTPUT-3A: The finalized conservation design should be also submitted, marked as 'FINAL', stamped and signed by the architect and civil/structural engineer, in three hard copies in scale and three electronic copies in FLASHDISK (excluding the priced BoQ). The priced BoQ will be submitted separately in one hardcopy and one copy electronic copy (FLASHDISC).

Additionally:

- the final approved set of drawings shall be translated into Turkish/Greek
- extensive summary of the particular specifications shall be made in Turkish/Greek
- extensive summary of the unpriced bills of quantities shall be made in Turkish/Greek

OUTPUT-4: Supervision and Technical Advices during the Works

Services for supervision advices will be provided to UNDP during the conservation works of the two sites which may be implemented in the second half of 2020 and in 2021.

It is expected that up to 8 working days per month of advice services will be required per each site.

A day will be taken as 8 hours of time allocated/spent by the design team for routine site inspections, ad-hoc site visits, on-site and off-site meetings for the works, as well as for reporting and time dedicated for modifications, alterations of the design and/or new elements required. Design team shall visit the sites and give advices whenever the Engineer of the contracts so require. At the end of each site visit, a note with sketches, drawings, photos, etc. shall be submitted to the Engineer within 24 hours of the site visit. The maintenance plan must be updated at the end of the implementation of works.

For quantifying the estimated input necessary for the advices, **8 days per month for 8 months** can be calculated; i.e. in total 64 working days will be required for the works per each site. If there is a need for more than the 64 working days this will be calculated pro rata. Payments for the technical advices shall be made in two instalments; one at the halfway of the duration of the works and the last one upon the issuance of the certificate of substantial completion for which the designers will be involved.

Note:

- Time taken to travel to the sites will not be calculated as time worked
- Not more than THREE hours shall be accepted for time required to prepare the site visit note/report.

8. TIMELINES OF THE ASSIGNMENT

The assignment will be broken into 2 phases; the design phase and the supervision advices phase. The design phase (outputs 1, 1A, 2, 2A, 3, and 3A) shall be completed within six (6) calendar months starting from the date of the contract signature.

Delays in submitting the final outputs will result in the application of liquidated damages for delay (LDD) at a rate of Euro 500 per week of delay beyond the sixth (6th) month from contract signature. The maximum LDD will not be more than the 20% of the contract amount.

The supervision phase of the assignment will start once the contract/s for the conservation works start/s.

The design team shall prepare and submit detailed work-plan for the designs phase as per the template attached. The work-plan should show in 'calendar weeks'. Submission of outputs and the presentation to stakeholders shall be clearly indicated on the workplan and public holidays and mandatory breaks must be taken into account while elaborating the work-plan.

9. THE DESIGN TEAM

The design team is composed by the core team and additional members of the technical disciplines required for the assignment in order to complete the whole assignment for all sites at the same time within the given timeframe of 6 calendar months.

There must be a core team which should be composed of;

- **two architects** (one registered with the GCYP technical chamber and one registered with the TCYP technical chamber),
- **two civil/structural engineers** (one registered with the GCYP technical chamber and one registered with the TCYP technical chamber),
- one conservator.

The core team members must meet the requirements stated in the evaluation criteria in the solicitation document.

CVs of the <u>core team members</u> must be submitted. The CVs of core team must be specific, showing exact durations of involvement.

The design team must be enhanced with technical staff and/or additional disciplines necessary to complete the designs within the stipulated time (further than the core team).

A list of the <u>names of all the team members for each site shall be given.</u>

10. LOGISTICS

The design team will be responsible for its own logistics in carrying out the assignment by arranging its own travel to and from the project site.

11. CONTRACTING

The design team will sign the contract with UNDP within 10 days of being notified of award of contract. The indemnity insurance as per clause 12 and the related insurances under clause 13 of the 'General Terms and Conditions for Contracts' shall be required at contract signature.

The contract will have two distinct durations that will define the period of designs phase (designs) and the period for the works phase (supervision advices). However, if the works phase is not implemented for any reason, the contract will be amended and/or foreclosed at no cost to UNDP.

12. Timeline of the overall services shall not be more than 6 calendar months:

Main Milestones	0	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Contract signature – start date	Х						
CHURCH-1 Panagia							
Trapeza church							
			1 1 1		1 1 1		
					+ + + + + + + + + + + + + + + + + + + +		
CHURCH-2 Agia							
Marina church							
CHURCH-3 Profitis			1 1 1				
Elias church							
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The work plan must detail each activity to achieve the relevant outputs, as well as the timeframe for the stakeholders' presentation and feedbacks; outputs and presentation must be shown in the workplan