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SUPPLIES TENDER TITLE

Tender for the supply, delivery, installation, testing and commissioning (as applicable) of Information Technology Equipment for the Faculty of Information Communications Technology (ICT) Building at the University of Malta

Date Published: 22 OCT 2010

Closing Date: 16 DEC 2010 at 10:00am CET

Cost of the Tender Document: €100.00

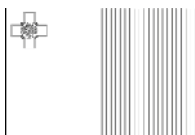
Operational Programme I – Cohesion Policy 2007-2013

Investing in Competitiveness for a Better Quality of Life

Tender part-financed by the European Union

European Regional Development Fund (ERDF)

Co-financing rate: 85% EU funds; 15% National Funds



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IMPORTANT:

Tenderers are to ensure that the mandatory and appropriate tender guarantee (bid bond) is to remain valid up to 16 MAY 2011

Clarifications shall be uploaded and will be available to view/download from: www.contracts.gov.mt/tenders

Department of Contracts

Notre Dame Ravelin, Floriana FRN 1600, Malta. Tel: (356) 21220212. Fax: (356) 21247681 Email: info.contracts@gov.mt

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TENDER PREVIEW

VOLUME 1 SECTION 1 – INSTRUCTIONS TO TENDERERS

A. GENERAL PART

1. General Instructions

- 1.1 In submitting a tender, the tenderer accepts in full and in its entirety, the content of this tender document, including subsequent Clarifications issued by the Central Government Authority, whatever his own corresponding conditions may be, which he hereby waives. Tenderers are expected to examine carefully and comply with all instructions, forms, contract provisions and specifications contained in this tender document.

No account can be taken of any reservation in the tender as regards the tender document; any disagreement, contradiction, alteration or deviation shall lead to the tender offer not being considered any further.

The Evaluation Committee shall, after having obtained approval by the General Contracts Committee, request rectifications in respect of incomplete/non-submitted information pertinent to the documentation as outlined in sub-Clause 16.1(a), 16.1(b), and 16.1(c) of these Instructions to Tenderers. Such rectification/s must be submitted within two (2) working days from notification, and will be subject to a non-refundable administrative penalty of €50: failure to comply shall result in the tender offer not being considered any further.

No rectification shall be allowed in respect of the documentation as outlined in sub-Clause 16.1(d), 16.1(e) and 16.1(f) of these Instructions to Tenderers. Only clarifications on the submitted information in respect of the latter may be eventually requested.

- 1.2 The subject of the contract is for the supply, delivery, installation, testing and commissioning (as applicable) by the Contractor of the various items of information communications technology equipment for the Faculty of Information Communications Technology (ICT) Building at the University of Malta in **ten (10) Lots** hereunder:-

- Lot 1 - Computers, Monitors, Printers & Servers
- Lot 2 - Network Equipment
- Lot 3 - Graphics Equipment
- Lot 4 - Network Analysis Equipment
- Lot 5 - Test & Measure Equipment
- Lot 6 - Spectrum Analysis Equipment
- Lot 7 - Eye Tracking Equipment
- Lot 8 - Robotics Equipment
- Lot 9 - Audiovisual and other equipment
- Lot 10 - Other General Equipment

- 1.3 The place of acceptance of the supplies shall be the Faculty of Information Communications Technology (ICT) Building at the University of Malta, the time-limits for delivery shall be within six (6) weeks from last signature of Contract and the INCOTERM²⁰⁰⁰ applicable shall be on DDP (Delivery Duty Paid) Malta terms.
- 1.4 This is a unit-price contract as further amplified in the Bills of Quantities
- 1.5 The tenderer will bear all costs associated with the preparation and submission of the tender. The Central Government Authority will in no case be responsible or liable for such costs, whatever the conduct or outcome of the procedure.
- 1.6 The Central Government Authority retains ownership of all tenders received under this tender procedure. Consequently, tenderers have no right to have their tenders returned to them.

2. Timetable

	DATE	TIME*
Clarification Meeting/Site Visit (Refer to Clause 9.1)	11/11/2010	1330pm
Deadline for request for any additional information from the Contracting Authority	30/11/2010	==
Last date on which additional information are issued by the Contracting Authority	10/12/2010	==
Deadline for submission of tenders / Tender Opening Session (unless otherwise modified in terms of Clause 11.3)	16/12/2010	10:00am
<ul style="list-style-type: none"> All times Central European Time (CET) 		

3. Lots

- 3.1 This tender is divided into lots. Tenderers may submit a tender for one lot only, several lots or all of the lots.
- 3.2 Each lot will form a separate contract and the quantities indicated for different lots will be indivisible. The tenderer must offer the whole of the quantity or quantities indicated for each lot. Under no circumstances will tenders for part of the quantities required be taken into consideration.
- 3.3 Contracts will be awarded lot by lot, but the Contracting Authority must choose the most favorable overall solution.

4. Financing

- 4.1 The project is co-financed by the European Union/Government of Malta, in accordance with the rules of European Regional Development Fund (ERDF) programme with a co-financing rate of 85% EU funds and 15% National Funds
- 4.2 The beneficiary of the financing is The University of Malta

5. Eligibility

- 5.1 Participation in tendering is open on equal terms to all natural and legal persons of the Member States of the European Union, the beneficiary country, any other country in accordance with Regulation 69 of the Public Procurement Regulations.
- 5.2 Natural persons, companies or undertakings who fall under any of the conditions set out in Regulation 50 of the Public Procurement Regulations, 2010 (Legal Notice 296 of 2010) may be excluded from participation in and the award of contracts. Tenderers or candidates who have been guilty of making false declarations will also incur financial penalties representing 10% of the total value of the contract being awarded.
- 5.3 Tenders submitted by companies forming a joint venture/consortium must also fulfil the following requirements:
- One partner must be appointed lead partner and that appointment confirmed by submission of powers of attorney signed by legally empowered signatories representing all the individual partners. The tender must include a preliminary agreement or letter of intent stating that all partners assume joint and several liability for the execution of the contract, that the lead partner is authorised to bind, and receive instructions for and on behalf of, all partners, individually and collectively.
 - All partners in the joint venture/consortium are bound to remain in the joint venture/consortium until the conclusion of the contracting procedure. The consortium/joint venture winning this contract must include the same partners for the whole performance period of the contract other than as may be permitted or required by law.
- 5.4 All materials, equipment and services to be supplied under the contract must originate in an eligible country. For these purposes, "origin" means the place where the materials and/or equipment are mined, grown, produced or manufactured and/or from which services are provided.

6. Selection Criteria

- 6.1 In order to be considered eligible for the award of the contract, tenderers must provide evidence that they meet or exceed certain minimum qualification criteria described hereunder.

In the case of a joint venture, the joint venture as a whole must satisfy the minimum qualifications required below.

- 6.1.1 No evidence of financial and economic standing is required.
- 6.1.2 Information about the tenderer's technical capacity.

(An economic operator may, where appropriate and for a particular contract, rely on the capacities of other entities, regardless of the legal nature of the links which it has with them. It must in that case prove to the contracting authority that it will have at its disposal the resources necessary for the execution of the contract, for example, by producing an undertaking by those entities to place the necessary resources at the disposal of the economic operator)

This information must follow the form in Volume 1, Section 4 of the tender documents and include:

- (a) A list of principal deliveries effected during the years **2007, 2008 and 2009**. (as per Volume 1, Section 4).

The minimum value of deliveries of a similar nature completed shall be not less than € 100,000.00 per annum.

The minimum number of deliveries of a similar scope/nature completed in the years 2007, 2008 and 2009 must be at least two (2) in number.

In so listing the end clients, the tenderer is giving his consent to the Evaluation Committee, so that the latter may, if it deems necessary, contact the relevant clients, with a view to obtain from them an opinion on the works provided to them, by the tenderer. The Evaluation Committee reserves the right to request additional documentation in respect of the deliveries listed.

7. Only One Tender Per Tenderer

- 7.1 Submission or participation by a tenderer in more than one tender for a contract will result in the disqualification of all those tenders for that contract in which the party is involved.
- 7.2 A company may not tender for a given contract both individually and as a partner in a joint venture/consortium.
- 7.3 A company may not tender for a given contract both individually/partner in a joint venture/consortium, and at the same time be nominated as a subcontractor by any another tenderer, or joint venture/consortium.
- 7.4 A company may act as a subcontractor for any number of tenderers, and joint ventures/consortia, provided that it does not participate individually or as part of a joint venture/consortium, and that the nominations do not lead to a conflict of interest, collusion, or improper practice.

8. Tender Expenses

- 8.1 The tenderer will bear all costs associated with the preparation and submission of the tender.
- 8.2 The Central Government Authority will neither be responsible for, nor cover, any expenses or losses incurred by the tenderer through site visits and inspections or any other aspect of his tender.

9. Clarification Meeting/Site Visit

- 9.1 A clarification meeting/site visit will be held on the date and time indicated in Clause 2, at the **Faculty of Information Communication Technology - Computer Building - University of Malta** to answer any questions on the tender document which have been forwarded in writing, or are raised during the same meeting. **(Meeting place near the entry to Parking Area no: 2 between 1315 hrs and 13.25 hrs, from whence we will proceed to the actual venue of the meeting)**

Minutes will be taken during the meeting, and these (together with any clarifications in response to written requests which are not addressed during the meeting) shall be posted online as a clarification note as per Clause 11.2.

Prospective Tenderers are advised to request a Temporary Parking Permit from the Security Gate at the new entrance to the University of Malta. (Mater Dei Side)

Meetings/visits by individual prospective tenderers during the tender period other than this meeting/site visit for all prospective tenderers cannot be permitted.

B. TENDER DOCUMENTS

10. Content of Tender Document

10.1 The set of tender documents comprises the following documents and should be read in conjunction with any clarification notes issued in accordance with Clause 24:-

Volume 1 Instructions to Tenderers

Volume 2 Draft Contract

- Special Conditions
- General Conditions (available online from www.contracts.gov.mt/conditions)

Volume 3 Technical Specifications

Volume 4 Model Financial Bid/Bill of Quantities

Volume 5 Drawings

10.2 Tenderers bear sole liability for examining with appropriate care the tender documents, including those design documents available for inspection, and any clarification notes to the tender documents issued during the tendering period, and for obtaining reliable information with respect to conditions and obligations that may in any way affect the amount or nature of the tender or the execution of the works. In the event that the tenderer is successful, no claim for alteration of the tender amount will be entertained on the grounds of errors or omissions in the obligations of the tenderer described above.

10.3 The tenderer must provide all documents required by the provisions of the tender document. All such documents, without exception, must comply strictly with these conditions and provisions and contain no alterations made by the tenderer.

11. Explanations/Clarification Notes Concerning Tender Documents

11.1 Tenderers may submit questions in writing to the Central Government Authority through:

- sending an email to info.contracts@gov.mt
- online from the Registered Users' Questions and Answers facility within the tender's page
- through www.contracts.gov.mt/contact-us
- fax number +356 21247681

up to 16 calendar days before the deadline for submission of tenders. The Central Government Authority must reply to all tenderers' questions, and amend the tender documents by publishing clarification notes, up to at least 6 calendar days before the deadline for submission of tenders.

- 11.2 Questions and answers, and alterations to the tender document will be published as a clarification note on the website of the Department of Contracts (www.contracts.gov.mt/tenders) within the respective tender's page, under the subheading "Preview & Free Tender Documents, and Clarifications". Clarification notes will constitute an integral part of the tender documentation, and it is the responsibility of tenderers to visit this website and be aware of the latest information published online prior to submitting their Tender.
- 11.3 The Central Government Authority may, at its own discretion, as necessary and in accordance with Clause 24, extend the deadline for submission of tenders to give tenderers sufficient time to take clarification notes into account when preparing their tenders.

12. Labour Law

- 12.1 Particular attention is drawn to the conditions concerning the employment of labour in Malta and the obligation to comply with all regulations, rules or instructions concerning the conditions of employment of any class of employee.

13. Law

- 13.1 By submitting their tenders, tenderers are accepting that this procedure is regulated by Maltese Law, and are deemed to know all relevant laws, acts and regulations of Malta that may in any way affect or govern the operations and activities covered by the tender and the resulting contract.

C. TENDER PREPARATION

14. Language of Tenders

- 14.1 The tender and all correspondence and documents related to the tender exchanged by the tenderer and the Central Government Authority must be written in English.
- 14.2 Supporting documents and printed literature furnished by the tenderer may be in another language, provided they are accompanied by an accurate translation into English. For the purposes of interpretation of the tender, the English language will prevail.

15. Presentation of Tenders

- 15.1 Tenders must satisfy the following conditions:-
- (a) All tenders must be submitted in one original, clearly marked "original", and one identical copy (including all documentation as in the original) signed in the same way as the original and clearly marked "copy".
 - (b) Both documents are to be separately sealed and placed in another sealed envelope/package so that the bid can be identified as one tender submission. Following the tender opening session, the copy shall be kept, unopened, at the Department of Contracts, for verification purposes only should the need arise.

- (c) All tenders must be received by date and time indicated in the timetable at Clause 2 and deposited in the tender box at the entrance of the Department of Contracts, Notre Dame Ravelin, Floriana, FRN 1600, Malta.
- (d) All tenders, as per (b) above, must bear only:-
 - (i) the above address;
 - (ii) the reference of the invitation to tender concerned;
 - (iii) if applicable, the number of the lot(s) to which the tender refers;
 - (iv) the name of the tenderer.

16. Content of Tender (Single-Envelope System)

16.1 The tender must comprise the following duly completed documents, inserted in a single, sealed envelope (unless their volume requires a separate submission):-

- (a) An original bid-bond for the applicable amount covering the number of lots tendered for, in the form provided in Volume 1, Section 3 ^(Note 1)
- (b) *General/Administrative Information* ^(Note 2)
 - (i) Statement on Conditions of Employment (Volume 1, Section 4)
- (c) *Selection Criteria*
 - (i) *Financial and Economic Standing* ^(Note 2)
 - (i) No Evidence of economic and financial standing is required
- (d) *Technical Capacity* ^(Note 3)
 - (i) List of principal deliveries effected during the years **2007, 2008 and 2009** (Volume 1, Section 4)
- (e) *Evaluation Criteria/Technical Specifications* ^(Note 3)
 - (i) Tenderer's Technical Offer in response to specifications (Volume 3)
 - (ii) Literature/List of Samples (Volume 1, Section 4)
- (f) *Financial Offer/Bill of Quantities* ^(Note 3)
 - (i) The Tender Form in accordance with the form provided in Volume 1, Section 2; a separate Tender Form is to be

submitted for each option tendered, each form clearly marked 'Option 1', 'Option 2' etc.;

- (ii) A financial bid calculated on a basis of **Delivered Duty Paid (DDP)** for the supplies tendered in the form provided in Volume 4.

Notes to Clause 16.1:

1. *Tenderers will be requested to clarify/rectify, within two working days from notification, the tender guarantee only in the following two circumstances: either incorrect validity date, and/or incorrect value.*
2. *Tenderers will be requested to either clarify/rectify any incorrect and/or incomplete documentation, and/or submit any missing documents within two working days from notification.*
3. *No rectification shall be allowed. Only clarifications on the submitted information may be requested.*

Tenderers must indicate where the above documentation is to be found in their offer by using an index. All documentation is to be securely bound/filed.

Tenderers are NOT required NOR expected to submit, with their offer, any components of the tender document except those specifically mentioned in Clause 16.

