

WORKS CONTRACT

CONTRACT NO.: AID 11106 – CIG 84690533A0

FINANCED FROM AICS AID 11106

Between
AICS Italian Agency for Development Cooperation
Khartoum Office - AID 11106
St. No. 33rd Amarat, House 25 Block 12 K-east
Khartoum, SUDAN

("the contracting Authority")

and

of the one part,

MANAZIL TRADING & INVESTMENT CO. LTD.
Khartoum - Riyadh Plot 24, Block 14
Official registration number)1: 11266
VAT number), :8037

("the contractor")

have agreed as follows:

of the other part,

PROJECT : *AID 11106 Sostegno al miglioramento della funzionalità e operatività degli ospedali generali di referenza di Port Sudan, Kassala e Gedaref*

CONTRACT TITLE: *K_08 REHABILITATION OF SAUDI MATERNITY HOSPITAL*

Identification number: AID 11106 – CIG 84690533A0

Whereas the contracting authority would like the contractor to carry out the following works:

Functional and structural rehabilitation works of Saudi Maternity Hospital (SMH) within Kassala Health Citadel (KHC)

and has accepted a tender by the contractor for the execution and completion of such works and the remedying of any defects therein.

It is hereby agreed as follows:

Handwritten signature in blue ink



- (1) In this contract, words and expressions shall have the meanings assigned to them in the contractual conditions set out below.
- (2) The following documents shall be deemed to form and be read and construed as part of this contract, in the following order of precedence:
 - (a) the contract,
 - (b) the special conditions,
 - (c) the general conditions,
 - (d) the breakdown of lump-sum price,
 - (e) the technical and/or performance specifications, (digital copy)
 - (f) the design documentation (drawings), (digital copy)
 - (g) any other documents forming part of the contract.

The various documents making up the contract shall be deemed to be mutually explanatory; in cases of ambiguity or divergence, they shall prevail in the order in which they appear above. Addenda shall have the order of precedence of the document they are amending.

- (3) In consideration of the payments to be made by the contracting authority to the contractor as hereinafter mentioned, the contractor undertakes to execute and complete the works and remedy defects therein in full compliance with the provisions of the contract.
- (4) The contracting authority hereby agrees to pay the contractor in consideration of the execution and completion of the works and remedying of defects therein the amount of:
 - Contract price **EURO 830,153.85**

or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the contract. VAT will be paid in compliance with the binding regulations, national law and international agreements concerning the execution of the project.

The following conditions to the contract shall apply:

			Contract -article:	Article
1	Price	Lump sum contract		
		Prices can not be revised	49	
2	Duration	12 (twelve) months implementation of works	48	
		Provisional acceptance, after completion of works	34	
		Defects liability period up to 90 days, after provisional acceptance	60	
			61	
		Final acceptance, after expiry of defects liability period	62	
3	Delay	0.1% of the contract price for every day of delay	36	
4	Supervisor	Arch. Maha Omer Mohamed	5	
5	Sub-contracting	Allowed up to 50% of the contract price, with the main Contractor maintaining full responsibility	7	
6	Bank guarantees	performance, pre-financing and retention guarantees	15, 46, 47	
7	Insurances	For damage to 3 rd parties, unlimited for bodily injury	16	
		Contractor all risk insurance	16	
		Insurance against accidents at work	16	
		Insurance for soundness of works	16	



8	Payments	lump sum advance for 10% of the original contract price, after conclusion of the contract	46
		Interim payment for 20% of the contract price, after completion of 30% of quantities, cf. 49 SC>	49, 50
		Interim payment for 20% of the contract price, after completion of 50% of quantities, cf. 49 SC>	49, 50
		Interim payment for 20% of the contract price, after completion of 75% of quantities, cf. 49 SC>	49, 50
		Interim payment for 20% of the contract price, after completion of 100% of quantities, cf. 49 SC>	49, 50
		Retention money for 10% of the contract price, after signed Final acceptance and final statement of account	47, 49

In witness whereof the parties hereto have signed the contract. This contract shall take effect on the date on which it is signed by the last party, namely the contractor.

Done in English in two originals, one original for the contracting authority, and one original for the contractor.

For the contractor

Name: *Malik Merghani*

Title: *projects manager*

Signature:

Date: *03/05/2021*



For the contracting authority

Name: Vincenzo Racalbuto

Title: Head of AICS Khartoum

Signature:

Date:



SPECIAL CONDITIONS

CONTENTS

These conditions amplify and supplement the general conditions governing the contract. Unless the special conditions provide otherwise, the general conditions remain fully applicable. The numbering of the articles of the special conditions is not consecutive but follows the numbering of the general conditions. Other special conditions should be indicated afterwards.

Article 2 Language of the contract

- 2.1 The language used shall be English.

Article 4 Communication

- 4.1 Communications during contract execution shall be addressed to:

AICS Italian Agency for Development Cooperation

Khartoum Office - AID 11106

St. No. 33rd Amarat, House 25 Block 12 K-east

Khartoum, SUDAN

Raimondo Cocco

E-mail: raimondo.cocco@aics.gov.it

Mobile: +249 9 6629 1384

Manazil Trading & Investment Co. Ltd.

Khartoum - Riyadh Plot 24, Block 14

Eng. Ashraf Zaki

E-mail: manazil97@gmail.com

- 4.2 An electronic system will be used by the contracting authority and the contractor for all stages of implementation including, inter alia, management of the contract (amendments and administrative orders), reporting (including reporting on results) and payments. The contractor will be required to register in and use the appropriate electronic exchange system to allow for the e-management of the contract.

The electronic management of the contract through the aforementioned system may commence on the date on which implementation of the contract starts, as described in Article 33 of the general conditions to the contract, or at a later date. In the latter case, the contracting authority will inform the contractor in writing that he will be required to use the electronic system for all communications within a maximum period of 3 months.

Article 5 Supervisor and supervisor's representative

- 5.2 Under this contract, the Supervisor does not delegate his duties and authority to a Supervisor's Representative
- 5.4 Administrative orders in the form of Site Instructions shall be solely used by the Supervisor to request from the Contractor a specific intervention on site, either in case of No Compliancy to the Contract technical specifications and/or documentation (correction of mistakes, installation of supplies not approved by the Supervisor, discrepancies as regards to the design) or in case of Variation Order:

Article 9 Access to the site

- 9.1 The contractor is obliged to give the Director of AICS Khartoum free access to its sites, factories, workshops, etc., and generally assist the Director, like the project Supervisor, in

August 2020

Manazil_SPECIAL CONDITIONS



the performance of his duties. The same provisions also apply to the appointed representatives of the Director of AICS Khartoum.

Article 12 General obligations

- 12.9 The Contractor will comply with its obligation toward visibility. These activities must comply with the rules lay down by AICS and instructions received by the site Supervisor.

Article 15 Performance guarantee

- 15.1 The amount of the performance guarantee will be 10% of the amount of the contract and any addenda thereto.
- 15.8 Within 60 days after the deliverance of the certificate of provisional acceptance according to Article 60.1 and the completion of any outstanding work or reservation, 100 % of the amount of the performance guarantee may be released.]

Article 16 Liabilities and insurance

- 16.1 a) By way of derogation from Article 16.1, a) paragraph 2, of the general conditions, compensation for damage to the works resulting from the contractor's liability in respect of the contracting authority is capped at an amount equal to the contract value.
- 16.1 b) By way of derogation from Article 16.1(b), paragraph 2, of the general conditions, compensation for damage resulting from the contractor's liability in respect of the contracting authority is capped at an amount equal to the contract value.
- 16.2 a) By derogation from Article 16.2(a) first paragraph of the general conditions, at the signature of the contract, the contractor shall ensure that itself, its staff, its subcontractors and any person for which the contractor is answerable, are adequately insured with insurance companies recognized on the insurance market.
- 16.2 a) By derogation from Article 16.2(a) paragraph 2 of the general conditions under specific request, at the contract signature, the contractor shall provide the contracting authority and the supervisor with all cover notes and/or insurance certificates showing that the contractor's obligations relating to insurance are fully respected.

Article 17 Programme of implementation of tasks

- 17.1 The Contractor shall provide the Supervisor with a simplified programme of implementation of the tasks. This programme shall include at least the order and time limits in which the Contractor proposes to carry out the works, and shall be based on the tranches foreseen in art. 49.1 of the special conditions.
- 17.2. The Supervisor shall return this document to the Contractor with any relevant remarks within 10 days of receipt, save where the Supervisor, within those 10 days, notifies the Contractor of its wish for a meeting in order to discuss the documents submitted.

Article 21 Exceptional risks

- 21.4 Potential exceptional weather conditions may be expected in Summer from June till September

Article 22 Safety on sites

Without prejudice to art. 22 of General Conditions for works contract, the Contractor is oblige to take all necessary steps to ensure safety on site.

AICS in his capacity of Contracting Authority is determined to foster a safety culture in the workplaces for workers, reasonably following European standards.

In view of the above, in order to support the Contractor, by derogation of art. 22.3 the Contracting Authority has introduced in the BoQs an item concerning safety on building site in the interests of Contractor employees, agents of the contracting authority and third parties.

The item is a percentage of budget for works and can only be spent for the purpose of ensuring safety by mean of (for instance) lighting, protection, fencing and security equipment which proves necessary for the proper implementation of the tasks or which may be required by the supervisor. The site supervisor will inform and indicate measures to be adopted in general and on case by case basis.

The contractor shall provide the contracting authority and the supervisor with copy of invoices and any other documents showing that the allocated budget has been properly spent.

Article 34 Period of implementation of tasks

- 34.1 The period of implementation of tasks is **12 (TWELVE) months maximum**

Article 36 Delays in the implementation of tasks

- 36.1 The rate of liquidated damages for delays in the completion of works shall be 0.1% of the contract price for every day or part thereof which elapses between the end of the period of implementation of tasks and the actual date of completion, up to a maximum amount of 10% of the contract price or, if the contract is subdivided into phases, 10% of the price of the phase concerned.

Article 39 Work register

- 39.1 **A work register is required.** Practical details to be recorded are mentioned in the General Conditions and shall be agreed upon with the Supervisor at the Commencement of Works
- 39.2 For lump sum contracts the statements criteria are based on percentage of works made corresponding to a percentage of global price

Article 40 Origin and quality of works and materials

- 40.1 All goods purchased under the contract must originate in any eligible source country. However, the goods to be purchased may originate from any country, whenever the total price of the estimated quantity of those goods, as reflected in a separate item of the breakdown of the lump-sum price (Volume 4.2.3) is below EUR 100.000. A category of similar goods to be purchased shall not be broken down over more than 1 item of the breakdown of the lump-sum price (Volume 4.2.3)

For these purposes, 'origin' means the place where the goods are mined, grown, produced or manufactured and/or from which services are provided. The origin of the goods must be determined according to the EU Customs Code or the applicable international agreement.

When importing goods, any change in the specified origin must be pointed out to the project supervisor and approved by him.

- 40.2 The works and the objects, appliances, equipment or materials used in their construction must comply with:
- (*) the requirements of the specifications set out in the Design Documents and BoQ where stated
- 40.3 Preliminary technical acceptance will be implemented upon Site Supervisor request and instruction.

Article 44: General principles for payments

- 44.1 Payments shall be made in EURO
- 44.2 Invoices shall be submitted to the contracting authority



- 44.3 By derogation, pre-financing payment to the Contractor for the lump-sum advance shall be made within 30 days. Other pre-financing payments to the Contractor shall be made within 60 days. Interim payments to the Contractor of the amounts due under each of the interim payment certificates approved by the supervisor shall be made within 60 days, and the final payment to the Contractor of the amounts due after the final statement of account issued by the Supervisor shall be made within 60 days.

Article 46 Pre-financing

- 46.1 The only pre-financing granted to the contractor, is the lump sum advance referred to in Article 46.1(a)
- 46.2 The total amount of the pre-financing is 10 % of the original contract price for the lump-sum advance.
- 46.8 The tranches laid down in Article 49.1 of these special conditions are determined so that the pre-financing is fully repaid before provisional acceptance.

Article 47 Retention monies

- 47.1 The sum retained to guarantee implementation of the contractor's obligations during the defects liability period is 10 % of the contract price. By derogation to Article 47.1 of the general conditions, that money is not retained from interim payments. The tranches laid down in Article 49.1 of these special conditions are determined so that the retention sum amounts to 10% of the contract price at the moment of the certificate of provisional acceptance.
- 47.2 By derogation to Article 47.2 of the general conditions, the retention sums cannot be substituted by a retention guarantee.

Article 48 Price revision

- 48.1 Prices are fixed and shall not be revised.

Article 49 Measurement

- 49.1 This is a lump sum contract. The amounts due shall be calculated by measuring the percentage of works carried out in relation to the firm quantities of each item of the breakdown of the lump-sum price and by applying that percentage to the lump-sum price of the related item.

	Percentage	Nature	Timing
1.	10%	Lump-sum advance of Article 46.1(a)	After conclusion of the contract
2.	20%	Interim payment of Article 50	After completion of 30% of works
3.	20%	Interim payment of Article 50	After completion of 50% of works
4.	20%	Interim payment of Article 50	After completion of 75% of works
5.	20%	Interim payment of Article 50	After completion of 100% of works and issuing of the certificate of provisional acceptance
6.	10%	Retention money of Article 47	Within 60 days of the issuing of the signed final statement of account

Article 50 Interim payments

- 50.1 The interim payments will be paid as determined in Article 49.1 of these special conditions.

Article 53 Delayed payments

- 53.1 By derogation from Article 53.1 of the general conditions, once the time-limit referred Article 44.3 has expired, the contractor shall be entitled to late-payment interest at the rate and for the period mentioned in the general conditions.

However, when the interest calculated in accordance with the first subparagraph is lower than or equal to EUR 200, it shall be paid to the creditor only upon a demand submitted within two months of receiving late payment

Article 61 Defects liability

- 61.1 The defects liability period is defined as the period commencing on the date of provisional acceptance, during which the contractor is required to make good any defect in, or damage to, any part of the work which may appear or occur during this period as notify by the supervisor or the contracting authority. The rights and obligations of the parties with regard to this defects liability period are laid down in Article 61 of the general conditions.
- 61.7 The defects liability period is set equal to 90 days starting from the Provisional Acceptance.

Article 68 Dispute settlement

- 68.4 Any dispute arising out of or relating to this Contract which cannot be settled otherwise shall be referred to the exclusive jurisdiction of the courts of Sudan.

Article 72 Data protection

- 72.1 Processing of personal data related to the implementation of the contract by the contracting authority takes place in accordance with the national legislation of the state of the contracting authority and with the provisions of the respective financing agreement.

* * *



VOLUME 2

SECTION 2

GENERAL CONDITIONS FOR WORKS CONTRACTS FINANCED BY THE EUROPEAN UNION BUDGET OR THE EUROPEAN DEVELOPMENT FUND (EDF)

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PRELIMINARY PROVISIONS

Article 1 - Definitions

- 1.1. The definitions of the terms used throughout this general conditions are laid down in the 'Glossary of terms', annex A1a to the practical guide, which forms an integral part of this contract.
- 1.2. The headings and titles in these general conditions shall not be taken as part thereof or be taken into consideration in the interpretation of the contract.
- 1.3. Where the context so permits, words in the singular shall be deemed to include the plural and vice versa, and words in the masculine shall be deemed to include the feminine and vice versa.
- 1.4. Words designating persons or parties shall include firms and companies and any organisation having legal capacity.

Article 2 - Language of the contract

- 2.1. The language of the contract and of all communications between the contractor, contracting authority and supervisor or their representatives shall be as stated in the special conditions.

Article 3 - Order of precedence of contract documents

- 3.1. The order of precedence of the contract documents shall be as stated in the contract.

Article 4 - Communications

- 4.1. Any written communications between the contracting authority and/or the supervisor on the one hand, and the contractor on the other hand, shall state the contract title and identification number and shall be sent by post, cable, telex, facsimile transmission, e-mail or personal delivery, to the appropriate addresses designated by those parties for that purpose in the special conditions.
- 4.2. If the sender requires evidence of receipt, it shall state such requirement in its communication and shall demand such evidence of receipt whenever there is a deadline for the receipt of the communication. In any event, the sender shall take all the necessary measures to ensure timely receipt of its communication.
- 4.3. Wherever the contract provides for the giving or issue of any notice, consent, approval, certificate or decision, unless otherwise specified such notice, consent, approval, certificate or decision shall be in writing and the words 'notify', 'consent', 'certify',



'approve' or 'decide' shall be construed accordingly. Any such consent, approval, certificate or decision shall not unreasonably be withheld or delayed.

Article 5 - Supervisor and supervisor's representative

- 5.1. The supervisor shall carry out the duties specified in the contract. Except as expressly stated in the contract, the supervisor shall not have authority to relieve the contractor of any of its obligations under the contract.
- 5.2. The supervisor may, from time to time, while retaining ultimate responsibility, delegate to the supervisor's representative any of the duties and authority vested in the supervisor and he may at any time revoke such delegation or replace the representative. Any such delegation, revocation or replacement shall be in writing and shall not take effect until a copy thereof has been delivered to the contractor. The administrative order which determines the duties, authority and identity of the supervisor's representative shall be issued by the supervisor at the moment of the commencement order. The role of the supervisor's representative shall be to supervise and inspect works and to test and examine the materials employed and the quality of workmanship. Under no circumstances will the supervisor's representative be empowered to relieve the contractor of its obligations under the contract or – save where express instructions to that effect are given below or in the contract – order works resulting in an extension of the period of implementation of tasks or additional costs to be paid by the contracting authority or introduce variants in the nature or scale of the works.
- 5.3. Any communication given by the supervisor's representative to the contractor in accordance with the terms of such delegation shall have the same effect as though it had been given by the supervisor, provided that:
 - a) any failure on the part of the supervisor's representative to disapprove any work, materials or plant shall not prejudice the authority of the supervisor to disapprove such work, materials or plant and to give the instructions necessary for the rectification thereof;
 - b) the supervisor shall be at liberty to reverse or vary the contents of such communication.
- 5.4. Instructions and/or orders issued in writing by the supervisor shall be considered an administrative order. Such orders shall be dated, numbered and entered by the supervisor in a register, and copies thereof delivered by hand, where appropriate, to the contractor's representative.

Article 6 - Assignment

- 6.1. An assignment shall be valid only if it is a written agreement by which the contractor transfers its contract or part thereof to a third party.
- 6.2. The contractor shall not, without the prior consent of the contracting authority, assign the contract or any part thereof, or any benefit or interest thereunder, except in the following cases:

- a) a charge, in favour of the contractor's bankers, of any monies due or to become due under the contract; or
 - b) the assignment to the contractor's insurers of the contractor's right to obtain relief against any other person liable in cases where the insurers have discharged the contractor's loss or liability.
- 6.3. For the purpose of Article 6.2 the approval of an assignment by the contracting authority shall not relieve the contractor of its obligations for the part of the contract already performed or the part not assigned for which the contractor's performance guarantee may be kept.
- 6.4. If the contractor has assigned its contract without authorization, the contracting authority may, without formal notice thereof, apply as of right the sanction for breach of contract provided for in Article 63 and 64.
- 6.5. Assignees must satisfy the eligibility criteria applicable for the award of the contract and they cannot fall under the exclusion criteria described in the tender dossier.
- 6.6. Before giving its approval the contracting authority should receive as needed a performance guarantee which may be requested for the full contract, a pre-financing guarantee and retention guarantee, from the assignees.

Article 7 - Subcontracting

- 7.1. A subcontract shall be valid only if it is a written agreement by which the contractor entrusts performance of a part of the contract to a third party. Simple plant hire, labour only and supply contracts are not considered or construed 'subcontracts' for the purpose of this article.
- 7.2. The contractor shall request to the contracting authority the authorisation to subcontract. The request must indicate the elements of the contract to be subcontracted and the identity of the subcontractors.
- Within 30 days of receipt of this request, the contracting authority must either extend the delay for a maximum of 15 days or notify the contractor of its decision, stating reasons should he withhold such authorization. If the contracting authority fails to notify its decision within the time limit referred to above, the request is deemed to be approved at the end of the time limit.
- 7.3. Subcontractors must satisfy the eligibility criteria applicable for the award of the contract. They cannot fall under the exclusion criteria described in the tender dossier and the contractor shall ensure that subcontractors are not subject to EU restrictive measures.
- 7.4. Subject to Articles 7.6 and 52, no subcontract creates contractual relations between any subcontractor and the contracting authority.
- 7.5. The contractor shall be responsible for the acts, defaults and negligence of its subcontractors and their agents or employees, as if they were the acts, defaults or negligence of the contractor, its agents or employees. The approval by the contracting authority of

the sub-contracting of any part of the contract or of the subcontractor to perform any part of the works shall not relieve the contractor of any of its obligations under the contract.

- 7.6. If a subcontractor has undertaken any continuing obligation for a period exceeding that of the defects liability period under the contract towards the contractor in respect of the work executed or the goods, materials, plant or services supplied by the subcontractor, the contractor shall, at any time after the expiration of the defects liability period, transfer immediately to the contracting authority, at the contracting authority's request and cost, the benefit of such obligation for the unexpired duration thereof. If the contractor fails to effect such a transfer, the said continuing obligation(s) shall be transferred automatically.
- 7.7. If the contractor enters into a subcontract without approval, the contracting authority may, without formal notice thereof, apply as of right the sanction for breach of contract provided for in Article 63 and 64.
- 7.8. If a subcontractor is found by the contracting authority or the supervisor to be incompetent in discharging its duties, the contracting authority or the supervisor may request the contractor to forthwith remove the subcontractor from the site and either to provide a subcontractor with qualifications and experience acceptable to the contracting authority as a replacement, or to resume the implementation of the tasks itself.

OBLIGATIONS OF THE CONTRACTING AUTHORITY

Article 8 - Supply of documents

- 8.1. Save where otherwise provided in the special conditions, within 30 days of the signing of the contract, the supervisor shall provide to the contractor, free of charge, a copy of the drawings prepared for the implementation of tasks as well as two copies of the specifications and other contract documents. The contractor may purchase additional copies of these drawings, specifications and other documents, insofar as they are available. Upon the final acceptance, the contractor shall return to the supervisor all drawings, specifications and other contract documents.
- 8.2. The contracting authority co-operates with the contractor to provide information that the latter may reasonably request in order to perform the contract.
- 8.3. Unless it is necessary for the purposes of the contract, the drawings, specifications and other documents provided by the contracting authority shall not be used or communicated to a third party by the contractor without the prior consent of the supervisor.
- 8.4. The supervisor shall have authority to issue to the contractor administrative orders incorporating such supplementary documents and instructions as shall be necessary for the proper and adequate execution of the works and the remedying of any defects therein.

Article 9 - Access to site

- 9.1. The contracting authority shall, in due time and in conformity with the progress of the works, place the site and access thereto at the disposal of the contractor in accordance

with the approved programme of implementation of tasks referred to in Article 17. The contractor grants appropriate access to other persons as set out in the special conditions or as instructed.

- 9.2. Any land procured for the contractor by the contracting authority shall not be used by the contractor for purposes other than the implementation of tasks.
- 9.3. The contractor shall preserve any facilities placed at its disposal in a good state while it is in occupation and shall, if so required by the contracting authority or the supervisor, restore them to their original state on completion of the contract, taking into account normal wear and tear.
- 9.4. The contractor shall not be entitled to any payment for improvements resulting from work carried out on its own initiative.

Article 10 - Assistance with local regulations

- 10.1. The contractor may request the assistance of the contracting authority in obtaining copies of laws, regulations and information on local customs, orders or by-laws of the country in which the works are executed, which may affect the contractor in the performance of its obligations under the contract. The contracting authority may provide the assistance requested to the contractor at the contractor's cost.
- 10.2. Subject to the provisions of the laws and regulations on foreign labour of the country in which the works are to be executed, the contracting authority provides reasonable assistance to the contractor, at its request, for its application for any visas and permits required by the law of the country in which the works are executed, including work and residence permits, for the personnel whose services the contractor and the contracting Authority consider necessary, as well as residence permits for their families.

Article 11 - Delayed payments to the contractor's staff

- 11.1. Where there is a delay in the payment to the contractor's employees of wages and salaries owing and of the allowances and contributions laid down by the law of the country in which the works are executed, the contracting authority may give notice to the contractor that within 15 days of the notice the contracting authority intends to pay such wages, salaries, allowances and contributions direct. Should the contractor contest that such payments are due, it shall make representations to the contracting authority with reasons, within the 15 day period. If the contracting authority, having considered such representations, is of the opinion that payment of the wages and salaries should be made, it may pay such wages, salaries, allowances and contributions out of amounts due to the contractor. Failing this, the contracting authority may obtain a contribution under any of the guarantees provided for in these general conditions. Any action taken by the contracting authority under this Article shall not relieve the contractor of its obligations to its employees, except to the extent that any obligation may be satisfied by this action. The contracting authority shall not assume any responsibility towards the contractor's employees by this action.

OBLIGATIONS OF THE CONTRACTOR

Article 12 - General obligations

- 12.1. The contractor shall, with due care and diligence, design the works to the extent stated in the contract, execute and complete the works in accordance with the contract and with the supervisor instructions, and shall remedy any defects in the works.
- 12.2. The contractor shall provide all superintendence, personnel, materials, plant, equipment and all other items, of a temporary or permanent nature required in and for such design, execution, completion and remedying of any defects, insofar as specified in, or may be reasonably inferred from the contract.
- 12.3. The contractor shall take full responsibility for the adequacy, stability and safety of all operations and methods of construction under the contract.
- 12.4. The contractor shall comply with any administrative orders given to him. Where the contractor considers that the requirements of an administrative order go beyond the authority of the supervisor or of the scope of the contract, the contractor shall give notice, with reasons, to the supervisor. If the contractor fails to notify within the 30 day period after receipt thereof, he shall be barred from so doing. Execution of the administrative order shall not be suspended because of this notice.
- 12.5. The contractor shall supply, without delay, any information and documents to the contracting authority or the European Commission upon request, regarding the conditions in which the contract is being executed.
- 12.6. The contractor shall respect and abide by all laws and regulations in force in the country in which the works are executed and shall ensure that its personnel, their dependants, and its local employees also respect and abide by all such laws and regulations. The contractor shall indemnify the contracting authority against any claims and proceedings arising from any infringement by the contractor, its employees and their dependants of such laws and regulations.
- 12.7. Subject to Article 12.9, the contractor undertakes to treat in the strictest confidence and not make use of or divulge to third parties any information or documents which are linked to the performance of the contract without the prior consent of the contracting authority. The contractor shall continue to be bound by this undertaking after completion of the tasks and shall obtain from each member of its staff the same undertaking. However, use of the contract's reference for marketing or tendering purposes does not require prior approval of the contracting authority, except where the contracting authority declares the contract to be confidential.
- 12.8. If the contractor acts on behalf of or is a joint venture or consortium of two or more persons, all such persons shall be jointly and severally bound in respect of the obligations under the contract, including any recoverable amount. The person designated by the consortium to act on its behalf for the purposes of this contract shall have the authority to bind the consortium. The composition or the constitution of the joint venture or consortium, including the share distribution between its members, shall not be altered

without the prior consent of the contracting authority. Any alteration of the composition or the constitution of the joint venture or consortium without the prior consent of the contracting authority may result in the termination of the contract.

- 12.9. Save where the European Commission requests or agrees otherwise, the contractor shall ensure the highest visibility to the financial contribution of the European Union. To ensure such publicity the contractor shall implement among other actions the specific activities described in the special conditions. All measures must comply with the rules in the Communication and Visibility Manual for EU External Actions published by the European Commission.
- 12.10. Any records must be kept for a 7-year period after the final payment is made under the contract. In case of failure to maintain such the contracting authority may, without formal notice thereof, apply as of right the sanction for breach of contract provided for in Article 63 and 64.

Article 12a - Code of conduct

- 12a.1 The contractor must at all times act impartially and as a faithful adviser in accordance with the code of conduct of its profession. It shall refrain from making public statements about the project or services without the contracting authority's prior approval. It shall not commit the contracting authority in any way whatsoever without its prior consent and shall make this obligation clear to third parties.

Physical abuse or punishment, or threats of physical abuse, sexual abuse or exploitation, harassment and verbal abuse, as well as other forms of intimidation shall be prohibited. The contractor shall also provide to inform the contracting authority of any breach of ethical standards or code of conduct as set in the present Article. In case the contractor is aware of any violations of the abovementioned standards he shall report in writing within 30 days to the contracting authority.

- 12a.2 The contractor and its staff shall respect human rights and applicable data protection rules.
- 12a.3 The contractor shall respect environmental legislation applicable in the country in which the works are executed and internationally agreed core labour standards, i.e. the ILO core labour standards, conventions on freedom of association and collective bargaining, elimination of forced and compulsory labour, elimination of discrimination in respect of employment and occupation, and the abolition of child labour, as well as applicable obligations established by these Conventions:
- Vienna Convention for the protection of the Ozone Layer and its Montreal Protocol on substances that deplete the Ozone Layer;
 - Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention);
 - Stockholm Convention on Persistent Organic Pollutants (Stockholm POPs Convention);

- Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (UNEP/FAO) (The PIC Convention) Rotterdam, 10 September 1998, and its 3 regional Protocols.

12a.4 The contractor or any of its sub-contractors, agents or personnel shall not abuse of its entrusted power for private gain. The contractor or any of its sub-contractors, agents or personnel shall not receive or agree to receive from any person or offer or agree to give to any person or procure for any person, gift, gratuity, commission or consideration of any kind as an inducement or reward for performing or refraining from any act relating to the performance of the contract or for showing favour or disfavour to any person in relation to the contract. The contractor shall comply with all applicable laws and regulations and codes relating to anti-bribery and anti-corruption.

12a.5 The payments to the contractor under the contract shall constitute the only income or benefit it may derive in connection with the contract. The contractor and its staff must not exercise any activity or receive any advantage inconsistent with their obligations under the contract.

12a.6 The execution of the contract shall not give rise to unusual commercial expenses. Unusual commercial expenses are commissions not mentioned in the contract or not stemming from a properly concluded contract referring to the contract, commissions not paid in return for any actual and legitimate service, commissions remitted to a tax haven, commissions paid to a recipient who is not clearly identified or commission paid to a company which has every appearance of being a front company. The European Commission may carry out documentary or on-the-spot checks it deems necessary to find evidence in case of suspected unusual commercial expenses.

The respect of the code of conduct set out in the present Article constitutes a contractual obligation. Failure to comply with the code of conduct is always deemed to be a breach of the contract under Article 63 of the General Conditions. In addition, failure to comply with the provision set out in the present Article can be qualified as grave professional misconduct that may lead either to suspension or termination of the contract, without prejudice to the application of administrative sanctions including exclusion from participation in future contract award procedures.

Article 12b - Conflict of Interest

12b.1 The contractor shall take all necessary measures to prevent or end any situation that could compromise the impartial and objective performance of the contract. Such conflict of interests may arise in particular as a result of economic interest, political or national affinity, family or emotional ties, or any other relevant connection or shared interest. Any conflict of interests which may arise during performance of the contract must be notified to the contracting authority without delay. In the event of such conflict, the contractor shall immediately take all necessary steps to resolve it.

12b.2 The contracting authority reserves the right to verify that such measures are adequate and may require additional measures to be taken if necessary. The contractor shall ensure that its staff, including its management, is not placed in a situation which could give rise to conflict of interests. Without prejudice to its obligation under the contract the contractor shall replace, immediately and without compensation from the contracting authority, any member of its staff exposed to such a situation.

- 12b.3 The contractor shall refrain from any contact which would compromise its independence or that of its personnel.
- 12b.4 The contractor shall limit its role in connection with the project to the provision of the works described in the contract.
- 12b.5 The contractor and anyone working under its authority or control in the performance of the contract or on any other activity shall be excluded from access to other EU budget/EDF funds available under the same project. However, if the contractor is able to prove that his involvement in a previous stages of the project does not constitute unfair competition, he may participate, subject to the prior approval of the contracting authority.

Article 13 - Superintendence of the works

- 13.1. The contractor shall itself superintend the works or shall appoint a representative to do so. Such appointment shall be submitted to the supervisor for approval within 30 days of the signature of the contract. The supervisor shall approve or refuse the appointment within 10 days. The approval may at any time be withdrawn. Should the supervisor refuse the representative appointed within the deadline, or withdraw approval of the appointment, it shall set out the grounds on which its decision is based, and the contractor shall submit an alternative appointment without delay. The address of the contractor's representative shall be deemed to be the address for service given by the contractor.
- 13.2. If the supervisor withdraws its approval of the contractor's representative, the contractor shall, as soon as is practicable, after receiving notice of such withdrawal, remove the representative from the works and replace it with another representative approved by the supervisor.
- 13.3. The contractor's representative shall have full authority to make any decision necessary for the execution of the works, to receive and carry out administrative orders and to countersign the work register referred to in Article 39 or attachment, where appropriate. In any event, the contractor shall be responsible for ensuring that the works are carried out satisfactorily including ensuring that the specifications and administrative orders are adhered to by its own employees and by its sub-contractors and their employees.

Article 14 - Staff

- 14.1. The persons employed by the contractor must be sufficient in number, and permit the optimum use of the human resources of the country in which the works are executed. Such employees must have the skills and experience necessary to ensure due progress and satisfactory execution of the works. The contractor shall immediately replace all employees indicated by the supervisor, in a letter stating reasons, as likely to jeopardize the satisfactory execution of the works.
- 14.2. The contractor shall make its own arrangements for the engagement of all staff and labour. The rates of remuneration and the general working conditions, as laid down by the law of the country in which the works are executed, shall apply as a minimum to employees on the site.

Article 15 - Performance guarantee

- 15.1. The contractor shall, together with the return of the countersigned contract, furnish to the contracting authority a guarantee for the full and proper performance of the contract. The amount of the guarantee shall be as specified in the special conditions and shall be in the range of 5 and 10% of the amount of the contract price including any amounts stipulated in addenda to the contract.
- 15.2. The performance guarantee shall be held against payment to the contracting authority for any loss resulting from the contractor's failure to perform its obligations under the contract.
- 15.3. The performance guarantee shall be in the format provided for in the contract and may be provided in the form of a bank guarantee, a banker's draft, a certified cheque, a bond provided by an insurance and/or bonding company, an irrevocable letter of credit or a cash deposit made with the contracting authority. If the performance guarantee is to be provided in the form of a bank guarantee, a banker's draft, a certified cheque or a bond, it shall be issued by a bank or bonding and/or insurance company approved by the contracting authority.
- 15.4. Unless stated otherwise in the special conditions, the performance guarantee shall be denominated in the types and proportions of currencies in which the original contract is payable.
- 15.5. No payments shall be made in favour of the contractor prior to the provision of the guarantee. The guarantee shall continue to remain valid until the date of the issuing of the signed final statement of account referred to in Article 51.
- 15.6. During the performance of the contract, if the natural or legal person providing the guarantee (i) is not able or willing to abide by its commitments, (ii) is not authorised to issue guarantees to contracting authorities, or (iii) appears not to be financially reliable, the guarantee shall be replaced. The contracting authority shall give formal notice to the contractor to provide a new guarantee on the same terms as the previous one. Should the contractor fail to provide a new guarantee, the contracting authority may terminate the contract.
- 15.7. The contracting authority shall demand payment from the guarantee of all sums for which the guarantor is liable under the guarantee due to the contractor's default under the contract, in accordance with the terms of the guarantee and up to the value thereof. The guarantor shall, without delay, pay those sums upon first demand by the contracting authority and the guarantor may not raise any objection for any reason whatsoever. Prior to making any claim under the performance guarantee, the contracting authority shall notify the contractor stating the nature of the default in respect of which the claim is to be made.
- 15.8. Unless the special conditions provide otherwise, the performance guarantee shall be released within 60 days of the issuing of the signed final statement of account referred to in Article 51, for its total amount except for amounts which are the subject of amicable settlement, conciliation, arbitration or litigation.

Article 16 - Liabilities, insurance and security arrangements

16.1. Liabilities

a) Liability for damage to works

Without prejudice to Article 61 (defects liability) and Article 66 (force majeure), the contractor shall assume (i) full responsibility for maintaining the integrity of the works and (ii) the risk of loss and damage, whatever their cause, until the final acceptance as foreseen in Article 62.

Compensation for damage to the works resulting from the contractor's liability in respect of the contracting authority is capped at an amount equal to one million euros if the contract value is less than or equal to one million euros. If the contract value is greater than one million euros, compensation for damages resulting from the contractor's liability shall be capped to the contract value.

However, compensation for loss or damage resulting from fraud or gross negligence of the contractor, its staff, its subcontractors and any person for which the contractor is answerable, can in no case be capped.

After the final acceptance as foreseen in Article 62, the contractor shall remain responsible for any breach of its obligations under the contract for such period as may be determined by the law governing the contract, or by default for a period of 10 years.

b) Contractor's liability in respect of the contracting authority

At any time, the contractor shall be responsible for and shall indemnify the contracting authority for any damage caused, during the performance of the works, to the contracting authority by the contractor, its staff, its subcontractors and any person for which the contractor is answerable.

Compensation for damage resulting from the contractor's liability in respect of the contracting authority is capped at an amount equal to one million euros if the contract value is less than or equal to one million euros. If the contract value is greater than one million euros, compensation for damages resulting from the contractor's liability shall be capped to the contract value.

However, compensation for loss or damage resulting from the contractor's liability in case of bodily injury, including death, can in no case be capped. The same applies to compensation for any damages of any kind resulting from fraud or gross negligence of the contractor, its staff, its subcontractors and any person for which the contractor is answerable.

c) Contractor's liability in respect of third parties

The contractor shall, at its own expense, indemnify, protect and defend, the contracting authority, its agents and employees, from and against all actions, claims, losses or damage, direct or indirect, of whatever nature (hereinafter 'claim(s)') arising

from any act or omission by the contractor, its staff, its subcontractors and/or any person for which the contractor is answerable, in the performance of the duties.

The contracting authority must notify any third party claim to the contractor as soon as possible after the contracting authority becomes aware of them.

If the contracting authority chooses to challenge and defend itself against the claim(s), the contractor shall bear the reasonable costs of defence incurred by the contracting authority, its agents and employees.

Under these general conditions, the agents and employees of the contracting authority, as well as the contractor's staff, its subcontractors and any person for which the contractor is answerable are considered to be third parties.

The contractor shall treat all claims in close consultation with the contracting authority

Any settlement or agreement settling a claim requires the prior express consent of the contracting authority and the contractor.

16.2. Insurance

a) Insurance – general issues

At the latest together with the return of the countersigned contract, and for the period of implementation of tasks, the contractor shall ensure that itself, its staff, its subcontractors and any person for which the contractor is answerable, are adequately insured with insurance companies recognized on the international insurance market, unless the contracting authority has given its express written consent on a specific insurance company.

At the latest together with the return of the countersigned contract, the contractor shall provide the contracting authority and the supervisor with all cover notes and/or certificates of insurance showing that the contractor's obligations relating to insurance are fully respected. The contractor shall submit without delay, whenever the contracting authority or the project manager so requests, an updated version of the cover notes and/or certificates of insurance.

The contractor shall obtain from the insurers that they commit to personally and directly inform the contracting authority and the supervisor of any event likely to reduce, cancel or alter in any manner whatsoever, that coverage. The insurers shall deliver this information as quickly as possible, and in any event at least thirty (30) days before the reduction, cancellation or alteration of the cover is effective. The contracting authority reserves the right to indemnify the insurer in case the contractor fails to pay the premium, without prejudice to the contracting authority's right to recover the amount of the premium it paid, and to subsequently seek compensation for its possible resulting damage.

Whenever possible, the contractor shall ensure that the subscribed insurance contracts contain a waiver of recourse in favour of the contracting authority and the supervisor, their agents and employees.

The purchase of adequate insurances by the contractor shall in no case exempt it from its statutory and/or contractual liabilities. As a minimum, the insurances listed hereafter shall provide cover up to the minimum contractual liabilities laid down in pursuance of Article 16.1 or minimum statutory liabilities laid down in pursuance of the applicable national legislation, whichever is the highest.

The contractor shall fully bear the consequences of a total or partial lack of coverage, and to the full discharge of the contracting authority and the supervisor.

The contractor shall ensure that its staff, its subcontractors and any person for which the contractor is answerable comply with the same insurance requirements imposed to it under this contract. In case of default of insurance or inadequate insurance of its staff, its subcontractors or any person for which the contractor is answerable, the contractor shall indemnify the contracting authority and the supervisor from all consequences resulting therefrom.

Under its own responsibility and without prejudice to the obligation to take out all insurance covering its obligations under this contract, the contractor shall ensure that all compulsory insurances are subscribed in compliance with the laws and regulations in force in the country in which the works are executed. It shall also ensure that all possible statutory obligations applying to the coverage are complied with.

The contracting authority and the supervisor shall not bear any liability for the assessment and adequacy of insurance policies taken out by the contractor with their contractual and/or statutory obligations.

b) Insurance – Specific issues

1. *Insurance for damage to third parties*

The contractor shall take out a civil liability insurance covering bodily injury and property damage that may be caused to third parties by reason of the execution of the works, as well as during the defects liability period. The insurance policy must specify that the contracting authority's and the supervisor's staff, as well as that of other contractors and third parties located on site are considered third parties under this insurance, which shall be unlimited for bodily injury.

2. *Works insurance*

The contractor shall take out a 'Contractor All Risk' insurance to the joint benefit of itself, its subcontractors, the contracting authority and the supervisor.

This insurance shall cover all damage to which the works included in the contract may be subject, including damage due to a defect or a design flaw of the plans, the building materials or the implementation for which the contractor is responsible under the contract and the damages due to natural events. This insurance shall also cover damage to existing goods and properties of the contracting authority and of the supervisor.