17. Tender Prices

- 17.1 Tenderers will be deemed to have satisfied themselves, before submitting their tender, to its correctness and completeness, to have taken account of all that is required for the full and proper performance of the contract, and to have included all costs in their rates and prices.
- 17.2 The tender must be submitted in Euro (€).
- 17.3 Tenderers must quote all components of the price **inclusive** of taxes, customs and import duties, and any discounts. Except as may otherwise be provided for in the contract, no payment will be made for items which have not been costed.
- 17.4 Different options are to be clearly identifiable in the technical and financial submission; **a separate Tender Form (as per Volume 1, Section 2) marked 'Option 1', 'Option 2' etc. for each individual option clearly outlining the price of the relative option is to be submitted.**
- 17.5 If the tenderer offers a discount, the discount must be absorbed in the rates of the Bill of Quantities/Financial Statement.
- 17.6 For contracts over €500,000, where VAT is not an eligible cost, and whose output VAT is liable to be paid in Malta, such VAT will be paid directly to the VAT Department in Malta by the Final Beneficiary.
- 17.7 The prices for the contract, must include all of the works to be provided. The prices quoted are fixed and not subject to revision or escalation in costs, unless otherwise provided for in the Special Conditions.

- 17.8 The **estimated budget available** for this tender is € 509,322.03 (five hundred and nine thousand three hundred and twenty two Euros and 03 cents) excluding VAT.

VAT and all other taxes are to be quoted separately.

18. Currencies of Tender and Payments

- 18.1 The currency of the tender is the Euro (€). All sums in the breakdown of the overall price, in the questionnaire and in other documents must be expressed in Euro (€), with the possible exception of originals of bank and annual financial statements.
- 18.2 Payments will be made upon certification of supplies by the Contracting Authority, based on the invoice issued by the Contractor, in accordance with the timeframes, terms and conditions of the contract.
- 18.3 All correspondence relating to payments, including invoices and interim and final statements, must be submitted as outlined in the contract.

19. Period of Validity of Tenders

- 19.1 Tenders must remain valid for a period of 150 days after the deadline for submission of tenders indicated in the contract notice, the tender document or as modified in accordance with Clauses 11.3 and/or 24. Any tenderer who quotes a shorter validity period will be rejected.
- 19.2 In exceptional circumstances the Central Government Authority may request that tenderers extend the validity of tenders for a specific period. Such requests and the responses to them must be made in writing. A tenderer may refuse to comply with such a request without forfeiting his tender guarantee (Bid Bond). However, his tender will no longer be considered for award. If the tenderer decides to accede to the extension, he may not modify his tender. He is, however, bound to extend the validity of his tender guarantee for the revised period of validity of the tender.
- 19.3 The successful tenderer must maintain his tender for a further 60 days from the date of notification of award.

20. Tender Guarantee (Bid Bond)

- 20.1 The tender guarantee (bid-bond) is set at the following amounts **per individual lot:-**

Lot no:	Description of Goods	Individual Bid-Bond Amount in €
Lot 1 -	Computers, Monitors, Printers & Servers	2200

Lot 2 -	Network Equipment	1800
Lot 3 -	Graphics equipment	500
Lot 4 -	Network Analysis Equipment	700
Lot 5 -	Test & Measure Equipment	300
Lot 6 -	Spectrum Analysis Equipment	800
Lot 7 -	Eye Tracking Equipment	500
Lot 8 -	Robotics Equipment	100
Lot 9 -	Audiovisual and other equipment	300
Lot 10 -	Other General Equipment	100

It is to be noted that the said tender guarantee (bid-bond) amounts are nominal so that prospective tenderers can be in a position to tender even for even one (1) Lot.

If a prospective tenderer tenders for more than one lot he may present a single tender guarantee (bid-bond) for all the Lots he has tendered for.

The tender guarantee (bid-bond) must be an original and valid guarantee presented in the form specified in Section 3. The guarantee must be issued by a local Maltese Bank or a Financial Institution licensed by a recognized Financial Regulator in the country where the company is located and who assumes responsibility for claims and payments to the amount as stated above. It must remain valid up to and including the **16th May, 2011**. The tender guarantee must be drawn up in the name of the Director General of the Department of Contracts, Notre Dame Ravelin, Floriana, FRN 1600, Malta.

The tender guarantee (bid bond) is intended as a pledge that the tenderer will not retract his offer up to the expiry date of the guarantee and, if successful, that he will enter into a contract with the Director General of Contracts on the terms and conditions stated in the tender document.

Hence, the guarantee shall be forfeited if the tenderer withdraws his tender before the above-mentioned validity date or if the tenderer fails to provide the Performance Guarantee.

Tender guarantees provided by tenderers who have not been selected shall be released within 30 calendar days from the signing of the contract. The tender guarantee of the successful tenderer shall be released on the signing of the contract, and on submission of a valid performance guarantee.

Offers that are not accompanied with the mandatory Tender Guarantee (Bid Bond) by the Closing Date and Time of the tender will be automatically disqualified.

Tenderers will be requested to clarify/rectify, within two working days from notification, the tender guarantee submitted, only in the following two circumstances: either incorrect validity date, and/or incorrect value. Such rectification/s must be submitted within two (2) working days, and will be subject to a non-refundable administrative penalty of €50. Failure

to comply shall result in the tender offer not being considered any further.

21. Variant Solutions

- 21.1 No variant solutions will be accepted. Tenderers must submit a tender in accordance with the requirements of the tender document.

22. Preparation and Signing of Tenders

- 22.1 All tenders must be submitted in one original, clearly marked "original", and one identical copy (including all documentation as in the original) signed in the same way as the original and clearly marked "copy". Tenders must comprise the documents specified in Clause 16 above.

It is the responsibility of the tenderers to ensure that both the original and the copy are an identical representation of one another.

- 22.2 The tenderer's submission must be typed in, or handwritten in indelible ink. Any pages on which entries or corrections to his submission have been made must be initialled by the person or persons signing the tender. All pages must be numbered consecutively by hand, machine or in any other way acceptable to the Central Government Authority.
- 22.3 The tender must contain no changes or alterations, other than those made in accordance with instructions issued by the Central Government Authority (issued as clarification notes) or necessitated by errors on the part of the tenderer. In the latter case, corrections must be initialled by the person signing the tender.
- 22.4 The tender will be rejected if it contains any alteration, tampering, addition or deletion to the tender documents not specified in a clarification note issued by the Central Government Authority.

D. SUBMISSION OF TENDERS

23. Sealing and Marking of Tenders

- 23.1 The tenders must be submitted in English and received **before** the deadline specified in Clause 2 or as otherwise specified in accordance with Clause 11.1 and/or 24.1. They must be submitted:

EITHER by recorded delivery (official postal/courier service) or hand delivered to:

**Department of Contracts,
Notre Dame Ravelin,
Floriana, FRN 1600
Malta**

Tenders submitted by any other means will not be considered.

- 23.2 Tenderers must seal the original and the copy of their tender as outlined in Clause 15.
- 23.3 If the outer envelope is not sealed and marked as required in Sub clause 15.1

the Central Government Authority will assume no responsibility for the misplacement or premature opening of the tender.

24. Extension of Deadline for Submission of Tenders

- 24.1 The Central Government Authority may, at its own discretion, extend the deadline for submission of tenders by issuing a clarification note in accordance with Clause 11. In such cases, all rights and obligations of the Central Government Authority and the tenderer regarding the original date specified in the contract notice will be subject to the new date.

25. Late Tenders

- 25.1 All tenders received after the deadline for submission specified in the contract notice or these instructions will be kept by the Central Government Authority. The associated guarantees will be returned to the tenderers.
- 25.2 No liability can be accepted for late delivery of tenders. Late tenders will be rejected and will not be evaluated.

26. Alterations and Withdrawal of Tenders

- 26.1 Tenderers may alter or withdraw their tenders by written notification prior to the deadline for submission of tenders. No tender may be altered after the deadline for submission.
- 26.2 Any notification of alteration or withdrawal must be prepared, sealed, marked and submitted in accordance with Clause 23, and the envelope must also be marked with "alteration" or "withdrawal".
- 26.3 The withdrawal of a tender in the period between the deadline for submission and the date of expiry of the validity of the tender will result in forfeiture of the tender guarantee provided for in Clause 20.

E. OPENING AND EVALUATION OF OFFERS

27. Opening of Tenders

- 27.1 Tenders will be opened in public session on the date and time indicated in the timetable at Clause 2 (or as otherwise specified in accordance with Clause 11.1 and/or 24.1) at the Department of Contracts, Notre Dame Ravelin, Floriana, FRN 1600, Malta by the General Contracts Committee.

They will draw up a 'Summary of Tenders Received' which will be published on the notice board at the Department of Contracts and shall also be available to view on the Department's website, www.contracts.gov.mt/tenders.

- 27.2 At the tender opening, the tenderers' names, the tender prices, variants,

written notification of alterations and withdrawals, the presence of the requisite tender guarantee and any other information the Central Government Authority may consider appropriate will be published.

- 27.3 Envelopes marked "withdrawal" will be read out first and returned to the tenderer.
- 27.4 Reductions or alterations to tender prices made by tenderers after submission will not be taken into consideration during the analysis and evaluation of tenders.

28. Secrecy of the Procedure

- 28.1 **After the opening of the tenders, no information about the examination, clarification, evaluation or comparison of tenders or decisions about the contract award may be disclosed before the notification of award.**
- 28.2 Information concerning checking, explanation, opinions and comparison of tenders and recommendations concerning the award of contract, may not be disclosed to tenderers or any other person not officially involved in the process unless otherwise permitted or required by law.
- 28.3 Any attempt by a tenderer to approach any member of the Evaluation Committee/Central Government Authority directly during the evaluation period will be considered legitimate grounds for disqualifying his tender.

29. Clarification of Tenders

- 29.1 When checking and comparing tenders, the evaluation committee may, after obtaining approval from the General Contracts Committee, ask a tenderer to clarify any aspect of his tender.
- 29.2 Such requests and the responses to them must be made by e-mail or fax. They may in no circumstances alter or try to change the price or content of the tender, except to correct arithmetical errors discovered by the evaluation committee when analysing tenders, in accordance with Clause 31.

30. Tender Evaluation Process

- 30.1 The following should be read in conjunction with Clause 27.
- 30.2 **Part 1: Administrative Compliance**

The Evaluation Committee will check the compliance of tenders with the instructions given in the tender document, and in particular the documentation submitted in respect of Clause 16.

The Evaluation Committee shall, after having obtained approval by the General Contracts Committee, request rectifications in respect of incomplete/non-submitted information pertinent to the documentation as outlined in sub-Clause 16.1(a), 16.1(b), and 16.1(c) of these Instructions to Tenderers.

Such rectification/s must be submitted within two (2) working days from notification, and will be subject to a non-refundable administrative penalty of €50. Failure to comply shall result in the tender offer not being considered any further.

No rectification shall be allowed in respect of the documentation as outlined in sub-Clause 16.1 (d), 16.1(e), and 16.1(f) of these Instructions to Tenderers. Only clarifications on the submitted information in respect of the latter may be eventually requested.

30.3 **Part 2: Eligibility and Selection Compliance**

Tenders which have been considered administratively compliant shall be evaluated for admissibility as outlined below:

(i) Eligibility Criteria

- Tender Form (Volume 1, Section 2)

(ii) Selection Criteria

- Evidence of technical capacity (sub-Clause 6.1.2)

30.4 **Part 3: Technical Compliance**

At this step of the evaluation process, the Evaluation Committee will analyse the administratively-compliant tenders' technical conformity in relation to the technical specifications (Volume 3, and the documentation requested by the Contracting Authority as per sub-Clause 16(e)), classifying them technically compliant or non-compliant.

Tenders who are deemed to be provisionally technically compliant through the evaluation of their technical offer (especially the specifications) shall be requested to submit technical literature (as per Volume 1 Section 4 so that the Evaluation Committee will corroborate the technical compliance of the offers received.

30.5 **Part 4. Financial Evaluation**

The financial offers for tenders which were not eliminated during the technical evaluation (i.e., those found to be technically compliant) will be evaluated.

The Evaluation Committee will check that the financial offers contain no arithmetical errors as outlined in Clause 31.

If the tender procedure contains several lots, financial offers are compared for each lot. The financial evaluation will have to identify the best financial offer for each lot.

31. Correction of Arithmetical Errors

31.1 Admissible tenders will be checked for arithmetical errors by the Evaluation Committee. Errors will be corrected as follows:

- (a) where there is a discrepancy between amounts in figures and in words, the amount in words will prevail;
- (b) where there is a discrepancy between a unit price and the total amount derived from the multiplication of the unit price and the quantity, the unit price as quoted will prevail.

- 31.2 The amount stated in the tender will be adjusted by the Evaluation Committee in the event of error, and the tenderer will be bound by that adjusted amount. In this regard, the Evaluation Committee shall seek the prior approval of the General Contracts Committee to communicate the revised price to the tenderer. If the tenderer does not accept the adjustment, his tender will be rejected and his tender guarantee forfeited.
- 31.3 When analysing the tender, the evaluation committee will determine the final tender price after adjusting it on the basis of Clause 31.1.

F. CONTRACT AWARD

32. Criteria for Award

- 32.1 The sole award criterion will be the price. The contract will be awarded to the cheapest priced tender satisfying the administrative and technical criteria.

33. Right Of The Central Government Authority To Accept Or Reject Any Tender

- 33.1 The Central Government Authority reserves the right to accept or reject any tender and/or to cancel the whole tender procedure and reject all tenders. The Central Government Authority reserves the right to initiate a new invitation to tender.
- 33.2 In the event of a tender procedure's cancellation, tenderers will be notified by the Central Government Authority. If the tender procedure is cancelled before the outer envelope of any tender has been opened, the sealed envelopes will be returned, unopened, to the tenderers.
- 33.3 Cancellation may occur where:-
- (a) the tender procedure has been unsuccessful, namely where no qualitatively or financially worthwhile tender has been received or there has been no response at all;
 - (b) the economic or technical parameters of the project have been fundamentally altered;
 - (c) exceptional circumstances or force majeure render normal performance of the project impossible;
 - (d) all technically compliant tenders exceed the financial resources available;
 - (e) there have been irregularities in the procedure, in particular where these have prevented fair competition.

In no circumstances will the Central Government Authority be liable for damages, whatever their nature (in particular damages for loss of profits) or relationship to the cancellation of a tender, even if the Central Government Authority has been advised of the possibility of damages. The publication of a contract notice does not commit the Central Government Authority to implement the programme or project announced.

34. Notification of Award, Contract Clarifications

- 34.1 Prior to the expiration of the period of validity of tenders, the Central Government Authority will notify the successful tenderer, in writing, that his tender has been recommended for award by the General Contracts

Committee, pending any appeal being lodged in terms of Part XIII of the Public Procurement Regulations (being reproduced in Volume 1, Section 6).

34.2 Unsuccessful bidders shall be notified with the outcome of the evaluation process, and will be provided the following information:-

- (i) the criteria for award;
- (ii) the name of the successful tenderer;
- (iii) the recommended price of the successful bidder;
- (iv) the reasons why the tenderer did not meet the technical specifications/ notification that the offer was not the cheapest (if applicable);
- (v) the deadline for filing a notice of objection (appeal);
- (vi) the deposit required if lodging an appeal.

34.3 The recommendations of the General Contracts Committee shall be published on the Notice Board of the Department of Contracts, and published online on the Department's website, www.contracts.gov.mt/gcc.

35. Contract Signing and Performance Guarantee

35.1 After the lapse of the appeals period, and pending that no objections have been received and/or upheld, the successful tenderer may be invited to clarify certain contractual questions raised therein. Such clarification will be confined to issues that had no direct bearing on the choice of the successful tender. The outcome of any such clarifications will be set out in a Memorandum of Understanding, to be signed by both parties and incorporated into the contract.

35.2 Within 15 calendar days of receiving the contract (against acknowledgment of receipt) from the Central Government Authority, the successful tenderer will sign and date the contract and return it to the Central Government Authority with the performance guarantee and the Financial Identification Form (if applicable). On signing of the contract by the Central Government Authority, the successful tenderer will become the Contractor and the contract will enter into force.

35.3 Before the Central Government Authority signs the contract with the successful tenderer, the successful tenderer may be requested to provide the documentary proof or statements required to show that it does not fall into any of the exclusion situations listed in Clause 7 of the Tender Form (Volume 1, Section 2). The above mentioned documents must be submitted by every member of a Joint Venture/Consortium (if applicable).

35.4 If the selected tenderer fails to sign and return the contract, other required documentation, and any guarantees required within the prescribed 15 calendar days, the Central Government Authority may consider the acceptance of the tender to be cancelled without prejudice to the Central Government Authority's right to seize the guarantee, claim compensation or pursue any other remedy in respect of such failure, and the successful tenderer will have no claim whatsoever on the Central Government Authority.

The tenderer whose tender has been evaluated as second cheapest may be recommended for award, and so on and so forth.

35.5 Only the signed contract will constitute an official commitment on the part of the Central Government Authority, and activities may not begin until the

contract has been signed by the Central Government Authority and the successful tenderer.

- 35.6 Tender guarantees (bid bonds) provided by tenderers who have not been selected shall be released within 30 calendar days from the signing of the contract. The tender guarantee of the successful tenderer shall be released on the signing of the contract, and on submission of a valid performance guarantee.
- 35.7 The performance guarantee referred to in the General Conditions is set at 10% of the amount of the contract and must be presented in the form specified in Volume 2, Section 4, to the tender document the performance guarantee shall be released within 30 days of the signing of the Final Statement of Account (Final Bill), unless the Special Conditions provide otherwise.

36. Period of Delivery

- 36.1 Following the signing of the contract by both parties, the Supervisor will issue a written notice of commencement of the contract in accordance with the General Conditions, as specified by the Special Conditions.
- 36.2 The Contractor must inform the Central Government Authority's representative by return that he has received the notice.

G. MISCELLANEOUS

37. Ethics Clauses

- 37.1 Any attempt by a candidate or tenderer to obtain confidential information, enter into unlawful agreements with competitors or influence the committee or the Central Government Authority during the process of examining, clarifying, evaluating and comparing tenders will lead to the rejection of his candidacy or tender and may result in administrative penalties.
- 37.2 Without the Central Government Authority's prior written authorisation, the Contractor and his staff or any other company with which the Contractor is associated or linked may not, even on an ancillary or subcontracting basis, supply other services, carry out works or supply equipment for the project. This prohibition also applies to any other programmes or projects that could, owing to the nature of the contract, give rise to a conflict of interest on the part of the Contractor.
- 37.3 When putting forward a candidacy or tender, the candidate or tenderer must declare that he is affected by no potential conflict of interest, and that he has no particular link with other tenderers or parties involved in the project.
- 37.4 The Contractor must at all times act impartially and as a faithful adviser in accordance with the code of conduct of his profession. He must refrain from making public statements about the project or services without the Contracting Authority's prior approval. He may not commit the Contracting Authority in any way without its prior written consent.
- 37.5 For the duration of the contract, the Contractor and his staff must respect

human rights and undertake not to offend the political, cultural and religious morals of Malta.

- 37.6 The Contractor may accept no payment connected with the contract other than that provided for therein. The Contractor and his staff must not exercise any activity or receive any advantage inconsistent with their obligations to the Contracting Authority.
- 37.7 The Contractor and his staff are obliged to maintain professional secrecy for the entire duration of the contract and after its completion. All reports and documents drawn up or received by the Contractor are confidential.
- 37.8 The contract governs the Parties' use of all reports and documents drawn up, received or presented by them during the execution of the contract.
- 37.9 The Contractor shall refrain from any relationship likely to compromise his independence or that of his staff. If the Contractor ceases to be independent, the Central Government Authority may, regardless of injury, terminate the contract without further notice and without the Contractor having any claim to compensation.
- 37.10 The tender(s) concerned will be rejected or the contract terminated if it emerges that the award or execution of a contract has given rise to unusual commercial expenses. Such unusual commercial expenses are commissions not mentioned in the main contract or not stemming from a properly concluded contract referring to the main 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 commissions paid to a company which has every appearance of being a front company.

38. Data Protection and Freedom of Information

- 38.1 Any personal data submitted in the framework of the procurement procedure and/or subsequently included in the contract shall be processed pursuant to the Data Protection Act (2001). It shall be processed solely for the purposes of the performance, management and follow-up of the procurement procedure and/or subsequent contract by the Central Government Authority/Contracting Authority without prejudice to possible transmission to the bodies charged with a monitoring or inspection task in conformity with National and/or Community law.
- 38.2 The provisions of this contract are without prejudice to the obligations of the Central Government Authority in terms of the Freedom of Information Act (Cap. 496 of the Laws of Malta). The Central Government Authority, prior to disclosure of any information to a third party in relations to any provisions of this contract which have not yet been made public, shall consult the contractor in accordance with the provisions of the said Act, pertinent subsidiary legislation and the Code of Practice issued pursuant to the Act. Such consultation shall in no way prejudice the obligations of the Central Government Authority in terms of the Act.

39. Gender Equality

- 39.1 In carrying out his/her obligations in pursuance of this contract, the tenderer shall ensure the application of the principle of gender equality and shall thus 'inter alia' refrain from discriminating on the grounds of gender, marital status or family responsibilities. Tenderers are to ensure that these principles are manifest in the organigram of the company where the principles

aforementioned, including the selection criteria for access to all jobs or posts, at all levels of the occupation hierarchy are amply proven. In this document words importing one gender shall also include the other gender.

TENDER PREVIEW

VOLUME 1 SECTION 2 – TENDER FORM

(A separate, distinct Tender Form must be submitted for EACH OPTION – if applicable - submitted)

Publication reference: CT 3086/2010

Director General Contracts

Department of Contracts

Notre Dame Ravelin

Floriana VLT2000

MALTA

Title of contract: Tender for the supply, delivery, installation, testing and commissioning (as applicable) of Information Technology Equipment for the Faculty of Information Communications Technology (ICT) Building at the University of Malta

A TENDER SUBMITTED BY

	Name(s) of tenderer(s)	Nationality	Proportion of Responsibilities ²
Leader ¹			
Partner ¹			
Etc ...			

1. Add/delete additional lines for partners as appropriate. Note that a sub-contractor is not considered to be a partner for the purposes of this tender procedure. If this tender is being submitted by an individual tenderer, the name of the tenderer should be entered as 'leader' (and all other lines should be deleted)

2. Proposed proportion of responsibilities between partners (in %) with indication of the type of the works to be performed by each partner (the company acting as the lead partner in a joint venture/consortium, they must have the ability to carry out at least 50% of the contract works by its own means. If a company is another partner in a joint venture/consortium (i.e. not the lead partner) it must have the ability to carry out at least 10% of the contract works by its own means).

Supply intended to be sub-contracted	Name and details of sub-contractors	Value of sub-contracting as percentage of the total cost ³	Experience in similar supplies (details to be specified)
--------------------------------------	-------------------------------------	---	--

1

2

(.)

3. The maximum amount of sub-contracting must not exceed 50% of the total contract value. The main contractor must have the ability to carry out at least 50% of the contract works by his own means.

B CONTACT PERSON (for this tender)

Name		Surname	
Telephone	(____) _____	Fax	(____) _____
Address		
E-mail			

C TENDERER'S DECLARATION(S)

To be completed and signed by the tenderer (including each partner in a consortium).

In response to your letter of invitation to tender for the above contract, we, the undersigned, hereby declare that:

- 1** We have examined, and accept in full and in its entirety, the content of this tender document (including subsequent Clarifications Notes issued by the Central Government Authority) for invitation to tender No [_____/_____] of [...../...../.....]. We hereby accept the contents thereto in their entirety, without reservation or restriction. We also understand that any disagreement, contradiction, alteration or deviation shall lead to our tender offer not being considered any further.

- 2** We offer to execute, in accordance with the terms of the tender document and the conditions and time limits laid down, without reserve or restriction, the following supplies:

Lot No 1: [.....]

Lot No 2: [.....]

Lot No 3: [.....] (etc.,)

- 3** The total price of our tender (including duties, VAT, other taxes and any discounts) is:

Lot No 1: [.....]

Lot No 2: [.....]

Lot No 3: [.....] (etc.,)

- 4** This tender is valid for a period of 150 days from the final date for submission of tenders.

- 5 If our tender is accepted, we undertake to provide a performance guarantee of 10% of the contract value as required by the General Conditions.
- 6 We are making this application in our own right and **[as partner in the consortium** led by < name of the leader / ourselves >] for this tender [Lot No]. We confirm that we are not tendering for the same contract in any other form. [We confirm, as a partner in the consortium, that all partners are jointly and severally liable by law for the performance of the contract, that the lead partner is authorised to bind, and receive instructions for and on behalf of, each member, and that all partners in the joint venture/consortium are bound to remain in the joint venture/consortium for the entire period of the contract's performance]. We are fully aware that, in the case of a consortium, the composition of the consortium cannot be modified in the course of the tender procedure.
- 7 We are not bankrupt or under an administration appointed by the Court, or under proceedings leading to a declaration of bankruptcy. We also declare that we have not been convicted criminally, or found guilty of professional misconduct. Furthermore, we are up-to-date in the payment of social security contributions and other taxes.
- 8 We accept that we shall be excluded from participation in the award of this tender if compliance certificates in respect of declarations made under Clause 7 of this declaration are not submitted by the indicated dates.
- 9 We agree to abide by the ethics clauses of the instructions to tenderers and, in particular, have no potential conflict of interests or any relation with other candidates or other parties in the tender procedure at the time of the submission of this application. We have no interest of any nature whatsoever in any other tender in this procedure. We recognise that our tender may be excluded if we propose key experts who have been involved in preparing this project or engage such personnel as advisers in the preparation of our tender.
- 10 We will inform the Central Government Authority immediately if there is any change in the above circumstances at any stage during the implementation of the contract. We also fully recognise and accept that any false, inaccurate or incomplete information deliberately provided in this application may result in our exclusion from this and other contracts funded by the Government of Malta and the European Communities.
- 11 Our tender submission has been made in conformity with the Instructions to Tenderers, and in this respect we confirm having included **in the appropriate packages as required**, the following documentation:

(a) **Tender Guarantee** ^(Note 1)

- Bid Bond covering the number of Lots tendered for.

(b) **General Information** ^(Note 2)

- Statement on Conditions of Employment

Selection Criteria

(c) **Technical Capacity** ^(Note 3)

- List of Principal Deliveries

(d) Evaluation Criteria/Technical Specifications ^(Note 3)

- Tenderer's Technical Offer
- Literature /List of Samples

(f) Tender Form, and Financial Offer/Bill of Quantities ^(Note 3)

Notes:

1. *Tenderers will be requested to clarify/rectify, within two working days from notification, the tender guarantee only in the following two circumstances: either incorrect validity date, and/or incorrect value. This is indicated by the symbol ◦*
2. *Tenderers will be requested to either clarify/rectify any incorrect and/or incomplete documentation, and/or submit any missing documents within two working days from notification. This is indicated by the symbol ◦*
3. *No rectification shall be allowed. Only clarifications on the submitted information may be requested. This is indicated by the symbol •*

12 I acknowledge that the Central Government Authority and/or Contracting Authority shall request rectifications in respect of incomplete/non-submitted information pertinent to the documentation listed in Clause 11(a), 11(b), and 11(c) of this Tender Form. We understand that such rectification/s must be submitted within two (2) working days, and will be subject to a non-refundable administrative penalty of €50, and that failure to comply shall result in our offer not being considered any further.

13 We note that the Central Government Authority is not bound to proceed with this invitation to tender and that it reserves the right to cancel or award only part of the contract. It will incur no liability towards us should it do so.

Name and Surname: _____

I.D. / Passport Number: _____

Signature of tenderer: _____

Duly authorised to sign this tender on behalf of: _____

Company/Lead Partner VAT No: _____
(if applicable)

Stamp of the firm/company: _____

Place and date: _____

VOLUME 1 SECTION 3 – TENDER GUARANTEE FORM (BID-BOND)

[On the headed notepaper of the financial institutions providing the guarantee]

Whereas the Director of Contracts has invited tenders for
and whereas Messrs [Name of tenderer] (hereinafter referred to as the Tenderer) is submitting such a tender in accordance with such invitation, we [Name of Bank], hereby guarantee to pay you on your first demand in writing a maximum sum of..... in case the Tenderer withdraws his tender before the expiry date or in the case the Tenderer fails to provide the Performance Bond, if called upon to do so in accordance with the Conditions of Contract.

The guarantee becomes payable on your first demand and it shall not be incumbent upon us to verify whether such demand is justified.

This guarantee is valid for a period of one hundred and fifty (150) days from the closing date of submission of tenders, and expires on the **16th May, 2011** unless it is extended by us or returned to us for cancellation before that date, any demand made by you for payment must be received at this office in writing not later than the above-mentioned expiry date.

This document should be returned to us for cancellation or utilisation or expiry or in the event of the guarantee being no longer required.

After the expiry date and in the absence of a written demand being received by us before such expiry date, this guarantee shall be null and void, whether returned to us for cancellation or not, and our liability hereunder shall terminate.

Yours faithfully,

.....
Bank Manager

Date:

VOLUME 1 SECTION 4 - TENDERER'S STATEMENT

1. Statement on Conditions of Employment

PUBLICATION REF: CT 3086/2010

It is hereby declared that all employees engaged on this contract shall enjoy working conditions such as wages, salaries, vacation and sick leave, maternity and parental leave as provided for in the relative Employment Legislation. Furthermore, we shall comply with Chapter 424 of the Laws of Malta (Occupational Health and Safety Authority Act) as well as any other national legislation, regulations, standards and/or codes of practice or any amendment thereto in effect during the execution of the contract.

In the event that it is proved otherwise during the execution of the contract it is hereby being consented that the contract is terminated with immediate effect and that no claim for damages or compensation be raised by us.

Signature:

(the person or persons authorised to sign on behalf of the tenderer)

Date:

TENDER PROFORM

2. List of Principal Deliveries

PUBLICATION REF: CT 3086/2010

List of principal deliveries effected during the years **2007, 2008 and 2009:**

Description of Supplies	Total Value of Supplies	Date of Delivery	Client*/ Contracting Authority*

* In so listing the end clients, I am giving my consent to the Evaluation Committee, so that the latter may, if it deems necessary, contact the relevant clients, with a view to obtain from them an opinion on the supplies provided to them.