This insurance shall also cover the equipment and the temporary works on the site up to their total value of reconstruction/replacement.

3. Motor insurance

The contractor shall take out insurance covering all vehicles used by the contractor or its subcontractors (whether they own them or not) in connection with the contract.

4. Insurance against accidents at work

The contractor shall take out insurance policies providing coverage of the contractor itself, its staff, its subcontractors and any person for which the contractor is answerable, in case of an accident at work or on the way to work. It shall ensure that its subcontractors do the same. It indemnifies the contracting authority against any claims that its employees or those of its subcontractors could have in this regard. For its permanent expatriate staff, where appropriate, the contractor shall in addition comply with the laws and regulations applicable in the country of origin.

5. Insurance of liability related to the soundness of the works

The contractor shall take out insurance covering in full its liability that may be triggered with regard to the soundness of the works even after final acceptance, as foreseen by the law of the country in which the works are executed.

- 16.3. The contractor shall put in place security measures for its staff commensurate with the physical danger possibly facing them in the country in which they work. The contractor shall be responsible for monitoring the level of physical risk to which its staff are exposed and for keeping the contracting authority informed of the situation. If the contracting authority or the contractor becomes aware of an imminent threat to the life or health of any of the contractor's staff, the contractor must take immediate emergency action to remove the individuals concerned to safety. If the contractor takes such action, he must communicate this immediately to the supervisor.

Article 17 - Programme of implementation of tasks

- 17.1. Notwithstanding any work programme submitted as part of its tender, the contractor shall provide the supervisor with a programme of implementation of tasks, broken down by activity and by month within 30 days of the signature of the contract. This programme includes at least the following information:

- a) the order and time limits within which the contractor proposes to carry out the works;
- b) the time limits within which submission and approval of the drawings are required;
- c) an organisation chart containing the names, qualifications and curricula vitae of the staff responsible for the site,
- d) a general description of the method including the sequence, by month and by nature, which the contractor proposes to carry out the works;

- e) a plan for the setting out and organisation of the site, and
 - f) such further details and information as the supervisor may reasonably require.
- 17.2. The supervisor shall return these documents to the contractor with its approval or any relevant remarks within ten days of receipt, save where the supervisor, within those ten days, notifies the contractor of its wish for a meeting in order to discuss the documents submitted.
- 17.3. If the supervisor fails to notify its decision or remarks or wish for a meeting within these 10 days, the programme submitted is deemed approved.
- 17.4. The approval of the programme by the supervisor shall not relieve the contractor from any of its obligations under the contract.
- 17.5. No material alteration to the programme shall be made without the approval of the supervisor. If, however, the progress of the works does not conform to the programme, the supervisor may instruct the contractor to submit a revised programme in accordance with the procedure laid down in Article 17.

Article 18 - Detailed breakdown of prices

- 18.1. If not provided in its tender and where necessary for the purposes of the contract, the contractor shall provide a detailed breakdown of its rates and prices within no more than 20 days following the supervisor's reasoned request.
- 18.2. Within 30 days of notification of the award of contract, the contractor shall provide to the supervisor for its information only, a detailed cash flow estimate, in quarterly periods, of all payments which may be due to the contractor under the contract. The contractor shall subsequently supply revised cash flow estimates at quarterly intervals, if so required by the supervisor. The communication shall not impose any liability whatsoever on the contracting authority or the supervisor.

Article 19 - Contractor's drawings and execution studies

- 19.1. The contractor shall submit to the supervisor for approval at its own expense, all design and construction drawings and other documents and objects necessary for the proper execution of the contract, and in particular:
- a) drawings, documents, samples and/or models as may be specified in the contract within the time limits and procedures laid down therein or in the programme of implementation of tasks;
 - b) drawings as the supervisor may reasonably require for the implementation of tasks.
 - c) plans, drawings and calculations needed to provide evidence of the stability and resistance of the structures, including foundation design and detailed reinforcement plan. These calculations and surveys should be sustained by sufficient site investigations and should be submitted in triplicate to the

supervisor for approval at least 30 days before commencing construction of the works in question.

- 19.2. The supervisor shall return to the contractor the drawings, documents, samples, models, design calculations, objects and other documents required under Article 19.1 with either its endorsement or its remarks within the time limits referred to in the contract or the approved programme of implementation of tasks or, if no time limit is specified, within 15 days of receipt. In the light of the complexity or the number of documents submitted for approval, if the supervisor cannot send its endorsement or its remarks within the time limit mentioned above, the supervisor shall send within 15 days of receipt a holding reply, indicating another time limit by which it will send its endorsement or its remarks, taking into account the relative urgency and complexity of the matter.

If the supervisor fails to notify its endorsement, remarks or holding reply within the time limits referred above, the drawings, documents, samples, models, design calculations, objects and other documents submitted to the supervisor according to Article 19.1 shall be deemed to be approved at the end of the time limits specified above.

- 19.3. Approved drawings, documents, samples and models shall be signed or otherwise identified by the supervisor and shall not be departed from except as otherwise instructed by the supervisor. Any contractor's drawings, documents, samples or models which the supervisor refuses to approve, shall be modified to meet the requirements of the supervisor and resubmitted by the contractor for approval. Within 15 days of being notified of the supervisor's remarks, the contractor shall make the requisite corrections, adjustments etc. to the documents, drawings, design calculations etc. The corrected or adjusted documents, drawings, design calculations etc. shall be resubmitted for the supervisor's approval under the same procedure.
- 19.4. The contractor shall supply additional copies of approved drawings in the form and number stated in the contract or in subsequent administrative orders.
- 19.5. The approval of any drawings, documents, samples or models by the supervisor shall not relieve the contractor from any of its obligations under the contract.
- 19.6. The supervisor shall have the right at all reasonable times to inspect all drawings, documents, samples or models relating to the contract at the contractor's premises.
- 19.7. Before provisional acceptance of the works, the contractor shall supply operation and maintenance manuals together with drawings to the contracting authority, which shall be in such detail as will enable the contracting authority to operate, maintain, adjust and repair all parts of the works. Unless otherwise stated in the special conditions, the manuals and drawings shall be in the language of the contract. The works shall not be considered to be completed for the purpose of provisional acceptance until such manuals and drawings have been supplied to the contracting authority.

Article 20 - Sufficiency of tender prices

- 20.1. Subject to any additional provisions which may be laid down in the special conditions, the contractor shall be deemed to have inspected and examined the site and its surroundings and to have satisfied itself before submitting its tender, as to the nature of

the ground and sub-soil, and to have taken into account the form and nature of the site, the extent and nature of the work and materials necessary for the completion of the works, the means of communication with and access to the site, the accommodation it may require and in general to have obtained for itself all necessary information as to risks, contingencies and all other circumstances influencing or affecting its tender.

20.2. The contractor shall be deemed to have satisfied itself before submitting its tender as to the correctness and sufficiency of the tender and of the rates and prices stated in the bill of quantities or price schedule which shall, except in so far as it is otherwise provided in the contract, cover all its obligations under the contract.

20.3. Since the contractor is deemed to have determined its prices on the basis of its own calculations, operations and estimates, it shall carry out without additional charge any work which is the subject of any item whatsoever in its tender for which it neither indicates a unit price nor a lump sum.

Article 21 - Exceptional risks

21.1. If during the execution of the works the contractor encounters artificial obstructions or physical conditions which could not reasonably have been foreseen by an experienced contractor, and if the contractor is of the opinion that additional costs will be incurred and/or an extension of the period of implementation of tasks will be necessary as a result of this, it shall give notice to the supervisor in accordance with Articles 35 and/or 55. The contractor shall specify in such notice the artificial obstructions and/or physical conditions, giving details of the anticipated effects thereof, the measures it is taking or intends to take and the extent of the anticipated delay in or interference with the execution of the works.

21.2. Following receipt of the notice, the supervisor may inter alia:

- a) require the contractor to provide an estimate of the cost of the measures it is taking or intends to take;
- b) approve measures referred to in Article 21.2 (a) with or without modification;
- c) give written instructions as to how the artificial obstructions or physical conditions are to be dealt with;
- d) order an amendment to, a suspension, or termination of the contract.

21.3. To the extent that the supervisor decides that the whole or part of the said artificial obstructions or physical conditions could not reasonably have been foreseen by an experienced contractor, the supervisor shall:

- a) take into account any delay suffered by the contractor as a result of such obstructions or conditions in determining any extension of the period of implementation of tasks to which the contractor is entitled under Article 35; and/or

- b) in case of artificial obstructions or physical conditions other than weather conditions, determine additional payments due to the contractor in accordance with Article 55.

21.4. Weather conditions shall not entitle the contractor to claims under Article 55.

21.5. If the supervisor decides that the artificial obstructions or physical conditions could, in whole or in part, have been reasonably foreseen by an experienced contractor, he shall so inform the contractor as soon as practicable.

Article 22 - Safety on sites

- 22.1. The contractor shall have the right to forbid access to the site to any person not involved in the performance of the contract, with the exception of persons authorised by the supervisor or the contracting authority.
- 22.2. The contractor shall ensure the safety on sites during the whole period of execution and shall be responsible for taking the necessary steps, in the interests of its employees, agents of the contracting authority and third parties, to prevent any loss or accident which may result from carrying out the works.
- 22.3. The contractor shall take all essential steps, on its own responsibility and at its expense, to ensure that existing structures and installations are protected, preserved and maintained. It shall be responsible for providing and maintaining at its expense all lighting, protection, fencing and security equipment which proves necessary for the proper implementation of the tasks or which may reasonably be required by the supervisor.
- 22.4. If, during the implementation of the tasks, urgent measures are necessary to obviate any risk of accident or damage or to ensure security following any accident or damage, the supervisor shall give formal notice to the contractor to do what is necessary. If the contractor is unwilling or unable to undertake the necessary measures, the supervisor may carry out the work at the expense of the contractor to the extent that the contractor is liable.

Article 23 - Safeguarding adjacent properties

- 23.1. On its own responsibility and at its expense, the contractor shall take all the precautions required by good construction practice and by the prevailing circumstances to safeguard adjacent properties and avoid causing any abnormal disturbance therein.
- 23.2. The contractor shall indemnify the contracting authority against the financial consequences of all claims by neighbouring landowners or residents to the extent that the contractor is liable and to the extent that the damage to adjacent properties is not the result of a hazard created through the design or method of construction imposed by the contracting authority or the supervisor upon the contractor.

Article 24 - Interference with traffic

- 24.1. The contractor shall ensure that the works and installations do not cause damage to, or obstruct traffic on, communication links such as roads, railways, waterways and airports, save as permitted under the special conditions. It shall, in particular, take account of weight restrictions when selecting routes and vehicles.
- 24.2. Any special measures which the contractor considers necessary or which are specified in the special conditions or which are required by the contracting authority in order to protect or strengthen sections of roads, tracks or bridges, shall be at the expense of the contractor, whether or not they are carried out by the contractor. The contractor shall inform the supervisor of any special measures it intends to take before carrying them out. The repair of any damage caused to roads, tracks or bridges by the transport of materials, plant or equipment shall be at the expense of the contractor.

Article 25 - Cables and conduits

- 25.1. Where, in the course of carrying out the works, the contractor encounters bench-marks indicating the course of underground cables, conduits and installations, it shall keep such bench-marks in position or replace them, should execution of the works have necessitated their temporary removal. Such related operations require the authorisation of the supervisor.
- 25.2. The contractor shall be responsible for the preservation, removal and replacement, as the case may be, of the cables, conduits and installations specified by the contracting authority in the contract and for the cost thereof.
- 25.3. Where the presence of cables, conduits and installations has not been specified in the contract but is revealed by bench-marks and references, the contractor shall be under a general duty of care and similar obligations regarding preservation, removal and replacement to those set out above. In this case, the contracting authority shall compensate it for expenditure, to the extent that such work is necessary for the execution of the contract.
- 25.4. However, the obligations to remove and replace cables, conduits and installations and the expenditure resulting therefrom shall not be the responsibility of the contractor if the contracting authority decides to accept that responsibility. The same shall apply where this obligation and the expenditure resulting therefrom devolve upon another specialist administration or an agent.
- 25.5. When any work on the site is likely to cause disturbances in or damage to a public utility service, the contractor shall immediately inform the supervisor in writing, giving a reasonable period of notice so that suitable measures may be taken in time to allow work to continue normally.

Article 26 - Setting-out

- 26.1. The contractor shall be responsible for:

- a) the accurate setting-out of the works in relation to original marks, lines and levels of reference given by the supervisor;
 - b) the correctness, of the position, levels, dimensions and alignment of all parts of the works; and
 - c) the provision of all necessary instruments, appliances and labour in connection with the foregoing responsibilities.
- 26.2. If, at any time during the execution of the works, any error appears in the position, levels, dimensions or alignment of any part of the works, the contractor, shall, if the supervisor so requires, at the contractor's cost, rectify such error to the satisfaction of the supervisor, unless such error is based on incorrect data supplied by the supervisor which an experienced contractor exercising due care would not have discovered, in which case the contracting authority shall be responsible for the cost of rectification.
- 26.3. The checking of any setting-out or of any line or level by the supervisor shall not in any way relieve the contractor of its responsibility for the accuracy thereof and the contractor shall carefully protect and preserve all bench-marks, sight-rails, pegs and other items used in setting-out the works.

Article 27 - Demolished materials

- 27.1. Where the contract includes demolition work, materials and articles obtained therefrom shall, unless the special conditions and /or the law of the country in which the works are executed otherwise provide and subject to the provisions of Article 28, become the property of the contractor.
- 27.2. Should the special conditions reserve to the contracting authority the right of ownership of materials or all or part of the articles obtained from the demolition work, the contractor shall take all the necessary precautions to ensure that these are preserved. It shall be liable for any destruction of, or damage to, such materials or articles caused by it or its agents.
- 27.3. Irrespective of the use to which the contracting authority intends to put the materials or articles, in respect of which it reserves the right of ownership, all costs incurred in transporting and storing them and all warehouse charges at the place indicated by the supervisor shall be borne by the contractor for any carriage not exceeding 1000 meters.
- 27.4. Save where the special conditions provide otherwise, the contractor shall, at its expense, progressively remove rubble and other demolition materials, rubbish and debris from the site.

Article 28 - Discoveries

- 28.1. Discoveries of any interest whatsoever made during excavation or demolition work shall be brought immediately to the attention of the supervisor. The supervisor shall decide how such discoveries are to be dealt with, taking due account of the law of the country in which the works are executed.

- 28.2. The contracting authority reserves the right of ownership of materials found during the excavation and demolition work carried out on land belonging to it, subject to compensating the contractor for any special efforts.
- 28.3. Artefacts, antiquities and natural, numismatic, or other objects which are of scientific interest, and also rare objects or objects made of precious metals found during excavation or demolition work shall be the property of the contracting authority.
- 28.4. In the event of disagreements, the contracting authority shall have sole authority to decide as to the qualifications set out in Articles 28.1 and 28.3.

Article 29 - Temporary works

- 29.1. The contractor shall carry out at its expense all the temporary works to enable the works to be carried out. The contractor shall submit to the supervisor the drawings for temporary works which the contractor intends to use, such as cofferdams, scaffolding, trusses and shuttering. The contractor shall take into account any observations made by the supervisor while assuming responsibility for these drawings.
- 29.2. Where the design of particular temporary works is specified in the special conditions to be the responsibility of the contracting authority, the supervisor shall provide the contractor with all drawings necessary in reasonable time to enable the contractor to undertake the temporary works in accordance with its programme. In such cases, the contracting authority shall be solely responsible for the safety and adequacy of the design. However, the contractor shall be responsible for the proper construction.

Article 30 - Soil studies

- 30.1. Subject to the special conditions and to the technical specifications, the contractor shall make available to the supervisor, the personnel and equipment necessary for carrying out any soil survey which the supervisor considers reasonably necessary. The contractor shall be compensated for the actual cost of the manpower and equipment used or made available in such work, plus a reasonable profit, if not already provided for in the contract.

Article 31 - Overlapping contracts

- 31.1. The contractor shall, in accordance with the requirements of the supervisor, afford all reasonable opportunities for carrying out their work to any other contractors employed by the contracting authority and their workmen, to the workmen of the contracting authority and of any other public authorities who may be employed on or near the site in the execution of any work not included in the contract, or of any contract which the contracting authority may enter into in connection with, or ancillary to, the works.
- 31.2. If, however, the contractor, on the written request of the supervisor, makes available to any such contractor, or public authority, or to the contracting authority, any roads or ways for the maintenance of which the contractor is responsible, or permits the use by any such other persons of the contractor's temporary works, scaffolding or other equipment on the site, or provides any other service of whatsoever nature, which was not provided for in

the contract, the contracting authority shall pay to the contractor in respect of such use or service, such sums and/or grant such extension of time, as shall, in the opinion of the supervisor, be reasonable.

31.3. The contractor shall not by reason of Article 31 be relieved of any of its obligations under the contract nor shall it be entitled to any claims other than those provided for in Article 31.2.

31.4. In no circumstances may difficulties arising with regard to one contract entitle the contractor to modify or delay implementation of other contracts. Similarly, the contracting authority may not take advantage of such difficulties to suspend payments due under another contract.

Article 32 - Patents and licenses

32.1. Save where otherwise provided in the special conditions, the contractor shall indemnify and hold the contracting authority and the supervisor harmless for all damages and cost incurred due to any claim brought by any third party including creators and intermediaries for any alleged or actual violations of intellectual, industrial or other property rights of any kind whatsoever based on the contracting authority's use as specified in the contract of patents, licenses, drawings, designs, models, or brand or trademarks, except where such infringement results from compliance with the design or specification provided by the contracting authority and/or the supervisor.

32.2. All industrial, intellectual and other property rights (including but not limited to patent rights and copyright) developed in connection with the tasks by or on behalf of the contractor, including but not limited to any rights in any documents prepared for the purpose of the contract or the tasks, shall remain vested in the contractor but the contracting authority shall have an irrevocable, royalty-free, non-exclusive licence of the above-mentioned rights for the purpose of the contract.

Such licence shall carry the right to grant sub-licences and shall be transferable by the contracting authority to third parties without the consent of the contractor being required.

All industrial, intellectual and other property rights (including but not limited to patent rights and copyright) developed in connection with the tasks by or on behalf of the contracting authority, including but not limited to any rights in any documents prepared for the purpose of the contract or the tasks, shall remain vested in the contracting authority but the contractor shall have the right at its cost to copy, use and obtain communication of these documents for the purpose of the contract.

Upon and notwithstanding any termination of the contract howsoever arising, as well as after completion of the tasks, the contracting authority shall continue to have the benefit of the licence referred to in Article 32.2, first paragraph.

IMPLEMENTATION OF THE TASKS AND DELAYS

Article 33 - Commencement orders

- 33.1. The supervisor issues an administrative order notifying the contractor of the date on which the period of implementation of tasks must start.
- 33.2. Save where the parties agree otherwise, the period of implementation of tasks shall not start before:
- a) in conformity with Article 9, the site, or part of the site has been placed at the disposal of the contractor according to the progress of the work set out in the programme of implementation of tasks approved by the supervisor;
 - b) the documents mentioned under Article 8.1 have been provided to the contractor.
- 33.3. Save where the parties agree otherwise, the period of implementation of tasks shall start no later than 180 days following notification of award of the contract.

Article 34 - Period of implementation of tasks

- 34.1. The period of implementation of tasks shall be as laid down in the special conditions, without prejudice to extensions of the period which may be granted under Article 35.
- 34.2. If provision is made for distinct periods of implementation of tasks for separate lots, in cases where one contractor is awarded more than one lot per contract, the periods of implementation of tasks for the separate lots will not be accumulated.

Article 35 - Extension of the period of implementation of tasks

- 35.1. The contractor may request an extension to the period of implementation of tasks if it is or will be delayed in completing the contract by any of the following reasons:
- a) exceptional weather conditions in the country in which the works are executed which may affect the implementation of the tasks;
 - b) artificial obstructions or physical conditions which could not reasonably have been foreseen by an experienced contractor;
 - c) administrative orders affecting the date of completion other than those arising from the contractor's default;
 - d) failure of the contracting authority to fulfil its obligations under the contract;
 - e) any suspension of the works which is not due to the contractor's default;
 - f) force majeure;
 - g) any other causes referred to in these general conditions which are not due to the contractor's default.

35.2. If the contractor considers itself to be entitled to any extension of the period of implementation under the contract, the contractor shall:

- a) give notice to the supervisor of its intention to make such a request no later than 15 days after the contractor became aware, or should have become aware of the event or circumstance giving rise to the request.

If the contractor fails to give notice of a request for extension of the period of implementation within such period of 15 days, the period of implementation shall not be extended and the contracting authority shall be discharged from all liability in connection with the request; and

- b) submit to the supervisor full and detailed particulars of the request, within 30 days from the above notification unless otherwise agreed between the contractor and the supervisor, in order that such request may be investigated.

35.3. Within 30 days from receipt of the contractor's detailed particulars of the request, the supervisor shall, by notice to the contractor after due consultation with the contracting authority and, where appropriate, the contractor, grant such extension of the period of implementation as may be justified, either prospectively or retrospectively, or inform the contractor that it is not entitled to an extension.

Article 36 - Delays in implementation of the tasks

36.1. If the contractor fails to complete the works within the time period(s) specified in the contract, the contracting authority shall, without formal notice and without prejudice to its other remedies under the contract be entitled to liquidated damages for every day or part thereof which shall elapse between the end of the period specified for implementation of tasks or extended period of implementation of tasks under Article 35 and the actual date of completion, at the rate and up to the maximum amount specified in the special conditions.

If the works have been the subject of partial acceptance in accordance with Article 59, the liquidated damages specified in the special conditions may be reduced in the proportion which the value of the accepted part bears to the value of the whole of the works.

36.2. If the contracting authority has become entitled to the maximum claim under Article 36.1 it may, after giving notice to the contractor:

- a) seize the performance guarantee; and/or
- b) terminate the contract; and/or
- c) enter into a contract with a third party at the contractor's cost for the provision of the balance of the works.

Article 37 - Amendments

37.1. Contract amendments must be formalised by a contract addendum signed by both parties or by an administrative order issued by the supervisor except if the amendments result from the application of the contract.

- 37.2. The supervisor shall have the power to order any amendment to any part of the works necessary for the proper completion and/or functioning of the works. Such amendments by administrative order may include additions, omissions, substitutions, changes in quality, quantity, form, character, kind, position, dimension, level or line and changes in the specified sequence, method or timing of execution of the works. No administrative order shall have the effect of invalidating the contract, but the financial effect, if any, of all such amendments shall be valued in accordance with Articles 37.5 and 37.7.
- 37.3. All administrative orders shall be issued in writing, it being understood that:
- a) if, for any reason, the supervisor finds it necessary to give an order orally, it shall as soon as possible thereafter confirm the order by an administrative order;
 - b) if the contractor confirms in writing an oral order given for the purpose of Article 37.3 (a) and the confirmation is not contradicted in writing forthwith by the supervisor, the supervisor shall be deemed to have issued an administrative order;
 - c) no administrative order is required to increase or decrease the quantity of any work where such increase or decrease is the result of the quantity exceeding or being less than that stated in the bill of quantities or price schedule, as the result of measurement laid down in Article 49.
- 37.4. Save as provided by Article 37.3 prior to issuing an administrative order, the supervisor shall notify the contractor of the nature and form of such amendment. The contractor shall then, without delay, submit to the supervisor a written proposal containing:
- a) a description of the tasks to be implemented or the measures to be taken and a programme for execution;
 - b) any necessary amendments to the programme of implementation of tasks or to any of the contractor's obligations resulting from this contract; and
 - c) any adjustment to the contract price in accordance with the rules set out in Article 37.
- 37.5. Following the receipt of the contractor's submission referred to in Article 37.4, the supervisor shall, after due consultation with the contracting authority and, where appropriate, the contractor, decide without delay whether or not to accept the amendment. If the supervisor accepts the amendment, it shall notify the contractor through an administrative order stating that the contractor shall carry out the amendment at the prices and under the conditions given in the contractor's submission referred to in Article 37.4 or as modified by the supervisor in accordance with Article 37.6.
- 37.6. The supervisor shall, for all amendments ordered by it in accordance with Article 37.3 and 37.5, ascertain the prices in accordance with the following principles:
- a) where work is of similar character and executed under similar conditions as work priced in the bill of quantities or price schedule, it shall be valued at such rates and prices contained therein;
 - b) where work is not of a similar character or is not executed under similar conditions, the rates and prices in the contract shall be used as the basis for valuation as far as is reasonable, failing which the supervisor shall make a fair valuation;

- c) if the nature or amount of any amendment relative to the nature or amount of the whole contract or to any part thereof is such that, in the opinion of the supervisor, any rate or price contained in the contract for any item of work is, by reason of such amendment, rendered unreasonable, the supervisor shall fix such rate or price as he thinks reasonable and proper in the circumstances;
- d) where an amendment is required by a default or breach of contract by the contractor, any additional cost attributable to such amendment shall be borne by the contractor.

37.7. On receipt of the administrative order, the contractor shall carry out the requested amendment according to the following principles:

- a) The contractor will be bound by these general conditions as if the amendment requested by administrative order were stated in the contract.
- b) The contractor shall not delay the execution of the administrative order pending the granting of any extension of time for completion or adjustment to the contract price.
- c) Where the administrative order precedes the adjustment to the contract price, the contractor shall keep records of the costs of undertaking the amendment and of the time expended thereon. Such records shall be open to inspection by the supervisor at all reasonable times.

37.8. Where on provisional acceptance an increase or reduction in the total value of the works resulting from an administrative order, or from some other circumstance which is not caused by the contractor's default, exceeds 15% of the initial contract price (or as amended by addendum), the supervisor shall, after consulting the contracting authority and the contractor, determine any addition to or reduction from the contract price as a consequence of applying Article 37.6. The sum so determined shall be based on the amount by which the increase or decrease in value of the works exceeds 15%. The supervisor shall notify the sum to the contracting authority and the contractor, and adjust the contract price accordingly.

37.9. The contractor shall notify the contracting authority of any change of bank account, using the form in Annex V. The contracting authority shall have the right to oppose the contractor's change of bank account.

Article 38 - Suspension

38.1. Suspension by administrative order of the supervisor:

The contractor shall, on the order of the supervisor, suspend the progress of the works or any part thereof for such time or times and in such manner as the supervisor may consider necessary. The suspension shall take effect on the day the contractor receives the order or at a later date when the order so provides. The supervisor shall, as soon as possible, instruct the contractor to resume the contract suspended.

38.2. Suspension by notice of the contractor:

Any default in payment of more than 30 days under any certificate issued by the supervisor from the expiry of the time-limit referred to in Article 44.3(b) entitles the contractor, after giving not less than 30 days' notice to the contracting authority, to suspend the work, or reduce the rate of the work, unless and until the contractor has received reasonable evidence of payment or payment.

The contractor's action shall not prejudice its entitlements to interest for delayed payment under Article 53.1 and to termination under Article 65.1.

If the contractor subsequently receives such evidence or payment before giving notice of termination, the contractor shall resume normal working as soon as reasonably practicable and, unless the parties agree otherwise, no later than 30 days after receiving the evidence or the payment.

38.3. Suspension in the event of presumed breach of obligations, irregularities or fraud:

The contract may be suspended in order to verify whether presumed breach of obligations or irregularities or fraud occurred during the award procedure or the performance of the contract. If these are not confirmed, performance of the contract shall resume as soon as possible.

38.4. During the period of suspension, the contractor shall take such protective measures as may be necessary to safeguard the works, plant, equipment and site against any deterioration, loss or damage. Additional expenses incurred in connection with such protective measures may be added to the contract price, unless:

- a) otherwise provided for in the contract; or
- b) such suspension is necessary by reason of some breach or default of the contractor; or
- c) such suspension is necessary by reason of normal climatic conditions on site; or
- d) such suspension is necessary for the safety or the proper execution of the works or any part thereof insofar as such necessity does not arise from any act, breach or default by the supervisor or the contracting authority or from any of the exceptional risks referred to in Article 21, or
- e) the presumed breach of obligations or irregularities or fraud mentioned in Article 38.3 are confirmed and attributable to the contractor.

38.5. The contractor shall introduce claims for additional payment or extension of the period of implementation in accordance with Articles 35 and 55.

38.6. If the period of suspension exceeds 180 days and the suspension is not due to the contractor's breach or default, the contractor may, by notice to the supervisor, request to proceed with the contract within 30 days, or terminate the contract.

38.7. The contracting authority shall, as soon as possible, order the contractor to resume the contract suspended or inform the contractor that it terminates the contract.

MATERIALS AND WORKMANSHIP

Article 39 - Work register

- 39.1. A work register shall, unless otherwise provided by the special conditions, be kept on the site by the supervisor, who shall enter in it at least the following information:
- a) the weather conditions, interruptions of work owing to inclement weather, hours of work, number and type of workmen employed on the site, materials supplied, equipment in use, equipment not in working order, tests carried out in situ, samples dispatched, unforeseen circumstances, as well as orders given to the contractor;
 - b) detailed statements of all the quantitative and qualitative elements of the work done and the supplies delivered and used, capable of being checked on the site and relevant in calculating payments to be made to the contractor.
- 39.2. The statements shall form an integral part of the work register but may, where appropriate, be recorded in separate documents. The technical rules for drawing up the statements shall be as set out in the special conditions.
- 39.3. The contractor shall ensure that statements are drawn up, in good time and in accordance with the special conditions, in respect of work, services and supplies which cannot be measured or verified subsequently; failing this, it shall accept the decisions of the supervisor, unless, at its own expense, it provides evidence to the contrary.
- 39.4. Entries made in the work register as work progresses shall be signed by the supervisor and countersigned by the contractor or its representative. If the contractor objects, it shall communicate its views to the supervisor within 15 days following the date on which the entry or the statements objected to are recorded. Should it fail to countersign or to submit its views within the period allowed, the contractor shall be deemed to agree with the notes shown in the register. The contractor may examine the work register at any time and may, without removing the document, make or receive a copy of entries which it considers necessary for its own information.
- 39.5. The contractor shall, on request, provide the supervisor with the information needed to keep the work register in good order.

Article 40 - Origin and quality of works and materials

- 40.1. Save where otherwise provided for in the special conditions, all goods purchased under the contract shall have their origin in any eligible source country as defined in the invitation to tender. The contractor must certify that the goods tendered comply with this requirement, specifying their countries of origin. It may be required to provide more detailed information in this respect. Failure to comply with this condition may result in the termination of the contract and/or suspension of payment.
- 40.2. The works, components and materials shall conform to the specifications, drawings, surveys, models, samples, patterns and other requirements in the contract which shall be

held at the disposal of the contracting authority or the supervisor for the purposes of identification throughout the period of performance.

- 40.3. Any preliminary technical acceptance stipulated in the special conditions shall be the subject of a request sent by the contractor to the supervisor. The request shall indicate the reference to the contract, the lot number and the place where such acceptance is to take place, as appropriate. The components and materials specified in the request must be certified by the supervisor as meeting the requirements for such acceptance prior to their incorporation in the works.
- 40.4. Even if materials or items to be incorporated in the works or in the manufacture of components have been technically accepted in this way, they may still be rejected if a further examination reveals defects or faults, in which case they must immediately be replaced by the contractor. The contractor may be given the opportunity to repair and make good materials and items which have been rejected, but such materials and items will be accepted for incorporation in the works only if they have been repaired and made good to the satisfaction of the supervisor.

Article 41 - Inspection and testing

- 41.1. The contractor shall ensure that the components and materials are delivered to the site in time to allow the supervisor to proceed with acceptance of the components and materials. The contractor is deemed to have fully appreciated the difficulties which it might encounter in this respect, and it shall not be permitted to advance any grounds for delay in fulfilling its obligations.
- 41.2. The supervisor shall be entitled to inspect, examine, measure and test the components, materials and workmanship, and check the progress of preparation, fabrication or manufacture of anything being prepared, fabricated or manufactured for delivery under the contract in order to establish whether the components, materials and workmanship are of the requisite quality and quantity. This shall take place at the place of manufacture, fabrication, preparation or on the site or at such other places as may be specified in the special conditions.
- 41.3. For the purposes of such tests and inspections, the contractor shall:
- a) provide to the supervisor, temporarily and free of charge, such assistance, test samples or parts, machines, equipment, tools, labour, materials, drawings and production data as are normally required for inspection and testing;
 - b) agree, with the supervisor, on the time and place for tests;
 - c) provide access for the supervisor at all reasonable times to the place where the tests are to be carried out.
- 41.4. If the supervisor is not present on the date agreed for tests, the contractor may, unless otherwise instructed by the supervisor, proceed with the tests, which shall be deemed to have been made in the supervisor's presence. The contractor shall immediately send duly certified copies of the test results to the supervisor, who shall, if he has not attended the test, be bound by the test results.

- 41.5. When components and materials have passed the above-mentioned tests, the supervisor shall notify the contractor or endorse the procedure's certificate to that effect.
- 41.6. If the supervisor and the contractor disagree on the test results, each shall give a statement of its views to the other within 15 days after such disagreement arises. The supervisor or the contractor may require such tests to be repeated on the same terms and conditions or, if either party so requests, by an expert to be selected by common consent. All test reports shall be submitted to the supervisor who shall communicate the results of these tests without delay to the contractor. The results of the re-testing shall be conclusive. The cost of re-testing shall be borne by the party whose views are proved wrong by the re-testing.
- 41.7. In the performance of its duties, the supervisor and any persons authorised by him shall not disclose to unauthorised persons information concerning the undertaking's methods of manufacture and operation obtained through inspection and testing.

Article 42 - Rejection

- 42.1. Components and materials which are not of the specified quality shall be rejected. A special mark may be applied to the rejected components or materials. This shall not be such as to alter them or affect their commercial value. Rejected components and materials shall be removed by the contractor from the site within a period which the supervisor shall specify, failing which they shall be removed by the supervisor as of right at the expense and risk of the contractor. Any work incorporating rejected components or materials shall be rejected.
- 42.2. The supervisor shall, during the progress of the works and before the works are taken over, have the power to order or decide:
- a) the removal from the site, within such time limits as may be specified in the order, of any components or materials which, in the opinion of the supervisor, are not in accordance with the contract;
 - b) the substitution of proper and suitable components or materials; or
 - c) the demolition and proper re-execution, or satisfactory repair, notwithstanding any previous test thereof or interim payment therefore, of any work which, in respect of components, materials, workmanship or design by the contractor for which it is responsible, is not, in the opinion of the supervisor, in accordance with the contract.
- 42.3. The supervisor shall, as soon as reasonably practicable, give to the contractor notice of its decision specifying particulars of the alleged defects.
- 42.4. The contractor shall with all speed and at its expense make good the defects so specified. If the contractor does not comply with such order, the contracting authority shall be entitled to employ other persons to carry out the same and all expenses consequent thereon or incidental thereto may be deducted by the contracting authority from any monies due or which may become due to the contractor.

- 42.5. The provisions of Article 42 shall not affect the right of the contracting authority to claim under Articles 36 and 63.

Article 43 - Ownership of plant and materials

- 43.1. All equipment, temporary works, plant and materials provided by the contractor shall, when brought on the site, be deemed to be exclusively intended for the execution of the works and the contractor shall not remove the same or any part thereof, except for the purpose of moving it from one part of the site to another, without the consent of the supervisor. Such consent shall, however, not be required for vehicles engaged in transporting any staff, labour, equipment, temporary works, plant or materials to or from the site.
- 43.2. The special conditions may provide that all equipment, temporary works, plant and materials on site owned by the contractor or by any company in which the contractor has a controlling interest shall, for the duration of the execution of the works, be:
- a) vested in the contracting authority; or
 - b) made subject to a lien in favour of the contracting authority; or
 - c) made subject to any other arrangement regarding priority interest or security.
- 43.3. In the event of termination of the contract in accordance with Article 63 due to the contractor's breach of contract, the contracting authority shall be entitled to use the equipment, temporary works, plant and materials on site in order to complete the works.
- 43.4. Any agreement for the hire by the contractor of equipment, temporary works, plant and materials brought onto the site, shall contain a provision that on request in writing made by the contracting authority within 7 days after the date on which the termination under Article 64 becomes effective, and on the contracting authority undertaking to pay all hire charges in respect thereof from such date, the owner thereof will hire such equipment, temporary works, plant or materials to the contracting authority on the same terms as they were hired by the contractor, save that the contracting authority shall be entitled to permit the use thereof by any other contractor employed by it for completing the works under the provisions of Article 64.3.
- 43.5. Upon termination of the contract before completion of the works, the contractor shall deliver to the contracting authority any plant, temporary works, equipment or materials the property in which has vested in the contracting authority or been made subject to a lien by virtue of Article 43.2. If it fails to do so, the contracting authority may take such appropriate action as it deems fit in order to obtain possession of such plant, temporary works, equipment and materials and recover the cost of so doing from the contractor.

PAYMENTS

Article 44 - General principles

- 44.1. Payments shall be made in euro or national currency as specified in the special conditions. The special conditions shall lay down the administrative or technical conditions governing payments of pre-financing, interim and/or final payments made in accordance with the general conditions.
- 44.2. Payments due by the contracting authority shall be made to the bank account mentioned on the financial identification form completed by the contractor. The same form, annexed to the payment request must be used to report changes of bank account.
- 44.3. Payment to the contractor shall be done as follows:
- a) Pre-financing payments shall be made within 90 days of receipt by the contracting authority of the contractor's invoice and the documents referred to in Article 46.3. The date of payment shall be the date on which the paying account is debited.
 - b) Payments to the contractor of the amounts due under each of the interim payment certificates and the final statement of account issued by the supervisor shall be made within 90 days of such certificate of statement accompanied by the contractor's invoice being delivered to the contracting authority. The date of payment shall be the date on which the paying account is debited.
- 44.4. The period referred to in 44.3 may be suspended by notifying the contractor that the invoice cannot be paid because the sum is not due, because appropriate substantiating documents have not been provided or because there is evidence that the expenditure might not be eligible. In the latter case, an inspection may be carried out on the spot for the purpose of further checks. The contractor shall provide clarifications, modifications or further information within 30 days of being asked to do so. Within 30 days of receipt of the clarification, the supervisor shall decide and issue if need be a revised payment certificate or a final statement of account and the payment period shall continue to run from this date.
- 44.5. The contractor undertakes to repay to the contracting authority any amounts paid in excess of the final amount due, before the deadline indicated in the debit note which is 45 days from the issuing of that note.

Should the contractor fail to make repayment within the above deadline, the contracting authority may (unless the contractor is a government department or public body of a Member State of the European Union) increase the amounts due by adding interest:

- at the rediscount rate applied by the central bank of the country of the contracting authority if payments are in the currency of that country;
- at the rate applied by the European Central Bank to its main refinancing transactions in euro, as published in the Official Journal of the European Union, C series, where payments are in euro,

on the first day of the month in which the time-limit expired, plus three and a half percentage points. The default interest shall be incurred over the time which elapses between the date of the payment deadline and the date on which payment is actually made. Any partial payments shall first cover the interest thus established.

Amounts to be repaid to the contracting authority may be offset against amounts of any kind due to the contractor. This shall not affect the parties' right to agree on payment in instalments. Bank charges arising from the repayment of amounts due to the contracting authority shall be borne entirely by the contractor.

Without prejudice to the prerogative of the contracting authority, if necessary, the European Union may as donor proceed itself to the recovery by any means.

- 44.6. Prior to, or instead of, terminating the contract as provided for in Article 64, the contracting authority may suspend payments as a precautionary measure without prior notice.
- 44.7. Where the award procedure or the performance of the contract proves to have been subject to breach of obligations, irregularities or fraud attributable to the contractor, the contracting authority may in addition to the possibility to suspend the performance of the contract in accordance with Article 38.3 and terminate the contract as provided for in Article 64, suspend payments and/or recover amounts already paid, in proportion to the seriousness of the breach of obligations irregularities or fraud. In addition to measures referred above, the contracting authority may reduce the contract value in proportion to the seriousness of the irregularities, fraud or of the breach of obligations, including where the activities concerned were not implemented or were implemented poorly, partially or late.

Article 45 - Provisional price contracts

- 45.1. In exceptional cases, where a provisional price contract has been awarded, the amount payable under the contract shall be calculated as follows:
- a) as for cost-plus contracts in Article 49.1 (c); or
 - b) initially on the basis of provisional prices and, after the conditions for performing the contract are known, as for lump-sum contracts or unit price contracts in Article 49.1 (a) and (b) respectively, or as in a hybrid contract.
- 45.2. The contractor shall supply such information as the contracting authority or the supervisor may reasonably require in respect of any matter relating to the contract for the purpose of the calculation. Where agreement cannot be reached on the valuation of the works, the amounts payable shall be determined by the supervisor.