Signature:

(the person or persons authorised to sign on behalf of the tenderer)

Date:

3. List of Literature

PUBLICATION REF: CT 3086/2010

List of literature to be submitted with the tender

Item	Description	Reference in Technical Specifications
1	Full Technical Literature for the required items	Technical Specifications for Lot 1
2	Full Technical Literature for the required items	Technical Specifications for Lot 2
3	Full Technical Literature for the required items	Technical Specifications for Lot 3
4	Full Technical Literature for the required items	Technical Specifications for Lot 4
5	Full Technical Literature for the required items	Technical Specifications for Lot 5
6	Full Technical Literature for the required items	Technical Specifications for Lot 6
7	Full Technical Literature for the required items	Technical Specifications for Lot 7
8	Full Technical Literature for the required items	Technical Specifications for Lot 8
9	Full Technical Literature for the required items	Technical Specifications for Lot 9
10	Full Technical Literature for the required items	Technical Specifications for Lot 10

Note: It is of utmost importance that original catalogues and any other literature tendered in support of the equipment offered, is submitted separately filed for **each Lot** as identified in the technical specifications.

Signature:

(the person or persons authorised to sign on behalf of the tenderer)

Date:

VOLUME 1 SECTION 5 – GLOSSARY

Definitions

Note: the present definitions are given here for convenience only, in the context of the tender procedure. The definitions set out in the contract as concluded are determining for the relations between the parties to the contract.

Administrative order: Any instruction or order issued by the Project Manager to the Contractor in writing regarding the execution of the contract.

Breakdown of the overall price: A heading-by-heading list of the rates and costs making up the price for a lump-sum contract.

Central Government Authority: means the Department of Contracts

Contracting Authority: means the final beneficiary.

Conflict of interest: Any event influencing the capacity of a candidate, tenderer or supplier to give an objective and impartial professional opinion, or preventing him, at any moment, from giving priority to the interests of the Central Government Authority and the Contracting Authority. Any consideration relating to possible contracts in the future or conflict with other commitments, past or present, of a candidate, tenderer or supplier, or any conflict with his own interests. These restrictions also apply to subcontractors and employees of the candidate, tenderer or supplier.

Contract value: The total value of the contract to be paid by the Contracting Authority in terms of the agreed terms and conditions.

Contractor: The successful tenderer, once all parties have signed the contract.

Day: Calendar day.

Dayworks: Varied work inputs subject to payment on an hourly basis for the Contractor's employees and plant.

Defects Notification Period: The period stated in the contract immediately following the date of provisional acceptance, during which the Contractor is required to complete the works and to remedy defects or faults as instructed by the Engineer.

Drawings: Drawings provided by the Contracting Authority and/or the Engineer, and/or drawings provided by the Contractor and approved by the Engineer, for the carrying out of the works.

Engineer's representative: Any natural or legal person, designated by the Engineer as such under the contract, and empowered to represent the Engineer in the performance of his functions, and in exercising such rights and/or powers as have been delegated to him. In this case, references to the Engineer will include his representative.

Equipment: Machinery, apparatus, components and any other articles intended for use in the works

Evaluation Committee: a committee made up of an odd number of voting members (at least three) appointed by the Central Government Authority and

possessing the technical, linguistic and administrative capacities necessary to give an informed opinion on tenders.

Final acceptance certificate: Certificate(s) issued by the Engineer to the Contractor at the end of the defects notification period stating that the Contractor has completed his obligations to construct, complete, and maintain the works concerned.

Final Beneficiary: The Department/Entity or other government body on whose behalf the Department of Contracts has issued this tender.

Foreign currency: Any currency permissible under the applicable provisions and regulations other than the Euro, which has been indicated in the tender.

General conditions: The general contractual provisions setting out the administrative, financial, legal and technical clauses governing the execution of contracts.

General damages: The sum not stated beforehand in the contract, which is awarded by a court or an arbitration tribunal, or agreed between the parties, as compensation payable to an injured party for a breach of the contract by the other party.

In writing: This includes any hand-written, typed or printed communication, including fax transmissions and electronic mail (e-mail).

Liquidated damages: The sum stated in the contract as compensation payable by the Contractor to the Contracting Authority for failure to complete the contract or part thereof within the periods under the contract, or as payable by either party to the other for any specific breach identified in the contract.

Modification: An instruction given by the Engineer which modifies the works.

National currency: The currency of the country of the Contracting Authority.

Period: A period begins the day after the act or event chosen as its starting point. Where the last day of a period is not a working day, the period expires at the end of the next working day.

Plant: appliances and other machinery, and, where applicable under the law and/or practice of the state of the Contracting Authority, the temporary structures on the site required to carry out the works but excluding equipment or other items required to form part of the permanent works.

Project Manager: The legal or natural person responsible for monitoring the execution of the contract on behalf of the Contracting Authority, where the latter is not the Central Government Authority.

Provisional sum: A sum included in the contract and so designated for the execution of works or the supply of goods, materials, plant or services, or for contingencies, which sum may be used in whole or in part, or not at all, as instructed by the Engineer.

Site: The places provided by the Contracting Authority where the works are to be carried out and other places stated in the contract as forming part of the site.

Special conditions: The special conditions laid down by the Contracting Authority as an integral part of the tender document, amplifying and supplementing the general

conditions, clauses specific to the contract and the terms of reference (for a service contract) or technical specifications (for a supply or works contract).

Supervisor/Engineer: The legal or natural person responsible for administering the contract on behalf of the Contracting Authority.

Tender document/s: The dossier compiled by the Contracting Authority and containing all the documents needed to prepare and submit a tender.

Tender price: The sum stated by the tenderer in his tender for carrying out the contract.

Works: Works of a permanent or temporary nature executed under the contract.

Written communications: Certificates, notices, orders and instructions issued in writing under the contract.

TENDER PREVIEW

VOLUME 1 SECTION 6 – EXTRACTS FROM THE PUBLIC PROCUREMENT REGULATIONS

Part XIII – Appeals

The procedure for the submission of appeals is stipulated in Part XIII of the Public procurement Regulations (Legal Notice 296/2010), reproduced hereunder for ease of reference.

- (1) Any tenderer or candidate concerned, or any person, having or having had an interest or who has been harmed or risks being harmed by an alleged infringement or by any decision taken including a proposed award in obtaining a contract or a cancellation of a call for tender, may file a notice of objection with the Review Board.

The notice shall be filed within ten calendar days following the date on which the contracting authority has by fax or other electronic means sent its proposed award decision.

The communication to each tenderer of the proposed award shall be accompanied by a summary of the relevant reasons relating to the rejection of the tender as set out in regulation 44(3), and by a precise statement of the exact standstill period.

The notice of objection shall only be valid if accompanied by a deposit equivalent to one per cent of the estimated value of the tender submitted by the tenderer, provided that in no case shall the deposit be less than one thousand and two hundred euro (€1,200) or more than fifty-eight thousand euro (€58,000). The Secretary of the Review Board shall immediately notify the Director that an objection had been filed with his authority thereby immediately suspending the award procedure. The Department of Contracts or the contracting authority involved, as the case may be, shall be precluded from concluding the contract during the period of ten calendar days allowed for the submission of appeals. The award process shall be completely suspended if an appeal is eventually submitted.

- (2) The procedure to be followed in submitting and determining complaints as well as the conditions under which such complaints may be filed shall be the following:-
 - (a) any decision by the General Contracts Committee (or a Special Contracts Committee) and by a contracting authority, shall be made public at the Department of Contracts or at the office of the contracting authority prior to the award of the contract;
 - (b) the notice of objection duly filed in accordance with sub-regulation (1) shall be made public by the Review Board not later than the next working day following its filing;
 - (c) within three working days of the publication of the replies the Secretary of the Review Board shall prepare a report (the Analysis Report) analysing the letter of objection. This report shall be circulated to the persons who file an objection and interested parties. After the preparatory process is duly completed, the Head of the contracting authority shall forward to the Chairman of the Review Board all documentation pertaining to the call for tenders in question including files, tenders submitted, copies of deposit receipts, any motivated letter, who shall then proceed as stipulated in Part XIV;
 - (d) the Director or the Head of the contracting authority shall publish a copy of the decision of the Review Board at his department or at the premises of the relevant contracting authority, as the case may be.

Copies of the decision shall be forwarded by the Secretary of the Board to the complaining tenderer, any persons who had registered or had an implied interest, the Director of Contracts and to the contracting authority concerned.

VOLUME 2

VOLUME 2 SECTION 1 - DRAFT CONTRACT FORM

Financed by: European Regional Development Fund (ERDF) Program

Project: ERDF 017: ICT Faculty at the University of Malta

Contract Number: 3086/2010

This contract is concluded between:

Department of Contracts
Notre Dame Ravelin
Floriana FRN 1600
Malta

(hereinafter called “The Central Government Authority”) on behalf of the University of Malta of Msida MSD 2080 – Malta [herein after called “The Contracting Authority”] on the one part, and

[Name of Contractor]
[Address]

(hereinafter called “The Contractor”) on the other part,

Whereas the Central Government Authority is desirous that certain supplies should be supplied, delivered, installed and where applicable commissioned, by the Contractor, viz.:

- supply, delivery, installation, testing and commissioning (as applicable) of Information Technology Equipment for the Faculty of Information Communications Technology (ICT) Building at the University of Malta

and has accepted a tender by the Contractor for the provision of such supplies and the remedying of any defects therein.

It is hereby agreed as follows:

1. In this contract words and expressions shall have the meanings assigned to them in the contractual conditions set out below.
2. The place of acceptance of the supplies shall be at the Faculty of Information Communications Technology (ICT) Building at the University of Malta – Msida 2080 – Malta, the time limits for delivery shall be within six (6) weeks from the last signature on the Contract, and the INCOTERM²⁰⁰⁰ applicable, shall be delivery duty paid (DDP) at the said Faculty of Information Communications Technology (ICT) Building
3. 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) this Contract,
 - (b) the Special Conditions,
 - (c) the General Conditions,
 - (d) the technical specifications and design documentation,
 - (e) the Contractor's technical offer (including any clarifications made during adjudication),
 - (f) the financial offer (after arithmetical corrections)/breakdown,
 - (g) the tender form,

(h) any other documents forming part of the contract.

Addenda shall have the order of precedence of the document they are modifying.

4. In consideration of the payments to be made by the Contracting Authority to the Contractor as hereinafter mentioned, the Contractor undertakes to deliver all supplies, and remedy defects therein in full compliance with the provisions of the contract.

5. The Contracting Authority hereby agrees to pay the Contractor in consideration of the supply, delivery, installation, testing and commissioning, as applicable, of the required equipment/supplies and remedying of defects therein, the amount of:-

- Contract price of €.....Delivery Duty Paid (including VAT/other taxes)
- Contract price in words:..... Euro

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 shall be paid in compliance with National Law (in particular the VAT Act 1998, the Act No X of 2003 and relevant Legal Notices).

6. The Contractor hereby agrees to submit a performance guarantee amounting to €..... equivalent to 10% of the contract value together with the signed contract.

7. 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.

Done in English in three (3) originals: one for the Central Government Authority, one for the Contracting Authority, and one for the Contractor.

Central Government Authority:

Contractor:

Signed by:

Signed by:

.....

.....

In the capacity of:

In the capacity of:

.....

.....

Being fully authorized by and acting on behalf of

Being fully authorized by and acting on behalf of

.....

.....

Date:

Date:

VOLUME 2 SECTION 2 - GENERAL CONDITIONS

The full set of General Conditions for Supply Contracts (Version 1.01 dated 15 March 2010) can be viewed/downloaded from:

www.contracts.gov.mt/conditions

It is hereby construed that the tenderers have availed themselves of these general conditions, and have read and accepted in full and without reservation the conditions outlined therein, and are therefore waiving any standard terms and conditions which they may have.

These general conditions will form an integral part of the contract that will be signed with the successful tenderer/s.

TENDER PREVIEW

VOLUME 2 SECTION 3 - SPECIAL CONDITIONS

These conditions amplify and supplement, if necessary, the General Conditions governing the contract. Unless the Special Conditions provide otherwise, those General Conditions remain fully applicable. The numbering of the Articles of the Special Conditions is not consecutive but follows the numbering of the Articles of the General Conditions. Other Special Conditions should be indicated afterwards.

Article 2: Law Applicable

- 2.1 The laws of Malta shall apply in all matters not covered by the provisions of the contract.
- 2.2 The language used shall be English.

Article 4: Communications

If the Contracting Authority, either on its own initiative or in response to a request from a prospective tenderer, provides additional information on the tender dossier, it must send such information in writing to all other prospective tenderers at the same time.

Tenderers may submit questions in writing to the following address up to 16 calendar days before the deadline for submission of tenders, specifying the **publication reference and the contract title**:

Contact name: Director General
Address: Department of Contracts
Notre Dame Ravelin
Floriana
Fax : +356 21 247 681
E-mail : info.contracts@gov.mt

Any clarification of the tender dossier will be communicated simultaneously in writing to all the tenderers at the latest 6 days before the deadline for submission of tenders. No further clarification will be provided after this date.

Any prospective tenderers seeking to arrange individual meetings with the Contracting Authority during the tender period will be excluded from the tender procedure.

Article 7: Supply of Documents

As per General Conditions

Article 8: Assistance With Local Regulations

As per General Conditions

Article 9: The Contractor's Obligations

9.6 As per General Conditions

Article 10: Origin

10.1 Supplies may originate in a Member State of the European Union or any other country as stipulated in **Article 69** of the Public Procurement Regulations 2010. The origin of the goods shall be determined according to the Community Customs Code or the international agreements to which the country concerned is a signatory.

Article 11: Performance Guarantee

11.1 The Contractor shall, within 15 days of receipt of the contract for signature, furnish the Central Government Authority with a guarantee for the full and proper performance of the contract. The amount of the guarantee shall be 10% of the amount of the contract price, including any amounts stipulated in addenda to the contract. In the case that the value of the contract does not exceed €10,000, no performance guarantee is required.

11.3 The performance guarantee shall be in the format given in Volume 2, Section 4 and shall be provided in the form of a bank guarantee.

11.7 As per General Conditions

Article 12: Insurance

12.1 Insurance costs are borne by the Supplier until provisional acceptance of the supplies.

Article 13: Performance Programme (Timetable)

Delivery to the University of Malta of the goods on this contract is to be done within **six (6) weeks** from the last date of signature on the Contract whilst the installation is to be carried out subject to a final confirmation by the University of Malta.

Article 14: Contractor's Drawings

14.1 As per General Conditions

14.7 As per General Conditions

Article 15: Tender Prices

15.1 As per General Conditions

Article 16: Tax and customs arrangements

16.1 As per General Conditions

16.2 As per General Conditions

Article 17: Patents and Licences

17.1 As per General Conditions

Article 18: Commencement Order

18.1 The commencement date of this tender shall be the last date of signature on the contract

Article 19: Delays in Execution

19.1 Without prejudice to the contents of Article 19.1 of the General Conditions, delivery to the University of Malta of the goods on this contract is to be done within six (6) weeks from the last date of signature on the Contract whilst the installation is to be carried out subject to a final confirmation by the University of Malta. If this six (6) week period includes any of the following dates:-

- 15th August,
- 25th December or;
- 1st January,

the period will be extended by a further two weeks. For the avoidance of doubt if this period includes both 25th December and 1st January there will only be one (1) two-week extension.

Article 22: Variations

22.1 Subject to the provisions of Regulation 78 of the Public Procurement Regulations 2010, the Central Government Authority reserves the right to vary the quantities specified for **all items in all Lots**. The total value of the supplies **may not rise or fall** as a result of the variation in the total quantities by more than **25 %** of the contract price. The unit prices used in the tender shall be applicable to the quantities procured under the variation.

Article 24: Quality of Supplies

As per General Conditions

Article 25: Inspection and Testing

25.2 As per General Conditions

Article 26: Methods of Payment

26.1 Payments will be made in Euro. Payments shall be authorized by the Contracting Authority, namely the University of Malta and paid by the Treasury Department.

26.3 The period quoted in Article 26.3 of the General Conditions may be subject to change according to the particular needs of the Department up to a maximum of 60 days.

26.5 The following payment schedule shall be applicable:-

- a) 50% of the contract price after the signing of the contract, against provision of the performance guarantee and a security guaranteeing repayment in full of this pre-financing;
- b) 40% of the contract price following provisional acceptance of the delivered supplies;
- c) 10% of the contract price subsequent to installation as agreed;

26.9 As per General Conditions

Article 28: Delayed Payments

28.1 The period quoted in Article 28.1 of the General Conditions may be subject to change according to the particular needs of the Department up to a maximum of 60 days.

28.2 Once the deadline laid down in Article 28.1 has expired, the Contractor may within two months of late payment, claim late-payment interest:-

- at the rediscount rate applied by the issuing institution of the country of the Central Government Authority.
- on the first day of the month in which the deadline expired, plus seven percentage points. The late-payment interest shall apply to the time which elapses between the date of the payment deadline (exclusive) and the date on which the Contracting Authority's account is debited (inclusive).

Article 29: Delivery

29.1 The Contractor shall bear all risks relating to the goods until provisional acceptance at destination. The supplies shall be packaged so as to prevent their damage or deterioration in transit to their destination.

29.2 All equipment shall be packed in sturdy packages to eliminate damages due to logistical operations up to arrival at destination and accordingly marked and labelled, with regard to handling procedures during transit.

29.3 The packaging shall become the property of the recipient subject to respect for the environment.

29.5 Each delivery is to be accompanied by a packing list and other delivery documents which are to clearly indicate both the Contract Number and the Lot number, if applicable.

29.6 All relevant packages are to be marked as follows:-

University of Malta
Msida MSD 2080
MALTA
Contract Number: CT 3086/2010
Lot no: _____

Article 31: Provisional Acceptance

- 31.1 A provisional acceptance certificate by the beneficiary will be delivered to the Contractor if the supply and delivery has been effected with the agreed periods of execution.

Article 32: Warranty

- 32.1 The Contractor shall warrant that the supplies are new, unused, of the most recent models and incorporate all recent improvements in design and materials.

The Contractor shall further warrant that none of the supplies have any defect arising from design, materials and workmanship. This warranty, covering but not limited to, defects in material or workmanship, shall remain valid for three (3) years after provisional acceptance of the installed equipment.

Article 33: After-Sales Service

- 33.1 The contractor shall provide and secure the provision of reliable and regular after-sales for a period of three (3) years.

The Contractor shall warrant as well that spare parts for the equipment would be available for a period of **not less than five (5) years** after delivery of the equipment and shall thereafter give notice to the University of Malta prior to the discontinuation of production of the spare parts.

Article 35: Breach of Contract

- 35.3 Without prejudice to the Government's right to dissolve 'ipso jure' the contract in the case of infringement of any condition thereunder and apart from the deduction established for delay in delivery, any such infringement shall render the contractor, in each case, liable to a deduction by way of damages of 5 per cent of the value of the contract, unless the Government elects, with regard to each particular infringement, but not necessarily with regard to all infringements, to claim actual damages incurred.

Article 41: Dispute Settlement by Litigation

Any dispute between the Parties that may arise during the performance of this contract and that has not been possible to settle otherwise between the Parties shall be submitted to the arbitration of the Malta Arbitration Centre in accordance with the Arbitration Act (Chapter 387) of the Laws of Malta.

This law is based on "Model Law" which is the Model Law on International Commercial Arbitration adopted on June 21, 1985 by the United Nations Commission on International Trade Law reproduced in the First Schedule of the Arbitration Act.

VOLUME 2 SECTION 4 - SPECIMEN PERFORMANCE GUARANTEE

(LETTERHEAD OF THE REGISTERED FINANCIAL INSTITUTION PROVIDING THE GUARANTEE)

Director of Contracts
Department of Contracts
Notre Dame Ravelin
Floriana FRN1600
Malta

[Date]

Dear Sir,

Our Guarantee Number **for €**.....

Account: [Account Holder's Name]

In connection with the contract entered into between yourself on behalf of the Director of Contracts and **[Name and Address of Contractor]** hereinafter referred to as "the Contractor" as per the latter's tender and your acceptance under **CT3086/2010**, whereby the contractor undertook the **[title of contract]** in accordance with Article 13 of the Special Conditions the [works/services/supplies] as mentioned, enumerated or referred to in the Specification and/or Bills of Quantities forming part of the contract documents, we hereby guarantee to pay you on demand a maximum sum of **€[amount in words and numbers]** in case the obligations of the above-mentioned contract are not duly performed by the Contractor.

This guarantee will become payable on your first demand and it shall not be incumbent upon us to verify whether such demand is justified.

For avoidance of doubt it is hereby declared that although this instrument gives rise to legal relations between the guarantor and the beneficiary, it is hereby specifically declared for all intents and purposes of law that this guarantee does not exempt the above-mentioned Contractor from any obligations, acts of performance or undertaking assumed under the tender documents as ratified in the contract.

Any payments due to the contractor in respect of the obligations entered into under the contract above referred to shall be made through this Bank.

This guarantee expires on the **[expiry date]** and unless it is extended by us or returned to us for cancellation before that date any demand made by you for payment must be received in writing not later than the aforementioned expiry date.

This document should be returned to us on utilization or expiry or in the event of the guarantee being no longer required.

After the expiry date and in the absence of a written demand being received by us before such expiry date, this guarantee shall be null and void, whether returned to us or not, and our liability hereunder shall terminate.

This guarantee is personal to you, and is not transferable or assignable.

Yours Faithfully,

.....
[Signatory on behalf of Guarantor]

VOLUME 2 SECTION 5 - SPECIMEN PREFINANCING PAYMENT GUARANTEE

(LETTERHEAD OF THE REGISTERED FINANCIAL INSTITUTION PROVIDING THE GUARANTEE)

Director of Contracts
Department of Contracts
Notre Dame Ravelin
Floriana FRN1600
Malta

[Date]

PUBLICATION REF: CT 3086/2010

Dear Sir,

We the undersigned, [***name, company name, address***], hereby declare that we will guarantee, as principal debtor, to [***Central Government Authority's name and address***] on behalf of [***Contractor's name and address***], the payment of [***indicate the amount***], corresponding to the guarantee mentioned in Article 44 of the Special Conditions without dispute, on receipt of a first written request from the beneficiary.

We further agree that no change or addition to or other modification of the terms of the contract or of the works to be performed thereunder or of any of the contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee. We hereby waive notice of any such change, addition or modification.

The guarantee will enter into force and take effect from the [***indicate the date of payment of the pre-financing***] and shall be valid until full repayment of the same amount by the Contractor.

We note that you will release the guarantee and notify us of the fact at the latest within thirty days of this date.

Done at on the/...../.....

Name and first name:

On behalf of:

Signature:

[stamp of the body providing the guarantee]

VOLUME 2 SECTION 6 - SPECIMEN RETENTION GUARANTEE

(LETTERHEAD OF THE REGISTERED FINANCIAL INSTITUTION PROVIDING THE GUARANTEE)

Director of Contracts
Department of Contracts
Notre Dame Ravelin
Floriana FRN1600
Malta

[Date]

PUBLICATION REF: CT 3086/2010

Dear Sir,

We, the undersigned, **[name, company name, address]**, hereby declare that we will guarantee, as principal debtor, to **[Central Government Authority's name and address]** on behalf of **[Contractor's name and address]**, the payment of **[indicate the amount]**, corresponding to the guarantee mentioned in Article 45 of the Special Conditions without dispute, on receipt of a first written request from the beneficiary.

We further agree that no change or addition to or other modification of the terms of the contract or of the works to be performed thereunder or of any of the contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee. We hereby waive notice of any such change, addition or modification.

The guarantee will enter into force and take effect from the *[indicate the date of payment of the sums retained under the contract]* and shall be valid until the date of issue of the certificate of final acceptance.

We note that you will release the guarantee and notify us of the fact at the latest within thirty days of the date of issue of this certificate.

Done at, on the/...../.....

Name and first name:

On behalf of:

Signature:

[stamp of the body providing the guarantee]

VOLUME 3 - TECHNICAL SPECIFICATIONS

Note:

Where in this tender document a standard is quoted, it is to be understood that the Contracting Authority will accept equivalent standards. However, it will be the responsibility of the respective bidders to prove that the standards they quoted are equivalent to the standards requested by the Contracting Authority.

Contents:-

- Lot 1 - Computers, Monitors, Printers & Servers
- Lot 2 - Network Equipment
- Lot 3 - Graphics Equipment
- Lot 4 - Network Analysis Equipment
- Lot 5 - Test & Measure Equipment
- Lot 6 - Spectrum Analysis Equipment
- Lot 7 - Eye Tracking Equipment
- Lot 8 - Robotics Equipment
- Lot 9 - Audiovisual and other equipment
- Lot 10 - Other General Equipment

General Notes:

The Tender comprises the supply, installation, testing and commissioning of office, research labs and lecture room equipment for the new Faculty of ICT Building, University of Malta.

- Tenderers shall submit technical specifications and catalogues of all equipment being proposed.
- For every item the brand, model number and manufacturer name must be specified.
- Equipment offered must conform to the minimum technical specifications provided in the tender. Specifications which are better may be accepted. If in doubt, bidders are advised to seek clarifications.
- Powered hardware must be fitted with an MSA BS 1363 plug (unless specified otherwise) and configured for a 230V/50Hz supply.
- Equipment offered must comply with the Energy Star or TCO Certifications Standards where applicable.
- Bidders are encouraged to seek any academic discounts, which may be applicable to the University of Malta, from the equipment manufacturer(s) prior to submitting their bid for this tender. Detailed specifications for each type of equipment required are given in the following sections.
- The bidder is to state:-
 - If there is a maximum guaranteed time period to resolve any problem;
 - What happens if a fault/problem is not resolved within this time period;
 - Details of escalation procedures;
 - Whether replacement equipment will be supplied for an indefinite time period until fault is resolved.
- Warranty for all items is deemed to be 36 calendar month guarantee on-site on all parts and labour unless otherwise stated.
- It is of utmost importance that original catalogues and any other literature tendered in support of the equipment offered, is submitted separately filed for each Lot as identified in the technical specifications.

TECHNICAL SPECIFICATIONS - EQUIPMENT

Lot 1 – Computers, Monitors, Printers & Servers

1.1 - Computers

The following details must be listed for each model:-

- Chipset and socket type.
- Processor type and speed.
- Laptop average battery runtime.
- Laptop security features.
- Weight of laptop unit.
- Internal & external communication ports and connections.
- Maximum upgradability of memory within same system configuration.
- Power rating of system during operation.
- Minimum warranty on laptop PC battery and eventual replacement.

Following conditions must apply:

- Warranty deemed to be 36 calendar month guarantee on-site on all parts (excluding laptop battery) and labour.
- Peripherals including keyboard, mouse and display should have the same colour scheme as the workstation external case.
- Laptop battery limited warranty must be clearly specified.
- Warranty terms that apply on dead pixels or pixel defects must conform to ISO 12406-2 specification on all TFT LCD screens including laptops.
- Compatibility with respect to the included operating system (Windows 7) and the following:
 - Windows XP
 - Windows Vista
 - Linux (list distribution)

1.1.1 - Lower-end Desktop Personal Computer (no OS)

Desktop workstations with the following minimum specifications:

- Processor: Intel Core i5-750 2.66GHz, 8MB Cache or equivalent
- Mainboard should at least support: 4 SATA-II
 - specify make, model, link to manufacturer site and drivers
 - specify form (ATX, Micro ATX, other)
- BIOS supports Boot Menu option and must allow this option to be disabled

- 4GB DDR3 (or better).
- Minimum 6 USB2.0 ports (ready to use) of which at least 2 ports must be on the front of the case.
- S.M.A.R.T. 500GB SATA2 HDD 7200 RPM with 16MB Buffer minimum
- 256MB 3D video card, DirectX 9 fully compliant (on-board allowed); must have at least 1xVGA and 1xDVI port. Should support Windows 7 AERO interface.
- HD Audio Codec or better audio with ready-to-use front connections for headphones & mic
- NIC Card 100/1000 Base-T (Autosensing) with RJ45 socket (on-board allowed);
- Internal DVD Super Multi Dual Layer including DVD-Writing software
- State noise emissions level in compliance with ISO 9296
- 3.5" Internal multi-type memory card reader – SDHC compatible
- 105 Key Windows standard keyboard, Maltese layout, PS/2 or USB, with an anti-glare matt surface & tilt facility.
- USB laser mouse with scroll wheel, including mouse pad.
- Case... specify type, external dimensions, number and type of drive bays

1.1.2 - Lower-end Desktop Personal Computer including Windows7

Desktop workstations with the following minimum specifications:

- Processor: Intel Core i5-750 2.66GHz, 8MB Cache or equivalent
- Mainboard should at least support: 4 SATA-II
 - specify make, model, link to manufacturer site and drivers
 - specify form (ATX, Micro ATX, other)
- BIOS supports Boot Menu option and must allow this option to be disabled
- 4GB DDR3 (or better).
- Minimum 6 USB2.0 ports (ready to use) of which at least 2 ports must be on the front of the case.
- S.M.A.R.T. 500GB SATA2 HDD 7200 RPM with 16MB Buffer minimum
- 256MB 3D video card, DirectX 9 fully compliant (on-board allowed); must have at least 1xVGA and 1xHDMI port with HDCP support. Should support Windows 7 AERO interface.
- HD Audio Codec or better audio with ready-to-use front connections for headphones & mic
- NIC Card 100/1000 Base-T (Autosensing) with RJ45 socket (on-board allowed);

- Internal DVD Super Multi Dual Layer including DVD-Writing software
- State noise emissions level in compliance with ISO 9296
- 3.5" Internal multi-type memory card reader – SDHC compatible
- 105 Key Windows standard keyboard, Maltese layout, PS/2 or USB, with an anti-glare matt surface & tilt facility.
- USB laser mouse with scroll wheel, including mouse pad.
- Case... specify type, external dimensions, number and type of drive bays
- Windows 7 Pro 64-bit Edition licence to be supplied as standard and installed; original media must also be supplied

1.1.3 - Higher-end Desktop Personal Computer (no OS)

High end desktop workstations with the following minimum specifications:

- Processor: Intel Core i7-960 3.2GHz, 8MB Cache or equivalent
- Mainboard should at least support: 4 SATA-II, 2 PCI Ex x16 slots, 1 PCI
 - specify make, model, link to manufacturer site and drivers
 - specify form (ATX, Micro ATX, other)
- BIOS supports Boot Menu option and must allow this option to be disabled
- Installed memory: 8GB DDR3
- Minimum 6 USB2.0 ports (ready to use) of which at least 2 ports must be on the front of the case.
- S.M.A.R.T. 1TB SATA2 HDD 7200 RPM with 32MB buffer
- Video Card fully compliant with DirectX 10, minimum 1GB RAM, performance of at least 500 Gigaflops, support for CUDA extensions. Must have 1 x HDMI & 1 X DVI sockets, supporting HDCP. Specify graphics chip type, card make, model, and link to manufacturer's site and drivers.
- Expansion Slots: 2 PCI Express, 1 of which running at x16, 2 PCI expansion slots.
- HD Audio Codec or better audio with ready-to-use front connections for headphones & mic ...
- NIC Card 100/1000 Base-T (Autosensing) with RJ45 socket (on-board allowed);
- BluRay-ROM burner multi drive (with DVD writing capabilities and including CD/DVD Writing software).
- State noise emissions level in compliance with ISO 9296
- 3.5" Internal multi-type memory card reader – SDHC compatible
- 105 Key Windows standard keyboard, Maltese layout, PS/2 or USB, with an anti-glare matt surface & tilt facility.
- USB laser mouse with scroll wheel, including mouse pad.