Article 46 - Pre-financing

- 46.1. If the special conditions so provide, pre-financing may be granted to the contractor, at its request and before the first interim payment takes place, for operations connected with the implementation of the tasks, in the cases listed hereinafter:

- a) as a lump-sum advance enabling it to meet expenditure resulting from the commencement of the contract;
 - b) as pre-financing for the purchase or order of : materials, plant, equipment, machines, tools and of any other substantial prior expenses such as the acquisition of patents or study costs, necessary for the execution of the contract. A proof of the conclusion of such purchase or order shall be provided by the contractor to obtain the pre-financing.
- 46.2. The special conditions shall state the amount of the pre-financing which shall not exceed 10% of the original contract price for the lump-sum referred to in Article 46.1 (a) and 20 % of the contract price for all other pre-financing referred to in Article 46.1 (b).
- 46.3. No pre-financing shall be granted until:
- a) the signature of the contract;
 - b) provision of the performance guarantee in accordance with Article 15;
 - c) provision, for the full amount of the pre-financing, of a financial guarantee issued in accordance with Article 15.3 and 15.6 which shall remain effective until the pre-financing has been completely repaid by the contractor out of interim payments under the contract unless otherwise provided for in the special conditions;
 - d) fulfilment of the contractor's obligation under Article 16;
 - e) approval of the programme of implementation of tasks by the supervisor.
- 46.4. The contractor shall use the pre-financing exclusively for operations connected with the implementation of the tasks. Should the contractor misuse any portion of the pre-financing, it shall become due and repayable immediately and no further pre-financing payments will be made.
- 46.5. Should the pre-financing guarantee cease to be valid and the contractor fail to re-validate it, either a deduction equal to the amount of the pre-financing may be made by the contracting authority from future payments due to the contractor under the contract, or the contracting authority may apply the provisions of Article 15.6.
- 46.6. If the contract is terminated for any reason whatsoever or the Contractor has not repaid the pre-financing on request, the guarantees securing the pre-financing may be invoked forthwith in order to repay the balance of the pre-financing still owed by the contractor, and the guarantor shall not delay payment or raise objection for any reason whatever.
- 46.7. The pre-financing guarantee provided for in Article 46 shall be released as and when pre-financing is repaid.
- 46.8. Further conditions and procedures for granting and repaying pre-financing shall be as laid down in the special conditions.

Article 47 - Retention monies

- 47.1. The sum which shall be retained from interim payments by way of guarantee to meet the contractor's obligations during the defects liability period, and the detailed rules governing that guarantee, shall be stipulated in the special conditions, provided that it shall, in no case, exceed 10% of the contract price.
- 47.2. Subject to the approval of the contracting authority, the contractor may, if it so wishes, substitute, not later than the date fixed for the commencement of the works, these retention sums by a retention guarantee, respecting the provisions of Articles 15.3 and 15.6.
- 47.3. The sum retained or the retention guarantee shall be released within 60 days of the issuing of the signed final statement of account referred to in Article 51, for its total amount except for amounts which are the subject of amicable settlement, conciliation, arbitration or litigation.

Article 48 - Revision of prices

- 48.1. Unless otherwise stipulated in the special conditions, and except as provided in Article 48.4 the contract shall be at fixed prices which shall not be revised.
- 48.2. Where prices may be revised under the contract, such revision shall take into account variations in the prices of significant local or external elements which serve as a basis for the calculation of the tender price, such as manpower, services, materials and supplies, as well as charges laid down by law or regulation. The detailed rules for the revision shall be as laid down in the special conditions.
- 48.3. Prices contained in the contractor's tender shall be deemed:
 - a) to have been arrived at on the basis of the conditions in force 30 days prior to the latest date fixed for submission of tenders; or in the case of direct agreement contracts, on the date of the contract;
 - b) to have taken account of the legislation and the relevant tax arrangements applicable at the reference date fixed in Article 48.3 (a).
- 48.4. In the event of changes to, or introduction of, any national or State statute, ordinance, decree or other law, or any regulation or by-law of any local or other public authority, after the date stated in Article 48.3 which causes a change in the contractual relationship between the parties to the contract, the contracting authority and the contractor shall consult on how best to proceed further under the contract, and may as a result of such consultation decide:
 - a) to amend the contract; or
 - b) on payment of compensation for the resulting imbalance by one party to the other; or
 - c) to terminate the contract by mutual agreement.

- 48.5. In the event of a delay in the implementation of the tasks for which the contractor is responsible, the indices to be considered for the revision of prices during the period of delay shall be the most advantageous to the contracting authority between those applied to the last interim certificate issued for tasks implemented during the period of implementation of tasks and those revised up to the provisional acceptance of the tasks.

Article 49 - Measurement

49.1. The following methods shall apply to the valuation of works contracts:

- a) For lump-sum contracts, the amount due under the contract shall be determined on the basis of the breakdown of the overall contract price, or on the basis of a breakdown expressed as a percentage of the contract price corresponding to completed stages of the works. Where items are accompanied by quantities, these shall be firm quantities for which the contractor has submitted its all-in price, and shall be paid for irrespective of the quantities of work actually carried out.
- b) For unit price contracts:
 - i. the amount due under the contract shall be calculated by applying the unit rates to the quantities actually executed for the respective items, in accordance with the contract;
 - ii. the quantities set out in the bill of quantities shall be the estimated quantities of the works, which shall not be taken as the actual and correct quantities of the works to be executed by the contractor in fulfilment of its obligations under the contract;
 - iii. the supervisor shall determine by measurement the actual quantities of the works executed by the contractor, and these shall be paid for in accordance with Article 50. Unless otherwise provided in the special conditions no additions shall be made to the items in the bill of quantities except as a result of an amendment in accordance with Article 37 or another provision of the contract entitling the contractor to additional payment;
 - iv. the supervisor shall, when he requires any parts of the works to be measured, give reasonable notice to the contractor to attend, or to send a qualified agent to represent him. The contractor or its agent shall assist the supervisor in making such measurements and shall furnish all particulars required by the supervisor. Should the contractor not attend, or omit to send such agent, the measurement made by the supervisor or approved by him shall be binding on the contractor;
 - v. the works shall be measured net, notwithstanding any general or local custom, except where otherwise provided for in the contract.
- c) For cost-plus contracts, the amount due under the contract shall be determined on the basis of actual costs with an agreed addition for overheads and profit. The special conditions shall stipulate the information which the contractor is required to submit to the supervisor for the purpose of Article 49.1 (c) and the manner in which it should be submitted.

- 49.2. Where an item in the contract is indicated as 'provisional' the provisional sum set aside for it shall not be taken into account in calculating the percentages referred to in Article 37.

Article 50 - Interim payments

- 50.1. The contractor shall submit an invoice for interim payment to the supervisor at the end of each period referred to in Article 50.7 in a form approved by the supervisor. The invoice shall include the following items, as applicable:
- a) the estimated contract value of the permanent works implemented up to the end of the period in question;
 - b) an amount reflecting any revision of prices pursuant to Article 48;
 - c) an amount to be withheld as retention sum under Article 47;
 - d) any credit and/or debit for the period in question in respect of plant and materials on site intended for, but not yet incorporated in, the permanent works in the amount and under the conditions set out in Article 50.2;
 - e) an amount to be deducted on account of the pre-financing repayment under the provisions of Article 46; and
 - f) any other sum to which the contractor may be entitled under the contract.
- 50.2. The contractor shall be entitled to such sums as the supervisor may consider proper in respect of plant and materials intended for, but not yet incorporated in, the permanent works provided that:
- a) the plant and materials conform with the specifications for the permanent works and are set out in batches in a way that they may be recognized by the supervisor;
 - b) such plant and materials have been delivered to the site, and are properly stored and protected against loss or damage or deterioration to the satisfaction of the supervisor;
 - c) the contractor's record of requirements, orders, receipts and use of plant and materials under the contract are kept in a form approved by the supervisor and such records are available for inspection by the supervisor;
 - d) the contractor submits with its statement, the estimated value of the plant and materials on site together with such documents as may be required by the supervisor for the purpose of valuation of the plant and materials and providing evidence of ownership and payment therefor; and
 - e) where the special conditions so provide, ownership of the plant and materials referred to in Article 43 shall be deemed to be vested in the contracting authority.
- 50.3. Approval by the supervisor of any interim invoice certified by him in respect of plant and materials pursuant to Article 50 shall be without prejudice to the exercise of any power of the supervisor under the contract to reject any plant or materials which are not in accordance with the provisions of the contract.

- 50.4. The contractor shall be responsible for any loss or damage to, and for the cost of storing and handling of, such plant and materials on site and shall effect such additional insurance as may be necessary to cover the risk of such loss or damage from any cause.
- 50.5. Within 30 days of receipt of the said invoice for interim payment, the supervisor shall:
- a) verify that, in the supervisor's opinion, the invoice for interim payment reflects the amount due to the contractor in accordance with the contract. In cases where there is a difference of opinion as to the value of an item, the supervisor's view shall prevail.
 - b) on determination of the amount due to the contractor, issue and transmit to the contracting authority for payment and to the contractor for information, an interim payment certificate for the amount due to the contractor and shall inform the contractor of the works for which payment is being made.
- 50.6. The supervisor may, by an interim payment certificate, make any corrections or modifications to any previous certificate issued by him, and has power to modify the valuation in or withhold the issue of, any interim payment certificate if the works or any part thereof is not being carried out to its satisfaction.
- 50.7. Unless the special conditions provide otherwise, the frequency shall be one interim payment per month.

Article 51 - Final statement of account

- 51.1. Unless otherwise agreed in the special conditions, the contractor shall submit to the supervisor a draft final statement of account no later than 90 days after the issue of the final acceptance certificate referred to in Article 62. In order to enable the supervisor to prepare the final statement of account, the draft final statement of account is submitted with supporting documents showing in detail the value of the work done in accordance with the contract and all further sums which the contractor considers to be due to it under the contract.
- 51.2. Within 90 days after receipt of the draft final statement of account and of all information reasonably required for its verification, the supervisor shall prepare and sign the final statement of account, which determines:
- a) the amount which in its opinion is finally due under the contract; and
 - b) after establishing the amounts previously paid by the contracting authority and all sums to which the contracting authority is entitled under the contract, the balance, if any, due from the contracting authority to the contractor, or from the contractor to the contracting authority, as the case may be.
- 51.3. The supervisor shall issue to the contracting authority or to its duly authorized representative, and to the contractor, the final statement of account showing the final amount to which the contractor is entitled under the contract. The contracting authority or its duly authorized representative and the contractor shall sign the final statement of account as an acknowledgement of the full and final value of the work implemented under the contract and shall promptly submit a signed copy to the supervisor together

with the invoice for the payment of the agreed balance, if any, due to the contractor. However, the final statement of account and the invoice for the payment of the balance shall not include amounts in dispute which are the subject of negotiations, conciliation, arbitration or litigation.

- 51.4. The final statement of account signed by the contractor constitutes a written discharge of the contracting authority confirming that the total in the final statement of account represents full and final settlement of all monies due to the contractor under the contract, other than those amounts which are the subject of amicable settlement, arbitration or litigation. However, such discharge becomes effective only after any payment due in accordance with the final statement of account has been made and the performance guarantee referred to in Article 15 has been returned to the contractor.
- 51.5. The contracting authority is not liable to the contractor for any matter or thing whatsoever arising out of, or in accordance with, the contract or execution of the works, unless the contractor has included a claim in respect thereof in its draft final statement of account.

Article 52 - Direct payments to sub-contractors

- 52.1. When the supervisor receives a claim from a sub-contractor duly approved under Article 7 to the effect that the contractor has not met its financial obligations so far as the sub-contractor is concerned, the supervisor gives notice to the contractor either to pay the sub-contractor or to inform it of the reasons why payment should not be made. Should such payment not be made, or reasons not be given within the period of notice, the supervisor may, after satisfying itself that the work has been carried out, certify, and the contracting authority pays the debt claimed by the sub-contractor out of the sums remaining due to the contractor. The contractor remains entirely responsible for the work in respect of which direct payment has been made.
- 52.2. If the contractor gives adequate reasons for refusing to settle all or part of the debt claimed by the sub-contractor, the contracting authority only pays to the sub-contractor only the amounts not in dispute. Sums claimed by the sub-contractor in respect of which the contractor has given adequate reasons for its refusal to pay shall be paid by the contracting authority only after the parties have come to an amicable settlement, or after the decision of an arbitrating authority or after a judgment of a court has been duly notified to the supervisor.
- 52.3. Direct payments to sub-contractors shall not exceed the value at contract prices of the services performed by the sub-contractors for which they request payment; the value at contract prices is calculated or assessed on the basis of the bill of quantities, the price schedule or the breakdown of the lump sum price.
- 52.4. Direct payments to sub-contractors are made entirely in the national currency of the country in which the works are executed, or partly in such national currency and partly in foreign currency, in accordance with the contract.
- 52.5. Where direct payments to sub-contractors are made in foreign currency, they are calculated in accordance with Article 56. They shall not result in any increase in the total amount payable in foreign currency, as stipulated in the contract.

- 52.6. The provisions of Article 52 apply subject to the requirements of the law applicable by virtue of Article 54 concerning the right to payment of creditors who are beneficiaries of an assignment of credit or of a collateral security.

Article 53 - Delayed payments

- 53.1. Once the time-limit referred to in Article 44.3 of the general conditions has expired, the contractor will, upon demand, submitted within two months of receiving late payment, be entitled to late-payment interest:

- at the rediscount rate applied by the central bank by the law of the country in which the works are executed if payments are in the currency of that country;
- at the rate applied by the European Central Bank to its main refinancing transactions in euro, as published in the Official Journal of the European Union, C series, if payments are in euro,

on the first day of the month in which the time-limit expired, plus three and a half percentage points. The interest shall be payable for the time elapsed between the expiry of the payment deadline and the date on which the contracting authority's account is debited.

- 53.2. Any default in payment of more than 30 days after the expiry of the time-limit stated in Article 44.3(b) shall entitle the contractor to suspend the work in accordance with the procedure laid down in Article 38.2.
- 53.3. Any default in payment of more than 120 days after the expiry of the time-limit stated in Article 44.3(b) shall entitle the contractor to terminate the contract in accordance with the procedure laid down in Article 65.

Article 54 - Payments to third parties

- 54.1. Orders for payments to third parties may be carried out only after an assignment made in accordance with Article 6. The assignment is notified to the contracting authority.
- 54.2. Notification of beneficiaries of the assignment is the sole responsibility of the contractor.
- 54.3. In the event of a legally binding attachment of the property of the contractor affecting payments due to it under the contract, and without prejudice to the time limit laid down in Article 53, the contracting authority has 30 days, starting from the day when it receives notification of the definitive lifting of the obstacle to payment, to resume payments to the contractor.

Article 55 - Claims for additional payment

- 55.1. If the contractor considers itself being entitled to additional payment under the contract, the contractor shall:
- a) if it intends to make any claim for additional payment, give to the supervisor notice of its intention or make such claim no later than 15 days after the

contractor became aware, or should have become aware of the event or circumstances giving rise of such claim, stating the reason for its claim;

If the contractor fails to give notice of a claim for additional payment within such period of 15 days, the contractor shall not be entitled to additional payment, and the contracting authority shall be discharged from all liability in connection with the request; and

- b) submit full and detailed particulars of its claim as soon as it is reasonably practicable, but no later than 60 days after the date of such notice, unless otherwise agreed by the supervisor. In case the supervisor agrees to another deadline than the said 60 days, the agreed upon deadline will, in any event, require that such particulars shall be submitted no later than the date of submission of the draft final statement of account. The contractor shall thereafter promptly submit such further particulars as the supervisor may reasonably require assessing the validity of the claim.

55.2. When the supervisor has received the full and detailed particulars of the contractor's claim that it requires, he shall, without prejudice to Article 21.4, after due consultation with the contracting authority and, where appropriate, the contractor, determine whether the contractor is entitled to additional payment and notify the parties accordingly.

55.3. The supervisor may reject any claim for additional payment which does not comply with the requirements of Article 55.

Article 56 - End date

56.1. The payment obligations of the EC under this contract shall cease at most 18 months after the end of the period of implementation of tasks, unless the contract is terminated in accordance with these general conditions. In the event of co-financing, this date shall be laid down in the special conditions.

ACCEPTANCE AND DEFECTS LIABILITY

Article 57 - General principles

57.1. Verification of the works by the supervisor with a view to provisional or final acceptance shall take place in the presence of the contractor. The absence of the contractor shall not be a bar to verification on condition that the contractor has been summoned in due form at least 30 days prior to the date of verification.

57.2. Should exceptional circumstances make it impossible to ascertain the state of the works or otherwise proceed with their acceptance during the period fixed for provisional or final acceptance, a statement certifying such impossibility shall be drawn up by the supervisor after consultation, where possible, with the contractor. The verification shall take place and a statement of acceptance or rejection shall be drawn up by the supervisor within 30 days following the date on which such impossibility ceases to exist. The contractor shall

not invoke these circumstances in order to avoid its obligation of presenting the works in a state suitable for acceptance.

Article 58 - Tests on completion

- 58.1. The works shall not be accepted until the prescribed verifications and tests have been carried out at the expense of the contractor. The contractor shall notify the supervisor of the date on which such verification and tests may commence.
- 58.2. Works which do not satisfy the terms and conditions of the contract, or in the absence of such terms and conditions, which are not carried out in accordance with trade practices in the country in which the works are executed, shall, if required, be demolished and rebuilt by the contractor or repaired to the satisfaction of the supervisor, otherwise this shall be done as of right after due notice at the expense of the contractor, by order of the supervisor. The supervisor may also require the demolition and reconstruction by the contractor, or repair to the satisfaction of the supervisor, under the same conditions, of any work in which unacceptable materials have been used, or carried out in the periods of suspension provided for in Article 38.

Article 59 - Partial acceptance

- 59.1. The contracting authority may make use of the various structures, parts of structures or sections of the works forming part of the contract as and when they are completed. Any taking over of the structures, parts of structures or sections of the works by the contracting authority shall be preceded by their partial provisional acceptance. However, works may in cases of urgency be taken over prior to acceptance provided an inventory of outstanding work is drawn up by the supervisor and agreed to by the contractor and the supervisor beforehand. Once the contracting authority has taken possession of a structure, a part thereof or section of the works, the contractor shall no longer be required to make good any damage resulting otherwise than from faulty construction or workmanship.
- 59.2. The supervisor may, at the request of the contractor and if the nature of the works so permits, proceed with partial provisional acceptance, provided that the structures, parts of structures or sections of the works are completed and suited to the use as described in the contract.
- 59.3. In the cases of partial provisional acceptance referred to in Article 59.1 and 59.2 the defects liability period provided for in Article 62 shall, unless the special conditions provide otherwise, run as from the date of such partial provisional acceptance.

Article 60 - Provisional acceptance

- 60.1. The works shall be taken over by the contracting authority when they have satisfactorily passed the tests on completion and a certificate of provisional acceptance has been issued or is deemed to have been issued.
- 60.2. The contractor may apply, by notice to the supervisor, for a certificate of provisional acceptance not earlier than 15 days before the works, in the contractor's opinion, are

complete and ready for provisional acceptance. The supervisor shall within 30 days after the receipt of the contractor's application either:

- a) issue the certificate of provisional acceptance to the contractor with a copy to the contracting authority stating, where appropriate, its reservations, and, inter alia, the date on which, in its opinion, the works were completed in accordance with the contract and ready for provisional acceptance; or
- b) reject the application giving its reasons and specifying the action which, in its opinion, is required of the contractor for the certificate to be issued.

60.3. If the supervisor fails either to issue the certificate of provisional acceptance or to reject the contractor's application within the period of 30 days, he shall be deemed to have issued the certificate on the last day of that period. The certificate of provisional acceptance shall not be deemed to be an admission that the works have been completed in every respect. If the works are divided by the contract into sections, the contractor shall be entitled to apply for separate certificates for each of the sections.

60.4. Upon provisional acceptance of the works, the contractor shall dismantle and remove temporary structures as well as materials no longer required for use in connection with the implementation of the contract. It shall also remove any litter or obstruction and redress any change in the condition of the site as required by the contract.

60.5. Immediately after provisional acceptance, the contracting authority may make use of all the works as completed.

Article 61 - Defects liability

61.1. The contractor shall be responsible for making good any defect in, or damage to, any part of the works which may appear or occur during the defects liability period and which:

- a) results from the use of defective plant or materials or faulty workmanship or design of the contractor; and/or
- b) results from any act or omission of the contractor during the defects liability period; and/or;
- c) appears in the course of an inspection made by, or on behalf of the contracting authority.

61.2. The contractor shall at its own cost make good the defect or damage as soon as practicable. The defects liability period for all items replaced or renewed shall recommence from the date when the replacement or renewal was made to the satisfaction of the supervisor. If the contract provides for partial acceptance, the defects liability period shall be extended only for the part of the works affected by the replacement or renewal.

61.3. If any such defect appears or such damage occurs, during the defects liability period, the contracting authority or the supervisor shall notify the contractor. If the contractor fails to

remedy a defect or damage within the time limit stipulated in the notification, the contracting authority may:

- a) carry out the works itself, or employ someone else to carry out the works at the contractor's risk and cost, in which case the costs incurred by the contracting authority shall be deducted from monies due to or from guarantees held against the contractor or from both; or
- b) terminate the contract.

61.4. If the defect or damage is such that the contracting authority has been deprived substantially of the whole or a part of the benefit of the works, the contracting authority shall, without prejudice to any other remedy, be entitled to recover all sums paid in respect of the parts of the works concerned together with the cost of dismantling such parts and clearing the site.

61.5. In case of emergency, where the contractor is not immediately available or, having been reached, is unable to take the measures required, the contracting authority or the supervisor may have the work carried out at the expense of the contractor. The contracting authority or the supervisor shall as soon as practicable inform the contractor of the action taken.

61.6. Where the special conditions stipulate that the maintenance work, necessitated by normal wear and tear, shall be carried out by the contractor, such work shall be paid for from a provisional sum. Deterioration resulting from the circumstances provided for in Article 21 or from abnormal use shall be excluded from this obligation unless it reveals a fault or defect justifying the request for repair or replacement under Article 61.

61.7. The defects liability period shall be stipulated in the special conditions and technical specifications. If the duration of the defects liability period is not specified, it shall be 365 days. The defects liability period shall commence on the date of provisional acceptance and may recommence in accordance with Article 61.2.

61.8. After provisional acceptance and without prejudice to the defects liability referred to in Article 61, the contractor shall no longer be responsible for risks which may affect the works and which result from causes not attributable to it. However, the contractor shall be responsible as from the date of provisional acceptance for the soundness of the construction, as laid down in the law of the country in which the works are executed.

Article 62 - Final acceptance

62.1. Upon the expiry of the defects liability period, or where there is more than one such period, upon the expiry of the latest period, and when all defects or damage have been rectified, the supervisor shall issue to the contractor a final acceptance certificate and a copy thereof to the contracting authority stating the date on which the contractor completed its obligations under the contract to the supervisor's satisfaction. The final acceptance certificate shall be given by the supervisor within 30 days after the expiration of the defects liability period, or as soon as any works ordered under Article 61 have been completed to the satisfaction of the supervisor.

- 62.2. The works shall not be considered as completed until the final acceptance certificate has been signed by the supervisor and delivered to the contracting authority, with a copy to the contractor.
- 62.3. Notwithstanding the issuance of the final acceptance certificate, the contractor and the contracting authority shall remain liable for the fulfilment of any obligation incurred under the contract prior to the issue of the final acceptance certificate, which remains unperformed at the time such final acceptance certificate is issued. The nature and extent of any such obligation shall be determined by reference to the provisions of the contract.

BREACH OF CONTRACT AND TERMINATION

Article 63 - Breach of contract

- 63.1. Either party commits a breach of contract where it fails to perform its obligations in accordance with the provisions of the contract.
- 63.2. Where a breach of contract occurs, the party injured by the breach is entitled to the following remedies:
- a) damages; and/or
 - b) termination of the contract.
- 63.3. Damages may be either:
- a) general damages; or
 - b) liquidated damages.
- 63.4. Should the contractor fail to perform any of its obligations in accordance with the provisions of the contract, the contracting authority is without prejudice to its right under Article 63.2, also entitled to the following remedies:
- a) suspension of payments; and/or
 - b) reduction or recovery of payments in proportion to the failure's extent.
- 63.5. Where the contracting authority is entitled to damages, it may deduct such damages from any sums due to the contractor or call on the appropriate guarantee.

Article 64 - Termination by the contracting authority

- 64.1. The contracting authority may, at any time and with immediate effect, subject to Article 64.9, terminate the contract, except as provided for under Article 64.2.
- 64.2. Subject to any other provision of these general conditions the contracting authority may, by giving seven days' notice to the contractor, terminate the contract and expel the contractor from the site in any of the following cases where:

- a) the contractor is in serious breach of contract for failure to perform its contractual obligations;
- b) the contractor fails to comply within a reasonable time with the notice given by the supervisor requiring it to make good the neglect or failure to perform its obligations under the contract which seriously affects the proper and timely performance of the works;
- c) the contractor refuses or neglects to carry out any administrative orders given by the supervisor;
- d) the contractor assigns the contract or sub-contracts without the authorisation of the contracting authority;
- e) the contractor is bankrupt, subject to insolvency or winding up procedures, is having its assets administered by a liquidator or by the courts, has entered into an arrangement with creditors, has suspended business activities, or is in any analogous situation arising from a similar procedure provided for under any national law or regulation relevant to that contractor;
- f) any organisational modification occurs involving a change in the legal personality, nature or control of the contractor, unless such modification is recorded in an addendum to the contract;
- g) any other legal disability hindering performance of the contract occurs;
- h) the contractor fails to provide the required guarantees or insurance, or the person providing the earlier guarantee or insurance is not able to abide by its commitments;
- i) the contractor has been guilty of grave professional misconduct proven by any means which the contracting authority can justify;
- j) it has been established by a final judgment or a final administrative decision or by proof in possession of the contracting authority that the contractor has been guilty of fraud, corruption, involvement in a criminal organisation, money laundering or terrorist financing, terrorist related offences, child labour or other forms of trafficking in human beings or circumventing fiscal, social or any other applicable legal obligations, including through the creation of an entity for this purpose;
- k) the contractor, in the performance of another contract financed by the EU budget/EDF funds, has been declared to be in serious breach of contract, which has led to its early termination or the application of liquidated damages or other contractual penalties or which has been discovered following checks, audits or investigations by the European Commission, the contracting authority, OLAF or the Court of Auditors;
- l) after the award of the contract, the award procedure or the performance of the contract proves to have been subject to breach of obligations, irregularities or fraud;

- m) the award procedure or the performance of another contract financed by the EU budget/EDF funds proves to have been subject to breach of obligations, irregularities or fraud which are likely to affect the performance of the present contract;
- n) the contractor fails to perform its obligation in accordance with Article 12.8, Article 12a or Article 12b;
- o) the contracting authority has become entitled to the maximum claim under Article 36.1;
- p) the contractor fails to perform its obligation in accordance with Article 61.3;
- q) the contractor is in breach of the data protection obligations resulting from Article 72 of these general conditions.

The cases of termination under points (e), (i), (j), (l), (m) and (n) may refer also to persons who are members of the administrative, management or supervisory body of the contractor and/or to persons having powers of representation, decision or control with regard to the contractor.

The cases of termination under points (a), (e), (f), (g), (i), (j), (k), (l), (m) and (n) may refer also to persons jointly and severally liable for the performance of the contract.

The cases under points (e), (i), (j), (k), (l), (m), (n) and (q) may refer also to subcontractors.

- 64.3. Termination shall be without prejudice to any other rights or powers under the contract of the contracting authority and the contractor. The contracting authority may, thereafter, complete the works itself or conclude any other contract with a third party, at the contractor's own expense. The contractor's liability for delay in completion shall immediately cease when the contracting authority terminates the contract without prejudice to any liability thereunder that may already have arisen.
- 64.4. Upon termination of the contract or when it has received notice thereof, the contractor shall take immediate steps to bring the works to a close in a prompt and orderly manner and to reduce expenditure to a minimum.
- 64.5. The supervisor shall, as soon as possible after termination, certify the value of the works and all sums due to the contractor as at the date of termination.
- 64.6. In the event of termination:
 - a) a report of work performed by the contractor shall be drawn up by the supervisor as soon as possible after inspection of the works, and inventory taken of temporary structures, materials, plant and equipment. The contractor shall be summoned to be present during the inspection and the taking of the inventory. The supervisor shall also draw up statements of emoluments still owed by the contractor to workers employed by him in relation to the contract and of sums owed by the contractor to the contracting authority;

- b) the contracting authority shall have the option of acquiring in whole or in part temporary structures which have been approved by the supervisor, equipment, plant and materials specifically supplied or manufactured in connection with the execution of work under the contract;
 - c) the purchase price of the temporary structures, equipment, plant and materials referred to above shall not exceed the unpaid portion of the expenditure incurred by the contractor, such expenditure being limited to that required for the performance of the contract under normal conditions;
 - d) the contracting authority may purchase, at market prices, the materials and items supplied or ordered by the contractor and not already paid for by the contracting authority on such conditions as the supervisor considers appropriate.
- 64.7. The contracting authority shall not be obliged to make any further payments to the contractor until the works are completed. After the works are completed, the contracting authority shall recover from the contractor the extra costs, if any, of completing the works, or shall pay any balance still due to the contractor.
- 64.8. If the contracting authority terminates the contract pursuant to Article 64.2, it shall, in addition to the extra costs for completion of the works and without prejudice to its other remedies under the contract, be entitled to recover from the contractor any loss it has suffered up to 10% of the contract price.
- 64.9. Where the termination is not due to an act or omission of the contractor, force majeure or other circumstances beyond the control of the contracting authority, the contractor shall be entitled to claim in addition to sums owed to it for work already performed, an indemnity for loss suffered.
- 64.10. This contract shall be automatically terminated if it has not given rise to any payment in the two years following its signing by both parties.

Article 65 - Termination by the contractor

- 65.1. The contractor may, by giving 14 days' notice to the contracting authority, terminate the contract if the contracting authority:
- a) fails for more than 120 days to pay the contractor the amounts due under any certificate issued by the supervisor after the expiry of the time limit stated in Article 44.3; or
 - b) consistently fails to meet its obligations after repeated reminders; or
 - c) suspends the progress of the works or any part thereof for more than 180 days for reasons not specified in the contract, or not attributable to the contractor's breach or default.
- 65.2. Such termination shall be without prejudice to any other rights of the contracting authority or the contractor acquired under the contract. Upon such termination, the

contractor shall, subject to the law of the country in which the works are executed, be entitled to immediately remove its equipment from the site.

- 65.3. In the event of such termination, the contracting authority shall pay the contractor for any loss or damage the contractor may have suffered. The maximum amount shall be 10% of the contract price.

Article 66 - Force majeure

- 66.1. Neither party shall be considered to be in default or in breach of its obligations under the contract if the performance of such obligations is prevented by any circumstances of force majeure which arises after the date of notification of award or the date when the contract becomes effective.
- 66.2. The term force majeure, as used herein covers any unforeseeable events, not within the control of either party and which by the exercise of due diligence neither party is able to overcome such as acts of God, strikes, lock-outs or other industrial disturbances, acts of the public enemy, wars whether declared or not, blockades, insurrection, riots, epidemics, landslides, earthquakes, storms, lightning, floods, washouts, civil disturbances, explosions. A decision of the European Union to suspend the cooperation with the partner country is considered to be a case of force majeure when it implies suspension of funding this contract.
- 66.3. Notwithstanding the provisions of Articles 36 and 64, the contractor shall not be liable to forfeiture of its performance guarantee, liquidated damages or termination for default if, and to the extent that, its delay in performance or other failure to perform its obligations under the contract is the result of an event of force majeure. The contracting authority shall similarly not be liable, notwithstanding the provisions of Articles 53 and 65, for payment of interest on delayed payments, for non-performance or for termination by the contractor for default, if, and to the extent that, the contracting authority's delay or other failure to perform its obligations is the result of force majeure.
- 66.4. If either party considers that any circumstances of force majeure have occurred which may affect performance of its obligations, it shall promptly notify the other party and the supervisor, giving details of the nature, the probable duration and the likely effect of the circumstances. Unless otherwise directed by the supervisor in writing, the contractor shall continue to perform its obligations under the contract as far as is reasonably practicable, and shall seek all reasonable alternative means for performance of its obligations which are not prevented by the force majeure event. The contractor shall not put into effect such alternative means unless directed so to do by the supervisor.
- 66.5. If the contractor incurs additional costs in complying with the supervisor's directions or using alternative means under Article 66.4, the amount thereof shall be certified by the supervisor.
- 66.6. If circumstances of force majeure have occurred and continue for a period of 180 days then, notwithstanding any extension of time for completion of the works that the contractor may by reason thereof have been granted, either party shall be entitled to serve upon the other 30 days' notice to terminate the contract. If, at the expiry of the period of 30 days, force majeure persists, the contract shall terminate and, in consequence thereof

under the law governing the contract, the parties shall be released from further performance of the contract.

Article 67 - Decease

- 67.1. Where the contractor is a natural person, the contract shall be automatically terminated if that person dies. However, the contracting authority shall examine any proposal made by the heirs or beneficiaries if they have notified their wish to continue the contract.
- 67.2. Where the contractor consists of a number of persons and one or more of them die, a report shall be agreed between the parties on the progress of the works, and the contracting authority shall decide whether to terminate or continue the contract in accordance with the undertaking given by the survivors and by the heirs or beneficiaries, as the case may be. The decision of the contracting authority shall be notified to those concerned within 30 days of receipt of such proposal.
- 67.3. In the cases provided for in Article 67.1 and 67.2, persons offering to continue to perform the contract shall notify the contracting authority thereof within 15 days of the date of decease.
- 67.4. Such persons shall be jointly and severally liable for the proper performance of the contract to the same extent as the deceased contractor. Continuation of the contract shall be subject to the rules relating to establishment of any guarantee provided for in the contract.

SETTLEMENT OF DISPUTES AND APPLICABLE LAW

Article 68 - Settlement of disputes

- 68.1. The parties shall make every effort to settle amicably any dispute relating to the contract which may arise between them, or between the supervisor and the contractor.
- 68.2. Once a dispute has arisen, a party shall notify the other party of the dispute, stating its position on the dispute and any solution which it envisages, and requesting an amicable settlement. The other party shall respond to this request for amicable settlement within 30 days, stating its position on the dispute. Unless the parties agree otherwise, the maximum time period laid down for reaching an amicable settlement shall be 120 days from the date of the notification requesting such a procedure. Should a party not agree to the other party's request for amicable settlement, should a party not respond in time to that request or should no amicable settlement be reached within the maximum time period, the amicable settlement procedure is considered to have failed.
- 68.3. In the absence of an amicable settlement, a party may notify the other party requesting a settlement through conciliation by a third person. If the European Commission is not a party to the contract, it may accept to intervene as conciliator. The other party shall respond to the request for conciliation within 30 days. Unless the parties agree otherwise, the maximum time period laid down for reaching a settlement through conciliation shall be 120 days from the notification requesting such a procedure. Should a party not agree to

the other party's request for conciliation, should a party not respond in time to that request or should no settlement be reached within the maximum time period, the conciliation procedure is considered to have failed.

- 68.4. If the amicable settlement procedure and, if so requested, the conciliation procedure fails, each party may refer the dispute to either the decision of a national jurisdiction or arbitration, as specified in the special conditions.

Article 69 - Applicable Law

- 69.1. This contract shall be governed by the law of the country of the contracting authority or, where the contracting authority is the European Commission, by the applicable European Union law complemented where necessary by the law of Belgium.

FINAL PROVISIONS

Article 70 - Administrative sanctions

- 70.1. Without prejudice to the application of other remedies laid down in the contract, a sanction of exclusion from all contracts and grants financed by the EU, may be imposed, after an adversarial procedure in line with the applicable Financial Regulation, upon the contractor who, in particular,
- a) is guilty of grave professional misconduct, has committed irregularities or has shown significant deficiencies in complying with the main obligations in the performance of the contract or has been circumventing fiscal, social or any other applicable legal obligations, including through the creation of an entity for this purpose. The duration of the exclusion shall not exceed the duration set by final judgement or final administrative decision or, in the absence thereof, three years;
 - b) is guilty of fraud, corruption, participation in a criminal organisation, money laundering, terrorist-related offences, child labour or trafficking in human beings. The duration of the exclusion shall not exceed the duration set by final judgement or final administrative decision or, in the absence thereof, five years.
- 70.2. In the situations mentioned in Article 70.1, in addition or in alternative to the sanction of exclusion, the contractor may also be subject to financial penalties representing 2-10% of the contract price.
- 70.3. Where the contracting authority is entitled to impose financial penalties, it may deduct such financial penalties from any sums due to the contractor or call on the appropriate guarantee.
- 70.4. The decision to impose administrative sanctions may be published on a dedicated internet-site, explicitly naming the contractor.

Article 71 - Verifications, checks and audits by European Union bodies

- 71.1. The contractor will allow the European Commission, the European Anti-Fraud Office and the European Court of Auditors to verify, by examining the documents and to make copies thereof or by means of on-the-spot checks, including checks of documents (original or copies), the implementation of the contract. In order to carry out these verifications and audits, the EU bodies mentioned above shall be allowed to conduct a full audit, if necessary, on the basis of supporting documents for the accounts, accounting documents and any other document relevant to the financing of the project. The contractor shall ensure that on-the-spot accesses is available at all reasonable times, notably at the contractor's offices, to its computer data, to its accounting data and to all the information needed to carry out the audits, including information on individual salaries of persons involved in the project. The contractor shall ensure that the information is readily available at the moment of the audit and, if so requested, that data be handed over in an appropriate form. These inspections may take place up to 7 years after the final payment.
- 71.2. Furthermore, the contractor will allow the European Anti-Fraud Office to carry out checks and verification on the spot in accordance with the procedures set out in the European Union legislation for the protection of the financial interests of the European Union against fraud and other irregularities.
- 71.3. To this end, the contractor undertakes to give appropriate access to staff or agents of the European Commission, of the European Anti-Fraud Office and of the European Court of Auditors to the sites and locations at which the contract is carried out, including its information systems, as well as all documents and databases concerning the technical and financial management of the project and to take all steps to facilitate their work. Access given to agents of the European Commission, European Anti-Fraud Office and the European Court of Auditors shall be on the basis of confidentiality with respect to third parties, without prejudice to the obligations of public law to which they are subject. Documents must be easily accessible and filed so as to facilitate their examination and the contractor must inform the contracting authority of their precise location.
- 71.4. The contractor guarantees that the rights of the European Commission, of the European Anti-Fraud Office and of the European Court of Auditors to carry out audits, checks and verification will be equally applicable, under the same conditions and according to the same rules as those set out in this Article, to any sub-contractor or any other party benefiting from EU budget/EDF funds.
- 71.5. Failure to comply with the obligations set forth in Article 71.1 to 71.4 constitutes a case of serious breach of contract.

Article 72 - Data protection

72.1. Processing of personal data by the contracting authority

Any personal data included in or relating to the contract, including its implementation, shall be processed in accordance with Regulation (EU) 2018/1725. Such data shall be processed solely for the purposes of the implementation, management and monitoring of the contract by the data controller.

The contractor or any other person whose personal data is processed by the data controller in relation to this contract has specific rights as a data subject under Chapter III (Articles 14-25) of Regulation (EU) 2018/1725, in particular the right to access, rectify or erase their personal data and the right to restrict the processing of their personal data or, where applicable, the right to object to processing or the right to data portability.

Should the contractor or any other person whose personal data is processed in relation to this contract have any queries concerning the processing of its personal data, it shall address itself to the data controller. They may also address themselves to the Data Protection Officer of the data controller. They have the right to lodge a complaint at any time to the European Data Protection Supervisor.

Details concerning the processing of personal data are available in the data protection notice referred to in the special conditions.

72.2 Processing of personal data by the contractor

The processing of personal data by the contractor shall meet the requirements of the general conditions and be processed solely for the purposes set out by the controller.

The contractor shall assist the controller for the fulfilment of the controller's obligation to respond to requests for exercising rights of person whose personal data is processed in relation to this contract as laid down in Chapter III (Articles 14-25) of Regulation (EU) 2018/1725. The contractor shall inform without delay the controller about such requests.

The contractor may act only on documented written instructions and under the supervision of the controller, in particular with regard to the purposes of the processing, the categories of data that may be processed, the recipients of the data and the means by which the data subject may exercise its rights.

The contractor shall grant personnel access to the data to the extent strictly necessary for the implementation, management and monitoring of the contract. The contractor must ensure that personnel authorised to process personal data has committed itself to confidentiality or is under appropriate statutory obligation of confidentiality in accordance with the provisions of Article 12.7 of these general conditions.

The contractor shall adopt appropriate technical and organisational security measures, giving due regard to the risks inherent in the processing and to the nature, scope, context and purposes of processing, in order to ensure, in particular, as appropriate:

- (a) the pseudonymisation and encryption of personal data;
- (b) the ability to ensure the ongoing confidentiality, integrity, availability and resilience of processing systems and services;
- (c) the ability to restore the availability and access to personal data in a timely manner in the event of a physical or technical incident;
- (d) a process for regularly testing, assessing and evaluating the effectiveness of technical and organisational measures for ensuring the security of the processing;
- (e) measures to protect personal data from accidental or unlawful destruction, loss, alteration, unauthorised disclosure of or access to personal data transmitted, stored or otherwise processed.

The contractor shall notify relevant personal data breaches to the controller without undue delay and at the latest within 48 hours after the contractor becomes aware of the breach. In such cases, the contractor shall provide the controller with at least the following information:

- (a) nature of the personal data breach including where possible, the categories and approximate number of data subjects concerned and the categories and approximate number of personal data records concerned;
- (b) likely consequences of the breach;
- (c) measures taken or proposed to be taken to address the breach, including, where appropriate, measures to mitigate its possible adverse effects.

The contractor shall immediately inform the data controller if, in its opinion, an instruction infringes Regulation (EU) 2018/1725, Regulation (EU) 2016/679, or other Union or Member State or third country applicable data protection provisions as referred to in the tender specifications.

The contractor shall assist the controller for the fulfilment of its obligations pursuant to Article 33 to 41 under Regulation (EU) 2018/1725 to:

- (a) ensure compliance with its data protection obligations regarding the security of the processing, and the confidentiality of electronic communications and directories of users;
- (b) notify a personal data breach to the European Data Protection Supervisor;
- (c) communicate a personal data breach without undue delay to the data subject, where applicable;
- (d) carry out data protection impact assessments and prior consultations as necessary.