- Case... specify type, external dimensions, number and type of drive bays
- Power cord must be fitted with Standard 5 Amp plug MSA BS 1363

1.1.4 - Nvidia GPU with Intel Desktop Personal Computer (no OS)

- Processor: Intel Core i7-930 2.8GHz, 8MB Cache
- Mainboard should at least support: 4 SATA-II, 2 PCI Ex x16 slots, 1 PCI
 - specify make, model, link to manufacturer site and drivers
 - specify form (ATX, Micro ATX, other)
- BIOS supports Boot Menu option and must allow this option to be disabled
- Installed memory: 8GB DDR3
- Minimum 6 USB2.0 ports (ready to use) of which at least 2 ports must be on the front of the case.
- S.M.A.R.T. 1TB SATA2 HDD 7200 RPM with 32MB buffer
- Graphics Card: Minimum 2x NVidia GeForce 400 Series GPU's supporting the "Fermi" architecture in TRI-SLI configuration. Fully compliant with DirectX 10, minimum 1GB RAM, performance of at least 500 Gigafllops, support for CUDA extensions. Must have 1 x HDMI & 1 X DVI sockets, supporting HDCP.
- Expansion Slots: 2 PCI Express, 1 of which running at x16, 2 PCI expansion slots.
- HD Audio Codec or better audio with ready-to-use front connections for headphones & mic ...
- NIC Card 100/1000 Base-T (Autosensing) with RJ45 socket (on-board allowed);
- BluRay-ROM burner multi drive (with DVD writing capabilities and including CD/DVD Writing software).
- State noise emissions level in compliance with ISO 9296
- 3.5" Internal multi-type memory card reader – SDHC compatible
- 105 Key Windows standard keyboard, Maltese layout, PS/2 or USB, with an anti-glare matt surface & tilt facility.
- USB laser mouse with scroll wheel, including mouse pad.
- Case... specify type, external dimensions, number and type of drive bays
- Power cord must be fitted with Standard 5 Amp plug MSA BS 1363

1.1.5 - ATI GPU with AMD Desktop Personal Computer (no OS)

- Processor: AMD Phenom II Processor (with at least 4 cores)
- Mainboard should at least support: 4 SATA-II, 2 PCI Ex x16 slots, 1 PCI
 - specify make, model, link to manufacturer site and drivers

- specify form (ATX, Micro ATX, other)
- BIOS supports Boot Menu option and must allow this option to be disabled
- Installed memory: 8GB DDR3
- Minimum 6 USB2.0 ports (ready to use) of which at least 2 ports must be on the front of the case.
- S.M.A.R.T. 1TB SATA2 HDD 7200 RPM with 32MB buffer
- Graphics Card: Minimum 2 ATI Radeon 5000 Series GPUs in Crossfire configuration. Fully compliant with DirectX 10, minimum 1GB RAM, performance of at least 500 Gigaflops, support for CUDA extensions. Must have 1 x HDMI & 1 X DVI sockets, supporting HDCP.
- Expansion Slots: 2 PCI Express, 1 of which running at x16, 2 PCI expansion slots.
- HD Audio Codec or better audio with ready-to-use front connections for headphones & mic ...
- NIC Card 100/1000 Base-T (Autosensing) with RJ45 socket (on-board allowed);
- BluRay-ROM burner multi drive (with DVD writing capabilities and including CD/DVD Writing software).
- State noise emissions level in compliance with ISO 9296
- 3.5" Internal multi-type memory card reader – SDHC compatible
- 105 Key Windows standard keyboard, Maltese layout, PS/2 or USB, with an anti-glare matt surface & tilt facility.
- USB laser mouse with scroll wheel, including mouse pad.
- Case... specify type, external dimensions, number and type of drive bays
- Power cord must be fitted with Standard 5 Amp plug MSA BS 1363

1.1.6 - Laptop - 1

Notebook computers with the following minimum configuration:

- Processor: Intel Core i7-720QM 1.6GHz, 6MB Cache or equivalent
- Display size: 14" to 15"
- Installed Memory : 4 GB DDR3
- Expansion Slots: 1xExpress Card Slot
- I/O Interfaces: 3x USB v2.0 ports, VGA, 1x mic; 1x headphone/line out
- LAN port: 1xRJ-45 Gigabit Ethernet port (10/100/1000 Mbps autosensing network card)
- Wireless: 802.11a/b/g/n
- Bluetooth V2.0 or higher
- Installed SATA2 Hard Drive: At least 500GB @ 7200rpm

- Video Card: HD Graphics with 512MB dedicated memory minimum
- Installed OS: Windows 7 Pro 64-bit (Installed + Media + All drivers)
- Installed Optical Drive: Blu-Ray Reader with CD/DVD writing capabilities (including CD/DVD Writing software)
- Pointing Device: Touch pad with scrolling function
- Built-in card readers: Secure Digital SDHC compatible
- Power Features: Li-Ion Battery with up to 6 hours battery life minimum
- Must include Kensington travel lock
- Maximum Weight: 2.7kg
- Compliant with ISO-13406-2
- Other peripherals: additional USB ergonomic keyboard , USB mouse, and docking station with power supply. Docking station should not be USB based, but should plug in a dedicated socket in the laptop.
- Carry case

1.1.7 - Laptop - 2

Notebook computers with the following minimum configuration:

- Processor: Intel Core i7-820XM 3.06GHz, 8MB Cache or equivalent
- Display size: 14" to 15"
- Installed Memory : 4 GB DDR3
- Expansion Slots: 1xExpress Card Slot
- Removable Graphics Card: NVidia 1GB GDDR3 memory config
- I/O Interfaces: 3x USB v2.0 ports, VGA, 1x mic; 1x headphone/line out
- LAN port: 1xRJ-45 Gigabit Ethernet port (10/100/1000 Mbps autosensing network card)
- Wireless: 802.11a/b/g/n
- Bluetooth V2.0 or higher
- Installed SATA2 Hard Drive: At least 500GB @ 7200rpm
- Installed OS: Windows 7 Pro 64-bit (Installed + Media + All drivers)
- Installed Optical Drive: Blu-Ray Reader with CD/DVD writing capabilities (including CD/DVD Writing software)
- Pointing Device: Touch pad with scrolling function
- Built-in card readers: Secure Digital SDHC compatible
- Power Features: Li-Ion Battery with up to 4 hours battery life minimum
- Must include Kensington travel lock
- Maximum Weight: 2.7kg
- Compliant with ISO-13406-2

- Other peripherals: additional USB ergonomic keyboard , USB mouse, and docking station with power supply. Docking station should not be USB based, but should plug in a dedicated socket in the laptop.
- Carry case

1.1.8 - Laptop - 3

Notebook computers with the following minimum configuration:

- Processor: Dual Core
- Display size: 11" to 12"
- Installed Memory : 4 GB
- I/O Interfaces: 2x USB v2.0 ports minimum, VGA
- Integrated mic and speakers
- Network interface (wireless): 802.11 a/g/n
- Bluetooth V2.0 or higher
- Installed SATA2 Hard Drive: At least 160GB
- Pointing Device: Touch pad with scrolling function
- Built-in card readers: Secure Digital SDHC compatible
- keyboard: English, UK layout
- Operating system: Windows 7 Pro 64-bit (Installed + Media + All drivers)
- Video Card: 256MB dedicated memory minimum
- Power Features: Li-Ion Battery with up to 4 hours battery life minimum
- Must include Kensington travel lock
- Power Adapters / Charger
- Maximum Weight: 2kg
- Other peripherals: additional USB ergonomic keyboard , USB mouse
- Carry case / pouch
- Compliant with ISO-13406-2

1.1.9 - Lower-end Mac

Mac 21.5 Inch, including wireless keyboard and mouse – ready to be used, with the following minimum specifications:

- Processor: 3.06GHz Intel Core 2 Duo
- Installed Memory: 8GB 1066MHz DDR3 SDRAM - 4x2GB
- Installed Hard Drive: 500GB Serial ATA Drive
- Installed OS: Mac OS X v10.6 Snow Leopard (Installed + Media + All drivers)
- Graphics Card: NVIDIA GeForce 9400M with 256MB or equivalent
- Wireless Keyboard (British) and wireless mouse

- User's Guide (English)
- Installed Optical Drive: Slot-loading 8x SuperDrive with 4x double-layer burning (including CD/DVD Writing software)
- Display: 21.5-inch LED-backlit TFT active-matrix display
- Warranty: 2 year guarantee on-site on all parts and labour
- Compliant with ISO-13406-2

1.1.10 - Higher-end Mac

Mac 27 Inch, including wireless keyboard and mouse – ready to be used, having the following minimum specifications:

- Processor: Intel Core i7 2.8GHz or equivalent
- Installed Memory : 8 GB DDR3 SDRAM 1066MHz
- 4x USB v2.0 ports
- LAN port: Built-in 10/100/1000BASE-T (Gigabit)
- Wireless: Built-in 802.11n Wi-Fi wireless networking
- Bluetooth 2.1 + EDR (Enhanced Data Rate)
- FireWire: One FireWire 800 port; 7 watts
- Audio: Built-in stereo speakers, built-in microphone, optical digital audio output/headphone out, optical digital audio input/audio line in
- Installed Hard Drive: 1TB Serial ATA 7200 rpm
- Installed OS: Mac OS X v10.6 Snow Leopard (Installed + Media + All drivers)
- Graphics Card: NVidia GeForce GT120 with 512MB or equivalent
- Installed Optical Drive: Slot-loading 8x SuperDrive with 4x double-layer burning (including CD/DVD Writing software)
- Video: Built-in iSight camera; Mini DisplayPort output with support for DVI, dual-link DVI, and VGA video
- Display: 27-inch LED-backlit glossy 16:9 widescreen TFT active-matrix display; 1920 by 1080 pixels
- Wireless Keyboard (British)
- Warranty: 2 year guarantee on-site on all parts and labour
- Compliant with ISO-13406-2
- Including Country kit

1.1.11 - Mac Laptop

Mac Laptop 15 inch, including external keyboard and optical mouse, having the following minimum specifications:

- Processor: Intel Core i5 2.4GHz or equivalent

- Installed Memory : 4GB 1066MHz DDR3 SDRAM - 2x2GB
- 2x USB v2.0 ports
- LAN port: Built-in 10/100/1000BASE-T (Gigabit)
- Wireless: Built-in 802.11n Wi-Fi wireless networking
- Bluetooth 2.1 + EDR (Enhanced Data Rate)
- FireWire: One FireWire 800 port
- Backlit Keyboard (British) & User's Guide (English)
- Multi-Touch trackpad
- Audio: Built-in stereo speakers, built-in microphone, optical digital audio output/headphone out, optical digital audio input/audio line in
- Installed Hard Drive: 320GB Serial ATA Drive @ 5400 rpm
- Installed OS: Mac OS X v10.6 Snow Leopard (Installed + Media + All drivers) or later
- Graphics Card: NVIDIA GeForce 9400M with 256MB of DDR3 SDRAM shared with main memory, or equivalent
- SD Card slot
- Built-in battery (8-9 hour)
- HD Graphics
- Installed Optical Drive: SuperDrive 8x (DVD±R DL/DVD±RW/CD-RW) (including CD/DVD Writing software)
- Video: Built-in iSight camera; Mini DisplayPort output with support for DVI, dual-link DVI, and VGA video
- Display Port to VGA Adapter
- Display: 15-inch Glossy Widescreen Display (15.4-inch LED-backlit glossy widescreen display, 1440x900 pixels)
- Wireless Mouse and keyboard
- Warranty: 2 year guarantee on-site on all parts and labour
- Compliant with ISO-13406-2

1.1.12 - Mac Backup Device

Time Capsule with the following minimum specifications:

- 2TB capacity
- USB connectivity
- Compatible with Mac Os X for automatic backups
- Warranty: 1 year guarantee on-site on all parts and labour

1.1.13 - 2- port KVM Switch

- High Video Resolution Support Up To 1920 x 1440
- Support Windows XP/VISTA/7, Unix
- Supports Hot Plug of PC's to KVM Switch
- No Software Required - easy PC selection via Hot Keys
- Works with no power adapter
- Auto Scan Mode for monitoring PCs
- Keyboard status restored when switching PCs
- LED Display for easy status monitoring
- All cables included

1.2 - Monitors

The following details must be listed for each model:

- Panel type.
- Viewing angle.
- Brightness.
- Contrast ratio.
- Pixel pitch.
- Image refresh rate.
- User controls.
- Weight.
- Physical dimensions.
-

Following conditions must apply:

- VGA, DVI, HDMI and Power Cables and AC power adaptor (where required) need to be included
- Warranty terms that apply on dead pixels or pixel defects must conform to ISO 13406-2 specification on all TFT LCD screens.

1.2.1 - 19" TFT LCD Monitor

This monitor is intended to be used with item 1.1

- 19" viewable area.
- Aspect ratio: 16:10 widescreen.
- Colour depth minimum: 16 million colours.
- Minimum contrast ratio 1000:1.
- Maximum response time: 5ms.

- Optimal resolution 1440 x 900 pixels.
- Display Screen Coating Anti-Glare
- Input signal 15-pin D-sub RGB and DVI, including necessary cable(s) to connect to PC.
- Security lock slot for Kensington (or compatible) cable.
- Internal power supply with IEC 60320 C6 or C14 connector.
- Integrated Speakers

1.2.2 - 24" TFT LCD Monitor

This monitor is intended to be used with items 1.2 and 1.3

- 24" viewable area.
- Aspect ratio: 16:9 widescreen.
- Colour depth minimum: 16.7 million colours.
- Minimum contrast ratio 1000:1.
- Maximum response time: 5ms.
- Optimal resolution 1920 x 1080 pixels @60Hz
- Display Screen Coating Anti-Glare
- Input signal 15-pin D-sub RGB, DVI, and HDMI with HDCP support. All necessary cables must be supplied.
- Security lock slot for Kensington (or compatible) cable.
- Internal power supply with IEC 60320 C6 or C14 connector.
- Integrated Speakers
-

1.2.3 - 32" TFT LCD Monitor

- 32" viewable area.
- Aspect ratio: 16:9 widescreen.
- Colour depth minimum: 16 million colours.
- Full-HD (1080p) resolution.
- Input signal 15-pin D-sub RGB, SCART, Composite, DVI, and HDMI with HDCP support. All necessary cables must be supplied.
- Internal power supply.
- Integrated Speakers
- Wall hung adjustable bracket:-
 - Tilt: 15 degrees.
 - Pan: 45 degrees (left and right).

- Horizontal correction: 5 degrees.
- Rotate: 90 degrees
- Installation of LCD monitor including mounting of wall bracket to intended installation site.

1.2.4 - 52" TFT LCD Monitor

- 52" viewable area.
- Aspect ratio: 16:9 widescreen.
- Colour depth minimum: 16 million colours.
- Full-HD (1080p) resolution.
- Input signal 15-pin D-sub RGB, SCART, Composite, DVI, and HDMI with HDCP support. All necessary cables must be supplied.
- Internal power supply.
- Integrated Speakers
- Wall hung adjustable bracket:
 - Tilt: 15 degrees.
 - Pan: 45 degrees (left and right).
 - Horizontal correction: 5 degrees.
 - Rotate: 90 degrees
- Installation of LCD monitor including mounting of wall bracket to intended installation site.

1.3 - Printers

The following details must be listed for each model:

- Print speed in pages per minute for mono printouts.
- Print speed in pages per minute for colour printouts.
- Printer output resolution.
- Total paper tray capacity.
- Consumable type, model number and average duty cycle.
- Scanner colour depth.
- Scanner maximum resolution

Applicable consumables (toners) must be included.

Following conditions must apply:

- Compatibility with:
 - Windows 7, XP, Vista
 - Linux (list distribution)
 - Mac OS X

1.3.1 - Monochrome Laser Office Printer

- 15 pages per minute rated output (mono A4)
- Output print resolution 600 x 600 dpi
- 150-sheet input tray
- monthly duty cycle: 5,000 sheets
- Connection interface: USB2.0
- Supported page size: Up to A4
- PCL and Postscript languages support

1.3.2 - Monochrome Laser Network Printer

- 25 pages per minute rated output (mono A4)
- Output print resolution 600 x 600 dpi
- 250-sheet input tray
- monthly duty cycle: 8,000 sheets
- Connection interface: USB2.0, 100 Base-T Ethernet RJ45
- Supported page size: Up to A4
- Duplexer for automated 2-sided printing
- PCL and Postscript languages support

1.3.3 - All-In-One Inkjet Colour Printer/ Scanner/Copier

- Colour/graphics printing 4 pages per minute
- Max print resolution 4800 x 1200 dpi
- 100-sheet Input Tray
- USB Connection
- USB Cable included
- Supported page size: Up to A4

1.3.4 - Colour Laser Printer

A colour laser printer with the following minimum specifications:

- Colour Print
- Black Text, Plain Paper: 12ppm
- Mixed Text and Graphics, Plain Paper: 8ppm
- Resolution: 600 x 600 dpi
- Duty Cycle (per month): Minimum 25,000 pages
- Connectivity: Network
- Supported page size: Up to A4
- Minimum Memory installed: 128MB
- PCL and Postscript languages support

1.4 - Servers

1.4.1 - Virtualisation Server

Server with the following minimum specifications:

- Rack mounted server (to fit in standard full depth rack) of not more than 4U height
- Windows Server 2008 OS or better (64 bit)
- Quad-Core Xeon (or equivalent) 2GHz or better
- Dual-Processor
- 64 GB ECC RAM
- RAID-5 Controller
- 4 x 450GB SAS Hot Swappable Hard Disks 10000 rpm minimum
- 2 x Redundant power supplies. Adequate cables should be provided to power the server from C13 power receptacles
- 2 x Redundant 1Gbps minimum Ethernet connections
- Network boot compatible
- Server management tools
- Including rack-mount kit
- 4 year warranty minimum including free replacement of failed drives

1.4.2 - Storage Server

- Rack mounted server (to fit in standard full depth rack) of not more than 4U height
- Windows Server 2008 OS or better (64 bit)
- Quad-Core Xeon (or equivalent) 2GHz or better
- Dual-Processor
- 16 GB ECC RAM
- RAID-5 Controller
- 8x 2TB SATA Hot Swappable Hard Disks
- 2 x Redundant power supplies. Adequate cables should be provided to power the server from C13 power receptacles
- 2 x Redundant 1Gbps minimum Ethernet connections
- Network boot compatible
- Server management tools
- Including rack-mount kit
- 4 year warranty minimum including free replacement of failed drives

1.4.3 - Multi-Core Server

Server with the following minimum specifications:

- Rack mounted server (to fit in standard full depth rack) of not more than 4U height
- Windows Server 2008 OS or better (64 bit)
- Quad-Core Xeon (or equivalent) 2GHz or better
- 16 GB ECC RAM
- RAID-5 Controller
- 4x 2TB PATA Hot Swappable Hard Disks
- 2 x Redundant power supplies. Adequate cables should be provided to power the server from C13 power receptacles
- 2 x Redundant 1Gbps minimum Ethernet connections
- Network boot compatible
- Server management tools
- Including rack-mount kit
- 4 year warranty minimum

1.4.4 - Large Scale Multi-Core Server

Server with the following minimum specifications:

- Rack mounted server (to fit in standard full depth rack) of not more than 4U height
- 4 x Quad-Core Xeon (or equivalent) 2GHz or better (minimum 16 cores spread across minimum 4 CPUs)
- 32 GB ECC RAM; support for memory sparing and mirroring
- Support for hot-plug PCI Express
- 4x 1TB SAS hot-swap hard disk drives, and Intel Integrated RAID support
- Redundant hot-swap variable-speed fan modules
- Dual Gigabit Ethernet ports
- Redundant 1+1 230V power supply modules. Adequate cables should be provided to power the server from C13 power receptacles
- DVD-ROM/CD-ROM for removable media
- Including rack-mount kit
- 4 year warranty minimum including free replacement of failed drives

1.4.5 - Large Scale Multi-Core Research Server

Server with the following minimum specifications:

- Rack mounted server (to fit in standard full depth rack) of not more than 4U height

- Xeon (or equivalent) 2GHz or better (minimum 24 core)
- 64 GB ECC RAM; support for memory sparing and mirroring
- Support for hot-plug PCI Express
- 4x 1TB SAS hot-swap hard disk drives, and Intel Integrated RAID support
- Redundant hot-swap variable-speed fan modules
- Dual Gigabit Ethernet ports
- Redundant 1+1 230V power supply modules. Adequate cables should be provided to power the server from C13 power receptacles
- DVD-ROM/CD-ROM for removable media
- Including rack-mount kit
- 4 year warranty minimum including free replacement of failed drives

1.4.6 - Modular Storage Array (iSCSI –based SAN)

- Dual storage controller with failover capability. If one controller fails, the other controller should take over all its functions, and the SAN should keep operating normally, albeit in a degraded mode.
- Connectivity with host: through iSCSI; 2 x 1GbE host ports per controller
- Drive type support: SAS and SATA
- Minimum of 24 drive bays
- Including a minimum of 24 x 2 TB hot swappable SATA drives 7200 rpm
- Supported Operating Systems:
 - Microsoft Windows Server 2008 IA32, x64, IA64(Standard, Enterprise, Datacenter)
 - Microsoft Windows 2003 R2
 - Microsoft Windows 2003 X64, IA64
 - Red Hat Linux
 - VMware
 - Microsoft Windows Server 2008 Hyper-V
 - RedHat Enterprise Linux Virtualization Fibre Channel Connectivity
- Rack-mountable chassis of not more than 6U height
- Dual power supply. Adequate cables should be provided to power the server from C13 power receptacles
- Hard disk drives can be located on 1 or 2 cascaded chassis
- Must support at least a further cascaded chassis for a total capacity of 72TB
- Including rack-mount kit

Lot 2 – Network Equipment

2.0 Server Room Equipment

Special notes to the technical specifications of Server Room Equipment

- The bidder shall be bound to supply, at no extra cost, upgrades to the software supplied with the system, including upgrades or patches to the systems' internal operating system, external management utilities, and firmware, as they become available during the system warranty period.
- The manufacturer of the equipment being offered must have a clearly stated policy for supporting the said equipment, including but not limited to software updates/bug fixes and replacement hardware components, for a minimum period of five (5) years after the date that the manufacturer ceases to sell the equipment.

2.1 - Wireless Router/Switch

- Number of WAN connections: 1
- Number of LAN Connections: 4
- Wired Ports: 10/100/1000 Mbps
- Wireless Speed: 300Mbps
- Wireless standards: 802.11 a/b/g/n
- Security: WEP (128 bit); WEP (64bit); WPA-PSK; WPA2-PSK

2.2 - Two (2) m Patch Lead

2m White RJ45 CAT5e Plug to Plug LSZH Patch Lead Cable

2.3 - Three (3) m Patch Lead

3m White RJ45 CAT5e Plug to Plug LSZH Patch Lead Cable

2.4 - Five (5) m Patch Lead

5m White RJ45 CAT5e Plug to Plug LSZH Patch Lead Cable

2.5 - HDMI over IP Transmitter

- This unit should connect to an HDMI source.
- Transmits an HDMI signal over one x 100Base-T that is 100Mbps Ethernet over Cat5e.
- The signal should be transmitted over IP, so that it can be routed via Ethernet switches and through VLANs.
- Supports HDTV resolutions to 1080p and computer resolutions to 1920x1200.
- Broadcast real-time HDMI video/audio. One transmitter must be able to feed multiple receivers.
- HDCP compliant.
- Compliant with HDMI 1.3 standard.
- Built-in scaler function allows different input and output resolutions without having to lower the quality of the HDMI source.
- One female HDMI port for source connection.
- One female 100Mbps RJ45 for sending high definition video/audio signals over IP and DDC signal.
- To include AC adaptor unless powered directly by 230VAC mains supply.

2.6 - HDMI over IP Receiver

- This unit should connect to the HDMI display.
- Supports HDTV resolutions to 1080p and computer resolutions to 1920x1200.
- Broadcast real-time HDMI video/audio.
- Receives an HDMI signal over one x 100Base-T, that is 100Mbps Ethernet over Cat5e.
- The signal should be received over IP, routed via Ethernet switches and through VLANs.
- HDCP compliant.
- Compliant with HDMI 1.3 standard.
- Built-in scaler function allows different input and output resolutions without having to lower the quality of the HDMI source.
- One female HDMI port for HDTV or computer display.
- One female 100Mbps RJ45 port for receiving high definition video/audio signals over IP and DDC signal.
- Signal type: HDMI1.3, HDCP compliant.
- To include AC adaptor unless powered directly by 230VAC mains supply.

2.7 - Standard Access Layer Switches

The bidder shall quote for the quantity of switches of this type indicated in the bill of quantities. These switches shall have the following minimum specifications:

- Ethernet Ports
 - 44 auto-sensing 10Base-T/100Base-TX/1000Base-T Ethernet ports
 - 4 dual-personality ports: each port can be used as either an RJ-45 10Base-TX/100Base-T/1000Base-TX port or an SFP (mini-GBIC) slot for use with SFP transceivers
- Console Port
 - 1 serial (RS-232) console port for initial configuration and out-of-band management
 - RJ-45 form factor
 - Console cable (RJ-45 to DB9) must be included
- Mounting
 - Mounts in a standard 19-inch rack
 - Rack mounting hardware must be included
 - 1U high
- Performance
 - Forwarding rate: 35mpps based on 64-byte packets
 - Switching fabric: 32 Gbps
 - MAC address table size: 8,000 MAC addresses
- Management
 - Cisco-like command-line interface that supports full configuration of all the features of the switch's operating software, and allows for dumping the entire configuration to a network server for backup purposes
 - Web Browser
 - Telnet & SSH
 - SNMPv1/v2c/v3 & RMON
 - IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
- Layer 2 Protocols

- IEEE 802.1Q VLANs
- IEEE 802.1D Spanning Tree Protocol
- IEEE 802.1p Priority
- IEEE 802.1s Multiple Spanning Trees
- IEEE 802.1AX Link Aggregation Control Protocol (LACP) – formerly IEEE 802.3ad
- IEEE 802.3x Flow Control

- Layer 3 Protocols
 - TFTP Protocol
 - Simple Network Time Protocol (SNTP) v4
 - ICMP
 - IGMPv3

- Automatic VLAN creation & propagation
 - VTP or MVRP (formerly GVRP)

- Security
 - IEEE 802.1X Port Based Network Access Control
 - TACACS+
 - RADIUS Authentication & Accounting
 - Secure Sockets Layer (SSL)
 - SSHv1/SSHv2 Secure Shell

2.8 - Advanced Access Layer Switches

The bidder shall quote for the quantity of switches of this type indicated in the bill of quantities. These switches shall have the following minimum specifications:-

- Ethernet Ports
 - 48 auto-sensing 10Base-TX/100Base-T/1000Base-TX ports
 - Support 4 x SFP (mini-GBIC) slots for use with SFP transceivers, possibly in a shared configuration with other ports.
 - Support 2 x 10 Gigabit Ethernet slots using either X2 transceivers, SFP+ transceivers or other form factor transceivers that provide standard interfaces for connection including but not limited to CX4 for 10G Ethernet over Copper medium and SC or LC for 10G Ethernet over optical fibre medium; possibly in a shared configuration with other ports.

- The switch must come configured with 1 x 10GBase-CX4 port
- Console Port
 - 1 serial (RS-232) console port for initial configuration and out-of-band management
 - RJ-45 form factor
 - Console cable (RJ-45 to DB9) must be included
- Mounting
 - Mounts in a standard 19-inch rack
 - Rack mounting hardware must be included
 - 1U high
- Performance
 - Forwarding rate: 100mpps based on 64-byte packets
 - Switching fabric: 176 Gbps
 - MAC address table size: 8,000 MAC addresses
- Management
 - Cisco-like command-line interface that supports full configuration of all the features of the switch's operating software, and allows for dumping the entire configuration to a network server for backup purposes
 - Web Browser
 - Telnet
 - SSHv1/SSHv2 and SSH over IPv6
 - SNMPv1/v2c/v3 & RMON
 - IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
 - ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)
- Layer 2 Protocols
 - IEEE 802.1D Spanning Tree Protocol
 - IEEE 802.1p Priority
 - IEEE 802.1Q VLANs
 - IEEE 802.1s Multiple Spanning Trees
 - IEEE 802.1w Rapid Reconfiguration of Spanning Tree

- IEEE 802.1AX Link Aggregation Control Protocol (LACP) – formerly IEEE 802.3ad
- IEEE 802.3x Flow Control
- Layer 3 Protocols
 - TFTP Protocol
 - ICMP & ICMPv6
 - Time Protocol
 - Simple Network Time Protocol (SNTP) v4
 - DHCP & DHCPv6
 - IGMPv3
 - IPv6
 - IPv6 Path MTU Discovery
 - Multicast Listener Discovery (MLD) version 2 for IPv6
 - Remote Operations MIB
 - MLD MIB
 - MIB for IP, MIB for TCP, MIB for UDP
- Automatic VLAN creation & propagation
 - VTP or MVRP (formerly GVRP)
- Security
 - IEEE 802.1X Port Based Network Access Control
 - TACACS+
 - RADIUS Authentication & Accounting
 - SSHv1/SSHv2 Secure Shell
 - Secure Sockets Layer (SSL)

2.9 - Standard Power over Ethernet (PoE) capable access layer switches

The bidder shall quote for the quantity of switches of this type indicated in the bill of quantities. These switches shall have the following minimum specifications:-

- Ethernet Ports
 - 24 auto-sensing 10Base-TX/100Base-T/1000Base-TX ports
 - Support 4 x SFP (mini-GBIC) slots for use with SFP transceivers, possibly in a shared configuration with other ports.