The contractor shall maintain a record of all data processing operations carried on behalf of the controller, transfers of personal data, security breaches, responses to requests for exercising rights of people whose personal data is processed and requests for access to personal data by third parties.

The contracting authority is subject to Protocol 7 of the Treaty on the Functioning of the European Union on the privileges and immunities of the European Union, particularly as regards the inviolability of archives (including the physical location of data and services) and data security, which includes personal data held on behalf of the contracting authority in the premises of the contractor or subcontractor.

The contractor shall notify the contracting authority without delay of any legally binding request for disclosure of the personal data processed on behalf of the contracting authority made by any national public authority, including an authority from a third country. The contractor may not give such access without the prior written authorisation of the contracting authority.


The duration of processing of personal data by the contractor will not exceed the period referred to in Article 12.10 of these general conditions. Upon expiry of this period, the contractor shall, at the choice of the controller, return, without any undue delay in a commonly agreed format, all personal data processed on behalf of the controller and the copies thereof or shall effectively delete all personal data unless Union or national law requires a longer storage of personal data.

For the purpose of Article 7 of these general conditions, if part or all of the processing of personal data is subcontracted to a third party, the contractor shall pass on the obligations referred to in the present article in writing to those parties, including subcontractors. At the request of the contracting authority, the contractor shall provide a document providing evidence of this commitment.

* * *

Description			PACKAGES			
			PACK 1	PACK 3	PACK 5	
			Block A, B, C, F	Block J	Block L	TOTAL
SUBTOTAL	1	ARCHITECTURAL	160,987.28 €	87,032.65 €	19,061.20 €	267,081.12 €
	2	STRUCTURAL	11,935.95 €	19,559.49 €	0.00 €	31,495.44 €
	3	ELECTRICAL	60,170.50 €	25,941.00 €	30,896.50 €	117,008.00 €
	4	ICT	74,251.00 €	61,357.50 €	141,135.50 €	276,744.00 €
	5	WATER SYSTEM	26,131.15 €	16,217.25 €	32,569.89 €	74,918.29 €
	6	FIRE SAFETY	1,141.00 €	708.00 €	784.00 €	2,633.00 €
	7	VENTILATION - AIR CONDITIONING	35,722.90 €	9,430.10 €	0.00 €	45,153.00 €
	8	MEDICAL GASES	0.00 €	15,121.00 €	0.00 €	15,121.00 €
		GRAND TOTAL	370,339.77 €	235,366.99 €	224,447.09 €	830,153.85 €



Project: Rehabilitation of the Saudi Maternity Hospital	Location: Kassala Health Citadel, Sudan	
Date: 31 January 2020	UNOPS	

BILL OF QUANTITIES-PACK 1-ARC

NOTES:

The articles include all the preparatory and basic work, including all the materials and accessories, required for their execution and perfect finish.

materials to be demolished or removed shall be considered as reusable and all necessary actions must be taken for their perfect conservation and placed in storage or in the successful tenderer's outlet, all according to the indications of the inspection.

*a.w-all works

**n.a- non applicable

Artº	Description of works	Un.	Quant.	Unit Price	Total
CHAPTER A - CONSTRUCTION SITE					
1.	Construction site assembly and disassembly, including plate construction site identifier and fencing; provisional installations namely for the developer; supervision; materials warehouse; equipment and tools; facilities for personnel services; sanitary facilities; provisional networks	a.w	1	6000	6,000.00 €
2.	Implementation and development of the health, safety and security plan.	a.w	1	1000.00	1,000.00 €
3.	Implementation and development of the prevention, construction and demolition waste management	a.w	1	1500	1,500.00 €
4.	Execution of the final cleaning of the work, including all the necessary work and removal from the contractor's deposit of surplus products	a.w	1	1500	1,500.00 €
SUBTOTAL A					10,000.00 €
CHAPTER B - DEMOLITIONS					
1.	Demolition element by element from the roof, of all the elements proposed for demolition, including removal single element with temporary shoring if necessary, removal and classification of debris and waste, for subsequent transport to the authorised outlet, all necessary work, materials and equipment.	a.w	1	100	100.00 €
2.	Execution of all necessary survey work/ disassembly of water installations and equipment, existing sewers, electrics, telephone, etc., including loading, carriage to and unloading of all cargoes materials.	a.w	1	520	520.00 €
3.	Demolition of existing brick walls, according to demolition plan, including removal of products from demolition, to dumping ground, to any distance	a.w	1	400	400.00 €
4.	Demolition of existing indoor and outdoor doors and windows according to demolition plan, including removal of products from demolition, to dumping ground, to any distance.	a.w	1	150	150.00 €
5.	Execution of demolition of existing indoor floors of ceramic tiles, for subsequent application of new coatings including removal of products from demolition, to dumping ground, at any distance.	a.w	1	150	150.00 €
6.	Execution of removal of existing bathroom fittings, including removal of products from demolition, to dumping ground, at any distance.	a.w	1	1500	1,500.00 €
7.	Existing walls to be demolished according to demolition plan	m2	734.78	1.5	1,102.17 €
SUBTOTAL B					3,922.17 €
CHAPTER C - GENERAL CIVIL AND INFRASTRUCTURE CONSTRUCTION					
1.	WALLS				
1.1	Exterior Walls				
1.1.1	P1 -nominated on the project as Skin Wall;with baked terracota pieces (please see detail on shett A.05.02)	m2	98.86	30	2,965.80 €



1.	WALLS				
1.1	Exterior Walls				
1.1.2	P2- nominated on the project as Thermal Block; 20cm thermal clay brick with massive brick exterior covering (please see detail on sheet A.05.02)	m2	21.6	15	324.00 €
1.2	Interior Walls				
1.2.1	P3- Internal mineral insulation liner with plasterboard covering (please see detail on sheet A.05.02)	m2	n.a		
1.2.2	P4- Interior plasterboard partition (please see detail on sheet A.05.02)	m2	224.55	15	3,368.25 €
1.2.3	P5- 11 cm brick double plastered (please see detail on sheet A.05.02)	m2	205.97	12	2,471.64 €
1.2.4	P6- 15cm brick double plastered (please see detail on sheet A.05.02)	m2	77.8	15	1,167.00 €
1.2.5	P7- 20cm brick double plastered (please see detail on sheet A.05.02)	m2	n.a		
2.	FENCE				
2.1	Proposed: nominated on the project as Skin Wall; with baked terracota pieces (please see sheet number: A.05.03- Constructive Details, Walls Fence)	m/l	n.a		
2.2	Future Expansion: nominated on the project as Skin Wall; with baked terracota pieces (please see sheet number: A.05.03- Constructive Details, Walls Fence)	m/l	n.a		
3.	COATINGS				
3.1	Coatings Interior Walls				
3.1.1	W2- 0.15x0.15m white ceramic tiles till 2.10m height	m2	112.82	20	2,256.40 €
3.2	Coatings Interior Flooring				
3.2.1	F2- 0.30x0.30m Porcelanic tiles, Anti-split, Grey colored	m2	122.35	22	2,691.70 €
3.2.2	F2- Baseboard	m/l	n.a		
3.2.3	F3- 0.60x0.60m Porcelanic tiles, Grey colored	m2	663.02	22	14,586.44 €
3.2.4	F3- Baseboard	m/l	324.84	11.00	3,573.24 €
3.2.5	F4- 0.60x0.60m Porcelanic tiles, Grey colored	m2	161.91	22	3,562.02 €
3.2.6	F4- Baseboard	m/l	n.a		
3.2.7	F5- 0.60x0.60m Porcelanic tiles, Yellow colored	m2	n.a		
3.2.8	F5- Baseboard	m/l	n.a		
3.	COATINGS				
3.2	Coatings Interior Flooring				
3.2.9	F6- 0.60x0.60m Porcelanic tiles, Purple colored	m2	n.a		
3.2.10	F6- Baseboard	m/l	n.a		
3.2.11	F7- 0.60x0.60m Porcelanic tiles, Blue colored	m2	247.98	22	5,455.56 €
3.2.12	F7- Baseboard	m/l	419.32	11.00	4,612.52 €
3.2.13	F8- 0.60x0.60m Porcelanic tiles, Blue colored	m2	n.a		
3.2.14	F8- Baseboard	m/l	n.a		
4.	CEILINGS				
4.1	Interior Ceilings				
4.1.2	Supply and execution of false interior ceiling: waterproofing plasterboard to be painted with paint (W1) including transport, unloading, support structure, backstrips, bars and reinforcements, relapses, opening of negatives for lighting, all complementary materials, works and accessories	m2	n.a		
5.	INTERIOR PAVING				
5.1	Floor levelling with screed levelling before the applyance of new coatings	v.g	1	1200	1,200.00 €
6.	PAINTINGS				
6.1	Exterior Paintings				
6.1.1	E2- "terracota" acrylic paint (RAL colour 2013)	m2	977.29	4	3,909.16 €
6.1.2	E3 - "concrete grey" acrylic paint (RAL colour 7023)	m2	270.20	4	1,080.80 €



6.1.3	E4-"pure white" poliuretane paint for metallic structure (RAL colour 9010)	m2	21.63	4	86.52 €
6.2	Interior Paintings				
6.2.1	W1-Washable acrylic white paint	m2	2600.83	5	13,004.15 €
7	WOODWORK				
7.1	A1:MDF 20mm WITH HPL; 3,40 x 0,70 x 1,10m	un	1	1150.00	1,150.00 €
7.2	A2:MDF 20mm WITH HPL; 1,20 x 0,70 x 1,10m	un	n.a		
7.3	A3:MDF 20mm WITH HPL; 1,10 x 0,70 x 1,10m)+(2,50 x 0,70 x 1,10m)	un	n.a		
7.4	A4:MDF 20mm WITH HPL; 2,10 x 0,70 x 1,10m	un	n.a		
7.5	A5: MDF 20mm WITH HPL; 2,55 x 0,70 x 1,10m	un	n.a		
7.6	B1: MDF 20mm WITH HPL ;1,65 x 0,60 x 0,90m	un	1	550.00	550.00 €
7.7	B1': MDF 20mm WITH HPL; 1,65 x 0,35 x 0,60m	un	1	450.00	450.00 €
7.8	B2: MDF 20mm WITH HPL; 2,15 x 0,60 x 0,90m	un	n.a		
7.9	A3':MDF 20mm WITH HPL; 2,5 x 0,70 x 1,10m)+(1,10 x 0,70 x 1,10m)	un	n.a		
7	WOODWORK				
7.10	B2': MDF 20mm WITH HPL; 2,15 x 0,35 x 0,60m	un	n.a		
7.11	B3: MDF 20mm WITH HPL; 1,90 x 0,60 x 0,90m	un	n.a		
7.12	B3':MDF 20mm WITH HPL; 1,90 x 0,35 x 0,60m	un	n.a		
7.13	B4: MDF 20mm WITH HPL; 2,55 x 0,60 x 0,90m	un	n.a		
7.14	B4': MDF 20mm WITH HPL; 2,55 x 0,35 x 0,60m	un	6	860	5,160.00 €
7.15	B5: MDF 20mm WITH HPL; 1,80 x 0,60 x 0,90m	un	n.a		
7.16	B6: MDF 20mm WITH HPL; 1,50 x 0,60 x 0,90m	un	3	600	1,800.00 €
7.17	C1: MDF 30mm WITH HPL; 1,65 x 0,60 x 0,75m	un	n.a		
7.18	C2: MDF 30mm WITH HPL; 1,70 x 0,60 x 0,75m	un	n.a		
7.19	C3: MDF 30mm WITH HPL; 2,20 x 0,60 x 0,75m	un	n.a		
7.20	C4:MDF 30mm WITH HPL; 2,40 x 0,60 x 0,75m	un	n.a		
7.21	C5: MDF 30mm WITH HPL; 2,10 x 0,60 x 0,75m	un	n.a		
7.22	C6: MDF 30mm WITH HPL; 1,90 x 0,60 x 0,75m	un	n.a		
7.23	D1: MDF 50mm WITH HPL; 4,95 x 0,70 x 0,75m	un	n.a		
7.24	D2: MDF 50mm WITH HPL; 1,70 x 0,70 x 0,75m	un	n.a		
8	DOORS				
8.1	Exterior Doors				
8.1.1	G.1- Double swing gate with fixed lateral sashes / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047" (dim. 4,22x2,10m). All accessories included.	un	1	700	700.00 €
8.1.2	G.2- Double swing gate with fixed lateral sashes / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047" (dim. 2,40x2,10m). All accessories included.	un	n.a		
8.1.3	G.3- Single swing gate with 1 fixed lateral sash / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047"(dim. 1,62x2,10m). All accessories included.	un	n.a		
8.1.4	G.4- Double swing gate / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047"(dim. 1,65x2,10m). All accessories included.	un	n.a		
8.1.5	G.5- Double swing gate with fixed lateral sashes / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047"(dim. 3,54x2,10m). All accessories included.	un	n.a		
8.1.6	G.6- Single swing gate with 1 fixed lateral sash / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047"(dim. 2,00x2,10m). All accessories included.	un	n.a		
8.1.7	G.6- Single swing gate with 1 fixed lateral sash / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047"(dim. 1,50x2,10m). All accessories included.	un	n.a		
8.2	Interior Doors				
8.2.1	D.1- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 0,70x2,10m). Handle in U-shaped	un	n.a		
8.2.2	D.2- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 0,80x2,10m). Handle in U-shaped	un	14	415	5,810.00 €
8.2.3	D.3- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 0,90x2,10m). Handle in U-shaped	un	16	430	6,880.00 €
8.2.4	D.4- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 0,80x2,70m). Upper transom with	un	8	540	4,320.00 €
8.2.5	D.5- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 0,85x2,70m). Upper transom with	un	n.a		
8.2.6	D.6- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 1,00x2,70m). Upper transom with	un	11	650	7,150.00 €
8.2.7	D.7- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 1,10x2,70m). Upper transom with	un	3	740	2,220.00 €
8.2.8	D.8- Double swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 1,60x2,70m). Upper transom	un	n.a		
8.2.9	D.9- Hermec sliding door / Hermetic system class 4, according UNI EN 12207 "Grupsa HS-201" / sheet of stainless steel (dim. 1,40x2,10m). No handle,	un	n.a		



8.2.10	D.10- Single swing door / MDF or plywood / thermal laminate HPL "light grey RAL 7047" with a kick board in stainless steel (dim. 1,00x3,10m). Upper transom	un	6	770	4,620.00 €
8.2.11	D.11- Double swing door / MDF or plywood / thermal laminate HPL "light grey RAL 7047" with a kick board in stainless (dim. 1,50x3,10m). Upper transom with	un	2	1115	2,230.00 €
8.2.12	D.11- Double swing door / MDF or plywood / thermal laminate HPL "light grey RAL 7047" with a kick board in stainless (dim. 1,60x3,10m). Upper transom with	un	n.a		
8.3	Technical cabinets				
8.3.1	TC.1- Technical cabinet with double swing door / MDF or plywood / thermal laminate HPL white "RAL 9010" (dim. 1,20x2,10). With key / no handle. All accessories included.	un	2	800	1,600.00 €
8.3.2	TC.2- Technical cabinet with double swing door / Galvanized steel/ painted "light grey RAL 7047" (dim. 1,20x2,10). With key / no handle. All accessories included.	un	n.a		
8.3.3	TC.3- Technical cabinet with single door / MDF or plywood/ thermal laminate HPL "white RAL 9010" (dim. 0,60x2,10). With key / no handle. All accessories included.	un	n.a		
8.3.4	TC.4- Technical cabinet with double swing door / Galvanized steel/ painted "light grey RAL 7047" (dim. 1,60x2,10). With key / no handle. All accessories included.	un	n.a		
8.3.5	TC.5- Technical cabinet with double swing door /MDF or plywood/thermolaminated "RAL 9010"	un	1	1000	1,000.00 €
9.	WINDOWS				
9.1	Interior Windows				
9.1.1	W.1- Slide and fixed window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 3,00x1,20). All accessories included.	un	2	520	1,040.00 €
9.1.2	W.2- Slide window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 2,25x1,50m). All accessories included.	un	n.a		
9.1.3	W.3- Slide window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 1,00x1,40m). All accessories included.	un	4	200	800.00 €
9.1.4	W.4- Boom hung window sash / Anodized aluminium / Laminated 5+5mm clear glass (dim. 0,60x1,50m). All accessories included.	un	n.a		
9.1.5	W.5- Slide window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 1,50x2,00m). All accessories included.	un	n.a		
9.1.6	W.6- Boom hung window sash / Anodized aluminium / Laminated 5+5mm clear glass (dim. 0,75x1,50m). All accessories included.	un	n.a		
9.1.7	W.7- Slide window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 1,50x1,50m). All accessories included.	un	6	325	1,950.00 €
9.1.8	W.8- Slide window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 1,50x1,50m). All accessories included.	un	24	325	7,800.00 €
9.1.9	W.9- Slide window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 1,00x1,30m). All accessories included.	un	n.a		
9.1.10	W.10- Fixed interior window / Anodized aluminium frame / Laminated 5+5mm clear glass (dim. 1,20x1,10m). All accessories included.	un	n.a		
9.1.11	W.11- Fixed interior window / Anodized aluminium frame / Laminated 5+5mm clear glass (dim. 2,20x1,10m). All accessories included.	un	n.a		
9.2	Shadding				
9.2.1	S.1- Existing shutters to be relocated in the west and south exposed windows (dim. 1,50x1,20m). All accessories included.	un	8	20	160.00 €
9.3	Window Sill				
9.3.1	Existing Pre-fabricated concrete window sill (same width as the window) to be relocated	un	5	20	100.00 €
10.	CANOPY				
10.1	Sandwich Roof Panels				
10.1.1	5 Ribs profiled outer sheet, exterior coating in white paint with good UV resistance (RAL 9010), core in Mineral wool with 80 mm thickness , interior coating: polymer coating resistant to mould (RAL 9010), Fire performance according to TS EN 13501-1,A2-s1	m2	39.5	45	1,777.50 €
10.2	Downspouts				
10.2.1	Metal downspouts painted in white with good UV resistance (RAL 9010) all joints and connections included	m/l	6.4	10	64.00 €
10.3	Gutters				
10.3.1	White Aluminium gutters, all joints included. Cover of the gutter with a lacquered (RAL 9010) metallic sheet with 48 cm high (please see detail on A,05,02 Walls and Gutters) held in place with metal clamps.	m/l	n.a		
11.	VARIOUS				
11.1	Supply and placement of break-proof mirrors placed complanarly with the tile, including transportation, discharge, fixing	m2	14.8	5	74.00 €



1.1.2	accessories, tapes and all materials and complementary accessories. Mirror: 1,2m height with variable lenght Railing (BLOCK A): Toprail, Handrail, rails (tubular shape with 5mm of diameter and 2mm tick), inner posts, in stainless steel	m/l	47.3	20	946.00 €
SUBTOTAL C					125,665.70 €
CHAPTER D - INSTALATION AND EQUIPMENT OF WATER AND SEWAGE SYSTEM					
1	SANITARY EQUIPMENT				
1.1	Supply and laying of ceramic sanitary ware white glazed including transport, unloading, fastenings and connections, seals and all complementary materials, works and accessories	a.w	1	1800	1,800.00 €
1.2	Toilets	un	2	300	600.00 €
1.3	Disabled Toilets	un	n.a		
1.4	Disabled Toilets Bars kits	un	n.a		
1.5	Squatting Toilet	un	10	320	3,200.00 €
1.6	Basin white glazed. dimensions: 45*35	un	9	325	2,925.00 €
1.7	Basin white glazed. dimensions: 60*45	un	12	350	4,200.00 €
1.8	Shower Kit	un	4	325	1,300.00 €
1.9	Drain	un	4	45	180.00 €
1.10	Foot washing bathtub	un	n.a		
1.11	Kitchen Sink	un	n.a		
1.12	Scrub Basin in stainless steel	un	n.a		
1.13	CSSD Basin	un	n.a		
1.14	Soiled Tray	un	1	100	100.00 €
SUBTOTAL D					14,305.00 €
CHAPTER E - LANDSCAPING					
10.1	Paving				
10.1.1	EF1-Resistent concrete pieces above a compacted pavement (vehicle road)	m2	398.89	9	3,590.01 €
10.1.2	EF2-Concrete pieces (pedestrian sidewalk)	m2	221.83	8.5	1,885.56 €
10.1.3	EF3-Compacted gravel	m2	n.a		
10.1.4	EF4-Earth and humus to plant resistant type grass	m2	65.92	2	131.84 €
10.1.5	Smoothed concrete floor with a siloxane sealer (exterior corridor)	m2	n.a		
10.2	Forestation				
10.2.1	New trees (local species to be defined)	un	1	100	100.00 €
10.2.1	New bushes (local species to be defined)	m/l	19.3	20	386.00 €
SUBTOTAL D					6,093.41 €
SUBTOTAL ARCHITECTURAL					160,987.28 €

End of BoQ_Saudy Maternity Hospital_ 31 January 2020



Project: Rehabilitation of the Saudi Maternity Hospital	Location: Kassala Health Citadel, Sudan	
Date: 31 January 2020	UNOPS	

BILL OF QUANTITIES-PACK 3-ARC

NOTES:	1. The
articles include all the preparatory and basic work, including all the materials and accessories, required for their execution and perfect finish.	2. All
materials to be demolished or removed shall be considered as reusable and all necessary actions must be taken for their perfect conservation and placed in storage or in the successful tenderer's outlet, all according to the indications of the inspection.	
*a.w-all works	**n.a-
non applicable	

Art ²	Description of works	Un.	Quant.	Unit Price	Total
CHAPTER A - CONSTRUCTION SITE					
1.	Construction site assembly and disassembly, including plate construction site identifier and fencing; provisional installations namely for the developer; supervision; materials warehouse; equipment and tools; facilities for personnel services; sanitary facilities; provisional networks	a.w	1	6,000.00 €	6,000.00 €
2.	Implementation and development of the health, safety and security plan	a.w	1	1,000.00 €	1,000.00 €
3.	Implementation and development of the prevention, construction and demolition waste management	a.w	1	1,500.00 €	1,500.00 €
4.	Execution of the final cleaning of the work, including all the necessary work and removal from the contractor's deposit of surplus products	a.w	1	1,500.00 €	1,500.00 €
SUBTOTAL A					10,000.00 €
CHAPTER B - DEMOLITIONS					
1.	Demolition element by element from the roof, of all the elements proposed for demolition, including removal single element with temporary shoring if necessary, removal and classification of debris and waste, for subsequent transport to the authorised outlet, all necessary work, materials and equipment.	a.w	1	540.00 €	540.00 €
2.	Execution of all necessary survey work/ disassembly of water installations and equipment, existing sewers, electrics, telephone, etc., including loading, carriage to and unloading of all cargoes materials.	a.w	1	500.00 €	500.00 €
3.	Demolition of existing brick walls, according to demolition plan, including removal of products from demolition, to dumping ground, to any distance	a.w	1	270.00 €	270.00 €
4.	Demolition of existing indoor and outdoor doors and windows according to demolition plan, including removal of products from demolition, to dumping ground, to any distance.	a.w	1	300.00 €	300.00 €
5.	Execution of demolition of existing indoor floors of ceramic tiles, for subsequent application of new coatings including removal of products from demolition, to dumping ground, at any distance.	a.w	1	750.00 €	750.00 €
6.	Execution of removal of existing bathroom fittings, including removal of products from demolition, to dumping ground, at any distance.	a.w	1	100.00 €	100.00 €
7.	Existing walls to be demolished according to demolition plan	m2	473.61	1.50 €	710.42 €
SUBTOTAL B					3,170.42 €
CHAPTER C - GENERAL CIVIL AND INFRASTRUCTURE CONSTRUCTION					
1.	WALLS				
1.1	Exterior Walls				
1.1.1	P1-nominated on the project as Skin Wall; baked terracota pieces (please see detail on shett A.05.02)	m2	107.25	30.00 €	3,217.50 €

Continuation of chapter C

1.	WALLS
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1.1	Exterior Walls				
1.1.2	P2- nominated on the project as Thermal Block; 20cm thermal clay brick with massive brick exterior covering (please see detail on sheet A.05.02)	m2	32.2	15.00 €	483.00 €
1.2	Interior Walls				
1.2.1	P3-Internal mineral insulation liner with plasterboard covering (please see detail on sheet A.05.02)	m2	n.a		
1.2.2	P4- Interior plasterboard partition (please see detail on sheet A.05.02)	m2	n.a		
1.2.3	P5- 11 cm brick double plastered (please see detail on sheet A.05.02)	m2	65.68	12.00 €	788.16 €
1.2.4	P6- 15cm brick double plastered (please see detail on sheet A.05.02)	m2	334.98	15.00 €	5,024.70 €
1.2.5	P7- 20cm brick double plastered (please see detail on sheet A.05.02)	m2	n.a		
2	FENCE				
2.1	Proposed:nominated on the project as Skin Wall; with baked terracota pieces (please see sheet number: A.05.03- Constructive Details,Walls Fence)	m/l	n.a		
2.2	Future Expansion: nominated on the project as Skin Wall; with baked terracota pieces (please see sheet number: A.05.03- Constructive Details,Walls Fence)	m/l	n.a		
3	COATINGS				
3.1	Coatings Interior Walls				
3.2.1	W2- 0.15x0.15m white ceramic tiles till 2.10m height	m2	131.64	20.00 €	2,632.80 €
3.2	Coatings Interior Flooring				
3.2.1	F2- 0.30x0.30m Porcelanic tiles,Anti-split, Grey colored	m2	84.07	22.00 €	1,849.54 €
3.2.2	F2- Baseboard	m/l			
3.2.3	F3- 0.60x0.60m Porcelanic tiles, Grey colored	m2	n.a		
3.2.4	F3- Baseboard	m/l	n.a		
3.2.5	F4- 0.60x0.60m Porcelanic tiles, Grey colored	m2	n.a		
3.2.6	F4- Baseboard	m/l	n.a		
3.2.7	F5-0.60x0.60m Porcelanic tiles,Yellow colored	m2	n.a		
3.2.8	F5- Baseboard	m/l	n.a		
3	COATINGS				
3.2	Coatings Interior Flooring				
3.2.9	F6-0.60x0.60m Porcelanic tiles, Purple colored	m2	n.a		
3.2.10	F6- Baseboard	m/l	n.a		
3.2.11	F7-0.60x0.60m Porcelanic tiles, Blue colored	m2	336.09	22.00 €	7,393.98 €
3.2.12	F7- Baseboard	m/l	177.89	11.00 €	1,956.79 €
3.2.13	F8-0.60x0.60m Porcelanic tiles, Blue colored	m2	114.31	22.00 €	2,514.82 €
3.2.14	F8- Baseboard	m/l	82.92	11.00 €	912.12 €
4	CEILINGS				
4.1	Interior Ceilings				
4.1.2	Supply and execution of false interior ceiling: waterproofing plasterboard to be painted with paint (W1) including transport, unloading, support structure, backstrips, bars and reinforcements, relapses, opening of negatives for lighting, all complementary materials, works and accessories	m2	120.15	15.00 €	1,802.25 €
5	INTERIOR PAVING				
5.1	Floor levelling with screed levelling before the appliance of new coatings	v.g	1	535.00 €	535.00 €
6	PAINTINGS				
6.1	Exterior Paintings				
6.1.1	E2- "terracota" acrylic paint (RAL colour 2013)	m2	586.41	4.00 €	2,345.64 €
6.1.2	E3 -"concrete grey" acrylic paint (RAL colour 7023)	m2	188.25	4.00 €	753.00 €
6.1.3	E4-"pure white" poliuretane paint for metallic structure (RAL colour 9010)	m2	76.42	4.00 €	305.68 €



6.2	Interior Paintings				
6.2.1	W1-Washable acrylic white paint	m2	1222.70	5.00 €	6,113.50 €
7.	WOODWORK				
7.1	A1:MDF 20mm WITH HPL; 3,40 x 0,70 x 1,10m	un			
7.2	A2:MDF 20mm WITH HPL; 1,20 x 0,70 x 1,10m	un			
7.3	A3:MDF 20mm WITH HPL; 1,10 x 0,70 x 1,10m)+(2,50 x 0,70 x 1,10m)	un			
7.4	A4:MDF 20mm WITH HPL; 2,10 x 0,70 x 1,10m	un	1	720.00 €	720.00 €
7.5	A5: MDF 20mm WITH HPL; 2,55 x 0,70 x 1,10m	un	1	860.00 €	860.00 €
7.6	B1: MDF 20mm WITH HPL ;1,65 x 0,60 x 0,90m	un			
7.7	B1': MDF 20mm WITH HPL; 1,65 x 0,35 x 0,60m	un			
7.8	B2: MDF 20mm WITH HPL; 2,15 x 0,60 x 0,90m	un			
7.9	A3':MDF 20mm WITH HPL; 2,5 x 0,70 x 1,10m)+(1,10 x 0,70 x 1,10m)	un			

7.	WOODWORK				
7.10	B2': MDF 20mm WITH HPL; 2,15 x 0,35 x 0,60m	un	n.a		
7.11	B3: MDF 20mm WITH HPL; 1,90 x 0,60 x 0,90m	un	n.a		
7.12	B3':MDF 20mm WITH HPL; 1,90 x 0,35 x 0,60m	un	n.a		
7.13	B4: MDF 20mm WITH HPL; 2,55 x 0,60 x 0,90m	un	1	1,020.00 €	1,020.00 €
7.14	B4': MDF 20mm WITH HPL;2,55 x 0,35 x 0,60m	un	1	860.00 €	860.00 €
7.15	B5: MDF 20mm WITH HPL; 1,80 x 0,60 x 0,90m	un	2	720.00 €	1,440.00 €
7.16	B6: MDF 20mm WITH HPL; 1,50 x 0,60 x 0,90m	un	n.a		
7.17	C1: MDF 30mm WITH HPL; 1,65 x 0,60 x 0,75m	un	n.a		
7.18	C2: MDF 30mm WITH HPL; 1,70 x 0,60 x 0,75m	un	n.a		
7.19	C3: MDF 30mm WITH HPL; 2,20 x 0,60 x 0,75m	un	n.a		
7.20	C4:MDF 30mm WITH HPL; 2,40 x 0,60 x 0,75m	un	1	980.00 €	980.00 €
7.21	C5: MDF 30mm WITH HPL;2,10 x 0,60 x 0,75m	un	n.a		
7.22	C6: MDF 30mm WITH HPL;1,90 x 0,60 x 0,75m	un	n.a		
7.23	D1: MDF 50mm WITH HPL;4,95 x 0,70 x 0,75m	un	n.a		
7.24	D2: MDF 50mm WITH HPL;1,70 x 0,70 x 0,75m	un	n.a		

8.	DOORS				
8.1	Exterior Doors				
8.1.1	G.1- Double swing gate with fixed lateral sashes / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047" (dim. 4,22x2,10m). All accessories included.	un	1	700.00 €	700.00 €
8.1.2	G.2- Double swing gate with fixed lateral sashes / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047" (dim. 2,40x2,10m). All accessories included.	un	n.a		
8.1.3	G.3- Single swing gate with 1 fixed lateral sash / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047"(dim. 1,62x2,10m). All accessories included.	un	n.a		
8.1.4	G.4- Double swing gate / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047"(dim. 1,65x2,10m). All accessories included.	un	n.a		
8.1.5	G.5- Double swing gate with fixed lateral sashes / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047"(dim. 3,54x2,10m). All accessories included.	un	1	580.00 €	580.00 €
8.1.6	G.6- Single swing gate with 1 fixed lateral sash / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047"(dim. 2,00x2,10m). All accessories included.	un	1	350.00 €	350.00 €
8.1.7	G.6- Single swing gate with 1 fixed lateral sash / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047"(dim. 1,50x2,10m). All accessories included.	un	n.a		
8.2	Interior Doors				
8.2.1	D.1- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 0,70x2,10m). Handle in U-	un	n.a		
8.2.2	D.2- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 0,80x2,10m). Handle in U-	un	7	415.00 €	2,905.00 €
8.2.3	D.3- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 0,90x2,10m). Handle in U-	un	8	430.00 €	3,440.00 €
8.2.4	D.4- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 0,80x2,70m). Upper	un	n.a		
8.2.5	D.5- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 0,85x2,70m). Upper	un	n.a		
8.2.6	D.6- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 1,00x2,70m). Upper	un	n.a		
8.2.7	D.7- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 1,10x2,70m). Upper	un	n.a		
8.2.8	D.8- Double swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 1,60x2,70m). Upper	un	1	1,080.00 €	1,080.00 €
8.2.9	D.9- Hermec sliding door / Hermetic system class 4, according UNI EN 12207 "Grupsa HS-201" / sheet of stainless steel (dim. 1,40x2,10m). No handle,	un	n.a		



8.2.10	D.10- Single swing door / MDF or plywood / thermal laminate HPL "light grey RAL 7047" with a kick board in stainless steel (dim. 1,00x3,10m). Upper	un	3	770.00 €	2,310.00 €
8.2.11	D.11- Double swing door / MDF or plywood / thermal laminate HPL "light grey RAL 7047" with a kick board in stainless (dim. 1,50x3,10m). Upper transom	un	1	1,115.00 €	1,115.00 €
8.2.12	D.11- Double swing door / MDF or plywood / thermal laminate HPL "light grey RAL 7047" with a kick board in stainless (dim. 1,60x3,10m). Upper transom	un	1	1,130.00 €	1,130.00 €

8.3	Technical cabinets				
8.3.1	TC.1- Technical cabinet with double swing door / MDF or plywood / thermal laminate HPL white "RAL 9010" (dim. 1,20x2,10). With key / no handle. All accessories included.	un	n.a		
8.3.2	TC.2- Technical cabinet with double swing door / Galvanized steel/ painted "light grey RAL 7047" (dim. 1,20x2,10). With key / no handle. All accessories included.	un	n.a		
8.3.3	TC.3- Technical cabinet with single door / MDF or plywood/ thermal laminate HPL "white RAL 9010" (dim. 0,60x2,10). With key / no handle. All accessories included.	un	3	400.00 €	1,200.00 €
8.3.4	TC.4- Technical cabinet with double swing door / Galvanized steel/ painted "light grey RAL 7047" (dim. 1,60x2,10). With key / no handle. All accessories included.	un	n.a		
8.3.5	TC.5- Technical cabinet with double swing door /MDF or plywood/thermolaminated "RAL 9010"	un	n.a		

9. WINDOWS

9.1	Interior Windows				
9.1.1	W.1- Slide and fixed window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 3,00x1,20). All accessories included.	un	n.a		
9.1.2	W.2- Slide window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 2,25x1,50m). All accessories included.	un	n.a		
9.1.3	W.3- Slide window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 1,00x1,40m). All accessories included.	un	n.a		
9.1.4	W.4- Boom hung window sash / Anodized aluminium / Laminated 5+5mm clear glass (dim. 0,60x1,50m). All accessories included.	un	n.a		
9.1.5	W.5- Slide window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 1,50x2,00m). All accessories included.	un	n.a		
9.1.6	W.6- Boom hung window sash / Anodized aluminium / Laminated 5+5mm clear glass (dim. 0,75x1,50m). All accessories included.	un	12	200.00 €	2,400.00 €
9.1.7	W.7- Slide window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 1,50x1,50m). All accessories included.	un	n.a		
9.1.8	W.8- Slide window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 1,50x1,50m). All accessories included.	un	10	325.00 €	3,250.00 €
9.1.9	W.9- Slide window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 1,00x1,30m). All accessories included.	un	n.a		
9.1.10	W.10- Fixed interior window / Anodized aluminium frame / Laminated 5+5mm clear glass (dim. 1,20x1,10m). All accessories included.	un	n.a		
9.1.11	W.11- Fixed interior window / Anodized aluminium frame / Laminated 5+5mm clear glass (dim. 2,20x1,10m). All accessories included.	un	n.a		
9.2	Shadding				
9.2.1	S.1- Existing shutters to be relocated in the west and south exposed windows (dim. 1,50x1,20m). All accessories included.	un	2	20.00 €	40.00 €
9.3	Window Sill				
9.3.1	Existing Pre-fabricated concrete window sill (same width as the window) to be relocated	un	5	20.00 €	100.00 €

10. CANOPY

10.1	Sandwich Roof Panels				
10.1.1	5 Ribs profiled outer sheet, exterior coating in white paint with good UV resistance (RAL 9010), core in Mineral wool with 80 mm thickness , interior coating: polymer coating resistant to mould (RAL 9010), Fire performance according to TS EN 13501-1,A2-s1	m2	55.47	45.00 €	2,496.15 €
10.2	Downspouts				
10.2.1	Metal downspouts painted in white with good UV resistance (RAL 9010) all joints and connections included	m/l	25.6	10.00 €	256.00 €
10.3	Gutters				
10.3.1	White Aluminium gutters, all joints included. Cover of the gutter with a lacquered (RAL 9010) metallic sheet with 48 cm high (please see detail on A.05.02 Walls and Gutters) held in place with metal clamps.	m/l	n.a		

11. VARIOUS


11.1	Supply and placement of break-proof mirrors placed complanarly with the tile, including transportation, discharge, fixing	m2	4.37	5.00 €	21.85 €
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accessories, tapes and all materials and complementary accessories. Mirror: 1,2m height with variable lenght					
SUBTOTAL C					67,882.23 €
CHAPTER D - INSTALATION AND EQUIPMENT OF WATER AND SEWAGE SYSTEM					
1. SANITARY EQUIPMENT					
1.1 Supply and laying of ceramic sanitary ware white glazed including transport, unloading, fastenings and connections, seals and all complementary materials, works and accessories	a.w	1	500.00 €	500.00 €	
1.2 Toilets	un	6	300.00 €	1,800.00 €	
1.3 Disabled Toilets	un	n.a			
1.4 Disabled Toilets Bars kits	un	n.a			
1.5 Squating Toilet	un	n.a			
1.6 Basin white glazed. dimensions: 45*35	un	n.a			
1.7 Basin white glazed. dimensions: 60*45	un	6	350.00 €	2,100.00 €	
1.8 Shower Kit	un	4	325.00 €	1,300.00 €	
1.9 Drain	un	4	45.00 €	180.00 €	
1.10 Foot washing bathtub	un	n.a			
1.11 Kitchen Sink	un	n.a			
1.12 Scrub Basin in stainless steel	un	n.a			
1.13 CSSD Basin	un	n.a			
1.14 Soiled Tray	un	1	100.00 €	100.00 €	
SUBTOTAL D					5,980.00 €
SUBTOTAL ARCHITECTURAL					87,032.65 €
CHAPTER E - LANDSCAPING					
10.1 Paving					
10.1.1 EF1-Resistent concrete pieces above a compacted pavement (vehicle road)	m2	n.a			
10.1.2 EF2-Concrete pieces (pedestrian sidewalk)	m2	n.a			
10.1.3 EF3-Compacted gravel	m2	n.a			
10.1.4 EF4-Earth and humus to plant resistant type grass	m2	n.a			
10.1.5 Smoothed concrete floor with a siloxane sealer (exterior corridor)	m2	n.a			
10.2 Forestation					
10.2.1 New trees (local species to be defined)	un	n.a			
10.2.1 New bushes (local species to be defined)	m/l	n.a			

End of BoQ_Saudy Maternity Hospital_ 31 January 2020



Project: Rehabilitation of the Saudi Maternity Hospital	Location: Kassala Health Citadel, Sudan	
Date: 31 January 2020	UNOPS	

BILL OF QUANTITIES-PACK 5-ARC

NOTES:

The articles include all the preparatory and basic work, including all the materials and accessories, required for their execution and perfect finish.

demolished or removed shall be considered as reusable and all necessary actions must be taken for their perfect conservation and placed in storage or in the successful tenderer's outlet, all according to the indications of the inspection.