- Console Port
 - 1 serial (RS-232) console port for initial configuration and out-of-band management
 - RJ-45 form factor
 - Console cable (RJ-45 to DB9) must be included
- Mounting
 - Mounts in a standard 19-inch rack
 - Rack mounting hardware must be included
 - 1U high
- Performance
 - Forwarding rate: 35mpps based on 64-byte packets
 - Switching fabric: 48 Gbps
 - MAC address table size: 8,000 MAC addresses
- Management
 - Cisco-like command-line interface that supports full configuration of all the features of the switch's operating software, and allows for dumping the entire configuration to a network server for backup purposes
 - Web Browser
 - Telnet
 - SNMPv1/v2c/v3 & RMON
 - IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
- Power over Ethernet
 - IEEE 802.3af Power over Ethernet
 - Must support 24 ports at 7.7W in 802.3af
- Layer 2 Protocols
 - IEEE 802.1D Spanning Tree Protocol
 - IEEE 802.1p Priority
 - IEEE 802.1Q VLANs

- IEEE 802.1s Multiple Spanning Trees
 - IEEE 802.1w Rapid Reconfiguration of Spanning Tree
 - IEEE 802.1AX Link Aggregation Control Protocol (LACP) – formerly IEEE 802.3ad
 - IEEE 802.3x Flow Control
- Layer 3 Protocols
 - TFTP Protocol
 - ICMP
 - Simple Network Time Protocol (SNTP) v4
 - IGMPv3
- Automatic VLAN creation & propagation
 - VTP or MVRP (formerly GVRP)
- Security
 - IEEE 802.1X Port Based Network Access Control
 - TACACS+
 - RADIUS Authentication & Accounting
 - SSHv1/SSHv2 Secure Shell
 - Secure Sockets Layer (SSL)

2.10 - Advanced Power over Ethernet (PoE) capable access layer switches

The bidder shall quote for the quantity of switches of this type indicated in the bill of quantities. These switches shall have the following minimum specifications:-

- Ethernet Ports
 - 24 auto-sensing 10Base-TX/100Base-T/1000Base-TX ports
 - Support 4 SFP (mini-GBIC) slots for use with SFP transceivers, possibly in a shared configuration with other ports.
 - Support 2 10 Gigabit Ethernet slots using either X2 transceivers, SFP+ transceivers or other form factor transceivers that provide standard interfaces for connection including but not limited to CX4 for 10G Ethernet over Copper medium and SC or LC for 10G Ethernet over optical fibre medium; possibly in a shared configuration with other ports.

- Console Port
 - 1 serial (RS-232) console port for initial configuration and out-of-band management
 - RJ-45 form factor
 - Console cable (RJ-45 to DB9) must be included

- Mounting
 - Mounts in a standard 19-inch rack
 - Rack mounting hardware must be included
 - 1U high

- Performance
 - Forwarding rate: 65Mpps based on 64-byte packets
 - Switching fabric: 128 Gbps
 - MAC address table size: 8,000 MAC addresses

- Management
 - Cisco-like command-line interface that supports full configuration of all the features of the switch's operating software, and allows for dumping the entire configuration to a network server for backup purposes
 - Web Browser
 - Telnet
 - SSHv1/SSHv2 and SSH over IPv6
 - SNMPv1/v2c/v3 & RMON
 - IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
 - ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)

- Power over Ethernet
 - IEEE 802.3af Power over Ethernet
 - Must support 24 ports at 15.4W in 802.3af
 - IEEE 802.3at Power Over Ethernet Plus
 - Must support 12 ports at 30W in 802.3at

- Layer 2 Protocols
 - IEEE 802.1D Spanning Tree Protocol
 - IEEE 802.1p Priority
 - IEEE 802.1Q VLANs
 - IEEE 802.1s Multiple Spanning Trees
 - IEEE 802.1w Rapid Reconfiguration of Spanning Tree
 - IEEE 802.1AX Link Aggregation Control Protocol (LACP) – formerly IEEE 802.3ad
 - IEEE 802.3x Flow Control

- Layer 3 Protocols
 - TFTP Protocol
 - ICMP & ICMPv6
 - Time Protocol
 - Simple Network Time Protocol (SNTP) v4
 - DHCP & DHCPv6
 - IGMPv3
 - IPv6
 - IPv6 Path MTU Discovery
 - Multicast Listener Discovery (MLD) version 2 for IPv6
 - Remote Operations MIB
 - MLD MIB
 - MIB for IP, MIB for TCP, MIB for UDP

- Automatic VLAN creation & propagation
 - VTP or MVRP (formerly GVRP)

- Security
 - IEEE 802.1X Port Based Network Access Control
 - TACACS+
 - RADIUS Authentication & Accounting
 - SSHv1/SSHv2 Secure Shell
 - Secure Sockets Layer (SSL)

2.11 - Data centre access layer modular switches

The bidder shall quote for the quantity of switches of this type indicated in the bill of quantities. These switches shall have the following minimum specifications:

- Ethernet Ports
 - Total of 24 x 10 Gigabit Ethernet ports
 - Switch must support
 - 10GBase-T
 - 10GBase-CX4
 - 10GBase-LR
 - 10GBase-LRM
 - 10GBase-SR
 - 10GSFP+Cu (SFP+ Direct Attach)
 - 1000BASE-T
 - 1000BASE-SX
 - 1000BASE-LX
 - The switch must come configured with 1 x 10GBase-LR ports and 2 x 10GBase-CX4 ports
- Console Port
 - 1 serial (RS-232) console port for initial configuration and out-of-band management
 - RJ-45 form factor
 - Console cable (RJ-45 to DB9) must be included
- Mounting
 - Mounts in a standard 19-inch rack
 - Rack mounting hardware must be included
 - 2U high
- Performance
 - Forwarding rate: 250Mpps
 - Switching fabric: 320 Gbps
 - MAC address table size: 50,000 MAC addresses

- Management
 - Cisco-like command-line interface that supports full configuration of all the features of the switch's operating software, and allows for dumping the entire configuration to a network server for backup purposes
 - Web Browser
 - Telnet
 - SSHv1/SSHv2 and SSH over IPv6
 - SNMPv1/v2c/v3 & RMON
 - IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
 - ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)

- Layer 2 Protocols
 - IEEE 802.1D Spanning Tree Protocol
 - IEEE 802.1p Priority
 - IEEE 802.1Q VLANs
 - IEEE 802.1s Multiple Spanning Trees
 - IEEE 802.1w Rapid Reconfiguration of Spanning Tree
 - IEEE 802.1AX Link Aggregation Control Protocol (LACP) – formerly IEEE 802.3ad
 - IEEE 802.3x Flow Control

- Layer 3 Protocols
 - TFTP Protocol
 - ICMP & ICMPv6
 - Time Protocol
 - Simple Network Time Protocol (SNTP) v4
 - DHCP & DHCPv6
 - IGMPv3
 - IPv6
 - IPv6 Path MTU Discovery
 - Multicast Listener Discovery (MLD) version 2 for IPv6
 - Remote Operations MIB
 - MLD MIB
 - MIB for IP, MIB for TCP, MIB for UDP

- Automatic VLAN creation & propagation
 - VTP or MVRP (formerly GVRP)
- Security
 - IEEE 802.1X Port Based Network Access Control
 - TACACS+
 - RADIUS Authentication & Accounting
 - SSHv1/SSHv2 Secure Shell
 - Secure Sockets Layer (SSL)

2.12 - Wi-Fi Access Points

- Cisco Aironet 1142 AIR-LAP1142N-E-K9

2.13 - Wi-Fi Management System

- Cisco 5508 Series Wireless Controller for up to 50 Aps

2.14 - IP Phones

- Alcatel-Lucent 4008EE IP phone without power supply including all the required licenses for the University Alcatel OmniPCX Enterprise R8.0 PABX

2.15 - 42U Server Cabinets

Cabinets shall consist of the following:

- cabinet dimensions: 600mm x 1200mm.
- 42U of usable rack height
- maximum static loading capacity of not less than 900kg, evenly distributed within the rack
 - 1 vented top panel with cable access
- 19" universal uprights
- 1 full height inset mesh front door, 75% perforated or more, complete with a key lockable lever latch handle
- 1 full height inset mesh, vertically divided, rear door, 75% perforated or more, complete with a key lockable lever latch handle

- full height key lockable solid sheet steel side panels
- 1 large cable access in the base
- Cabinets shall be black in colour and must have an ingress protection (IP) rating of IP20 or better.
- Cabinet keys which shall not be compatible with the locks of the other cabinets procured by this tender. In addition 3 master keys that open all the locks of all the cabinets shall be supplied.

2.16 - Power Distribution Unit

Power Distribution Unit (PDU), having the following minimum requirements:-

- Input: 1 x IEC60309 3-Phase 400VAC 50Hz; 4 pole, 5 wire; 32A
- Output: 6 x IEC60320 C19 (16A) 230V receptacles, each with separate circuit breaker
- Load Capacity (@230V): 22kVA
- 1U, rack mountable including rack-mount kit and/or brackets.

2.17 - Power Distribution Extension Units

PDU extension units, having the following minimum requirements:-

- Input: 1 x IEC60320 C20 (16A) 230V receptacle
- Converter/adaptor cable to plug input into a single phase 230VAC 50Hz; 2P+E; 16A receptacle
- Output: minimum of 7 x IEC60320 C13 (10A) 230V receptacles
- Mountable in a 0 (zero) U configuration

Lot 3 – Graphics Equipment

3.1 - Rack-Mountable GPU Computing Server

Rack mounted GPU computing device based on similar specs as the NVidia Tesla S870 GPU computing system:-

- 19" Standard Rack mounted design (for use in full depth 42U racks) of not more than 3U height
- Four GPUs with minimum 128 thread processors per GPU
- 6Gb system memory minimum (with 1.5Gb dedicated memory per GPU minimum)
- PCI Express x8 or x16 connection for host
- Windows and Linux support
- CUDA compatible and include support for C-based programming
- Standard numerical libraries for FFT (Fast Fourier Transform) and BLAS (Basic Linear Algebra Subroutines)
- Scalar thread processor with full integer and floating point operations
- Parallel Data Cache
- Minimum 50 GB/sec. peak bandwidth per GPU
- IEEE 754 single-precision floating point
- Including rack-mount kit
- Minimum 2 year warranty on hardware
- 2 x Redundant power supplies. Adequate cables should be provided to power the server from C13 power receptacles

3.2 - Desktop GPU Computing Server

Personal Super Computer powered by NVIDIA's Tesla 20-Series GPU or higher, with the following minimum specifications:-

- Minimum 1 x C2050 GPU
- Minimum 2 x Intel 4-core processors
- Support for 9GB minimum GPU dedicated memory
- Support for 64GB system memory
- Minimum 12GB installed system memory
- Windows and Linux Support
- Integrated Video with minimum 1600x1200@60Hz resolution
- 2x Gigabit Ethernet Connection
- Minimum 1TB SATA 7200rpm storage

3.3 - Hand-held 3D Laser Scanner

A 3D laser scanner which is able to sample surface points and create an accurate point cloud representation, with the following minimum specifications:-

- Sampling Speed: 8,000 measurements per minute
- Class II Laser (eye safe)
- XY Accuracy: minimum of 0.1mm
- Resolution in the Z Direction: 0.2mm
- Exported file formats to include: TXT, OBJ, X3D, STL

3.4 - 3D Vision Equipment

3D vision set-up with the following minimum specifications:-

- Nvidia 3D Vision Kit including:-
 - 1 pair of 3D vision active shutter glasses with storage pouch
 - 3D vision USB controller / IR emitter
 - 2.5mm stereo audio plug cable
 - DVI to HDMI cable
 - USB 2.0 type A to 5-pin mini-B cable
 - Quick start guide
 - Installation CD
- 3D Vision-Ready Display

Lot 4 – Network Analysis Equipment

4.1 - Network Protocol Analyzer

Hardware Network Protocol Analyzer for Voice and Video over IP analysis, testing end-to-end latency and jitter, measuring network performance, and solving VoIP problems using high-level protocol analysis. The below features need to be included:-

- Capture of traffic over 10/100/1000 Mbps, with 10 Gbps module (optional)
- Monitoring and decoding of high-level IP protocols (specify protocols)
- Analysis and troubleshooting of IP voice and video networks
- Multi-layer network analysis (up to OSI Layer 7)
- Traffic generation for load/stress testing (emulating at least 50 calls per second and emulating network faults such as jitter)
- Verification of streaming service including IP Multicasts and traffic impairment emulator
- IPv6 support
- QoS Performance Testing (audio and video)
- Real time measurement of in-service traffic and traffic monitoring
- Offline analysis of previously captured data
- Support of remote access / management of the hardware through a 10/100 Mb Ethernet IP connection
- Interoperability with third party sniffer technologies (specify which)

Lot 5 – Test & Measure Equipment

5.1 - Signal Generator and Counter

- Frequency and Display Specs:
 - Frequency Range: 0.005Hz to 5MHz min. in discrete ranges with fine adjustment
 - Fine tuning Range: 1000:1 min. on each range
 - Accuracy of output frequency, amplitude and DC offset: better than 0.01% of displayed value
 - Display type: LCD, 4 digits min. for frequency display plus 3 digits min. for amplitude/ DC offset display.
- Output Specs:
 - Main 50Ω or 600Ω
 - Amplitude 2mV to 20V peak-peak open circuit (1mV to 10V peak to peak into 50Ω)
 - Attenuator Ranges 0dB, -20dB, -40dB, -60dB
 - d.c. Offset Range ±10V from 50Ω
 - Aux. Out 0 to 5V TTL/CMOS logic levels capable of driving 2 standard TTL loads. Frequency, symmetry and phase as main outputs.
- Waveform Specs:
 - Sine: Distortion <0.5% on 500, 5k and 50k ranges; <1% on 5, 50 and 500k ranges. All harmonics >25dB below fundamental on 5M range Amplitude Flatness ±0.2dB to 200kHz; ±2dB to 5MHz or better
 - Triangle: Linearity Better than 99% to 200 kHz
 - Square Wave: Rise and Fall Times <45ns
 - Symmetry: Symmetry Range Variable type 1:9 to 9:1 (on top decade of each range)
- Sweep Modes:
 - Sweep Range: >1000:1 within each range
 - Sweep Rate: Adjustable type. 20ms to 20s min.
 - Sweep Mode: Linear or logarithmic
 - Sweep Output: ramp waveform signal

- Amplitude Modulation:
 - Depth: Variable to 100%
 - Frequency: internal modulation frequency to be specified; external modulation frequency: DC to 100kHz min.
- External Frequency Counter:
 - Frequency Range: 5Hz to 20MHz min., full auto-ranging
 - Input Sensitivity: better than/equal to 50mV rms (sine wave)
 - Resolution: 6 digits in 0.5s, 7 digits in 5s, min.
- Safety: Complies with EN601010-1
- EMC: Complies with EN61326
- Warranty: 24 calendar month guarantee on-site on all parts (no exception) and labour on site

5.2 - Power Supply

- Number of Outputs: 2 variable (isolated / parallel/series/tracking configuration) + 1 fixed 5 V
- Voltage Range: 0 - 30V min. stable at <0.01% of max. output for 10% input voltage change; stable at <0.01% of max. output for 90% load change
- Ripple and Noise: <1mV
- Current Range: 0 - 2 A min.
- Input Supply Voltage: 240 Nominal $\pm 10\%$ @ 50Hz
- Display: Dual (Voltage and current for variable output)
- Meter Type: Digital
- Meter accuracy (20°C-25°C): Voltage 0.1% of reading +1 digit Current 0.3% of reading +1 digit
- Meter Resolution: Voltage 0.01V; current 0.001A
- Output Impedance: <5m Ω @