*a.w-all works

**n.a- non applicable

Artº	Description of works	Un.	Quant.	Unit Price	Total
CHAPTER A - CONSTRUCTION SITE					
1.	Construction site assembly and disassembly, including plate construction site identifier and fencing; provisional installations namely for the developer; supervision; materials warehouse; equipment and tools; facilities for personnel services; sanitary facilities; provisional networks	a.w	1	6,000.00 €	
2.	Implementation and development of the health,safety and security plan	a.w	1	1,000.00 €	
3.	Implementation and development of the prevention, construction and demolition waste management	a.w	1	1,500.00 €	
4.	Execution of the final cleaning of the work, including all the necessary work and removal from the contractor's deposit of surplus products	a.w	1	1,500.00 €	
SUBTOTAL A					10,000.00 €
CHAPTER B - DEMOLITIONS					
1.	Demolition element by element from the roof, of all the elements proposed for demolition, including removal single element with temporary shoring if necessary, removal and classification of debris and waste, for subsequent transport to the authorised outlet, all necessary work, materials and equipment.	a.w	1	100.00 €	
2.	Execution of all necessary survey work/ disassembly of water installations and equipment, existing sewers, electrics, telephone, etc., including loading, carriage to and unloading of all cargoes materials.	a.w	1	100.00 €	
3.	Demolition of existing brick walls, according to demolition plan, including removal of products from demolition, to dumping ground, to any distance	a.w	1	100.00 €	
4.	Demolition of existing indoor and outdoor doors and windows according to demolition plan, including removal of products from demolition, to dumping ground, to any distance.	a.w	1	100.00 €	
5.	Execution of demolition of existing indoor floors of ceramic tiles, for subsequent application of new coatings including removal of products from demolition, to dumping ground, at any distance.	a.w	1	100.00 €	
6.	Execution of removal of existing bathroom fittings, including removal of products from demolition, to dumping ground, at any distance.	a.w	1	100.00 €	
7.	Existing walls to be demolished according to demolition plan	m2	n.a		
SUBTOTAL B					600.00 €
CHAPTER C - GENERAL CIVIL AND INFRASTRUCTURE CONSTRUCTION					
1.	WALLS				
1.1	Exterior Walls				
1.1.1	P1 -nominated on the project as Skin Wall; baked terracota pieces	m2	n.a		



Continuation of chapter C

1.	WALLS				
1.1	Exterior Walls				
1.1.2	P2- nominated on the project as Thermal Block; 20cm thermal clay brick with massive brick exterior covering (please see detail on shett A.05.02)	m2	n.a		
1.2	Interior Walls				
1.2.1	P3-Internal mineral insulation liner with plasterboard covering (please see detail on shett A.05.02)	m2	n.a		
1.2.2	P4- Interior plasterboard partition (please see detail on shett A.05.02)	m2	n.a		
1.2.3	P5- 11 cm brick double plastered (please see detail on shett A.05.02)	m2	n.a		
1.2.4	P6- 15cm brick double plastered (please see detail on shett A.05.02)	m2	n.a		
1.2.5	P7- 20cm brick double plastered (please see detail on shett A.05.02)	m2	n.a		
2.	FENCE				
2.1	Proposed:nominated on the project as Skin Wall; with baked terracota pieces (please see sheet number: A.05.03- Constructive Details,Walls Fence)	m/l	n.a		
2.2	Future Expansion: nominated on the project as Skin Wall; with baked terracota pieces (please see sheet number: A.05.03- Constructive Details,Walls Fence)	m/l	n.a		
3.	COATINGS				
3.1	Coatings Interior Walls				
3.2.1	W2- 0.15x0.15m white ceramic tiles till 2.10m height	m2	n.a		
3.2	Coatings Interior Flooring				
3.2.1	F2- 0.30x0.30m Porcelanic tiles,Anti-split, Grey colored	m2	n.a		
3.2.2	F2- Baseboard	m/l	n.a		
3.2.3	F3- 0.60x0.60m Porcelanic tiles, Grey colored	m2	n.a		
3.2.4	F3- Baseboard	m/l	n.a		
3.2.5	F4- 0.60x0.60m Porcelanic tiles, Grey colored	m2	n.a		
3.2.6	F4- Baseboard	m/l	n.a		
3.2.7	F5-0.60x0.60m Porcelanic tiles,Yellow colored	m2	n.a		
3.2.8	F5- Baseboard	m/l	n.a		
3.	COATINGS				
3.2	Coatings Interior Flooring				
3.2.9	F6-0.60x0.60m Porcelanic tiles, Purple colored	m2	n.a		
3.2.10	F6- Baseboard	m/l	n.a		
3.2.11	F7-0.60x0.60m Porcelanic tiles, Blue colored	m2	n.a		
3.2.12	F7- Baseboard	m/l	n.a		
3.2.13	F8-0.60x0.60m Porcelanic tiles, Blue colored	m2	n.a		
3.2.14	F8- Baseboard	m/l	n.a		
4.	CEILINGS				
4.1	Interior Ceilings				
4.1.2	Supply and execution of false interior ceiling: waterproofing plasterboard to be painted with paint (W1) including transport, unloading, support structure, backstrips, bars and reinforcements, relapses, opening of negatives for lighting, all complementary materials, works and accessories	m2	n.a		
5.	INTERIOR PAVING				
5.1	Floor levelling with screed levelling before the appllyance of new coatings	a.w	1	100.00 €	100.00 €



6.	PAINTINGS				
6.1	Exterior Paintings				
6.1.1	E2- "terracota" acrylic paint (RAL colour 2013)	m2	n.a		
6.1.2	E3 -"concrete grey" acrylic paint (RAL colour 7023)	m2	n.a		
6.1.3	E4-"pure white" poliuretane paint for metalic structure (RAL colour 9010)	m2	n.a		
6.2	Interior Paintings				
6.2.1	W1-Washable acrylic white paint	m2	n.a		
7.	WOODWORK				
7.1	A1:MDF 20mm WITH HPL; 3,40 x 0,70 x 1,10m	un	n.a		
7.2	A2:MDF 20mm WITH HPL; 1,20 x 0,70 x 1,10m	un	n.a		
7.3	A3:MDF 20mm WITH HPL; 1,10 x 0,70 x 1,10m)+(2,50 x 0,70 x 1,10m)	un	n.a		
7.4	A4:MDF 20mm WITH HPL; 2,10 x 0,70 x 1,10m	un	n.a		
7.5	A5: MDF 20mm WITH HPL; 2,55 x 0,70 x 1,10m	un	n.a		
7.6	B1: MDF 20mm WITH HPL ;1,65 x 0,60 x 0,90m	un	n.a		
7.7	B1': MDF 20mm WITH HPL; 1,65 x 0,35 x 0,60m	un	n.a		
7.8	B2: MDF 20mm WITH HPL; 2,15 x 0,60 x 0,90m	un	n.a		
7.9	A3':MDF 20mm WITH HPL; 2,5 x 0,70 x 1,10m)+(1,10 x 0,70 x 1,10m)	un	n.a		

7.	WOODWORK				
7.10	B2': MDF 20mm WITH HPL; 2,15 x 0,35 x 0,60m	un	n.a		
7.11	B3: MDF 20mm WITH HPL; 1,90 x 0,60 x 0,90m	un	n.a		
7.12	B3':MDF 20mm WITH HPL; 1,90 x 0,35 x 0,60m	un	n.a		
7.13	B4: MDF 20mm WITH HPL; 2,55 x 0,60 x 0,90m	un	n.a		
7.14	B4': MDF 20mm WITH HPL;2,55 x 0,35 x 0,60m	un	n.a		
7.15	B5: MDF 20mm WITH HPL; 1,80 x 0,60 x 0,90m	un	n.a		
7.16	B6: MDF 20mm WITH HPL; 1,50 x 0,60 x 0,90m	un	n.a		
7.17	C1: MDF 30mm WITH HPL; 1,65 x 0,60 x 0,75m	un	n.a		
7.18	C2: MDF 30mm WITH HPL; 1,70 x 0,60 x 0,75m	un	n.a		
7.19	C3: MDF 30mm WITH HPL; 2,20 x 0,60 x 0,75m	un	n.a		
7.20	C4:MDF 30mm WITH HPL; 2,40 x 0,60 x 0,75m	un	n.a		
7.21	C5: MDF 30mm WITH HPL;2,10 x 0,60 x 0,75m	un	n.a		
7.22	C6: MDF 30mm WITH HPL;1,90 x 0,60 x 0,75m	un	n.a		
7.23	D1: MDF 50mm WITH HPL;4,95 x 0,70 x 0,75m	un	n.a		
7.24	D2: MDF 50mm WITH HPL;1,70 x 0,70 x 0,75m	un	n.a		

8.	DOORS				
8.1	Exterior Doors				
8.1.1	G.1- Double swing gate with fixed lateral sashes / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047" (dim. 4,22x2,10m). All accessories included.	un	n.a		
8.1.2	G.2- Double swing gate with fixed lateral sashes / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047" (dim. 2,40x2,10m). All accessories included.	un	n.a		
8.1.3	G.3- Single swing gate with 1 fixed lateral sash / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047"(dim. 1,62x2,10m). All accessories included.	un	n.a		
8.1.4	G.4- Double swing gate / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047"(dim. 1,65x2,10m). All accessories included.	un	n.a		
8.1.5	G.5- Double swing gate with fixed lateral sashes / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047"(dim. 3,54x2,10m). All accessories included.	un	n.a		
8.1.6	G.6- Single swing gate with 1 fixed lateral sash / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047"(dim. 2,00x2,10m). All accessories included.	un	n.a		
8.1.7	G.6- Single swing gate with 1 fixed lateral sash / tubular galvanized steel gate / polyester thermosetting powder coating in "light grey RAL 7047"(dim. 1,50x2,10m). All accessories included.	un	n.a		
8.2	Interior Doors				
8.2.1	D.1- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 0,70x2,10m). Handle in U-	un	n.a		
8.2.2	D.2- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 0,80x2,10m). Handle in U-	un	n.a		
8.2.3	D.3- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 0,90x2,10m). Handle in U-	un	n.a		
8.2.4	D.4- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 0,80x2,70m). Upper	un	n.a		
8.2.5	D.5- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 0,85x2,70m). Upper	un	n.a		



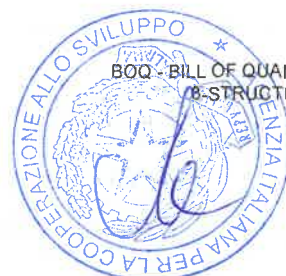
8.2.6	D.6- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 1,00x2,70m). Upper	un	n.a		
8.2.7	D.7- Single swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 1,10x2,70m). Upper	un	n.a		
8.2.8	D.8- Double swing door / MDF or plywood / thermal laminate HPL "Polyrey G012 GRIS" with kick board in stainless steel (dim. 1,60x2,70m). Upper	un	n.a		
8.2.9	D.9- Hermec sliding door / Hermetic system class 4, according UNI EN 12207 "Grupsa HS-201" / sheet of stainless steel (dim. 1,40x2,10m). No handle,	un	n.a		
8.2.10	D.10- Single swing door / MDF or plywood / thermal laminate HPL "light grey RAL 7047" with a kick board in stainless steel (dim. 1,00x3,10m). Upper	un	n.a		
8.2.11	D.11- Double swing door / MDF or plywood / thermal laminate HPL "light grey RAL 7047" with a kick board in stainless (dim. 1,50x3,10m). Upper transom	un	n.a		
8.2.12	D.11- Double swing door / MDF or plywood / thermal laminate HPL "light grey RAL 7047" with a kick board in stainless (dim. 1,60x3,10m). Upper transom	un	n.a		
8.3	Technical cabinets				
8.3.1	TC.1- Technical cabinet with double swing door / MDF or plywood / thermal laminate HPL white "RAL 9010" (dim. 1,20x2,10). With key / no handle. All accessories included.	un	n.a		
8.3.2	TC.2- Technical cabinet with double swing door / Galvanized steel/ painted "light grey RAL 7047" (dim. 1,20x2,10). With key / no handle. All accessories included.	un	n.a		
8.3.3	TC.3- Technical cabinet with single door / MDF or plywood/ thermal laminate HPL "white RAL 9010" (dim. 0,60x2,10). With key / no handle. All accessories included.	un	n.a		
8.3.4	TC.4- Technical cabinet with double swing door / Galvanized steel/ painted "light grey RAL 7047" (dim. 1,60x2,10). With key / no handle. All accessories included.	un	n.a		
8.3.5	TC.5- Technical cabinet with double swing door /MDF or plywood/thermolaminated "RAL 9010"	un	n.a		
9	WINDOWS				
9.1	Interior Windows				
9.1.1	W.1- Slide and fixed window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 3,00x1,20). All accessories included.	un	n.a		
9.1.2	W.2- Slide window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 2,25x1,50m). All accessories included.	un	n.a		
9.1.3	W.3- Slide window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 1,00x1,40m). All accessories included.	un	n.a		
9.1.4	W.4- Boom hung window sash / Anodized aluminium / Laminated 5+5mm clear glass (dim. 0,60x1,50m). All accessories included.	un	n.a		
9.1.5	W.5- Slide window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 1,50x2,00m). All accessories included.	un	n.a		
9.1.6	W.6- Boom hung window sash / Anodized aluminium / Laminated 5+5mm clear glass (dim. 0,75x1,50m). All accessories included.	un	n.a		
9.1.7	W.7- Slide window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 1,50x1,50m). All accessories included.	un	n.a		
9.1.8	W.8- Slide window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 1,50x1,50m). All accessories included.	un	n.a		
9.1.9	W.9- Slide window sashes / Anodized aluminium / Laminated 5+5mm clear glass (dim. 1,00x1,30m). All accessories included.	un	n.a		
9.1.10	W.10- Fixed interior window / Anodized aluminium frame / Laminated 5+5mm clear glass (dim. 1,20x1,10m). All accessories included.	un	n.a		
9.1.11	W.11- Fixed interior window / Anodized aluminium frame / Laminated 5+5mm clear glass (dim. 2,20x1,10m). All accessories included.	un	n.a		
9.2	Shadding				
9.2.1	S.1- Existing shutters to be relocated in the west and south exposed windows (dim. 1,50x1,20m). All accessories included.	un	n.a		
9.3	Window Sill				
9.3.1	Existing Pre-fabricated concrete window sill (same width as the window) to be relocated	un	n.a		
10	CANOPY				
10.1	Sandwich Roof Panels				
10.1.1	5 Ribs profiled outer sheet, exterior coating in white paint with good UV resistance (RAL 9010), core in Mineral wool with 80 mm thickness , interior coating: polymer coating resistant to mould (RAL 9010), Fire performance according to TS EN 13501-1,A2-s1	m2	172.76	45.00 €	7,774.20 €
10.2	Downspouts				
10.2.1	Metal downspouts painted in white with good UV resistance (RAL 9010) all joints and connections included	m/l	8.70	10.00 €	87.00 €



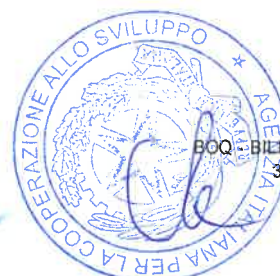
10.3	Gutters				
10.3.1	White Aluminium gutters, all joints included. Cover of the gutter with a lacquered (RAL 9010) metallic sheet with 48 cm high (please see detail on A.05.02 Walls and Gutters) held in place with metal clamps.	m/l	n.a		
11.	VARIOUS				
11.1	Supply and placement of break-proof mirrors placed complanarly with the tile, including transportation, discharge, fixing accessories, tapes and all materials and complementary accessories. Mirror: 1,2m height with variable lenght	m2	n.a		
SUBTOTAL C					7,961.20 €
CHAPTER D - INSTALLATION AND EQUIPMENT OF WATER AND SEWAGE SYSTEM					
1.	SANITARY EQUIPMENT				
1.1	Supply and laying of ceramic sanitary ware white glazed including transport, unloading, fastenings and connections, seals and all complementary materials, works and accessories	a.w	1	500.00 €	500.00 €
1.2	Toilets	un	n.a		
1.3	Disabled Toilets	un	n.a		
1.4	Disabled Toilets Bars kits	un	n.a		
1.5	Squatting Toilet	un	n.a		
1.6	Basin white glazed. dimensions: 45*35	un	n.a		
1.7	Basin white glazed. dimensions: 60*45	un	n.a		
1.8	Shower Kit	un	n.a		
1.9	Drain	un	n.a		
1.10	Foot washing bathtub	un	n.a		
1.11	Kitchen Sink	un	n.a		
1.12	Scrub Basin in stainless steel	un	n.a		
1.13	CSSD Basin	un	n.a		
1.14	Soiled Tray	un	n.a		
CHAPTER E - LANDSCAPING					
10.1	Paving				
10.1.1	EF1-Resistent concrete pieces above a compacted pavement (vehicle road)	m2	n.a		
10.1.2	EF2-Concrete pieces (pedestrian sidewalk)	m2	n.a		
10.1.3	EF3-Compacted gravel	m2	n.a		
10.1.4	EF4-Earth and humus to plant resistant type grass	m2	n.a		
SUBTOTAL D					500.00 €
SUBTOTAL ARCHITECTURAL					19,061.20 €
10.1.5	Smoothed concrete floor with a siloxane sealer (exterior corridor)	m2	n.a		
10.2	Forestation				
10.2.1	New trees (local species to be defined)	un	n.a		
10.2.1	New bushes (local species to be defined)	m/l	n.a		
End of BoQ_Saudy Maternity Hospital_ 31 January 2020					



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
3 STRUCTURES						
3.1 BLOCK A						
3.1.1	EARTH-WORKS					
3.1.1.1	Excavation					
3.1.1.1.1	Excavation on land of any nature in order to obtain project levels, including loading and transport of surplus material to the dump, eventual bracing, pumping of the tributary water to the excavation, regularization of the bottom of the box and replacement of land whenever necessary, all executed in order to obtain the levels indicated in the design.	m3	19.8	5.00 €		99.00 €
3.1.1.2	Excavation for foundations					
3.1.1.2.1	Excavation on land of any nature for the implementation of foundations elements, including loading and transport of surplus material to the dump, eventual bracing, pumping of the tributary water to the excavation, regularization of the bottom of the box and replacement of land whenever necessary, all executed in order to obtain the levels indicated in the design.	m3	33.9	5.00 €		169.57 €
3.1.2	CONCRETE					
3.1.2.1	Blinding concrete					
3.1.2.1.1	Concrete C16/20, for regularization of foundations, including supply, transport, placement, compaction and curing, according to the design.	m3	0.7	100.00 €		66.40 €
3.1.2.1.2	Concrete C16/20, for foundation well, including supply, transport, placement, compaction and curing, according to the design.	m3	21.5	100.00 €		2,152.00 €
	Note: For the quantification of the concrete in foundation pits (and the respective excavation) it was considered that the soil with the appropriate characteristics to support the projected structures is 3m deep, measured in relation to the level of the pavement. This assumption must be verified on site.					
3.1.3	REINFORCED CONCRETE					
3.1.3.1	Foundations					
3.1.3.1.1	Reinforced concrete in Footing Standard grey concrete C25/30, including supply, transport, placement, compaction, curing and incorporation of water-repellent, according to the design. Reinforcement in A500 steel, including supply, transport, folding, cutting, assembly, anchorages, splicing, scrap and laying, according to the design. Formwork for concrete, in metal or wood molds, without defects, including transport, shoring, oil extraction and subsequent disassembly, according to the design.	m3	2.9	250.00 €		720.00 €
3.1.3.1.2	Reinforced concrete in Locking Beams Standard grey concrete C25/30, including supply, transport, placement, compaction, curing and incorporation of water-repellent, according to the design. Reinforcement in A500 steel, including supply, transport, folding, cutting, assembly, anchorages, splicing, scrap and laying, according to the design. Formwork for concrete, in metal or wood molds, without defects, including transport, shoring, oil extraction and subsequent disassembly, according to the design.	m3	4.3	250.00 €		1,072.00 €
3.1.3.1.3	Reinforced concrete in Plinths Standard grey concrete C25/30, including supply, transport, placement, compaction, curing and incorporation of water-repellent, according to the design. Reinforcement in A500 steel, including supply, transport, folding, cutting, assembly, anchorages, splicing, scrap and laying, according to the design. Formwork for concrete, in metal or wood molds, without defects, including transport, shoring, oil extraction and subsequent disassembly, according to the design.	m3	0.4	270.00 €		108.00 €
3.1.4	OTHER SLABS					
3.1.4.1	Ground Floor Slab Ground floor consisting of a concrete slab C25/30 0,15m thick, including surface hardener, top and bottom welded reinforcement mesh, PVC membrane with 0,12mm thick, concrete slab C16/20, 0.05m thick, crushed material densely packed with 0.30m thickness, regularization and compacting of the existing ground, supply, transport, laying and all the necessary complementary work, all executed according to the design.	m2	34.4	50.00 €		1,720.00 €
3.1.5	WATERPROOFING					
3.1.5.1	Waterproofing type system Impermeability of the elements buried in contact with the ground, with application of bituminous paint in two coats, including supply, transport and placement, folds, overlaps, finishes and losses, all executed according to the project.	m2	54.9	5.00 €		274.30 €
3.1.6	STEEL STRUCTURE					
3.1.6.1	Structure in Steel Profiles Steel structure in S275 JR/JRH resistance steel profiles, including in the unit price the cost of the following works: supply, transport, assembly, welding and / or screw connections, plates, reinforcements, supports, waste, anchors, screws, nut, washers , connectors, bars, anchors, welds, holes, chemical sealing, mortar, scraping, anti-corrosion and any additional work required, according to the project.					
3.1.6.1.1	IPE 270	kg	324.9	3.00 €		974.70 €



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
3	STRUCTURES					
3.1.6.1.2	IPE 240	kg	368.4	3.00 €	1,105.20 €	
3.1.6.1.3	IPE 200	kg	201.6	3.00 €	604.80 €	
3.1.6.1.4	IPE 160	kg	284.4	3.00 €	853.20 €	
3.1.6.1.5	CHS 200x5	kg	412.8	3.00 €	1,238.40 €	
3.1.6.1.6	SHS 50x50x4	kg	156.3	3.00 €	469.02 €	
3.1.6.1.7	SHS 40x40x4	kg	53.1	3.00 €	159.36 €	
3.1.6.2	Execution of fire protection in steel profiles (article 3.1.6.1) including in the unit price the cost of the following works: surface preparation, intumescent painting with fire resistance up to 60 minutes and any additional work required, according to the project.	gv	1.0	150.00 €	150.00 €	
SUBTOTAL STRUCTURAL						11,935.95 €
Important Notes: 1) The measures to determine quantities relating earth-works, were obtained from the geometric shapes defined in the design. No blistering, overcrowing, slopes or work platforms were considered. These costs should be included in the unit price of the excavation presented by the contractor. 2) Prior the start of the excavation, the contractor must certify whether or not plant network, such as water, sanitation, gas, electrical and telephone installations and provision of their protection or diversion, must be reflected in the unit price of the excavation presented by the contractor. 3) The measures to determinate the quantities of reinforced concrete were obtained from geometric shapes defined in the design. 4) The measurement of steel does not consider anchorages, overlays, hooks, scrap and accessories. These costs must be included in the unit price per kg submitted by the contractor. 5) In order to obtain all the characteristics of the materials, including concrete and steel, should be consulted the drawing of Table Frame of Materials and General Notes.						

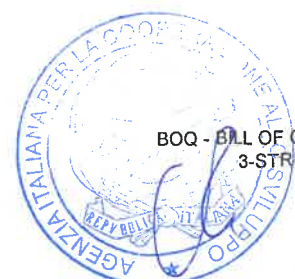


BOQ - BILL OF QUANTITY
3 STRUCTURES

CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
3 STRUCTURES						
3.1 BLOCK J						
3.1.1	EARTH-WORKS					
3.1.1.1	Excavation					
3.1.1.1.1	Excavation on land of any nature in order to obtain project levels, including loading and transport of surplus material to the dump, eventual bracing, pumping of the tributary water to the excavation, regularization of the bottom of the box and replacement of land whenever necessary, all executed in order to obtain the levels indicated in the design.	m3	27.1	5.00 €	135.58 €	
3.1.1.2	Excavation for foundations					
3.1.1.2.1	Excavation on land of any nature for the implementation of foundations elements, including loading and transport of surplus material to the dump, eventual bracing, pumping of the tributary water to the excavation, regularization of the bottom of the box and replacement of land whenever necessary, all executed in order to obtain the levels indicated in the design.	m3	43.4	5.00 €	217.08 €	
3.1.2	CONCRETE					
3.1.2.1	Blinding concrete					
3.1.2.1.1	Concrete C16/20, for regularization of foudations, including supply, transport, placement, compaction and curing, according to the design.	m3	1.5	100.00 €	153.50 €	
3.1.2.1.2	Concrete C16/20, for foundation well, including supply, transport, placement, compaction and curing, according to the design.	m3	29.3	100.00 €	2,931.60 €	
	Note: For the quantification of the concrete in foundation pits (and the respective excavation) it was considered that the soil with the appropriate characteristics to support the projected structures is 3m deep, measured in relation to the level of the pavement. This assumption must be verified on site.					
3.1.3	REINFORCED CONCRETE					
3.1.3.1	Foundations					
3.1.3.1.1	Reinforced concrete in Footing					
	Standard grey concrete C25/30, including supply, transport, placement, compaction, curing and incorporation of water-repellent, according to the design. Reinforcement in A500 steel, including supply, transport, folding, cutting, assembly, anchorages, splicing, scrap and laying, according to the design. Formwork for concrete, in metal or wood molds, without defects, including transport, shoring, oil extraction and subsequent disassembly, according to the design.	m3	5.0	250.00 €	1,240.00 €	
3.1.3.1.2	Reinforced concrete in Locking Beams					
	Standard grey concrete C25/30, including supply, transport, placement, compaction, curing and incorporation of water-repellent, according to the design. Reinforcement in A500 steel, including supply, transport, folding, cutting, assembly, anchorages, splicing, scrap and laying, according to the design. Formwork for concrete, in metal or wood molds, without defects, including transport, shoring, oil extraction and subsequent disassembly, according to the design.	m3	7.7	250.00 €	1,918.75 €	
3.1.3.1.3	Reinforced concrete in Plinths					
	Standard grey concrete C25/30, including supply, transport, placement, compaction, curing and incorporation of water-repellent, according to the design. Reinforcement in A500 steel, including supply, transport, folding, cutting, assembly, anchorages, splicing, scrap and laying, according to the design. Formwork for concrete, in metal or wood molds, without defects, including transport, shoring, oil extraction and subsequent disassembly, according to the design.	m3	1.0	270.00 €	259.20 €	
3.1.4	OTHER SLABS					
3.1.4.1	Ground Floor Slab					
	Ground floor consisting of a concrete slab C25/30, 0.15m thick, including surface hardener, top and bottom welded reinforcement mesh, PVC membrane with 0.12mm thick, oncrete slab C16/20, 0.05m thick, crushed material densely packed with 0.30m thickness, regularization and compacting of the existing ground, supply, transport, laying and all the necessary complementary work, all executed according to the design.	m2	37.7	50.00 €	1,884.00 €	
3.1.5	WATERPROOFING					
3.1.5.1	Waterproofing type system					
	Impermeability of the elements buried in contact with the ground, with application of bituminous paint in two coats, including supply, transport and placement, folds, overlaps, finishes and losses, all executed according to the project.	m2	99.7	5.00 €	498.60 €	
3.1.6	STEEL STRUCTURE					
3.1.6.1	Structure in Steel Profiles					
	Steel structure in S275 JR/JRH resistance steel profiles, including in the unit price the cost of the following works: supply, transport, assembly, welding and / or screw connections, plates, reinforcements, supports, waste, anchors, screws, nut, washers, connectors, bars, anchors, welds, holes, chemical sealing, mortar, scraping, anti-corrosion and any additional work required, according to the project.	kg	1,151.6	3.00 €	3,454.77 €	
3.1.6.1.1	IPE 270	kg	1,151.6	3.00 €	3,454.77 €	



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
3 STRUCTURES						
3.1.6.1.2	IPE 140	kg	571.5	3.00 €		1,714.41 €
3.1.6.1.3	L50x50x4	kg	32.1	3.00 €		96.39 €
3.1.6.1.4	CHS 200x5	kg	940.8	3.00 €		2,822.40 €
3.1.6.1.5	SHS 50x50x4	kg	560.8	3.00 €		1,682.53 €
3.1.6.1.6	Rod Ø 12mm	kg	33.6	3.00 €		100.70 €
3.1.6.2	Execution of fire protection in steel profiles (article 3.1.6.1) including in the unit price the cost of the following works: surface preparation, intumescent painting with fire resistance up to 60 minutes and any additional work required, according to the project.	gv	1.0	450.00 €		450.00 €
Important Notes: 1) The measures to determine quantities relating earth-works, were obtained from the geometric shapes defined in the design. No blistering, overcrowing, slopes or work platforms were considered. These costs should be included in the unit price of the excavation presented by the contractor. 2) Prior the start of the excavation, the contractor must certify whether or not plant network; such as water, sanitation, gas, electrical and telephone installations and provision of their protection or diversion, must be reflected in the unit price of the excavation presented by the contractor. 3) The measures to determinate the quantities of reinforced concrete were obtained from geometric shapes defined in the design. 4) The measurement of steel does not consider anchorages, overlays, hooks, scrap and accessories. These costs must be included in the unit price per kg submitted by the contractor. 5) In order to obtain all the characteristics of the materials, including concrete and steel, should be consulted the drawing of Table Frame of Materials and General Notes.						
SUBTOTAL STRUCTURAL						19,559.49 €



BOQ - BILL OF QUANTITY
3-STRUCTURES

CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
8 ELECTRICAL INSTALLATIONS						
8.1 BLOCK A						
	<p>The Bill of Quantities, Specifications, Drawings and all other Contract documents are complementary to each other. It is the responsibility of the Contractor to check the locations and quantities of the materials and equipment to be executed in accordance with the drawings. The unit rate of the materials and equipment shall be based on the Specification, all components as required and specified under each item concerned in the Specifications, Drawings, and all other Contract documents.</p>					
8.1.1	Low Voltage Switchboard					
8.1.1.1	Supply and installation in accordance with the conditions defined in the written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.1.1.2	Normal / Standby Switchboards:					
8.1.1.2.1	- S.A.0 (E)	Un	1	200.00		200.00 €
8.1.1.2.2	- S.A.1 (E)	Un	1	200.00		200.00 €
8.1.1.2.3	- S.A.2 (E)	Un	1	200.00		200.00 €
8.1.1.2.4	- S.A.3 (E)	Un	1	200.00		200.00 €
8.1.1.2.5	- S.A.4 (E)	Un	1	200.00		200.00 €
8.1.1.3	Lighting Command Switchboards:					
8.1.1.3.1	- Q.C.I	Un	1	200.00		200.00 €
8.1.2	Cabling					
8.1.2.1	Supply and installation in accordance with the conditions defined in the written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.1.2.2	LV Distribution Cables (Indoor):					
8.1.2.2.1	- 5G6 mm² Cu/ XLPE/ PVC	m	132	6.00 €		792.00 €
8.1.3	Lighting					
8.1.3.1	Supply and installation in accordance with the conditions defined in the written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.1.3.2	Indoor Lighting:					
8.1.3.2.1	Luminaires:					
8.1.3.2.1.1	- L1	Un	1	60.00 €		60.00 €
8.1.3.2.1.2	- L3.1	Un	13	60.00 €		780.00 €
8.1.3.2.1.3	- L3.2	Un	12	60.00 €		720.00 €
8.1.3.2.1.4	- L4.1	Un	11	60.00 €		660.00 €
8.1.3.2.1.5	- L4.2	Un	36	60.00 €		2,160.00 €
8.1.3.2.1.6	- L8.1	Un	3	60.00 €		180.00 €
8.1.3.2.1.8	- L9.0	Un	1	60.00 €		60.00 €
8.1.3.2.1.9	- L14.3	Un	8	60.00 €		480.00 €
8.1.3.2.1.10	- L15.1	Un	2	60.00 €		120.00 €
8.1.3.2.1.11	- L18.2	Un	2	60.00 €		120.00 €
8.1.3.2.1.12	- L21	Un	14	60.00 €		840.00 €
8.1.3.3	Outdoor Lighting:					
8.1.3.3.1	Luminaires:					
8.1.3.3.1.1	- E1	Un	3	120.00 €		360.00 €
8.1.3.4	Lighting Command Devices					
8.1.3.4.1	- One way switch, surface mounting	Un	14	5.00 €		70.00 €
8.1.3.4.2	- Double pole switch, surface mounting	Un	17	7.00 €		119.00 €
8.1.3.4.3	- Two way switch, surface mounting	Un	6	8.00 €		48.00 €
8.1.3.4.4	- Surface Mounting Movement Detector 180°	Un	5	100.00 €		500.00 €
8.1.3.4.5	- Surface Mounting Movement Detector 360°	Un	6	100.00 €		600.00 €
8.1.3.5	Flush and surface Mounting Boxes:					
8.1.3.5.1	- Surface or Recessed mounting Connection Box	Un	85	40.00		3,400.00 €
8.1.3.6	Electrical cables:					
8.1.3.6.1	Enclosed in a recessed or surface conduiting:					
8.1.3.6.1.1	- 2x 1,5 mm² Cu/ XLPE/ LSZH	m	81	1.00		81.00 €
8.1.3.6.1.2	- 3x 1,5 mm² Cu/ XLPE/ LSZH	m	140	1.50		210.00 €
8.1.3.6.1.3	- 3G 1,5 mm² Cu/ XLPE/ LSZH	m	528	1.50		792.00 €
8.1.3.6.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
8.1.3.6.2.1	- 3x 1,5 mm² Cu/ XLPE/ LSZH	m	53	1.50		79.50 €
8.1.3.6.2.2	- 3G 1,5 mm² Cu/ XLPE/ LSZH	m	210	1.50		315.00 €
8.1.3.7	Metric Rigid Conduit:					
8.1.3.7.1	Enclosed in a recessed or surface conduiting:					
8.1.3.7.1.1	- PEAD Ø 20 mm	m	748	1.00		748.00 €
8.1.4	Emergency / Safety Lighting					
8.1.4.1	Supply and installation in accordance with the conditions defined in the written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.1.4.2	Indoor Lighting:					
8.1.4.2.1	- S1 - maintained (60min Autonomy)	Un	8	120.00		960.00 €
8.1.4.2.2	- S1 - not maintained (60min Autonomy)	Un	33	120.00		3,960.00 €
8.1.4.2.3	- S2 - maintained (60min Autonomy)	Un	3	120.00		360.00 €
8.1.4.3	Electrical cables:					
8.1.4.3.1	Enclosed in a recessed or surface conduiting:					



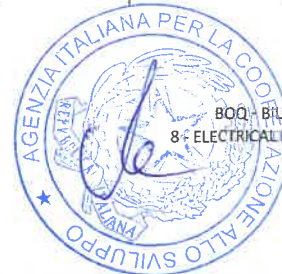
CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
8 ELECTRICAL INSTALLATIONS						
8.1.4.3.1.1	- 3G 1,5 mm² Cu/ XLPE/ LSZH	m	72	1.50	108.00 €	
8.1.4.3.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
8.1.4.3.2.1	- 3G 1,5 mm² Cu/ XLPE/ LSZH	m	121	1.50	181.50 €	
8.1.4.4	Metric Rigid Conduit:					
8.1.4.4.1	Enclosed in a recessed or surface conduiting:					
8.1.4.4.1.1	- PVC Ø 20 mm	m	72	1.00	72.00 €	
8.1.5	General Purpose Power Outlet					
8.1.5.1	Supply and installation in accordance with the conditions defined in the written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.1.5.2	Single Flush and Surface Mounting Devices - Normal/Standby Supply:					
8.1.5.2.1	- Surface mounting earth Socket (BS Type) - 16A IP44	Un	33	7.00	231.00 €	
8.1.5.2.2	- Surface mounting earth Socket (BS Type) - 16A with cover IP44	Un	3	9.00	27.00 €	
8.1.5.2.3	- Flush Mounting Earthed Socket (BS Type) - 16A trunking	Un	17	7.00	119.00 €	
8.1.5.3	Double Flush and Surface Mounting Devices - Normal/Standby Supply:					
8.1.5.3.1	- Surface mounting earth Socket (BS Type) - 16A IP44	Un	1	14.00	14.00 €	
8.1.5.3.2	- Flush Mounting Earthed Socket (BS Type) - 16A trunking	Un	44	14.00	616.00 €	
8.1.5.4	Flush and surface Mounting Boxes:					
8.1.5.4.1	- Surface or Recessed mounting Connection Box	Un	58	2.00	116.00 €	
8.1.5.4.2	- Surface or Recessed mounting Terminal Box	Un	46	3.00	138.00 €	
8.1.5.5	Electrical cables:					
8.1.5.5.1	Enclosed in a recessed or surface conduiting:					
8.1.5.5.1.1	- 3G 2.5 mm² Cu/ XLPE/ LSZH	m	921	3.00	2,763.00 €	
8.1.5.5.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
8.1.5.5.2.1	- 3G 2.5 mm² Cu/ XLPE/ LSZH	m	546	3.00	1,638.00 €	
8.1.5.6	Metric Rigid Conduit:					
8.1.5.6.1	Enclosed in a recessed or surface conduiting:					
8.1.5.6.1.1	- PVC Ø 20 mm	m	921.00	1.00	921.00 €	
8.1.6	Cable tray, Trunking System and Conduits					
8.1.6.1	Supply and installation in accordance with the conditions defined in the written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.1.6.2	Metallic perforated cable tray of side height 60 mm:					
8.1.6.2.1	Electrical Installation:					
8.1.6.2.1.1	- 100 width, strip-galvanised	m	25	12.00	300.00 €	
8.1.6.2.1.2	- 200 width, strip-galvanised	m	65	14.00	910.00 €	
8.1.6.2.1.3	- 300 width, strip-galvanised	m	15	16.00	240.00 €	
8.1.6.2.1.4	- 400 width, strip-galvanised	m	35	18.00	630.00 €	
8.1.6.2.2	ICT Installation:					
8.1.6.2.2.1	- 100 width, strip-galvanised	m	30	12.00	360.00 €	
8.1.6.2.2.2	- 200 width, strip-galvanised	m	65	14.00	910.00 €	
8.1.6.2.2.3	- 300 width, strip-galvanised	m	35	16.00	560.00 €	
8.1.6.2.2.4	- 400 width, strip-galvanised	m	8	18.00	144.00 €	
8.1.6.3	Distribution Cable-Trunkings:					
8.1.6.3.1	- Cable-Trunkings, with 110x50mm	m	150	6.00	900.00 €	
8.1.6.4	Metric Rigid Conduit:					
8.1.6.4.1	Enclosed in a recessed or surface conduiting:					
8.1.6.4.1.1	- PVC Ø 25 mm	m	100	1.50	150.00 €	
8.1.7	Complementary Work					
8.1.7.1	- Construction work to support the implementation of water distribution networks for fire-fighting purposes, as well as all the works, materials and accessories necessary to the correct execution of the task.	Gv	1	300.00 €	300.00 €	
8.1.7.2	- Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task	Gv	1	500.00 €	500.00 €	
8.1.8	Final Work					
8.1.8.1	- Verification, cleaning and testing of all network.	Gv	1	500.00 €	500.00 €	
8.1.8.2	- Elaboration of the pieces drawn according to the work executed.	Gv	1	500.00 €	500.00 €	
TOTAL ELECTRICAL INSTALLATIONS					34,623.00 €	34,623.00 €
8.2 BLOCK B						
8.2.1	The Bill of Quantities, Specifications, Drawings and all other Contract documents are complementary to each other. It is the responsibility of the Contractor to check the locations and quantities of the materials and equipment to be executed in accordance with the drawings. The unit rate of the materials and equipment shall be based on the Specification, all components as required and specified under each item concerned in the Specifications, Drawings, and all other Contract documents.					
8.2.1	Low Voltage Switchboard					
8.2.1.1	Supply and installation in accordance with the conditions defined in the written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.2.1.2	Normal / Standby Switchboards:					
8.2.1.2.1	- S.B.0 (E)	Un	1	6.00	6.00 €	
8.2.2	Cabling					



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
8 ELECTRICAL INSTALLATIONS						
8.2.2.1	Supply and installation in accordance with the conditions defined in the written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.2.2.2	Distribution Cables (Indoor):					
8.2.2.2.1	- 5G6 mm² Cu/ XLPE/ PVC	ml	33	6.00	198.00 €	
8.2.3	Lighting					
8.2.3.1	Supply and installation in accordance with the conditions defined in the written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.2.3.2	Indoor Lighting:					
8.2.3.2.1	Luminaires:					
8.2.3.2.1.1	- L3.1	Un	3	60.00	180.00 €	
8.2.3.2.1.2	- L4.2	Un	16	60.00	960.00 €	
8.2.3.2.1.3	- L21	Un	3	60.00	180.00 €	
8.2.3.3	Lighting Command Devices					
8.2.3.3.1	- Double pole switch, surface mounting	Un	8	7.00	56.00 €	
8.2.3.3.2	- Surface Mounting Movement Detector 360°	Un	1	100.00	100.00 €	
8.2.3.4	Flush and surface Mounting Boxes:					
8.2.3.4.1	- Surface or Recessed mounting Connection Box	Un	21			
8.2.3.5	Electrical cables:					
8.2.3.5.1	Enclosed in a recessed or surface conduiting:					
8.2.3.5.1.1	- 3x 1,5 mm² Cu/ XLPE/ LSZH	ml	44	1.50	66.00 €	
8.2.3.5.1.2	- 3G 1,5 mm² Cu/ XLPE/ LSZH	ml	54	1.50	81.00 €	
8.2.3.5.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
8.2.3.5.2.1	- 3G 1,5 mm² Cu/ XLPE/ LSZH	ml	69	1.50	103.50 €	
8.2.3.6	Metric Rigid Conduit:					
8.2.3.6.1	Enclosed in a recessed or surface conduiting:					
8.2.3.6.1.1	- PEAD Ø 20 mm	ml	98	1.00	98.00 €	
8.2.4	Emergency / Safety Lighting					
8.2.4.1	Supply and installation in accordance with the conditions defined in the written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.2.4.2	Indoor Lighting:					
8.2.4.2.1	- S1 - maintained (60min Autonomy)	Un	1	120.00	120.00 €	
8.2.4.2.2	- S1 - not maintained (60min Autonomy)	Un	8	120.00	960.00 €	
8.2.4.2.3	- S2 - maintained (60min Autonomy)	Un	1	120.00	120.00 €	
8.2.4.3	Electrical cables:					
8.2.4.3.1	Enclosed in a recessed or surface conduiting:					
8.2.4.3.1.1	- 3G 1,5 mm² Cu/ XLPE/ LSZH	ml	12	1.50	18.00 €	
8.2.4.3.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
8.2.4.3.2.1	- 3G 1,5 mm² Cu/ XLPE/ LSZH	ml	6	1.50	9.00 €	
8.2.4.4	Metric Rigid Conduit:					
8.2.4.4.1	Enclosed in a recessed or surface conduiting:					
8.2.4.4.1.1	- PVC Ø 20 mm	ml	12	1.00	12.00 €	
8.2.5	General Purpose Power Outlet					
8.2.5.1	Supply and installation in accordance with the conditions defined in the written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.2.5.2	Single Flush and Surface Mounting Devices - Normal/Standby Supply:					
8.2.5.2.1	- Surface mounting earth Socket (BS Type) - 16A IP44	Un	10	7.00	70.00 €	
8.2.5.2.2	- Flush Mounting Earthed Socket (BS Type) - 16A trunking	Un	8	7.00	56.00 €	
8.2.5.3	Double Flush and Surface Mounting Devices - Normal/Standby Supply:					
8.2.5.3.1	- Flush Mounting Earthed Socket (BS Type) - 16A trunking	Un	16	14.00	224.00 €	
8.2.5.4	Flush and surface Mounting Boxes:					
8.2.5.4.1	- Surface or Recessed mounting Connection Box	Un	22	2.00	44.00 €	
8.2.5.4.2	- Surface or Recessed mounting Terminal Box	Un	16	3.00	48.00 €	
8.2.5.5	Electrical cables:					
8.2.5.5.1	Enclosed in a recessed or surface conduiting:					
8.2.5.5.1.1	- 3G 2.5 mm² Cu/ XLPE/ LSZH	ml	259	3.00	777.00 €	
8.2.5.5.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
8.2.5.5.2.1	- 3G 2.5 mm² Cu/ XLPE/ LSZH	ml	158	3.00	474.00 €	
8.2.5.6	Metric Rigid Conduit:					
8.2.5.6.1	Enclosed in a recessed or surface conduiting:					
8.2.5.6.1.1	- PVC Ø 20 mm	ml	259	1.00	259.00 €	
8.2.6	Cable tray, Trunking System and Conduits					
8.2.6.1	Supply and installation in accordance with the conditions defined in the written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.2.6.2	Metallic perforated cable tray of side height 60 mm:					
8.2.6.2.1	Electrical Installation:					
8.2.6.2.1.1	- 100 width, strip-galvanised	ml	28	12.00	336.00 €	
8.2.6.2.1.2	- 200 width, strip-galvanised	ml	13	14.00	182.00 €	
8.2.6.2.1.3	- 300 width, strip-galvanised	ml	23	16.00	368.00 €	
8.2.6.2.2	ICT Installation:					
8.2.6.2.2.1	- 100 width, strip-galvanised	ml	25	12.00	300.00 €	



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
8 ELECTRICAL INSTALLATIONS						
8.2.6.2.2.2	- 200 width, strip-galvanised	mi	15	14.00	210.00 €	
8.2.6.2.2.3	- 300 width, strip-galvanised	mi	18	16.00	288.00 €	
8.2.6.3	Distribution Cable-Trunkings:					
8.2.6.3.1	- Cable-Trunkings, with 110x50mm	mi	40			
8.2.6.4	Metric Rigid Conduit:					
8.2.6.4.1	Enclosed in a recessed or surface conduiting:					
8.2.6.4.1.1	- PVC Ø 25 mm	mi	70.00	1.50	105.00 €	
8.2.7	Complementary Work					
8.2.7.1	- Construction work to support the implementation of water distribution networks for fire-fighting purposes, as well as all the works, materials and accessories necessary to the correct execution of the task.	Gv	1	300.00	300.00 €	
8.2.7.2	- Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task	Gv	1	500.00	500.00 €	
8.2.8	Final Work					
8.2.8.2	- Verification, cleaning and testing of all network.	Gv	1	500.00	500.00 €	
8.2.8.3	- Elaboration of the pieces drawn according to the work executed.	Gv	1	500.00	500.00 €	
TOTAL ELECTRICAL INSTALLATIONS					8,808.50 €	8,808.50 €
8.3 BLOCK C						
8.3.1	The Bill of Quantities, Specifications, Drawings and all other Contract documents are complementary to each other. It is the responsibility of the Contractor to check the locations and quantities of the materials and equipment to be executed in accordance with the drawings. The unit rate of the materials and equipment shall be based on the Specification, all components as required and specified under each item concerned in the Specifications, Drawings, and all other Contract documents.					
8.3.1.1	Low Voltage Switchboard Supply and installation in accordance with the conditions defined in the written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.3.1.2	Normal / Standby Switchboards:					
8.3.1.2.1	- S.C.S (E)	Un	1	200.00	200.00 €	
8.3.2	Cabling Supply and installation in accordance with the conditions defined in the written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.3.2.2	Distribution Cables (Outdoor):					
8.3.2.2.1	- 3G6 mm² Al/ XLPE/ PVC	mi	55	7.00	385.00 €	
8.3.3	Lighting Supply and installation in accordance with the conditions defined in the written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.3.3.2	Indoor Lighting:					
8.3.3.2.1	Luminaires:					
8.3.3.2.1.1	- L9.0	Un	2	60.00	120.00 €	
8.3.3.2.1.2	- L9.2	Un	1	60.00	60.00 €	
8.3.3.3	Outdoor Lighting:					
8.3.3.3.1	Luminaires:					
8.3.3.3.1.1	- E1	Un	4	120.00	480.00 €	
8.3.3.3.2	Column:					
8.3.3.3.2.1	- C1 (Metal column of galvanized steel of single section, conical shape with height up to 8m)	Un	2	12.00	24.00 €	
8.3.3.4	Lighting Command Devices					
8.3.3.4.1	- One way switch, surface mounting	Un	1	5.00	5.00 €	
8.3.3.4.2	- Two way switch, surface mounting	Un	2	8.00	16.00 €	
8.3.3.5	Flush and surface Mounting Boxes:					
8.3.3.5.1	- Surface or Recessed mounting Connection Box	Un	2	40.00	80.00 €	
8.3.3.6	Electrical cables:					
8.3.3.6.1	Enclosed in a recessed or surface conduiting:					
8.3.3.6.1.1	- 2x 1,5 mm² Cu/ XLPE/ LSZH	mi	17	1.00	17.00 €	
8.3.3.6.1.2	- 3x 1,5 mm² Cu/ XLPE/ LSZH	mi	15	1.50	22.50 €	
8.3.3.6.1.3	- 3G 1,5 mm² Cu/ XLPE/ LSZH	mi	66	1.50	99.00 €	
8.3.3.6.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
8.3.3.6.2.1	- 3x 1,5 mm² Cu/ XLPE/ LSZH	mi	53	1.50	79.50 €	
8.3.3.6.2.2	- 3G 1,5 mm² Cu/ XLPE/ LSZH	mi	210	1.50	315.00 €	
8.3.3.7	Metric Rigid Conduit:					
8.3.3.7.1	Enclosed in a recessed or surface conduiting:					
8.3.3.7.1.1	- PEAD Ø 20 mm	mi	98	1.00	98.00 €	
8.3.4	Emergency / Safety Lighting					
8.3.4.1	Supply and installation in accordance with the conditions defined in the written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
8 ELECTRICAL INSTALLATIONS						
8.3.4.2	Indoor Lighting:	Un	1	120.00	120.00 €	
8.3.4.2.1	- S3 - maintained (60min Autonomy)					
8.3.4.3	Electrical cables:	m	6	1.50	9.00 €	
8.3.4.3.1	Enclosed in a recessed or surface conduiting: - 3G 1,5 mm² Cu/ XLPE/ LSZH					
8.3.4.4	Metric Rigid Conduit:	m	6	1.00	6.00 €	
8.3.4.4.1	Enclosed in a recessed or surface conduiting: - PVC Ø 20 mm					
8.3.5	General Purpose Power Outlet					
8.3.5.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification; drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.3.5.2	Single Flush and Surface Mounting Devices - Normal/Standby Supply:	Un	1	7.00	7.00 €	
8.3.5.2.1	- Surface mounting earth Socket (BS Type) - 16A IP44					
8.3.5.3	Double Flush and Surface Mounting Devices - Normal/Standby Supply:	Un	2	7.00	14.00 €	
8.3.5.3.1	- Flush Mounting Earthed Socket (BS Type) - 16A trunking					
8.3.5.4	Flush and surface Mounting Boxes:	Un	1	2.00	2.00 €	
8.3.5.4.3	- Surface or Recessed mounting Connection Box					
8.3.5.4.3	- Surface or Recessed mounting Terminal Box	Un	2	3.00	6.00 €	
8.3.5.5	Electrical cables:					
8.3.5.5.1	Enclosed in a recessed or surface conduiting:	m	33	3.00	99.00 €	
8.3.5.5.1.1	- 3G 2.5 mm² Cu/ XLPE/ LSZH					
8.3.5.5.2	On the air, fixed on a cable tray or ladder horizontal or vertical:	m	9	3.00	27.00 €	
8.3.5.5.2.1	- 3G 2.5 mm² Cu/ XLPE/ LSZH					
8.3.5.6	Metric Rigid Conduit:					
8.3.5.6.1	Enclosed in a recessed or surface conduiting:	m	33	1.00	33.00 €	
8.3.5.6.1.1	- PVC Ø 20 mm					
8.3.6	Cable tray, Trunking System and Conduits					
8.3.6.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.3.6.2	Metallic perforated cable tray of side height 60 mm:					
8.3.6.2.1	ICT Installation:					
8.3.6.2.2.1	- 100 width, strip-galvanised	m	10	12.00	120.00 €	
8.3.6.3	Distribution Cable-Trunkings:					
8.3.6.3.1	- Cable-Trunkings, with 110x50mm	m	5	6.00	30.00 €	
8.3.6.4	Metric Rigid Conduit:					
8.3.6.4.1	Enclosed in a recessed or surface conduiting:					
8.3.6.4.1.1	- PVC Ø 25 mm	m	5	1.50	7.50 €	
8.3.7	Complementary Work					
8.3.7.1	- Construction work to support the implementation of water distribution networks for fire-fighting purposes, as well as all the works, materials and accessories necessary to the correct execution of the task.	Gv	1	300.00	300.00 €	
8.3.7.2	- Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task	Gv	1	500.00	500.00 €	
8.3.8	Final Work					
8.3.8.1	- Verification, cleaning and testing of all network.	Gv	1	500.00	500.00 €	
8.3.8.2	- Elaboration of the pieces drawn according to the work executed.	Gv	1	500.00	500.00 €	
TOTAL ELECTRICAL INSTALLATIONS					4,281.50 €	4,281.50 €
8.4 BLOCK F						
8.4.1	The Bill of Quantities, Specifications, Drawings and all other Contract documents are complementary to each other. It is the responsibility of the Contractor to check the locations and quantities of the materials and equipment to be executed in accordance with the drawings. The unit rate of the materials and equipment shall be based on the Specification, all components as required and specified under each item concerned in the Specifications, Drawings, and all other Contract documents.					
8.4.1	Low Voltage Switchboard					
8.4.1.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.4.1.2	Normal / Standby Switchboards:	Un	1	200.00	200.00 €	
8.4.1.2.1	- S.F.O (E)					
8.4.2	Lighting					
8.4.2.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.4.2.2	Indoor Lighting:					
8.4.2.2.1	Luminaires:					
8.4.2.2.1.1	- L9.1	Un	7	60.00	420.00 €	



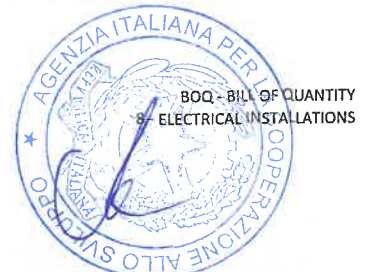
CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
8 ELECTRICAL INSTALLATIONS						
8.4.2.2.1.2	- L15.2	Un	12	60.00	720.00 €	
8.4.2.2.1.3	- L25	Un	2	60.00	120.00 €	
8.4.2.3	Outdoor Lighting:					
8.4.2.3.1	Luminaires:					
8.4.2.3.1.1	- E1	Un	4	120.00	480.00 €	
8.4.2.4	Lighting Command Devices					
8.4.2.4.1	- One way switch, surface mounting	Un	2	5.00	10.00 €	
8.4.2.4.2	- Surface Mounting Movement Detector 180°	Un	14	100.00	1,400.00 €	
8.4.2.4.3	- Surface Mounting Movement Detector 360°	Un	2	100.00	200.00 €	
8.4.2.5	Flush and surface Mounting Boxes:					
8.4.2.5.1	- Surface or Recessed mounting Connection Box	Un	23	40.00	920.00 €	
8.4.2.6	Electrical cables:					
8.4.2.6.1	Enclosed in a recessed or surface conduiting:					
8.4.2.6.1.1	- 2x 1,5 mm² Cu/ XLPE/ LSZH	ml	14	1.00	14.00 €	
8.4.2.6.1.2	- 3x 1,5 mm² Cu/ XLPE/ LSZH	ml	24	1.50	36.00 €	
8.4.2.6.1.3	- 3G 1,5 mm² Cu/ XLPE/ LSZH	ml	204	1.50	306.00 €	
8.4.2.6.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
8.4.2.6.2.1	- 3x 1,5 mm² Cu/ XLPE/ LSZH	ml	53	1.50	79.50 €	
8.4.2.6.2.2	- 3G 1,5 mm² Cu/ XLPE/ LSZH	ml	210	1.50	315.00 €	
8.4.2.7	Metric Rigid Conduit:					
8.4.2.7.1	Enclosed in a recessed or surface conduiting:					
8.4.2.7.1.1	- PEAD Ø 20 mm	ml	242	1.00	242.00 €	
8.4.3	Emergency / Safety Lighting					
8.4.3.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.4.3.2	Indoor Lighting:					
8.4.3.2.1	- S4 - not maintained (60min Autonomy)	Un	4	120.00	480.00 €	
8.4.3.3	Electrical cables:					
8.4.3.3.1	Enclosed in a recessed or surface conduiting:					
8.4.3.3.1.1	- 3G 1,5 mm² Cu/ XLPE/ LSZH	ml	24	1.50	36.00 €	
8.4.3.4	Metric Rigid Conduit:					
8.4.3.4.1	Enclosed in a recessed or surface conduiting:					
8.4.3.4.1.1	- PVC Ø 20 mm	ml	24	1.00	24.00 €	
8.4.4	General Purpose Power Outlet					
8.4.4.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.4.4.2	Single Flush and Surface Mounting Devices - Normal/Standby Supply:					
8.4.4.2.1	- Surface mounting earth Socket (BS Type) - 16A IP44	Un	45	7.00	315.00 €	
8.4.4.2.2	- Surface mounting earth Socket (BS Type) - 16A with cover IP44	Un	4	9.00	36.00 €	
8.4.4.2.3	- Flush Mounting Earthed Socket (BS Type) - 16A trunking	Un	29	7.00	203.00 €	
8.4.4.3	Double Flush and Surface Mounting Devices - Normal/Standby Supply:					
8.4.4.3.1	- Surface mounting earth Socket (BS Type) - 16A IP44	Un	1	14.00	14.00 €	
8.4.4.3.2	- Flush Mounting Earthed Socket (BS Type) - 16A trunking	Un	66	14.00	924.00 €	
8.4.4.4	Flush and surface Mounting Boxes:					
8.4.4.4.4	- Surface or Recessed mounting Connection Box	Un	50	3.00	150.00 €	
8.4.4.5	Electrical cables:					
8.4.4.5.1	Enclosed in a recessed or surface conduiting:					
8.4.4.5.1.1	- 3G 2.5 mm² Cu/ XLPE/ LSZH	ml	454	3.00	1,362.00 €	
8.4.4.5.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
8.4.4.5.2.1	- 3G 2.5 mm² Cu/ XLPE/ LSZH	ml	399	3.00	1,197.00 €	
8.4.4.6	Metric Rigid Conduit:					
8.4.4.6.1	Enclosed in a recessed or surface conduiting:					
8.4.4.6.1.1	- PVC Ø 20 mm	ml	454	1.00	454.00 €	
8.4.5	Complementary Work					
8.4.5.1	- Construction work to support the implementation of water distribution networks for fire-fighting purposes, as well as all the works, materials and accessories necessary to the correct execution of the task.	Gv	1	300.00	300.00 €	
8.4.5.2	- Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task	Gv	1	500.00	500.00 €	
8.4.6	Final Work					
8.4.6.1	- Verification, cleaning and testing of all network.	Gv	1	500.00	500.00 €	
8.4.6.2	- Elaboration of the pieces drawn according to the work executed.	Gv	1	500.00	500.00 €	
TOTAL ELECTRICAL INSTALLATIONS					12,457.50 €	12,457.50 €
SUBTOTAL ELECTRICAL						60,170.50 €



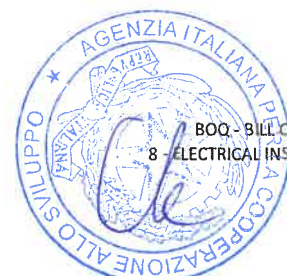
CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
8 ELECTRICAL INSTALLATIONS						
8.1 BLOCK J						
8.1.1	The Bill of Quantities, Specifications, Drawings and all other Contract documents are complementary to each other. It is the responsibility of the Contractor to check the locations and quantities of the materials and equipment to be executed in accordance with the drawings. The unit rate of the materials and equipment shall be based on the Specification, all components as required and specified under each item concerned in the Specifications, Drawings, and all other Contract documents.					
8.1.1.1	Low Voltage Switchboard Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.1.1.2	Normal / Standby Switchboards:					
8.1.1.2.1	- S.J.0 (E)	Un	1	200.00 €		200.00 €
8.1.1.2.2	- S.J.1 (E)	Un	1	200.00 €		200.00 €
8.1.1.2.3	- S.J.2 (E)	Un	1	200.00 €		200.00 €
8.1.1.2.4	- S.J.3 (E)	Un	1	200.00 €		200.00 €
8.1.1.2.5	- S.J.4 (E)	Un	1	200.00 €		200.00 €
8.1.1.2.6	- S.J.5 (E)	Un	1	200.00 €		200.00 €
8.1.1.3	Uninterrupted Switchboards:					
8.1.1.3.1	- S.J.ICU (IT)	Un	1	200.00 €		200.00 €
8.1.1.4	Tertiary Power Supply					
8.1.1.4.1	- UPS System with a rated power of the 8KVA 1/1 (60min Autonomy), single-phase, on-line double conversion architecture, run through the inverter, VFI.	Un	1			
8.1.1.5	Safety Isolating Transformers - Medical IT Systems:					
8.1.1.5.1	- Dry type isolation transformers, 230 V / 230 V, IP23, 5KVA equipped with thermal sensors and load supervisor, complete with all necessary accessories.	Un	1			
8.1.1.5.3	- Permanent electrical insulating monitors	Un	1			
8.1.1.5.4	- Permanent electrical insulating repeaters	Un	1			
8.1.2	Cabling					
8.1.2.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.1.2.2	LV Distribution Cables (Indoor):					
8.1.2.2.1	- 5G16 mm² Cu/ XLPE/ PVC	ml	2	9.00 €		18.00 €
8.1.2.2.2	- 3G16 mm² Cu/ XLPE/ PVC	ml	14	8.00 €		112.00 €
8.1.2.2.3	- 5G6 mm² Cu/ XLPE/ PVC	ml	34	7.00 €		238.00 €
8.1.2.2.4	- 5G4 mm² Cu/ XLPE/ PVC	ml	142	4.00 €		568.00 €
8.1.3	Lighting					
8.1.3.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.1.3.2	Indoor Lighting:					
8.1.3.2.1	Luminaires:					
8.1.3.2.1.1	- L2	Un	10	60.00 €		600.00 €
8.1.3.2.1.2	- L3.1	Un	5	60.00 €		300.00 €
8.1.3.2.1.3	- L3.2	Un	11	60.00 €		660.00 €
8.1.3.2.1.4	- L6	Un	9	60.00 €		540.00 €
8.1.3.2.1.5	- L9.0	Un	7	60.00 €		420.00 €
8.1.3.2.1.6	- L9.1	Un	12	60.00 €		720.00 €
8.1.3.2.1.7	- L9.2	Un	3	60.00 €		180.00 €
8.1.3.2.1.8	- L15.1	Un	2	60.00 €		120.00 €
8.1.3.2.1.9	- L15.2	Un	3	60.00 €		180.00 €
8.1.3.2.1.10	- L18.2	Un	2	60.00 €		120.00 €
8.1.3.2.1.11	- L18.3	Un	2	60.00 €		120.00 €
8.1.3.2.1.12	- L18.4	Un	4	60.00 €		240.00 €
9.1.3.3	Outdoor Lighting:					
9.1.3.3.1	Luminaires:					
9.1.3.3.1.1	- E1	Un	8	120.00 €		960.00 €
8.1.3.4	Lighting Command Devices					
8.1.3.4.1	- One way switch, surface mounting	Un	9	5.00 €		45.00 €
8.1.3.4.2	- Double pole switch, surface mounting	Un	4	7.00 €		28.00 €
8.1.3.4.3	- Two way switch, surface mounting	Un	2	8.00 €		16.00 €
8.1.3.4.4	- One way switch, flush mounting head wall unit	Un	8			64.00 €
8.1.3.4.5	- Surface Mounting Detector 180°	Un	8	100.00 €		800.00 €
8.1.3.4.6	- Surface Mounting Movement Detector 360°	Un	5	100.00 €		500.00 €
8.1.3.4.7	- Surface Mounting Presence Detector 360°	Un	4	100.00 €		400.00 €
8.1.3.5	Flush and surface Mounting Boxes:					
8.1.3.5.1	- Flush and surface Mounting Boxes:	Un	63	40.00 €		2,520.00 €
8.1.3.6	Electrical cables:					
8.1.3.6.1	Enclosed in a recessed or surface conduiting:					
8.1.3.6.1.1	- 2x 1,5 mm² Cu/ XLPE/ LSZH	ml	111	1.50 €		166.50 €
8.1.3.6.1.2	- 3x 1,5 mm² Cu/ XLPE/ LSZH	ml	75	1.50 €		112.50 €
8.1.3.6.1.3	- 3G 1,5 mm² Cu/ XLPE/ LSZH	ml	400	1.50 €		600.00 €
8.1.3.6.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
8.1.3.6.2.1	- 3x 1,5 mm² Cu/ XLPE/ LSZH	ml	58	1.50 €		87.00 €



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
8 ELECTRICAL INSTALLATIONS						
8.1.3.6.2.2	- 3G 1,5 mm² Cu/ XLPE/LSZH	ml	273	1.50 €	409.50 €	
8.1.3.7	Metric Rigid Conduit:					
8.1.3.7.1	Enclosed in a recessed or surface conduiting:					
8.1.3.7.1.1	- PEAD Ø 20 mm	ml	585	1.00 €	585.00 €	
8.1.4	Emergency / Safety Lighting					
8.1.4.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.1.4.2	Indoor Lighting:					
8.1.4.2.1	- S1 - maintained (60min Autonomy)	Un	7	120.00 €	840.00 €	
8.1.4.2.2	- S1 - not maintained (60min Autonomy)	Un	10	120.00 €	1,200.00 €	
8.1.4.2.3	- S3 - not maintained (60min Autonomy)	Un	2	120.00 €	240.00 €	
8.1.4.3	Flush and surface Mounting Boxes:					
8.1.4.3.1	- Surface or Recessed mounting Connection Box	Un	16	3.00 €	48.00 €	
8.1.4.4	Electrical cables:					
8.1.4.4.1	Enclosed in a recessed or surface conduiting:					
8.1.4.4.1.1	- 3G 1,5 mm² Cu/ XLPE/LSZH	ml	24	1.50 €	36.00 €	
8.1.4.4.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
8.1.4.4.2.1	- 3G 1,5 mm² Cu/ XLPE/LSZH	ml	69	1.50 €	103.50 €	
8.1.4.5	Metric Rigid Conduit:					
8.1.4.5.1	Enclosed in a recessed or surface conduiting:					
8.1.4.5.1.1	- PVC Ø 20 mm	ml	24	1.00 €	24.00 €	
8.1.5	General Purpose Power Outlet					
8.1.5.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.1.5.2	Single Flush and Surface Mounting Devices - Normal/Standby Supply:					
8.1.5.2.1	- Surface Mounting Earthed Socket (BS Type) - 16A with cover IP44	L/n	6	9.00 €	54.00 €	
8.1.5.2.2	- Surface mounting earth Socket (BS Type) - 16A IP44	Un	42	7.00 €	294.00 €	
8.1.5.3	Double Flush and Surface Mounting Devices - Normal/Standby Supply:					
8.1.5.3.1	- Surface Mounting Earthed Socket (BS Type) - 16A IP44	Un	3	14.00 €	42.00 €	
8.1.5.3.2	- Flush Mounting Earthed Socket (BS Type) - 16A trunking	Un	2	14.00 €	28.00 €	
8.1.5.4	Triple Flush and Surface Mounting Devices - Normal/Standby Supply:					
8.1.5.4.1	- Flush Mounting Earthed Socket (BS Type) - 16A head wall unit	L/n	12	7.00 €	84.00 €	
8.1.5.5	Double Flush and Surface Mounting Devices - Uninterruptible Supply:					
8.1.5.5.1	- Flush Mounting Earthed Socket (BS Type) - 16A head wall unit	Un	8	7.00 €	56.00 €	
8.1.5.8	Flush and surface Mounting Boxes:					
8.1.5.8.1	- Surface or Recessed mounting Connection Box	Un	74	3.00 €	222.00 €	
8.1.5.8.2	- Surface or Recessed mounting Terminal Box	Un	19	2.00 €	38.00 €	
8.1.5.9	Electrical cables:					
8.1.5.9.1	Enclosed in a recessed or surface conduiting:					
8.1.5.9.1.1	- 3G 2.5 mm² Cu/ XLPE/LSZH	ml	767	3.00 €	2,301.00 €	
8.1.5.9.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
8.1.5.9.2.1	- 3G 2.5 mm² Cu/ XLPE/LSZH	ml	346	3.00 €	1,038.00 €	
8.1.5.9.2.2	- 5G 2.5 mm² Cu/ XLPE/LSZH	ml	53	4.00 €	212.00 €	
8.1.5.10	Metric Rigid Conduit:					
8.1.5.10.1	Enclosed in a recessed or surface conduiting:					
8.1.5.10.1.1	- PVC Ø 20 mm	ml	767	1.00 €	767.00 €	
8.1.6	Cable tray, Trunking System and Conduits					
8.1.6.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.1.6.2	Metallic perforated cable tray of side height 60 mm:					
8.1.6.2.1	Electrical Installation:					
8.1.6.2.1.1	- 400 width, strip-galvanised	ml	28	18.00 €	504.00 €	
8.1.6.2.1.2	- 200 width, strip-galvanised	ml	18	14.00 €	252.00 €	
8.1.6.2.1.3	- 100 width, strip-galvanised	ml	50	12.00 €	600.00 €	
8.1.6.2.2	ICT Installation:					
8.1.6.2.2.1	- 200 width, strip-galvanised	ml	30	14.00 €	420.00 €	
8.1.6.2.2.2	- 100 width, strip-galvanised	ml	27	12.00 €	324.00 €	
8.1.6.3	Distribution Cable-Trunkings:					
8.1.6.3.1	- Cable-Trunkings, with 110x50mm	ml	5	6.00 €	30.00 €	
8.1.6.4	Head wall unit:					
	(complete with all the materials and accessories necessary to the correct execution of the task)					
8.1.6.4.1	- HW 1 - UCI - 1,5m	Un	8			
8.1.6.5	Metric Rigid Conduit:					
8.1.6.5.1	Enclosed in a recessed or surface conduiting:					
8.1.6.5.1.1	- PVC Ø 25 mm	ml	36	1.50 €	54.00 €	
8.1.7	Equipotentiality network					
8.1.7.1	- Equipotentiality network of the ICU, including equalizar panel, conection to the conductive floor and other conductive elements.	Gv	1	300.00 €	300.00 €	
8.1.8	Complementary Work					
8.1.8.1	- Construction work to support the implementation of water distribution networks for fire-fighting purposes, as well as all the works, materials and accessories necessary to the correct execution of the task.	Gv	1	500.00 €	500.00 €	
8.1.8.2	- Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task	Gv	1	500.00 €	500.00 €	
8.1.9	Final Work					
8.1.9.1	- Verification, cleaning and testing of all network.	Gv	1	500.00 €	500.00 €	
8.1.9.2	- Elaboration of the pieces drawn according to the work executed.	Gv	1	500.00 €	500.00 €	
TOTAL ELECTRICAL INSTALLATIONS					25,941.00 €	25,941.00 €



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
8 ELECTRICAL INSTALLATIONS						
8.1 BLOCK L						
	<p>The Bill of Quantities, Specifications, Drawings and all other Contract documents are complementary to each other.</p> <p>It is the responsibility of the Contractor to check the locations and quantities of the materials and equipment to be executed in accordance with the drawings.</p> <p>The unit rate of the materials and equipment shall be based on the Specification, all components as required and specified under each item concerned in the Specifications, Drawings, and all other Contract documents.</p>					
8.1.1	Low Voltage Switchboard					
8.1.1.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.1.1.2	Normal / Standby Switchboards:					
8.1.1.2.1	- S.L.0.1 (E)	Un	1	200.00 €		200.00 €
8.1.1.2.2	- S.L.1.1 (E)	Un	1	200.00 €		200.00 €
8.1.1.2.3	- S.L.0.2 (E)	Un	1	200.00 €		200.00 €
8.1.1.2.4	- S.L.1.2 (E)	Un	1	200.00 €		200.00 €
8.1.2	Cabling					
8.1.2.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.1.2.2	Distribution Cables (Outdoor):					
8.1.2.2.1	- 5G6 mm² Al/ XLPE/ PVC	ml	16	7.00 €		112.00 €
8.1.2.2.3	- 5G4 mm² Al/ XLPE/ PVC	ml	8	4.00 €		32.00 €
8.1.2.2.1	- 3G4 mm² Al/ XLPE/ PVC	ml	34	4.00 €		136.00 €
8.1.3	Lighting					
8.1.3.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.1.3.2	Indoor Lighting:					
8.1.3.2.1	Luminaires:					
8.1.3.2.1.1	- L1	Un	20	60.00 €		1,200.00 €
8.1.3.2.1.2	- L2.1	Un	20	60.00 €		1,200.00 €
8.1.3.2.1.3	- L9.0	Un	8	60.00 €		480.00 €
8.1.3.2.1.4	- L9.2	Un	4	60.00 €		240.00 €
8.1.3.2.1.5	- L18.1	Un	20	60.00 €		1,200.00 €
8.1.3.2.1.6	- L25	Un	4	60.00 €		240.00 €
9.1.3.3	Outdoor Lighting:					
9.1.3.3.1	Luminaires:					
9.1.3.3.1.1	- E1	Un	6	120.00 €		720.00 €
8.1.3.4	Lighting Command Devices					
8.1.3.4.1	- One way switch, surface mounting	Un	24	5.00 €		120.00 €
8.1.3.4.2	- Double pole switch, surface mounting	Un	20	7.00 €		140.00 €
8.1.3.4.3	- Surface Mounting Movement Detector 180°	Un	4	100.00 €		400.00 €
8.1.3.4.4	- Surface Mounting Movement Detector 360°	Un	4	100.00 €		400.00 €
8.1.3.5	Flush and surface Mounting Boxes:					
8.1.3.5.1	- Surface or Recessed mounting Connection Box	Un	76	40.00 €		3,040.00 €
8.1.3.6	Electrical cables:					
8.1.3.6.1	Enclosed in a recessed or surface conduiting:					
8.1.3.6.1.1	- 2x 1,5 mm² Cu/ XLPE/ LSZH	ml	96	1.50 €		144.00 €
8.1.3.6.1.2	- 3x 1,5 mm² Cu/ XLPE/ LSZH	ml	100	1.50 €		150.00 €
8.1.3.6.1.3	- 3G 1,5 mm² Cu/ XLPE/ LSZH	ml	699	1.50 €		1,048.50 €
8.1.3.6.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
8.1.3.6.2.1	- 3x 1,5 mm² Cu/ XLPE/ LSZH	ml	23	1.50 €		34.50 €
8.1.3.6.2.2	- 3G 1,5 mm² Cu/ XLPE/ LSZH	ml	372	1.50 €		558.00 €
8.1.3.7	Metric Rigid Conduit:					
8.1.3.7.1	Enclosed in a recessed or surface conduiting:					
8.1.3.7.1.1	- PEAD Ø 20 mm	ml	894	1.00 €		894.00 €
8.1.4	Emergency / Safety Lighting					
8.1.4.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.1.4.2	Indoor Lighting:					
8.1.4.2.1	- S1 - maintained (60min Autonomy)	Un	4	120.00 €		480.00 €
8.1.4.2.2	- S1 - not maintained (60min Autonomy)	Un	24	120.00 €		2,880.00 €
8.1.4.2.3	- S2 - maintained (60min Autonomy)	Un	4	120.00 €		480.00 €
8.1.4.3	Electrical cables:					
8.1.4.3.1	Enclosed in a recessed or surface conduiting:					
8.1.4.3.1.1	- 3G 1,5 mm² Cu/ XLPE/LSZH	ml	18	1.50 €		27.00 €
8.1.4.3.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
8.1.4.3.2.1	- 3G 1,5 mm² Cu/ XLPE/ LSZH	ml	18	1.50 €		27.00 €
8.1.4.4	Metric Rigid Conduit:					
8.1.4.4.1	Enclosed in a recessed or surface conduiting:					
8.1.4.4.1.1	- PVC Ø 20 mm	ml	18	1.00 €		18.00 €
8.1.5	General Purpose Power Outlet					



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
8 - ELECTRICAL INSTALLATIONS						
8.1.5.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.1.5.2	Single Flush and Surface Mounting Devices - Normal/Standby Supply:	Un	69	7.00 €	483.00 €	
8.1.5.2.1	- Surface mounting earth Socket (BS Type) - 16A IP44					
8.1.5.3	Double Flush and Surface Mounting Devices - Normal/Standby Supply:	Un	48	14.00 €	672.00 €	
8.1.5.3.1	- Flush Mounting Earthed Socket (BS Type) - 16A trunking					
8.1.5.8	Flush and surface Mounting Boxes:	Un	79	2.00 €	158.00 €	
8.1.5.8.1	- Surface or Recessed mounting Connection Box	Un	46	3.00 €	138.00 €	
8.1.5.8.2	- Surface or Recessed mounting Terminal Box					
8.1.5.9	Electrical cables:					
8.1.5.9.1	Enclosed in a recessed or surface conduiting:	ml	1085	3.00 €	3,255.00 €	
8.1.5.9.1.1	- 3G 2.5 mm² Cu/ XLPE/ LSZH					
8.1.5.9.2	On the air, fixed on a cable tray or ladder horizontal or vertical:	ml	793	3.00 €	2,379.00 €	
8.1.5.9.2.1	- 3G 2.5 mm² Cu/ XLPE/ LSZH					
8.1.5.10	Metric Rigid Conduit:					
8.1.5.10.1	Enclosed in a recessed or surface conduiting:	ml	1085	1.00 €	1,085.00 €	
8.1.5.10.1.1	- PVC Ø 20 mm					
8.1.6	Cable tray, Trunking System and Conduits					
8.1.6.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
8.1.6.2	Metallic perforated cable tray of side height 60 mm:					
8.1.6.2.1	Electrical Instalation:	ml	110	12.00 €	1,320.00 €	
8.1.6.2.1.1	- 100 width, strip-galvanised					
8.1.6.2.2	ICT Instalation:	ml	125	14.00 €	1,750.00 €	
8.1.6.2.2.1	- 200 width, strip-galvanised					
8.1.6.3	Distribution Cable-Trunkings:	ml	98	6.00 €	588.00 €	
8.1.6.3.1	- Cable-Trunkings, with 110x50mm					
8.1.6.4	Metric Rigid Conduit:					
8.1.6.4.1	Enclosed in a recessed or surface conduiting:	ml	45	1.50 €	67.50 €	
8.1.6.4.1.1	- PVC Ø 25 mm					
8.1.7	Complementary Work	Gv	1	300.00 €		
8.1.7.1	- Construction work to support the implementation of water distribution networks for fire-fighting purposes, as well as all the works, materials and accessories necessary to the correct execution of the task.				300.00 €	
8.1.7.2	- Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task	Gv	1	500.00 €		
					500.00 €	
8.1.8	Final Work	Gv	1	500.00 €	500.00 €	
8.1.8.1	- Verification, cleaning and testing of all network.					
8.1.8.2	- Elaboration of the pieces drawn according to the work executed.	Gv	1	500.00 €	500.00 €	
TOTAL ELECTRICAL INSTALLATIONS						30,896.50 €



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
9 INFORMATION & COMMUNICATIONS TECHNOLOGY (ITC)						
9.1 BLOCK A + B + C						
9.1.1	<p>The Bill of Quantities, Specifications, Drawings and all other Contract documents are complementary to each other.</p> <p>It is the responsibility of the Contractor to check the locations and quantities of the materials and equipment to be executed in accordance with the drawings.</p> <p>The unit rate of the materials and equipment shall be based on the Specification, all components as required and specified under each item concerned in the Specifications, Drawings, and all other Contract documents.</p> <p>TCP/IP Network</p>					
9.1.1.1	<p>Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:</p>					
9.1.1.1.1	<p>Building Telecommunications Racks, Boxes and Cabinets:</p>					
9.1.1.1.1.1	<p>- (Main Rack)</p>					
9.1.1.1.1.1.1	Un	1	1,550.00 €	1,550.00 €		
9.1.1.1.1.1.2	Un	1	360.00 €	360.00 €		
9.1.1.1.1.1.3	Un	1	360.00 €	360.00 €		
9.1.1.1.1.1.4	Un	1	190.00 €	190.00 €		
9.1.1.1.1.1.5	Un	6	180.00 €	1,080.00 €		
9.1.1.1.1.1.6	Un	1	130.00 €	130.00 €		
9.1.1.1.1.7	Un	1		130.00 €	130.00 €	
9.1.1.1.2	<p>Flush and Surface Mounting Devices:</p>					
9.1.1.1.2.1	Un	4	12.50 €	50.00 €		
9.1.1.1.2.2	Un	5	15.50 €	77.50 €		
9.1.1.1.2.3	Un	53	32.00 €	1,696.00 €		
9.1.1.1.3	<p>Electrical cables:</p>					
9.1.1.1.3.1	<p>Enclosed in a recessed or surface conduiting:</p>					
9.1.1.1.3.1.1	ml	340	0.70 €	238.00 €		
9.1.1.1.3.2	<p>On the air, fixed on a cable tray or ladder horizontal or vertical:</p>					
9.1.1.1.3.2.1	ml	4600	0.70 €	3,220.00 €		
9.1.1.1.3.3	<p>Patch cords:</p>					
9.1.1.1.3.3.1	Un	144	12.50 €	1,800.00 €		
9.1.1.1.3.3.2	Un	144	15.50 €	2,232.00 €		
9.1.1.1.3.3.3	Un	15	32.00 €	480.00 €		
9.1.1.1.3.4	<p>Metric Rigid Conduit:</p>					
9.1.1.1.3.4.1	<p>Enclosed in a recessed or surface conduiting:</p>					
9.1.1.1.3.4.1.1	ml	320	3.50 €	1,120.00 €		
9.1.1.1.4	<p>Others:</p>					
9.1.1.1.4.1	Gv	1	5,500.00 €	5,500.00 €		
9.1.1.1.4.2	Gv	1	1,000.00 €	1,000.00 €		
9.1.2	<p>TV Cabling</p>					
9.1.2.1	<p>Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:</p>					
9.1.2.1.1	Gv	1	2,500.00 €	2,500.00 €		
9.1.2.1.2	Gv	1	2,000.00 €	2,000.00 €		
9.1.2.1.3	Gv	1	1,500.00 €	1,500.00 €		
9.1.2.1.4	<p>Flush and Surface Mounting Devices:</p>					
9.1.2.1.4.1	Un	2	2,000.00 €	4,000.00 €		
9.1.2.1.5	<p>Electrical cables:</p>					
9.1.2.1.5.1	<p>Enclosed in a recessed or surface conduiting:</p>					
9.1.2.1.5.1.1	ml	30	0.70 €	21.00 €		
9.1.2.1.5.2	<p>On the air, fixed on a cable tray or ladder horizontal or vertical:</p>					
9.1.2.1.5.2.1	ml	40	0.70 €	28.00 €		
9.1.2.1.6	<p>Metric Rigid Conduit:</p>					
9.1.2.1.6.1	<p>Enclosed in a recessed or surface conduiting:</p>					
9.1.2.1.6.1.1	ml	25	3.50 €	87.50 €		
9.1.2.1.7	<p>Others:</p>					
9.1.2.1.7.1	Gv	1	2,000.00 €	2,000.00 €		
9.1.2.1.7.2	Gv	1	1,000.00 €	1,000.00 €		
9.1.3	<p>Video Security System</p>					
9.1.3.1	<p>Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:</p>					
9.1.3.1.1	<p>Video Security System Devices:</p>					
9.1.3.1.1.1	Gv	1	1,400.00 €	1,400.00 €		
9.1.3.1.1.2	Gv	1	6,500.00 €	6,500.00 €		



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
9. INFORMATION & COMMUNICATIONS TECHNOLOGY (ITC)						
9.1.3.1.1.3	- Security Camera "Bullet" IP (POE) / Outdoor	Un	2	3,000.00 €	6,000.00 €	
9.1.3.1.2	Electrical cables:					
9.1.3.1.2.1	Enclosed in a recessed or surface conduiting:					
9.1.3.1.2.1.1	- S/FTP 4 pair, CAT6A, LSZH, 250/23	ml	10	0.70 €	7.00 €	
9.1.3.1.2.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
9.1.3.1.2.2.1	- S/FTP 4 pair, CAT6A, LSZH, 250/23	ml	100	0.70 €	70.00 €	
9.1.3.1.3	Metric Rigid Conduit:					
9.1.3.1.3.1	Enclosed in a recessed or surface conduiting:					
9.1.3.1.3.1.1	- PVC Ø 20 mm	ml	8	3.50 €	28.00 €	
9.1.3.1.4	Others:					
9.1.3.1.4.1	- Engineering, System Programming, including System Testing, Commissioning and Training.	Gv	1	1,000.00 €	1,000.00 €	
9.1.4	Fire Detection System					
9.1.4.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
9.1.4.1.1	Fire Detection Devices:					
9.1.4.1.1.1	- Self contained Fire control panel, addressable fire alarm system.	Un	1	190.00 €	190.00 €	
9.1.4.1.1.2	- Manual call points	Un	10	190.00 €	1,900.00 €	
9.1.4.1.1.3	- Optical smoke detector including detector base	Un	51	230.00 €	11,730.00 €	
9.1.4.1.1.4	- Siren including base	Un	2	190.00 €	380.00 €	
9.1.4.1.2	Electrical cables:					
9.1.4.1.2.1	Enclosed in a recessed or surface conduiting:					
9.1.4.1.2.1.1	- JE-H(st)H 2x2x0,8mm²	ml	350	0.70 €	245.00 €	
9.1.4.1.2.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
9.1.4.1.2.2.1	- JE-H(st)H 2x2x0,8mm²	ml	280	0.70 €	196.00 €	
9.1.4.1.3	Metric Rigid Conduit:					
9.1.4.1.3.1	Enclosed in a recessed or surface conduiting:					
9.1.4.1.3.1.1	- PVC Ø 20 mm	ml	330	3.50 €	1,155.00 €	
9.1.4.1.4	Others:					
9.1.4.1.4.1	- Engineering, System Programming, including System Testing, Commissioning and Training.	Gv	1	5,500.00 €	5,500.00 €	
9.1.5	Complementary Work					
9.1.5.1	Construction work to support the implementation of water distribution networks for fire-fighting purposes, as well as all the works, materials and accessories necessary to the correct execution of the task.	Gv	1		2,000.00 €	
9.1.5.1.1	- Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task	Gv	1		1,000.00 €	
9.1.6	Final Work					
9.1.6.1	- Verification, cleaning and testing of all network.	Gv	1	300.00 €	300.00 €	
9.1.6.2	- Elaboration of the pieces drawn according to the work executed.	Gv	1	300.00 €	300.00 €	
TOTAL ITC					74,251.00 €	



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
9. INFORMATION & COMMUNICATIONS TECHNOLOGY (ITC)						
9.1 BLOCK J						
	<p>The Bill of Quantities, Specifications, Drawings and all other Contract documents are complementary to each other.</p> <p>It is the responsibility of the Contractor to check the locations and quantities of the materials and equipment to be executed in accordance with the drawings.</p> <p>The unit rate of the materials and equipment shall be based on the Specification, all components as required and specified under each item concerned in the Specifications, Drawings, and all other Contract documents.</p>					
9.1.1	TCP/IP Network					
9.1.1.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
9.1.1.1.1	Building Telecommunications Racks, Boxes and Cabinets:					
9.1.1.1.1.1	- (Rack 4)					
9.1.1.1.1.1.1	- Server Cabinet 12U's (Rack 19" A800xL600xP600 [mm])	Un	1	380.00 €		380.00 €
9.1.1.1.1.1.2	- Optical Fiber Panel 12 SC/APC connector (OF arrival)	Un	1	360.00 €		360.00 €
9.1.1.1.1.1.3	- Panel Coaxial (RG-CC Mirror)	Un	1	360.00 €		360.00 €
9.1.1.1.1.1.4	- Patch Panel 1HU 24 RJ45 Cat 6A connector. (Distribution)	Un	1	190.00 €		190.00 €
9.1.1.1.1.1.5	- Outlet Rackmount Power Strip 220V with a breaker.	Un	1	130.00 €		130.00 €
9.1.1.1.1.1.6	- Including, set of 2 fans with thermostat, Fixed Shelf, Cable Management, Rings, and all required accessories and equipments necessary for its perfect assembly and operation.	Un	1	130.00 €		130.00 €
9.1.1.1.2	Flush and Surface Mounting Devices:					
9.1.1.1.2.1	- Data outlet 1xRJ45 CAT 6A - Surfaced assembly	Un	5	11.00 €		55.00 €
9.1.1.1.2.2	- Data outlet 2xRJ45 CAT 6A - Surfaced assembly	Un	8	76.00 €		608.00 €
9.1.1.1.2.3	- Data outlet 2xRJ45 CAT 6A - Trunking System assembly	Un	2	12.50 €		25.00 €
9.1.1.1.3	Electrical cables:					
9.1.1.1.3.1	Enclosed in a recessed or surface conduiting:					
9.1.1.1.3.1.1	- U/UTP Category 6A Copper LSZH	ml	500	0.70 €		350.00 €
9.1.1.1.3.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
9.1.1.1.3.2.1	- U/UTP Cat 6 LSZH	ml	420	0.70 €		294.00 €
9.1.1.1.4	Patch cords:					
9.1.1.1.4.1	- U/UTP Category 6A Copper 1,0mt LSZH	Un	24	12.50 €		300.00 €
9.1.1.1.4.2	- U/UTP Category 6A Copper 3mt LSZH	Un	24	15.50 €		372.00 €
9.1.1.1.4.3	- FO 50/125 OM3 LSZH	Un	2	240.00 €		480.00 €
9.1.1.1.5	Metric Rigid Conduit:					
9.1.1.1.5.1	Enclosed in a recessed or surface conduiting:					
9.1.1.1.5.1.1	- PVC Ø 25 mm	ml	480	3.50 €		1,680.00 €
9.1.1.1.6	Others:					
9.1.1.1.6.1	- Engineering, System Programming, including System Testing, Commissioning and Training.	Gv	1	460.00 €		460.00 €
9.1.1.1.6.2	- Connections, connectorizations and labeling.	Gv	1	400.00 €		400.00 €
9.1.2	Nurse Call System					
9.1.2.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
9.1.2.1.1	Nurse Call System Devices:					
9.1.2.1.1.1	- System server Module with license; With Ethernet interface; with Web server; Web Configuration interface; With Autofeed; Supplied with UTP CAT 6A LSZH yellow 1.5 metres; DHCP required for System setup, including the test tool, to installed in the premises for servers.	Gv	1	10,000.00 €		10,000.00 €
9.1.2.1.1.2	- Module de serveur de voix sur IP (VoIP); avec interface ethernet; avec l'interface avec le central téléphonique; avec une capacité de 120 lits; avec module graphique et organisateur de appels avec serveur web; Interface de configuration web; avec autoalimenté; fourni avec fouet UTP CAT 6A LSZH jaune 1,5 mètres, à installé dans le Locaux pour les serveurs.	Gv	1	5,000.00 €		5,000.00 €
9.1.2.1.1.3	- Main Door visual controller and indicator (P)	Un	2	3,000.00 €		6,000.00 €
9.1.2.1.1.4	- Call module 2 buttons	Un	8	1,000.00 €		8,000.00 €
9.1.2.1.1.5	- Nurse display panel with audio	Un	1	1,000.00 €		1,000.00 €
9.1.2.1.2	Electrical cables:					
9.1.2.1.2.1	Enclosed in a recessed or surface conduiting:					
9.1.2.1.2.1.1	- U/UTP 4 pair, CAT6A, LSZH, 250/23	ml	15	0.70 €		10.50 €
9.1.2.1.2.1.2	- Bus Cable	ml	30	0.70 €		21.00 €
9.1.2.1.2.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
9.1.2.1.2.2.1	- U/UTP 4 pair, CAT6A, LSZH, 250/23	ml	15	0.70 €		10.50 €
9.1.2.1.2.2.2	- Bus Cable	ml	5	0.70 €		3.50 €
9.1.2.1.3	Metric Rigid Conduit:					
9.1.2.1.3.1	Enclosed in a recessed or surface conduiting:					
9.1.2.1.3.1.1	- PVC Ø 20 mm	ml	40	3.50 €		140.00 €
9.1.2.1.4	Others:					
9.1.2.1.4.1	- Engineering, System Programming, including System Testing, Commissioning and Training.	Gv	1	4,600.00 €		4,600.00 €
9.1.3	Video Security System					
9.1.3.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
9. INFORMATION & COMMUNICATIONS TECHNOLOGY (ITC)						
9.1.3.1.1	Video Security System Devices:	Un	1	540.00 €	540.00 €	
9.1.3.1.1.1	- Security Camera "Bullet" IP (POE) / Indoor					
9.1.3.1.2	Electrical cables:					
9.1.3.1.2.1	Enclosed in a recessed or surface conduiting:					
9.1.3.1.2.1.1	- S/FTP 4 pair, CAT6A, LSZH, 250/23	ml	80	0.70 €	56.00 €	
9.1.3.1.3	Others:					
9.1.3.1.3.1	- Engineering, System Programming, including System Testing, Commissioning and Training.	Gv	1	3,000.00 €	3,000.00 €	
9.1.4	Fire Detection System					
9.1.4.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
9.1.4.1.1	Fire Detection Devices:					
9.1.4.1.1.1	- Repeater alarm panel sounder/beacons Orange	Un	1	190.00 €	190.00 €	
9.1.4.1.1.2	- Manual call points	Un	3	190.00 €	570.00 €	
9.1.4.1.1.3	- Optical smoke detector including detector base	Un	16	230.00 €	3,680.00 €	
9.1.4.1.1.4	- Siren including base	Un	1	190.00 €	190.00 €	
9.1.4.1.2	Electrical cables:					
9.1.4.1.2.1	Enclosed in a recessed or surface conduiting:					
9.1.4.1.2.1.1	- JE-H(st)H 2x2x0,8mm²	ml	160	0.70 €	112.00 €	
9.1.4.1.2.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
9.1.4.1.2.2.1	- JE-H(st)H 2x2x0,8mm²	ml	50	0.70 €	35.00 €	
9.1.4.1.3	Metric Rigid Conduit:					
9.1.4.1.3.1	Enclosed in a recessed or surface conduiting:					
9.1.4.1.3.1.1	- PVC Ø 20 mm	ml	150	3.50 €	525.00 €	
9.1.4.1.4	Others:					
9.1.4.1.4.1	- Engineering, System Programming, including System Testing, Commissioning and Training.	Gv	1	5,000.00 €	5,000.00 €	
9.1.5	Complementary Work					
9.1.5.1	Construction work to support the implementation of water distribution networks for fire-fighting purposes, as well as all the works, materials and accessories necessary to the correct execution of the task.	Gv	1	5,000.00 €		
9.1.5.1.1	- Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task	Gv	1	500.00 €		
9.1.6	Final Work					
9.1.6.1	- Verification, cleaning and testing of all network.	Gv	1	300.00 €	300.00 €	
9.1.6.2	- Elaboration of the pieces drawn according to the work executed.	Gv	1	300.00 €	300.00 €	
TOTAL ITC				61,357.50 €		



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
9. INFORMATION & COMMUNICATIONS TECHNOLOGY (ITC)						
9.1. BLOCK I						
	<p>The Bill of Quantities, Specifications, Drawings and all other Contract documents are complementary to each other.</p> <p>It is the responsibility of the Contractor to check the locations and quantities of the materials and equipment to be executed in accordance with the drawings.</p> <p>The unit rate of the materials and equipment shall be based on the Specification, all components as required and specified under each item concerned in the Specifications, Drawings, and all other Contract documents.</p> <p>TCP/IP Network</p> <p>Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:</p>					
9.1.1	Building Telecommunications Racks, Boxes and Cabinets:					
9.1.1.1	- (Rack 5)					
9.1.1.1.1	- Server Cabinet 24U's (Rack 19" A1300xL800xP800 [mm])	Un	1	540.00 €		540.00 €
9.1.1.1.1.2	- Optical Fiber Panel 12 SC/APC connector (OF arrival)	Un	1	360.00 €		360.00 €
9.1.1.1.1.3	- Panel Coaxial (RG-CC Mirror)	Un	1	360.00 €		360.00 €
9.1.1.1.1.4	- Patch Panel 1HU 24 RJ45 Cat 6A connector. (Distribution)	Un	2	190.00 €		380.00 €
9.1.1.1.1.5	- Outlet Rackmount Power Strip 220V with a breaker.	Un	1	130.00 €		130.00 €
9.1.1.1.1.6	- Including, set of 2 fans with thermostat, Fixed Shelf, Cable Management, Rings, and all required accessories and equipments necessary for its perfect assembly and operation.	Un	1	130.00 €		130.00 €
9.1.1.1.2	Flush and Surface Mounting Devices:					
9.1.1.1.2.1	- Data outlet 2xRJ45 CAT 6A - Trunkung System assembly	Un	8	11.00 €		88.00 €
9.1.1.1.3	Electrical cables:					
9.1.1.1.3.1	Enclosed in a recessed or surface conduiting:					
9.1.1.1.3.1.1	- U/UTP Category 6A Copper LSZH	ml	120	0.70 €		84.00 €
9.1.1.1.3.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
9.1.1.1.3.2.1	- U/UTP Cat 6 LSZH	ml	550	0.70 €		385.00 €
9.1.1.1.4	Patch cords:					
9.1.1.1.4.1	- U/UTP Category 6A Copper 1,0mt LSZH	Un	48	12.50 €		600.00 €
9.1.1.1.4.2	- U/UTP Category 6A Copper 3mt LSZH	Un	48	15.50 €		744.00 €
9.1.1.1.4.3	- FO 50/125 OM3 LSZH	Un	4	230.00 €		920.00 €
9.1.1.1.5	Metric Rigid Conduit:					
9.1.1.1.5.1	Enclosed in a recessed or surface conduiting:					
9.1.1.1.5.1.1	- PVC Ø 25 mm	ml	100	3.50 €		350.00 €
9.1.1.1.6	Others:					
9.1.1.1.6.1	- Engineering, System Programming, including System Testing, Commissioning and Training.	Gv	1	3,000.00 €		3,000.00 €
9.1.1.1.6.2	- Connections, connectorizations and labeling.	Gv	1	2,000.00 €		2,000.00 €
9.1.2	TV Cabling					
9.1.2.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
9.1.2.1.1	Flush and Surface Mounting Devices:					
9.1.2.1.1.1	- TV outlet single surface flush mounting	Un	20			
9.1.2.1.2	Electrical cables:					
9.1.2.1.2.1	Enclosed in a recessed or surface conduiting:					
9.1.2.1.2.1.1	- Coaxial cable T-100 PVC Class A 3GHz 16PRIC (Antenna)	ml	250	0.70 €		175.00 €
9.1.2.1.2.2	Multimode 2 Fiber Cable interior LSFH (Rack Distribution)	ml				
9.1.2.1.2.2.1	On the air, fixed on a cable tray or ladder horizontal or vertical:					
9.1.2.1.2.2.1.1	- Coaxial cable T-100 PVC Class A 3GHz 16PRIC (Antenna)	ml	520	0.70 €		364.00 €
9.1.2.1.3	Metric Rigid Conduit:					
9.1.2.1.3.1	Enclosed in a recessed or surface conduiting:					
9.1.2.1.3.1.1	- PVC Ø 25 mm	ml	50	3.50 €		175.00 €
9.1.2.1.4	Others:					
9.1.2.1.4.1	- Engineering, System Programming, including System Testing, Commissioning and Training.	Gv	1	4,600.00 €		4,600.00 €
9.1.2.1.4.2	- Connections, connectorizations and labeling.	Gv	1	1,000.00 €		1,000.00 €
9.1.3	Nurse Call System					
9.1.3.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
9.1.3.1.1	Nurse Call System Devices:					
9.1.3.1.1.1	- System server Module with license; With Ethernet interface; with Web server; Web Configuration interface; With Autofeed; Supplied with UTP CAT 6A LSZH yellow 1.5 metres; DHCP required for System setup. Including the test tool, to installed in the premises for servers.	Gv	1	10,000.00 €		10,000.00 €
9.1.3.1.1.2	- Module de serveur de voix sur IP (VoIP); avec interface ethernet; avec l'interface avec le central téléphonique; avec une capacité de 120 lits; avec module graphique et organisateur de appels avec serveur web; interface de configuration web; avec autoalimenté; fourni avec fouet UTP CAT 6A LSZH jaune 1,5 mètres, à installé dans le Locaux pour les serveurs.	Gv	1	5,000.00 €		5,000.00 €
9.1.3.1.1.3	- Main Door visual controller and indicator (P)	Un	16	3,000.00 €		48,000.00 €
9.1.3.1.1.4	- Secondary Door visual controller and indicator (S)	Un	8	1,000.00 €		8,000.00 €
9.1.3.1.1.5	- Call module 2 buttons	Un	28	1,000.00 €		28,000.00 €
9.1.3.1.1.6	- Nurse display panel with audio	Un	4	1,000.00 €		4,000.00 €
9.1.3.1.2	Electrical cables:					
9.1.3.1.2.1	Enclosed in a recessed or surface conduiting:					
9.1.3.1.2.1.1	- U/UTP 4 pair, CAT6A, LSZH, 250/23	ml	30	0.70 €		21.00 €

CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
9 INFORMATION & COMMUNICATIONS TECHNOLOGY (ITC)						
9.1.3.1.2.1.2	- Bus Cable	ml	35	0.70 €	24.50 €	
9.1.3.1.2.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
9.1.3.1.2.2.1	- U/UTP 4 pair, CAT6A, LSZH, 250/23	ml	650	0.70 €	455.00 €	
9.1.3.1.2.2.2	- Bus Cable	ml	130	0.70 €	91.00 €	
9.1.3.1.3	Metric Rigid Conduit:					
9.1.3.1.3.1	Enclosed in a recessed or surface conduiting:					
9.1.3.1.3.1.1	- PVC Ø 20 mm	ml	30	3.50 €	105.00 €	
9.1.3.1.4	Others:					
9.1.3.1.4.1	- Engineering, System Programming, including System Testing, Commissioning and Training.	Gv	1	4,600.00 €	4,600.00 €	
9.1.4	Fire Detection System					
9.1.4.1	Supply and installation in accordance with the conditions defined in the in written pieces, specification, drawings and other elements of the project, for the following equipment and materials, and all required accessories as specified in schedules of equipment, detailed drawings and specs:					
9.1.4.1.1	Fire Detection Devices:					
9.1.4.1.1.1	- Repeater alarm panel sounder/beacons Orange	Un	2	190.00 €	380.00 €	
9.1.4.1.1.2	- Manual call points	Un	4	190.00 €	760.00 €	
9.1.4.1.1.3	- Optical smoke detector including detector base	Un	24	230.00 €	5,520.00 €	
9.1.4.1.1.4	- Siren including base	Un	2	190.00 €	380.00 €	
9.1.4.1.2	Electrical cables:					
9.1.4.1.2.1	Enclosed in a recessed or surface conduiting:					
9.1.4.1.2.1.1	- JE-H(st)H 2x2x0,8mm²	ml	160	0.70 €	112.00 €	
9.1.4.1.2.2	On the air, fixed on a cable tray or ladder horizontal or vertical:					
9.1.4.1.2.2.1	- JE-H(st)H 2x2x0,8mm²	ml	110	0.70 €	77.00 €	
9.1.4.1.3	Metric Rigid Conduit:					
9.1.4.1.3.1	Enclosed in a recessed or surface conduiting:					
9.1.4.1.3.1.1	- PVC Ø 20 mm	ml	150	3.50 €	525.00 €	
9.1.4.1.4	Others:					
9.1.4.1.4.1	- Engineering, System Programming, including System Testing, Commissioning and Training.	Gv	1	4,600.00 €	4,600.00 €	
9.1.5	Complementary Work					
9.1.5.1	Construction work to support the implementation of water distribution networks for fire-fighting purposes, as well as all the works, materials and accessories necessary to the correct execution of the task.	Gv	1	3,000.00 €	3,000.00 €	
9.1.5.1.1	- Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task	Gv	1	500.00 €	500.00 €	
9.1.6	Final Work					
9.1.6.1	- Verification, cleaning and testing of all network.	Gv	1	300.00 €	300.00 €	
9.1.6.2	- Elaboration of the pieces drawn according to the work executed.	Gv	1	300.00 €	300.00 €	
TOTAL ITC						141,135.50 €



REHABILITATION OF THE SAUDI MATERNITY HOSPITAL KASSALA HEALTH CITADEL - SUDAN BOQ - BILL OF QUANTITY Package 1 (Block A, B, C, F)		
CODE	DISCIPLINE	VALUE
4	WATER SUPPLY SYSTEM	4,226.15 €
5	WASTEWATER DRAINAGE SYSTEM	12,760.00 €
6	STORMWATER DRAINAGE SYSTEM	2,242.00 €
7	FIREFIGHTING WATER SYSTEM	6,903.00 €
TOTAL:		26,131.15 €



BOQ - BILL OF QUANTITY
SUMMARY

CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
4. WATER SUPPLY SYSTEM						
4.1	Package 1 (Block A, B, C, F)					4,226.15 €
4.1.1	Pipping					
4.1.1.1	Supply and installation of PP-R Pipes for the water supply network, with thermal insulation in hot water, including all the works, materials and accessories necessary to the correct execution of the task, with the following diameters:					
4.1.1.1.1	Cold Water:					
4.1.1.1.1.1	Ø 16 mm	m	55.00	1.00 €		55.00 €
4.1.1.1.1.2	Ø 20 mm	m	94.00	1.50 €		141.00 €
4.1.1.1.1.3	Ø 25 mm	m	84.00	2.50 €		210.00 €
4.1.1.1.1.4	Ø 32 mm	m	42.00	3.00 €		126.00 €
4.1.1.1.1.5	Ø 40 mm	m	28.00	3.60 €		100.80 €
4.1.1.1.2	Hot Water:					
4.1.1.1.2.1	Ø 20 mm	m	19.90	1.50 €		29.85 €
4.1.1.1.2.2	Ø 25 mm	m	27.00	2.50 €		67.50 €
4.1.1.2	Supply and installation of HDPE pipe for the water supply network, buried, including earthworks and installation, as well as all the works, materials and accessories necessary to the correct execution of the task, with the following diameters:					
4.1.1.2.1	Cold Water:					
4.1.1.2.1.1	Ø 40 mm	m	11.60	50.00 €		580.00 €
4.1.2	Equipment and Accessories					
4.1.2.1	Supply and installation of angles Valves, as well as all the works, materials and accessories necessary to the correct execution of the task, with the following equipments:					
4.1.2.1.1	Wash Basin					
	- In cold water:	un	23	4.00 €		92.00 €
4.1.2.1.2	WC Cistern					
	- In cold water:	un	8	4.00 €		32.00 €
4.1.2.2	Supply and installation of Valves, as well as all the works, materials and accessories necessary to the correct execution of the task, with the following diameters:					
4.1.2.2.1	Ø 20 mm	un	12	4.00 €		48.00 €
4.1.2.2.2	Ø 25 mm	un	3	6.00 €		18.00 €
4.1.2.3	Supply and installation of shut-off buried Valves, as well as all the works, materials and accessories necessary to the correct execution of the task, with the following diameters:					
4.1.2.3.1	Ø 25 mm	un	1	6.00 €		6.00 €
4.1.2.3.2	Ø 90 mm	un	40	20.00 €		800.00 €
4.1.2.4	Supply and installation of electrical heaters with accumulation tank, including shut-off valves, retention valves, electrical connection work, and all accessories, and all works and materials and accessories necessary to a correct execution of the task, with the following capacities:					
4.1.2.4.1	100L horizontal	un	2	560.00 €		1,120.00 €
4.1.3	Complementary Work					
4.1.3.1	Construction work to support the implementation of water distribution networks for fire-fighting purposes, as well as all the works, materials and accessories necessary to the correct execution of the task.					
		gv	1	300.00 €		300.00 €
4.1.3.2	Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task					
		gv	1	250.00 €		250.00 €
4.1.4	Final Work					
4.1.4.1	Verification, cleaning and testing of all network.	gv	1	150.00 €		150.00 €
4.1.4.2	Elaboration of the pieces drawn according to the work executed.	gv	1	100.00 €		100.00 €



BOQ BILL OF QUANTITY
4-WATER SUPPLY

CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
5. WASTEWATER DRAINAGE SYSTEM						
5.1 Package 1 (Block A, B, C, F)						25,520.00 €
5.1.1	Pipping					
5.1.1.1	Supply and installation of PVC pipes for buried/embedded wastewater drainage network (inside building), installed in proper ditches, as well as all complementary works, materials and accessories necessary to the perfect execution of the task, according to the plans and construction supervision instructions, with the following diameters:					
5.1.1.1.1	Ø 40 mm	m	65.00	6.00 €		390.00 €
5.1.1.1.2	Ø 75 mm	m	54.00	7.50 €		405.00 €
5.1.1.1.3	Ø 90 mm	m	87.00	9.00 €		783.00 €
5.1.1.2	Supply and installation of PVC pipes for buried/embedded wastewater drainage network (outside building), installed in proper ditches, including terrain movements, such as excavation, landfill and transportation of remaining terrain offsite (if necessary), as well as all complementary works, materials and accessories necessary to the perfect execution of the task, according to the plans and construction supervision instructions, with the following diameters:					
5.1.1.2.1	Ø 110 mm	m	86.00	12.00 €		1,032.00 €
5.1.1.2.2	Ø 125 mm	m	23.00	12.00 €		276.00 €
5.1.2	Equipment and Accessories					
5.1.2.1	Supply and installation of siphon, as well as all the works, materials and accessories necessary to the correct execution of the task, to install on the following equipments:					
5.1.2.1.1	Wash Basin	un	23	150.00 €		3,450.00 €
5.1.2.1.2	Turkish Toilet	un	10	100.00 €		1,000.00 €
5.1.2.1.3	Shower	un	4	150.00 €		600.00 €
5.1.2.2	Supply and installation of traps in chrome plated brass, as well as all the works, materials and accessories necessary to the correct execution of the task.	un	12	70.00 €		840.00 €
5.1.2.3	Supply and installation of ventilation hats, to be installed on the roof, as well as all the works, materials and accessories necessary to the correct execution of the task, with the following diameters:					
5.1.2.3.1	Ø 90 mm	un	6	30.00 €		180.00 €
5.1.2.4	Supply and installation of PVC floor gully with stainless steel grill, as well as all the works, materials and accessories necessary to the correct execution of the task.	un	4	6.00 €		24.00 €
5.1.2.5	Execution of a concrete manholes supported by a suitable recessed cast iron covers, load class B125 to receive the same finishing of the floor, including terrain movements, such as excavation, landfill and transportation of remaining terrain offsite (if necessary), as well as all complementary works, materials and accessories necessary to the perfect execution of the task, according to the plans, detail drawings and construction supervision instructions, with the following dimensions:					
5.1.2.5.1	0.60x0.60	un	9	150.00 €		1,350.00 €
5.1.2.5.2	0.80x0.80	un	6	180.00 €		1,080.00 €
5.1.3	Complementary Work					
5.1.3.1	Construction work to support the implementation of wastewater networks, as well as all the works, materials and accessories necessary to the correct execution of the task.	gv	1	400.00 €		400.00 €
5.1.3.2	Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task	gv	1	400.00 €		400.00 €
5.1.3.3	Evaluation, rehabilitation (if necessary), cleaning and maintenance works of existing networks to be maintained, including all materials and work necessary for their perfect execution.	gv	1	300.00 €		300.00 €
5.1.4	Final Work					
5.1.4.1	Verification and testing of all network.	gv	1	150.00 €		150.00 €
5.1.4.2	Elaboration of the pieces drawn according to the work executed.	gv	1	100.00 €		100.00 €
SUBTOTAL WASTE WATER						12,760.00 €



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
6. STORMWATER DRAINAGE SYSTEM						
6.1	Package 1 (Block A, B, C, F)					4,484.00 €
6.1.1	Pipping					
6.1.1.1	Supply and installation of PVC pipes for vertical rainwater drainage network, embedded/at sight, as well as all complementary works, materials and accessories necessary to the perfect execution of the task, according to the plans and construction supervision instructions, with the following diameters:					
6.1.1.1.1	Ø 160 mm	m	8.00	12.00 €	96.00 €	
6.1.1.2	Supply and installation of PVC pipes for buried/embedded rainwater drainage network, installed in proper ditches, including terrain movements, such as excavation, landfill and transportation of remaining terrain offsite (if necessary), as well as all complementary works, materials and accessories necessary to the perfect execution of the task, according to the plans and construction supervision instructions, with the following diameters:					
6.1.1.2.1	Ø 160 mm	m	43.00	12.00 €	516.00 €	
6.1.2	Equipment and Accessories					
6.1.2.1	Execution of a concrete manholes supported by a suitable gully cast iron covers, load class B125 to receive the same finishing of the floor, including terrain movements, such as excavation, landfill and transportation of remaining terrain offsite (if necessary), as well as all complementary works, materials and accessories necessary to the perfect execution of the task, according to the plans, detail drawings and construction supervision instructions, with the following					
6.1.2.1.1	0.40x0.40	un	1	100.00 €	100.00 €	
6.1.2.2	Execution of a concrete manholes supported by a suitable recessed cast iron covers, load class B125 to receive the same finishing of the floor, including terrain movements, such as excavation, landfill and transportation of remaining terrain offsite (if necessary), as well as all complementary works, materials and accessories necessary to the perfect execution of the task, according to the plans, detail drawings and construction supervision instructions, with the following dimensions:					
6.1.2.2.1	0.60x0.60	un	1	150.00 €	150.00 €	
6.1.2.2.2	0.80x0.80	un	1	180.00 €	180.00 €	
6.1.2.2.3	1.00x1.00	un	1	200.00 €	200.00 €	
6.1.3	Complementary Work					
6.1.3.1	Construction work to support the implementation of wastewater networks, as well as all the works, materials and accessories necessary to the correct execution of the task.	gv	1	300.00 €	300.00 €	
6.1.3.2	Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task	gv	1	250.00 €	250.00 €	
6.1.3.3	Evaluation, rehabilitation (if necessary), cleaning and maintenance works of existing networks to be maintained, including all materials and work necessary for their perfect execution.	gv	1	200.00 €	200.00 €	
6.1.4	Final Work					
6.1.4.1	Verification and testing of all network.	gv	1	150.00 €	150.00 €	
6.1.4.2	Elaboration of the pieces drawn according to the work executed.	gv	1	100.00 €	100.00 €	
SUBTOTAL STORMWATER DRAINAGE					2,242.00 €	



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
7. FIRE FIGHTING WATER SYSTEM						
7.1 Package 1 (Block A/B/C/F)						
7.1.1	Pippling					
7.1.1.1	Supply and installation of HDPE pipe, for Firefighting network, buried, including earthworks and installation, as well as all the works, materials and accessories necessary to the correct execution of the task, with the following diameters:					
7.1.1.1.1	Ø 90 mm	m	8.60	100.00 €	860.00 €	
7.1.1.2	Supply and Installation of Galvanized steel pipe, for the Firefighting network, including bonding and branch accessories, supports and clamps with acoustic insulation, threaded or grooved, installed at sight, fixed by quick-mount clamps in galvanized iron attached to walls or ceilings, including opening and closure of notches, wall/floor/ceilings holes for pipe crossings, a first coat of painting anticorrosive, and two coats of colour finishing according legal standards, and remaining accessories necessary to the good functioning of the network, according the plans and construction supervision instruction, with the following diameters:					
7.1.1.2.1	Ø 50 mm	m	41.00	32.00 €	1,312.00 €	
7.1.1.2.2	Ø 65 mm	m	26.00	52.00 €	1,352.00 €	
7.1.1.2.3	Ø 80 mm	m	3.00	93.00 €	279.00 €	
7.1.2	Equipment and Accessories					
7.1.2.1	Supply and installation of Swing type fire hose reel, Model 99-N(19mm), to be installed in a closet with 180º opening door, predicted by the architecture, with reinforced PVC hose, with 30m length, 3 position nozzle: jet, fog and closure, including manual quick-release valve with manometer, axial bracket, tested and approved according EN 671-1:2012, remaining accessories and necessary works for a perfect execution of the task according construction supervision instructions.	un	4	400.00 €	1,600.00 €	
7.1.3	Complementary Work					
7.1.3.1	Construction work to support the implementation of water distribution networks for fire-fighting purposes, as well as all the works, materials and accessories necessary to the correct execution of the task.					
7.1.3.2	Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task	gv	1	400.00 €	400.00 €	
7.1.4	Final Work					
7.1.4.1	Verification, cleaning and testing of all network.	gv	1	200.00 €	200.00 €	
7.1.4.2	Elaboration of the pieces drawn according to the work executed.	gv	1	200.00 €	200.00 €	
SUBTOTAL FIRE FIGHTING WATER					6.903.00 €	



REHABILITATION OF THE SAUDI MATERNITY HOSPITAL KASSALA HEALTH CITADEL - SUDAN BOQ - BILL OF QUANTITY Package 3 (Block J)		
CODE	DISCIPLINE	VALUE
4	WATER SUPPLY SYSTEM	2,583.25 €
5	WASTEWATER DRAINAGE SYSTEM	6,829.00 €
6	STORMWATER DRAINAGE SYSTEM	3,540.00 €
7	FIREFIGHTING WATER SYSTEM	3,265.00 €
TOTAL		16,217.25 €



BOQ - BILL OF QUANTITY
SUMMARY

CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
4 WATER SUPPLY SYSTEM						
4.1	Package 3 (Block J)					5,186.50 €
4.1.1	Piping					
4.1.1.1	Supply and installation of PP-R Pipes for the water supply network, with thermal insulation in hot water, including all the works, materials and accessories necessary to the correct execution of the task, with the following diameters:					
4.1.1.1.1	Cold Water:					
4.1.1.1.1.1	Ø 16 mm	m	19.00	1.00 €	19.00 €	
4.1.1.1.1.2	Ø 20 mm	m	23.00	1.50 €	34.50 €	
4.1.1.1.1.3	Ø 25 mm	m	12.10	2.50 €	30.25 €	
4.1.1.1.1.4	Ø 32 mm	m	42.00	3.00 €	126.00 €	
4.1.1.1.1.5	Ø 40 mm	m	28.00	3.60 €	100.80 €	
4.1.1.1.1.6	Ø 50 mm	m	6.50	3.60 €	23.40 €	
4.1.1.1.2	Hot Water:					
4.1.1.1.2.1	Ø 20 mm	m	13.20	1.50 €	19.80 €	
4.1.1.1.2.2	Ø 25 mm	m	22.00	2.50 €	55.00 €	
4.1.1.1.2.3	Ø 32 mm	m	1.50	3.00 €	4.50 €	
4.1.1.2	Supply and installation of HDPE pipe for the water supply network, buried, including earthworks and installation, as well as all the works, materials and accessories necessary to the correct execution of the task, with the following diameters:					
4.1.1.2.1	Cold Water:					
4.1.1.2.1.1	Ø 50 mm	m	1.00	50.00 €	50.00 €	
4.1.2	Equipment and Accessories					
4.1.2.1	Supply and installation of angles Valves, as well as all the works, materials and accessories necessary to the correct execution of the task, with the following equipments:					
	Wash Basin					
	- In cold water:	un	6	4.00 €	24.00 €	
	WC Cistern					
	- In cold water:	un	6	4.00 €	24.00 €	
4.1.2.2	Supply and installation of Valves, as well as all the works, materials and accessories necessary to the correct execution of the task, with the following diameters:					
4.1.2.2.1	Ø 20 mm	un	1	4.00 €	4.00 €	
4.1.2.2.2	Ø 25 mm	un	3	6.00 €	18.00 €	
4.1.2.2.3	Ø 32 mm	un	5	6.00 €	30.00 €	
4.1.2.3	Supply and installation of shut-off buried Valves, as well as all the works, materials and accessories necessary to the correct execution of the task, with the following diameters:					
4.1.2.3.1	Ø 50 mm	un	1	20.00 €	20.00 €	
4.1.2.4	Supply and installation of electrical heaters with accumulation tank, including shut-off valves, retention valves, electrical connection work, and all accessories, and all works and materials and accessories necessary to a correct execution of the task, with the following capacities:					
4.1.2.4.1	200L vertical	un	1	1,200.00 €	1,200.00 €	
4.1.3	Complementary Work					
4.1.3.1	Construction work to support the implementation of water distribution networks for fire-fighting purposes, as well as all the works, materials and accessories necessary to the correct execution of the task.					
		gv	1	300.00 €	300.00 €	
4.1.3.2	Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task					
		gv	1	250.00 €	250.00 €	
4.1.4	Final Work					
4.1.4.1	Verification, cleaning and testing of all network.	gv	1	150.00 €	150.00 €	
4.1.4.2	Elaboration of the pieces drawn according to the work executed.	gv	1	100.00 €	100.00 €	
SUBTOTAL WATER SUPPLY					2,583.25 €	



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
5. WASTEWATER DRAINAGE SYSTEM						
5.1	Package 3 (Block J)					13,658.00 €
5.1.1	Pipping					
5.1.1.1	Supply and installation of PVC pipes for buried/embedded wastewater drainage network (inside building), installed in proper ditches, as well as all complementary works, materials and accessories necessary to the perfect execution of the task, according to the plans and construction supervision instructions, with the following diameters:					
5.1.1.1.1	Ø 40 mm	m	29.00	6.00 €		174.00 €
5.1.1.1.2	Ø 75 mm	m	18.00	7.50 €		135.00 €
5.1.1.1.3	Ø 90 mm	m	34.00	9.00 €		306.00 €
5.1.1.2	Supply and installation of PVC pipes for buried/embedded wastewater drainage network (outside building), installed in proper ditches, including terrain movements, such as excavation, landfill and transportation of remaining terrain offsite (if necessary), as well as all complementary works, materials and accessories necessary to the perfect execution of the task, according to the plans and construction supervision instructions, with the following diameters:					
5.1.1.2.1	Ø 110 mm	m	101.00	12.00 €		1,212.00 €
5.1.1.2.2	Ø 125 mm	m	6.00	12.00 €		72.00 €
5.1.2	Equipment and Accessories					
5.1.2.1	Supply and installation of siphon, as well as all the works, materials and accessories necessary to the correct execution of the task, to install on the following equipments:					
5.1.2.1.1	Wash Basin	un	7	150.00 €		1,050.00 €
5.1.2.1.2	Turkish Toilet	un	1	100.00 €		100.00 €
5.1.2.1.3	Shower	un	3	150.00 €		450.00 €
5.1.2.2	Supply and installation of traps in chrome plated brass, as well as all the works, materials and accessories necessary to the correct execution of the task.	un	5	70.00 €		350.00 €
5.1.2.3	Supply and installation of ventilation hats, to be installed on the roof, as well as all the works, materials and accessories necessary to the correct execution of the task, with the following diameters:					
5.1.2.3.1	Ø 90 mm	un	3	30.00 €		90.00 €
5.1.2.4	Execution of a concrete manholes supported by a suitable recessed cast iron covers, load class B125 to receive the same finishing of the floor, including terrain movements, such as excavation, landfill and transportation of remaining terrain offsite (if necessary), as well as all complementary works, materials and accessories necessary to the perfect execution of the task, according to the plans, detail drawings and construction supervision instructions, with the following dimensions:					
5.1.2.4.1	0.60x0.60	un	5	150.00 €		750.00 €
5.1.2.4.2	0.80x0.80	un	3	180.00 €		540.00 €
5.1.2.4.3	1.00x1.00	un	3	200.00 €		600.00 €
5.1.3	Complementary Work					
5.1.3.1	Construction work to support the implementation of wastewater networks, as well as all the works, materials and accessories necessary to the correct execution of the task.	gv	1	300.00 €		300.00 €
5.1.3.2	Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task	gv	1	250.00 €		250.00 €
5.1.3.3	Evaluation, rehabilitation (if necessary), cleaning and maintenance works of existing networks to be maintained, including all materials and work necessary for their perfect execution.	gv	1	200.00 €		200.00 €
5.1.4	Final Work					
5.1.4.1	Verification and testing of all network.	gv	1	150.00 €		150.00 €
5.1.4.2	Elaboration of the pieces drawn according to the work executed.	gv	1	100.00 €		100.00 €
SUBTOTAL WASTE SYSTEM						6,829.00 €



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
6. STORMWATER DRAINAGE SYSTEM						
6.1 Package 3 (Block J)						7,080.00 €
6.1.1	Pipping					
6.1.1.1	Supply and installation of PVC pipes for vertical rainwater drainage network, embedded/at sight, as well as all complementary works, materials and accessories necessary to the perfect execution of the task, according to the plans and construction supervision instructions, with the following diameters:					
6.1.1.1.1	Ø 200 mm	m	14.00	20.00 €	280.00 €	
6.1.1.2	Supply and installation of PVC pipes for buried/embedded rainwater drainage network, installed in proper ditches, including terrain movements, such as excavation, landfill and transportation of remaining terrain offsite (if necessary), as well as all complementary works, materials and accessories necessary to the perfect execution of the task, according to the plans and construction supervision instructions, with the following diameters:					
6.1.1.2.1	Ø 160 mm	m	155.00	12.00 €	1,860.00 €	
6.1.2	Equipment and Accessories					
6.1.2.1	Execution of a concrete manholes supported by a suitable gully cast iron covers, load class B125 to receive the same finishing of the floor, including terrain movements, such as excavation, landfill and transportation of remaining terrain offsite (if necessary), as well as all complementary works, materials and accessories necessary to the perfect execution of the task, according to the plans, detail drawings and construction supervision instructions, with the following					
6.1.2.1.1	0.40x0.40	un	1	100.00 €	100.00 €	
6.1.2.2	Execution of a concrete manholes supported by a suitable recessed cast iron covers, load class B125 to receive the same finishing of the floor, including terrain movements, such as excavation, landfill and transportation of remaining terrain offsite (if necessary), as well as all complementary works, materials and accessories necessary to the perfect execution of the task, according to the plans, detail drawings and construction supervision instructions, with the following dimensions:					
6.1.2.2.1	0.60x0.60	un	2	150.00 €	300.00 €	
6.1.3	Complementary Work					
6.1.3.1	Construction work to support the implementation of wastewater networks, as well as all the works, materials and accessories necessary to the correct execution of the task.	gv	1	300.00 €	300.00 €	
6.1.3.2	Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task	gv	1	250.00 €	250.00 €	
6.1.3.3	Evaluation, rehabilitation (if necessary), cleaning and maintenance works of existing networks to be maintained, including all materials and work necessary for their perfect execution.	gv	1	200.00 €	200.00 €	
6.1.4	Final Work					
6.1.4.1	Verification and testing of all network.	gv	1	150.00 €	150.00 €	
6.1.4.2	Elaboration of the pieces drawn according to the work executed.	gv	1	100.00 €	100.00 €	
SUBTOTAL STORM WATER SYSTEM						3,540.00 €



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
FIRE FIGHTING WATER SYSTEM						
7.1	Package 3 (Block U)					6,530.00 €
7.1.1	Piping					
7.1.1.1	Supply and installation of HDPE pipe, for Firefighting network, buried, including earthworks and installation, as well as all the works, materials and accessories necessary to the correct execution of the task, with the following diameters:					
7.1.1.1.1	Ø 50 mm	m	16.50	50.00 €	825.00 €	
7.1.1.2	Supply and installation of Galvanized steel pipe, for the Firefighting network, including bonding and branch accessories, supports and clamps with acoustic insulation, threaded or grooved, installed at sight, fixed by quick-mount clamps in galvanized iron attached to walls or ceilings, including opening and closure of notches, wall/floor/ceilings holes for pipe crossings, a first coat of painting anticorrosive, and two coats of colour finishing according legal standards, and remaining accessories necessary to the good functioning of the network, according the plans and construction supervision instruction, with the following diameters:					
7.1.1.2.1	Ø 50 mm	m	7.50	32.00 €	240.00 €	
7.1.2	Equipment and Accessories					
7.1.2.1	Supply and installation of Swing type fire hose reel, Model 99-N(19mm), to be installed in a closet with 180° opening door, predicted by the architecture, with reinforced PVC hose, with 30m length, 3 position nozzle: jet, fog and closure, including manual quick-release valve with manometer, axial bracket, tested and approved according EN 671-1:2012, remaining accessories and necessary works for a perfect execution of the task according construction supervision instructions.	un	3	400.00 €	1,200.00 €	
7.1.3	Complementary Work					
7.1.3.1	Construction work to support the implementation of water distribution networks for fire-fighting purposes, as well as all the works, materials and accessories necessary to the correct execution of the task.					
7.1.3.2	Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task	gv	1	300.00 €	300.00 €	
7.1.4	Final Work					
7.1.4.1	Verification, cleaning and testing of all network.	gv	1	200.00 €	200.00 €	
7.1.4.2	Elaboration of the pieces drawn according to the work executed.	gv	1	200.00 €	200.00 €	
TOTAL FIRE FIGHTING WATER					3,265.00 €	



REHABILITATION OF THE SAUDI MATERNITY HOSPITAL KASSALA HEALTH CITADEL - SUDAN BOQ - BILL OF QUANTITY Package 5 (Block L)		
CODE	DISCIPLINE	VALUE
4	WATER SUPPLY SYSTEM	5,434.89 €
5	WASTEWATER DRAINAGE SYSTEM	19,825.00 €
6	STORMWATER DRAINAGE SYSTEM	1,336.00 €
7	FIREFIGHTING WATER SYSTEM	5,974.00 €
TOTAL		32,569.89 €



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
4. WATER SUPPLY SYSTEM				5,434.89 €		
4.1 Package 5 (Block L)				5,434.89 €		
4.1.1	Pipping					
4.1.1.1	Supply and installation of PP-R Pipes for the water supply network, with thermal insulation in hot water, including all the works, materials and accessories necessary to the correct execution of the task, with the following diameters:					
4.1.1.1.1	Cold Water:					
4.1.1.1.1.1	Ø 16 mm	m	99.00	1.00	99.00 €	
4.1.1.1.1.2	Ø 20 mm	m	132.00	1.50	198.00 €	
4.1.1.1.1.3	Ø 25 mm	m	52.00	2.50	130.00 €	
4.1.1.1.1.4	Ø 32 mm	m	21.50	3.00	64.50 €	
4.1.1.1.1.5	Ø 40 mm	m	50.20	3.60	180.72 €	
4.1.1.1.1.6	Ø 50 mm	m	47.20	3.60	169.92 €	
4.1.1.1.1.7	Ø 63 mm	m	6.10	7.50	45.75 €	
4.1.1.1.2	Hot Water:					
4.1.1.1.2.1	Ø 20 mm	m	90.00	1.50	135.00 €	
4.1.1.1.2.2	Ø 25 mm	m	10.00	2.50	25.00 €	
4.1.1.2	Supply and installation of HDPE pipeor the water supply network, buried, including earthworks and installation, as well as all the works, materials and accessories necessary to the correct execution of the task, with the following diameters:					
4.1.1.2.1	Cold Water:					
4.1.1.2.1.1	Ø 63 mm	m	2.50	70.00	175.00 €	
4.1.2	Equipment and Accessories					
4.1.2.1	Supply and installation of angles Valves, as well as all the works, materials and accessories necessary to the correct execution of the task, with the following equipments:					
	Wash Basin					
	- In cold water:	un	20	4.00	80.00 €	
	WC Cistern					
	- In cold water:	un	40	4.00	160.00 €	
4.1.2.2	Supply and installation of Valves, as well as all the works, materials and accessories necessary to the correct execution of the task, with the following diameters:					
4.1.2.2.1	Ø 20 mm	un	24	4.00	96.00 €	
4.1.2.2.2	Ø 25 mm	un	16	6.00	96.00 €	
4.1.2.2.3	Ø 32 mm	un	20	6.00	120.00 €	
4.1.2.3	Supply and installation of shut-off buried Valves, as well as all the works, materials and accessories necessary to the correct execution of the task, with the following diameters:					
4.1.2.3.1	Ø 63 mm	un	2	10.00	20.00 €	
4.1.2.4	Supply and installation of eletrical heaters with acumulation tank, including shut-off valves, retention valves, electrical connection work, and all accessories, and all works and materials and accessories necessary to a correct execution of the task, with the following capacities:					
4.1.2.4.1	50L horizontal	un	2	300.00	600.00 €	
4.1.2.4.2	80L horizontal	un	4	560.00	2,240.00 €	
4.1.3	Complementary Work					
4.1.3.1	Construction work to support the implementation of water distribution networks for fire-fighting purposes, as well as all the works, materials and accessories necessary to the correct execution of the task.					
4.1.3.2	Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task	qv	1	300.00	300.00 €	
4.1.4	Final Work					
4.1.4.1	Verification, cleaning and testing of all network.	qv	1	150.00	150.00 €	
4.1.4.2	Elaboration of the pieces drawn according to the work executed.	qv	1	100.00	100.00 €	
				5,434.89 €		



BOQ - BILL OF QUANTITY
4-WATER SUPPLY

CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
5	WASTEWATER DRAINAGE SYSTEM					19,825.00 €
5.1	Package 5 (Block L)					19,825.00 €
5.1.1	Pipping					
5.1.1.1	Supply and installation of PVC pipes for buried/embedded wastewater drainage network (inside building), installed in proper ditches, as well as all complementary works, materials and accessories necessary to the perfect execution of the task, according to the plans and construction supervision instructions, with the following diameters:					
5.1.1.1.1	Ø 40 mm	m	77.00	6.00 €		462.00 €
5.1.1.1.2	Ø 75 mm	m	16.00	7.50 €		120.00 €
5.1.1.1.3	Ø 90 mm	m	46.00	9.00 €		414.00 €
5.1.1.2	Supply and installation of PVC pipes for suspended wastewater drainage network, as well as all complementary works, materials and accessories necessary to the perfect execution of the task, according to the plans and construction supervision instructions, with the following diameters:					
5.1.1.2.1	Ø 90 mm	m	12.00	12.00 €		144.00 €
5.1.1.2.2	Ø 110 mm	m	27.00	12.00 €		324.00 €
5.1.1.3	Supply and installation of PVC pipes for buried/embedded wastewater drainage network (outside building), installed in proper ditches, including terrain movements, such as excavation, landfill and transportation of remaining terrain offsite (if necessary), as well as all complementary works, materials and accessories necessary to the perfect execution of the task, according to the plans and construction supervision instructions, with the following diameters:					
5.1.1.3.1	Ø 110 mm	m	32.00	12.00 €		384.00 €
5.1.1.3.2	Ø 125 mm	m	12.00	15.00 €		180.00 €
5.1.1.3.3	Ø 160 mm	m	71.00	15.00 €		1,065.00 €
5.1.2	Equipment and Accessories					
5.1.2.1	Supply and installation of siphon, as well as all the works, materials and accessories necessary to the correct execution of the task, to install on the following equipments:					
5.1.2.1.1	Wash Basin	un	20	150.00 €		3,000.00 €
5.1.2.1.2	Turkish Toilet	un	20	100.00 €		2,000.00 €
5.1.2.1.3	Shower	un	20	150.00 €		3,000.00 €
5.1.2.2	Supply and installation of traps in chrome plated brass, as well as all the works, materials and accessories necessary to the correct execution of the task.	un	20	70.00 €		1,400.00 €
5.1.2.3	Supply and installation of cleaning vertical eye on the floor, as well as all the works, materials and accessories necessary to the correct execution of the task.	un	10	30.00 €		300.00 €
5.1.2.4	Supply and installation of ventilation hats, to be installed on the roof, as well as all the works, materials and accessories necessary to the correct execution of the task, with the following diameters:					
5.1.2.4.1	Ø 90 mm	un	2	6.00 €		12.00 €
5.1.2.5	Execution of a concrete manholes supported by a suitable recessed cast iron covers, load class B125 to receive the same finishing of the floor, including terrain movements, such as excavation, landfill and transportation of remaining terrain offsite (if necessary), as well as all complementary works, materials and accessories necessary to the perfect execution of the task, according to the plans, detail drawings and construction supervision instructions, with the following dimensions:					
5.1.2.5.1	0.80x0.80	un	14	180.00 €		2,520.00 €
5.1.2.6	Execution of the septic tank in reinforced concrete, according to the drawing, and in all circumstances its structural resistance must be ensured and its complete tightness, through an interior covering suitable to the characteristics of the water to be treated; the openings must have a minimum usable dimension of 600mmx600mm or a minimum usable diameter of 600mm, with hermetic closure; must have a downward slope directed towards the openings, in order to facilitate the easier removal of accumulated sludge; must have septa at the entrance and exit; be provided with ventilation with a diameter of not less than 90mm. Including all complementary works, materials and accessories necessary to the perfect execution of the task	un	1	3,500.00 €		3,500.00 €
5.1.3	Complementary Work					
5.1.3.1	Construction work to support the implementation of wastewater networks, as well as all the works, materials and accessories necessary to the correct execution of the task.	gv	1	300.00 €		300.00 €
5.1.3.2	Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task	gv	1	250.00 €		250.00 €
5.1.3.3	Evaluation, rehabilitation (if necessary), cleaning and maintenance works of existing networks to be maintained, including all materials and work necessary for their perfect execution.	gv	1	200.00 €		200.00 €
5.1.4	Final Work					
5.1.4.1	Verification and testing of all network.	gv	1	150.00 €		150.00 €
5.1.4.2	Elaboration of the pieces drawn according to the work executed.	gv	1	100.00 €		100.00 €
						19,825.00 €



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
6.	STORMWATER DRAINAGE SYSTEM					1,336.00 €
6.1.	Package 5 (Block L)					1,336.00 €
6.1.1	Pipping					
6.1.1.1	Supply and installation of PVC pipes for vertical rainwater drainage network, embedded/at sight, as well as all complementary works, materials and accessories necessary to the perfect execution of the task, according to the plans and construction supervision instructions, with the following diameters:					
6.1.1.1.1	Ø 160 mm	m	28.00	12.00	336.00 €	
6.1.2	Complementary Work					
6.1.2.1	Construction work to support the implementation of wastewater networks, as well as all the works, materials and accessories necessary to the correct execution of the task.	gv	1	300.00	300.00 €	
6.1.2.2	Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task	gv	1	250.00	250.00 €	
6.1.2.3	Evaluation, rehabilitation (if necessary), cleaning and maintenance works of existing networks to be maintained, including all materials and work necessary for their perfect execution.	gv	1	200.00	200.00 €	
6.1.3	Final Work					
6.1.3.1	Verification and testing of all network.	gv	1	150.00	150.00 €	
6.1.3.2	Elaboration of the pieces drawn according to the work executed.	gv	1	100.00	100.00 €	
						1,336.00 €



BOQ - BILL OF QUANTITY
6-STORMWATER DRAINAGE

CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
7. FIRE FIGHTING WATER SYSTEM				5,974.00 €		
7.1. Package 5 (Block L)				5,974.00 €		
7.1.1	Piping					
7.1.1.1	Supply and installation of HDPE pipe, for Firefighting network, buried, including earthworks and installation, as well as all the works, materials and accessories necessary to the correct execution of the task, with the following diameters:					
7.1.1.1.1	Ø 75 mm	m	23.00	78.00	1,794.00 €	
7.1.1.2	Supply and Installation of Galvanized steel pipe, for the Firefighting network, including bonding and branch accessories, supports and clamps with acoustic insulation, threaded or grooved, installed at sight, fixed by quick-mount clamps in galvanized iron attached to walls or ceilings, including opening and closure of notches, wall/floor/ceilings holes for pipe crossings, a first coat of painting anticorrosive, and two coats of colour finishing according legal standards, and remaining accessories necessary to the good functioning of the network, according the plans and construction supervision instruction, with the following diameters:					
7.1.1.2.1	Ø 50 mm	m	12.00	32.00	384.00 €	
7.1.1.2.2	Ø 65 mm	m	23.00	52.00	1,196.00 €	
7.1.2	Equipment and Accessories					
7.1.2.1	Supply and installation of Swing type fire hose reel, Model 99-N(19mm), to be installed in a closet with 180° opening door, predicted by the architecture, with reinforced PVC hose, with 30m length, 3 position nozzle: jet, fog and closure, including manual quick-release valve with manometer, axial bracket, tested and approved according EN 671-1:2012, remaining accessories and necessary works for a perfect execution of the task according construction supervision instructions.	un	4	400.00	1,600.00 €	
7.1.3	Complementary Work					
7.1.3.1	Construction work to support the implementation of water distribution networks for fire-fighting purposes, as well as all the works, materials and accessories necessary to the correct execution of the task.					
7.1.3.2	Supply and installation of intumescent clamps and sleeves with characteristics EI60 and EI90 for fire protection at crossings of pipes in combustible material, as well as all the works, materials and accessories necessary to the correct execution of the task	gv	1	300.00	300.00 €	
7.1.4	Final Work					
7.1.4.1	Verification, cleaning and testing of all network.	gv	1	200.00	200.00 €	
7.1.4.2	Elaboration of the pieces drawn according to the work executed.	gv	1	200.00	200.00 €	
						5,974.00 €



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
13 FIRE SAFETY						
13.1 BLOCK A 840.00 €						
13.1.1	EMERGENCY SIGNS					
13.1.1.1	Application of emergency signs, in accordance with the fire safety project, with the following dimensions:					
13.1.1.1.1	200 x 200 mm:					
13.1.1.1.1.1	S1 - Fire extinguisher	un	11.0	10.00 €	110.00 €	
13.1.1.1.2	150 x 200 mm:					
13.1.1.1.2.1	S2 - Fire Alarm	un	9.0	10.00 €	90.00 €	
13.1.1.1.2.2	S4 - Fire Hose	un	5.0	10.00 €	50.00 €	
13.1.1.1.2.3	S5 - Fire extinguisher Instructions for use, Carbon Dioxide	un	5.0	10.00 €	50.00 €	
13.1.1.1.2.4	S6 - Fire extinguisher Instructions for use, ABC Powder	un	6.0	10.00 €	60.00 €	
13.1.1.1.3	300 x 300 mm:					
13.1.1.1.3.1	P1 - Warning, Electric switch	un	5.0	10.00 €	50.00 €	
13.1.1.1.4	PE - Application of Escape Plan and simplified instructions, in accordance with the fire safety project.	un	6.0	10.00 €	60.00 €	
13.1.2	MEANS OF FIRST INTERVENTION					
13.1.2.1	EXTINGUISHERS					
13.1.2.1.1	Installation of portable fire extinguishers with the following characteristics:					
13.1.2.1.1.1	ABC Powder, 6kg	un	6.0	25.00 €	150.00 €	
13.1.2.1.1.2	Carbon Dioxide (CO ₂), 5kg	un	4.0	46.00 €	184.00 €	
13.1.2.1.1.3	Carbon Dioxide (CO ₂), 2kg	un	1.0	36.00 €	36.00 €	
13.2 BLOCK B 85.00 €						
13.2.1	EMERGENCY SIGNS					
13.2.1.1	Application of emergency signs, in accordance with the fire safety project, with the following dimensions:					
13.2.1.1.1	200 x 200 mm:					
13.1.1.1.1.1	S1 - Fire extinguisher	un	1.0	10.00 €	10.00 €	
13.2.1.1.2	150 x 200 mm:					
13.2.1.1.2.1	S2 - Fire Alarm	un	1.0	10.00 €	10.00 €	
13.2.1.1.2.2	S4 - Fire Hose	un	1.0	10.00 €	10.00 €	
13.2.1.1.2.3	S6 - Fire extinguisher Instructions for use, ABC Powder	un	1.0	10.00 €	10.00 €	
13.2.1.1.3	300 x 300 mm:					
13.2.1.1.3.1	P1 - Warning, Electric switch	un	1.0	10.00 €	10.00 €	
13.2.1.1.4	Application of Escape Plan and simplified instructions, in accordance with the fire safety project.	un	1.0	10.00 €	10.00 €	
13.2.2	MEANS OF FIRST INTERVENTION					
13.2.2.1	EXTINGUISHERS					
13.2.2.1.1	Installation of portable fire extinguishers with the following characteristics:					
13.2.2.1.1.1	ABC Powder, 6kg	un	1.0	25.00 €	25.00 €	
13.3 BLOCK F 100.00 €						
13.3.1	EMERGENCY SIGNS					
13.3.1.1	Application of emergency signs, in accordance with the fire safety project, with the following dimensions:					
13.3.1.1.1	200 x 200 mm:					
13.3.1.1.1.1	S1 - Fire extinguisher	un	2.0	10.00 €	20.00 €	
13.3.1.1.2	150 x 200 mm:					
13.3.1.1.2.1	S6 - Fire extinguisher Instructions for use, ABC Powder	un	2.0	10.00 €	20.00 €	
13.3.1.1.3	300 x 300 mm:					
13.3.1.1.3.1	P1 - Warning, Electric switch	un	1.0	10.00 €	10.00 €	
13.3.2	MEANS OF FIRST INTERVENTION					
13.3.2.1	EXTINGUISHERS					
13.3.2.1.1	Installation of portable fire extinguishers with the following characteristics:					
13.3.2.1.1.1	ABC Powder, 6kg	un	2.0	25.00 €	50.00 €	
13.4 BLOCK C 116.00 €						
13.4.1	EMERGENCY SIGNS					
13.4.1.1	Application of emergency signs, in accordance with the fire safety project, with the following dimensions:					
13.4.1.1.1	200 x 200 mm:					
13.4.1.1.1.1	S1 - Fire extinguisher	un	1.0	10.00 €	10.00 €	
13.4.1.1.1.2	S8 - Emergency fuel shut off valve	un	1.0	10.00 €	10.00 €	
13.4.1.1.2	150 x 200 mm:					
13.4.1.1.2.1	S2 - Fire Alarm	un	1.0	10.00 €	10.00 €	
13.4.1.1.2.2	S5 - Fire extinguisher Instructions for use, Carbon Dioxide	un	1.0	10.00 €	10.00 €	
13.4.1.1.3	300 x 100 mm:					
13.4.1.1.3.1	S9 - Fire alarm control panel	un	1.0	10.00 €	10.00 €	
13.4.1.1.3.2	S10 - Mains Electricity cut off point	un	1.0	10.00 €	10.00 €	
13.4.1.1.4	300 x 300 mm:					
13.4.1.1.4.1	P1 - Warning, Electric switch	un	1.0	10.00 €	10.00 €	
13.4.2	MEANS OF FIRST INTERVENTION					
13.4.2.1	EXTINGUISHERS					
13.4.2.1.1	Installation of portable fire extinguishers with the following characteristics:					
13.4.2.1.1.1	Carbon Dioxide (CO ₂), 5kg	un	1.0	46.00 €	46.00 €	
SUBTOTAL FIRE SAFETY					1.141.00 €	1.141 Esc.



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
13	FIRE SAFETY					
13.1	BLOCK J					
13.1.1	EMERGENCY SIGNS					
13.1.1.1	Application of emergency signs, in accordance with the fire safety project, with the following dimensions:					
13.1.1.1.1	200 x 200 mm:					
13.1.1.1.1.1	S1 - Fire extinguisher	un	11.0	10.00 €		110.00 €
13.1.1.1.2	150 x 200 mm:					
13.1.1.1.2.1	S2 - Fire Alarm	un	4.0	10.00 €		40.00 €
13.1.1.1.2.2	S4 - Fire Hose	un	2.0	10.00 €		20.00 €
13.1.1.1.2.3	S5 - Fire extinguisher Instructions for use, Carbon Dioxide	un	3.0	10.00 €		30.00 €
13.1.1.1.2.4	S6 - Fire extinguisher Instructions for use, ABC Powder	un	8.0	10.00 €		80.00 €
13.1.1.1.3	300 x 300 mm:					
13.1.1.1.3.1	P1 - Warning, Electric switch	un	7.0	10.00 €		70.00 €
13.1.1.1.4	PE - Application of Escape Plan and simplified instructions, in accordance with the fire safety project.	un	2.0	10.00 €		20.00 €
13.1.2	MEANS OF FIRST INTERVENTION					
13.1.2.1	EXTINGUISHERS					
13.1.2.1.1	Installation of portable fire extinguishers with the following characteristics:					
13.1.2.1.1.1	ABC Powder, 6kg	un	8.0	25.00 €		200.00 €
13.1.2.1.1.2	Carbon Dioxide (CO ₂), 5kg	un	3.0	46.00 €		138.00 €
SUBTOTAL FIRE SAFETY						708.00 €



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BCQ - BILL OF QUANTITY						
13	FIRE SAFETY					784.00 €
13.1	BLOCK L					784.00 €
13.1.1	EMERGENCY SIGNS					
13.1.1.1	Application of emergency signs, in accordance with the fire safety project, with the following dimensions:					
13.1.1.1.1	200 x 200 mm:					
13.1.1.1.1.1	S1 - Fire extinguisher	un	12.0	10.00 €	120.00 €	
13.1.1.1.2	150 x 200 mm:					
13.1.1.1.2.1	S2 - Fire Alarm	un	4.0	10.00 €	40.00 €	
13.1.1.1.2.2	S4 - Fire Hose	un	4.0	10.00 €	40.00 €	
13.1.1.1.2.3	S5 - Fire extinguisher Instructions for use, Carbon Dioxide	un	4.0	10.00 €	40.00 €	
13.1.1.1.2.4	S6 - Fire extinguisher Instructions for use, ABC Powder	un	8.0	10.00 €	80.00 €	
13.1.1.1.3	300 x 300 mm:					
13.1.1.1.3.1	P1 - Warning, Electric switch	un	4.0	10.00 €	40.00 €	
13.1.1.1.4	PE - Application of Escape Plan and simplified instructions, in accordance with the fire safety project.	un	4.0	10.00 €	40.00 €	
13.1.2	MEANS OF FIRST INTERVENTION					
13.1.2.1	EXTINGUISHERS					
13.1.2.1.1	Installation of portable fire extinguishers with the following characteristics:					
13.1.2.1.1.1	ABC Powder, 6kg	un	8.0	25.00 €	200.00 €	
13.1.2.1.1.2	Carbon Dioxide (CO ₂), 5kg	un	4.0	46.00 €	184.00 €	
						784 Esc.



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
10 Ventilation and Air Conditioning (VAC)						
BLOCK A+B+F+C						
10.1	Ventilation and Air Conditioning (VAC)					
10.1.1	Ducts and Casings (Section 3/4/6)					
10.1.1.1	Supply and installation of spiral galvanized steel ductwork and fittings including hangers and washers covered in an approved vapour seal, complete with duct cladding, volume control dampers, fire dampers, supports and all required accessories as per technical specifications and drawings.					
10.1.1.1.1	- Spiral galvanized steel ductwork without insulation	ml	0.30	100.00 €		30.00 €
10.1.1.1.1	- DN 125					
10.1.2	VAC Fans (Section 8)					
10.1.2.1	Supply and installation of exhaust and ceiling fans complete with fittings, flexible connectors, spring mount vibration isolators, frequency inverter, protection against corrosion and all required accessories as specified in schedules of equipment, detailed drawings and technical specifications.					
10.1.2.1.1	Exhaust wall mounted Fan	Un	2.00	50.00 €		100.00 €
10.1.2.1.1	- EF1 - S&P Silent 200					
10.1.2.1.2	Ceiling fans	Un	34.00	55.00 €		1,870.00 €
10.1.2.1.2.1	- CF1 - Ceiling fan - S&P HTB 75 RC	Un	1.00	55.00 €		55.00 €
10.1.2.1.2.2	- CF2 - Ceiling fan - S&P HTB 90 RC	Un	5.00	65.00 €		325.00 €
10.1.2.1.2.3	- CF4 - Ceiling fan - S&P HTB IP55					
10.1.3	Air Outlets And Inlets (Section 10)					
10.1.3.1	Supply and installation of exhaust air louvers complete with insect screen and gravity shutters including connections to ductwork and all required accessories as per technical specifications and drawings.	Un	2.00	400.00 €		800.00 €
10.1.3.1.1	- EL1 - 200x200					
10.1.4	Split Air Conditioners (Section 11)					
10.1.4.1	Supply and installation of outdoor units, including integral controls, protection device, protection against corrosion, complete with condensate piping, as per technical specifications and drawings.					
10.1.4.1.1	CDU1 - LGS09EQ.UA3	Un	33.00	400.00 €		13,200.00 €
10.1.4.1.2	CDU2 - LGS12EQ.UA3	Un	2.00	400.00 €		800.00 €
10.1.4.2	Supply and installation of indoor units, including wired remote control, accessories, supports as per technical specifications and drawings.					
10.1.4.2.1	FCU1 - LGS09EQ.NSJ	Un	33.00	400.00 €		13,200.00 €
10.1.4.2.2	FCU2 - LGS12EQ.NSJ	Un	2.00	400.00 €		800.00 €
10.1.5	HVAC Testing, Adjusting and Balancing (Section 13)					
10.1.5.1	Final tests of the installation including balancing, adjusting, commissioning and handing to client complete operational systems and equipment as per technical specifications and drawings. Installation according to drawings and specifications.	Gv	1.00	200.00 €		200.00 €
10.2	Hydraulic Installations VAC					
10.2.1	Refrigerant Piping (Section 14)					
10.2.1.1	Supply and installation of refrigeration tube - EN 12735-1, copper tube designed specifically for refrigeration and air conditioning use and accordingly cleaned, nitrogen-purged and capped, complete with all necessary fittings, supports and all required accessories as technical specifications and drawings.					
10.2.1.1.1	Copper with thermal insulation and protection exposed pipe by aluminium cladding	ml	184.70	7.00 €		1,292.90 €
10.2.1.1.1	- Lq Ø6.4 mm / Gas Ø9.5 mm					
10.2.1.1.2	Supply and installation of drainage pipe work complete with all necessary fittings, supports and accessories within building as per technical specifications and drawings.	Gv	1.00	550.00 €		550.00 €
10.3	General					
10.3.1	Identification for VAC Ducting Piping and Equipment.	Gv	1.00	200.00 €		200.00 €
10.3.2	Painting, Tagging and Labelling of entire mechanical system as specified.	Gv	1.00	200.00 €		200.00 €
10.3.3	Maintenance for two years (guarantee period), including supply of all needed spare parts during the year.	Gv	1.00	1,750.00 €		1,750.00 €
10.3.4	Transport of Equipment VAC	Gv	1.00	350.00 €		350.00 €
SUBTOTAL VENTILATION AND AIR CONDITIONING						35,722.90 €

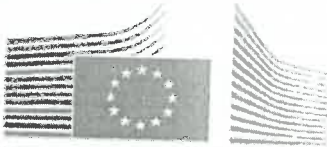


CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
10 Ventilation and Air Conditioning (VAC)						
BLOCK J						
10.1	Ventilation and Air Conditioning (VAC)					
10.1.1	Ducts and Casings (Section 3/4/6)					
10.1.1.1	Supply and installation of spiral galvanized steel ductwork and fittings including hangers and washers covered in an approved vapour seal, complete with duct cladding, volume control dampers, fire dampers, supports and all required accessories as per technical specifications and drawings.					
10.1.1.1.1	- Spiral galvanized steel ductwork without insulation	ml	0.30	100.00 €		30.00 €
10.1.1.1.1	- DN 125					
10.1.2	VAC Fans (Section 8)					
10.1.2.1	Supply and installation of exhaust and ceiling fans complete with fittings, flexible connectors, spring mount vibration isolators, frequency inverter, protection against corrosion and all required accessories as specified in schedules of equipment, detailed drawings and technical specifications.					
10.1.2.1.1	Exhaust wall mounted Fan	Un	2.00	50.00 €		100.00 €
10.1.2.1.1	- EF1 - S&P Silent 200					
10.1.2.1.2	Ceiling fans	Un	1.00	55.00 €		55.00 €
10.1.2.1.2.1	- CF1 - Ceiling fan - S&P HTB 75 RC	Un	3.00	55.00 €		165.00 €
10.1.2.1.2.2	- CF2 - Ceiling fan - S&P HTB 90 RC	Un		55.00 €		
10.1.2.1.2.3	- CF3 - Ceiling fan - S&P HTB 150 RC	Un	4.00	55.00 €		220.00 €
10.1.3	Air Outlets And Inlets (Section 10)					
10.1.3.1	Supply and installation of door grille complete with all accessories as per technical specifications and drawings.					
10.1.3.1.1	- ATG1 - 200x100	Un	1.00	200.00 €		200.00 €
10.1.3.2	Supply and installation of exhaust air louvers complete with insect screen and gravity shutters including connections to ductwork and all required accessories as per technical specifications and drawings.					
10.1.3.2.1	- EL1 - 200x200	Un	2.00	400.00 €		800.00 €
10.1.4	Split Air Conditioners (Section 11)					
10.1.4.1	Supply and installation of outdoor units, including integral controls, protection device, protection against corrosion, complete with condensate piping, as per technical specifications and drawings.					
10.1.4.1.1	CDU1 - LGS09EQ.UA3	Un	2.00	400.00 €		800.00 €
10.1.4.1.2	CDU3 - LGS18EQ.UL2	Un	3.00	500.00 €		1,500.00 €
10.1.4.1.3	CDU4 - LGS24EQ.SSK	Un	1.00	650.00 €		650.00 €
10.1.4.2	Supply and installation of indoor units, including wired remote control, accessories, supports as per technical specifications and drawings.					
10.1.4.2.1	FCU1 - LGS09EQ.NSJ	Un	2.00	400.00 €		800.00 €
10.1.4.2.2	FCU3 - LGS18EQ.NSK	Un	3.00	500.00 €		1,500.00 €
10.1.4.2.3	FCU4 - LGS24EQ.NSK	Un	1.00	650.00 €		650.00 €
10.1.5	HVAC Testing, Adjusting and Balancing (Section 13)					
10.1.5.1	Final tests of the installation including balancing, adjusting, commissioning and handing to client complete operational systems and equipment as per technical specifications and drawings. Installation according to drawings and specifications.	Gv	1.00	300.00 €		300.00 €
10.2	Hydraulic Installations VAC					
10.2.1	Refrigerant Piping (Section 14)					
10.2.1.1	Supply and installation of refrigeration tube - EN 12735-1, copper tube designed specifically for refrigeration and air conditioning use and accordingly cleaned, nitrogen-purged and capped, complete with all necessary fittings, supports and all required accessories as technical specifications and drawings.					
10.2.1.1.1	Copper with thermal insulation and protection exposed pipe by aluminium cladding					
10.2.1.1.1.1	- Liq Ø6.4 mm / Gas Ø9.5 mm	ml	17.40	7.00 €		121.80 €
10.2.1.1.1.2	- Liq Ø6.4 mm / Gas Ø12.7 mm	ml	9.30	8.00 €		74.40 €
10.2.1.1.1.3	- Liq Ø6.4 mm / Gas Ø15.9 mm	ml	7.10	9.00 €		63.90 €
10.2.1.1.2	Supply and installation of drainage pipe work complete with all necessary fittings, supports and accessories within building as per technical specifications and drawings.	Gv	1.00	200.00 €		200.00 €
10.3	General					
10.3.1	Identification for VAC Ducting Piping and Equipment.	Gv	1.00	200.00 €		200.00 €
10.3.2	Painting, Tagging and Labelling of entire mechanical system as specified.	Gv	1.00	200.00 €		200.00 €
10.3.3	Maintenance for two years (guarantee period), including supply of all needed spare parts during the year.	Gv	1.00	600.00 €		600.00 €
10.3.4	Transport of Equipment VAC	Gv	1.00	200.00 €		200.00 €
SUBTOTAL VENTILATION AIR CONDITIONING						9,430.10 €



CODE	DESCRIPTION	UNITS	QUANTITIES	PRICES (Euros)		
				Unitary	Partial	Totals
BOQ - BILL OF QUANTITY						
11 MECHANICAL INSTALLATIONS						
11.1 MEDICAL GASES						
11.1.1 BLOCK J 30,242.00 €						
11.1.4	SECTION 4					
11.1.4.1	COPPER PIPELINE					
11.1.4.1.1	Supply and assembly of copper tube suitable for medical gases (according to EN 13348), degreased, deoxidized, arsenic-free, silver-welded (silver content not less than 40% of this), plugged at the ends, with certificate issued by the manufacturer, including all connection accessories, for:					
11.1.4.1.1.1	Ø 8 x 10 mm for to gas O ₂	m	67.0	18.00 €		1,206.00 €
11.1.4.1.1.2	Ø 10 x 12 mm for to gas O ₂	m	29.0	20.00 €		580.00 €
11.1.4.1.1.3	Ø 14 x 16 mm for to gas O ₂	m	8.0	24.00 €		192.00 €
11.1.4.1.1.4	Ø 8 x 10 mm for to gas MCA	m	56.0	18.00 €		1,008.00 €
11.1.4.1.1.5	Ø 10 x 12 mm for to gas MCA	m	22.0	20.00 €		440.00 €
11.1.4.2	IDENTIFICATION OF PIPELINES					
11.1.4.2.1	Identification of pipework throughout their length, whether mounted in false ceiling or buried piping, in conventional color or with labels	vg	1.0	170.00 €		170.00 €
11.1.4.3	MEDICAL GAS OUTLETS					
11.1.4.3.1	Supply and assembly of outlets double-sided, with internal filter, with CE marking, manufactured according to ISO 7396-1 2016 for the following gases:					
11.1.4.3.1.1	O ₂	un	16.0	85.00 €		1,360.00 €
11.1.4.3.1.2	MCA	un	8.0	85.00 €		680.00 €
11.1.4.4	BALL VALVES					
11.1.4.4.1	Supply and assembly of 1/4 turn isolating valves, manufactured according to ISO 7396-1: 2016, for network sectioning, for:					
11.1.4.4.1.1	Ø 8 x 10 mm for to gas O ₂	un	1.0	95.00 €		95.00 €
11.1.4.4.1.2	Ø 10 x 12 mm for to gas O ₂	un	2.0	105.00 €		210.00 €
11.1.4.4.1.3	Ø 8 x 10 mm for to gas MCA 4,5 bar	un	3.0	95.00 €		285.00 €
11.1.4.5	PRESSURE REDUCTION					
11.1.4.5.1	Supply and assembly of second reduction for O2 in pressure 8 bar / 4,8 bar, with Medical Device marking 93/42 / EEC, in simple, manufactured according to ISO 7396-1: 2016.	un	1.0	1,265.00 €		1,265.00 €
11.1.4.5.2	Supply and assembly of second reduction for MCA in pressure 8 bar / 4,5 bar, with Medical Device marking 93/42 / EEC, in simple, manufactured according to ISO 7396-1: 2016.	un	1.0	1,265.00 €		1,265.00 €
11.1.5	SECTION 5					
11.1.5.1	ALARMS SYSTEM					
11.1.5.1.1	Local electronic-type alarm including pressure sensors across the network (O ₂) and all connections, with CE device marking medical and according to ISO 7396-1: 2016. Brand: Air Liquide Medicinal	un	1.0	980.00 €		980.00 €
11.1.5.1.2	Local electronic-type alarm including pressure sensors across the network (MCA) and all connections, with CE device marking medical and according to ISO 7396-1: 2016. Brand: Air Liquide Medicinal	un	1.0	980.00 €		980.00 €
11.1.6	SECTION 6					
11.1.6.1	ELECTRICAL INSTALLATIONS					
11.1.6.1.1	Electrical connections to the alarm system	un	1.0	170.00 €		170.00 €
11.1.6.2	TESTE AND EXPERIENCE					
11.1.6.2.1	Construction and electricity works	vg	1.0	1,035.00 €		1,035.00 €
11.1.6.2.2	Tests and experiences with the delivery of certificates signed by the contractor and inspection, according to the standard and ISO 7396-1: 2016	vg	1.0	1,110.00 €		1,110.00 €
11.1.6.2.3	Final screens with the traces of the medical gas networks	vg	1.0	980.00 €		980.00 €
11.1.6.3	SATT TRAINING					
11.1.6.3.1	Staff training and warranty and maintenance for two years (guarantee period), including supply of all needed spare parts during the year.	vg	1.0	1,110.00 €		1,110.00 €
SUBTOTAL MEDICAL GASES						15,121.00 €





PLEASE COMPLETE AND SIGN THIS FORM AND ATTACH COPIES OF OFFICIAL SUPPORTING DOCUMENTS (REGISTER(S) OF COMPANIES, OFFICIAL GAZETTE, VAT REGISTRATION, ETC.)

LEGAL ENTITY

PRIVACY STATEMENT

http://ec.europa.eu/budget/contracts_grants/info_contracts/legal_entities/legal_entities_en.cfm#en

Please use CAPITAL LETTERS and LATIN CHARACTERS when filling in the form.

PRIVATE/PUBLIC LAW BODY WITH LEGAL FORM

OFFICIAL NAME ①	Manazil Trading & Investment Co. Ltd.		
BUSINESS NAME (if different)			
ABBREVIATION			
LEGAL FORM	Contracting		
ORGANISATION TYPE	FOR PROFIT <input checked="" type="checkbox"/> NON FOR PROFIT <input type="checkbox"/> NGO ② YES <input type="checkbox"/> NO <input type="checkbox"/>		
MAIN REGISTRATION NUMBER ③	11266		
SECONDARY REGISTRATION NUMBER (if applicable)			
PLACE OF MAIN REGISTRATION	CITY	Khartoum	
	COUNTRY	Sudan	
DATE OF MAIN REGISTRATION	07 DD	03 MM	1997 YYYY
VAT NUMBER	8037		
ADDRESS OF HEAD OFFICE	Khartoum- Riyadh- Mashtal Street Block No 14 Plot 24		
POSTCODE	11111	P.O. BOX	10171
COUNTRY	Sudan	CITY	Khartoum
E-MAIL	manazil97@gmail.com		
PHONE	83 227436		

DATE 17/12/2020

SIGNATURE OF AUTHORISED REPRESENTATIVE

STAMP



① National denomination and its translation in EN or FR if existing.

② NGO = Non Governmental Organisation, to be completed if NFPO is indicated.

③ Registration number in the national register of companies. See table with corresponding field denomination by country.





FINANCIAL IDENTIFICATION

PRIVACY STATEMENT

http://ec.europa.eu/budget/contracts_grants/info_contracts/financial_id/financial_id_en.cfm#en

Please use CAPITAL LETTERS and LATIN CHARACTERS when filling in the form.

BANKING DETAILS ①

ACCOUNT NAME ②	Manazil Trading & Investment Co.Ltd		
IBAN/ACCOUNT NUMBER ③	78874		
CURRENCY	USA Dollar+ SDG		
BIC/SWIFT CODE		BRANCH CODE ④	
BANK NAME	Sudanese French Bank		
ADDRESS OF BANK BRANCH			
STREET & NUMBER	AL Mashtal Street/ Riyad		
TOWN/CITY	Khartoum- Riyadh	POSTCODE	
COUNTRY	Sudan		

ACCOUNT HOLDER'S DATA

AS DECLARED TO THE BANK

ACCOUNT HOLDER	Manazil Trading & Investment Co. Ltd		
STREET & NUMBER	AL Mashtal Street/ Riyad, Block 14 Plot 24		
TOWN/CITY	Khartoum	POSTCODE	11111
COUNTRY	Sudan		

REMARK

BANK STAMP + SIGNATURE OF BANK REPRESENTATIVE ⑤

DATE (Obligatory)
21/12/2020

SIGNATURE OF ACCOUNT HOLDER (Obligatory)

- ① Enter the final bank data and not the data of the intermediary bank.
- ② This does not refer to the type of account. The account name is usually the one of the account holder. However, the account holder may have chosen to give a different name to its bank account.
- ③ Fill in the IBAN Code (International Bank Account Number) if it exists in the country where your bank is established
- ④ Only applicable for US (ABA code), for AU/NZ (BSB code) and for CA (Transit code). Does not apply for other countries.
- ⑤ It is preferable to attach a copy of RECENT bank statement. Please note that the bank statement has to confirm all the information listed above under 'ACCOUNT NAME', 'ACCOUNT NUMBER/IBAN' and 'BANK NAME'. With an attached statement, the stamp of the bank and the signature of the bank's representative are not required. The signature of the account-holder and the date are ALWAYS mandatory.

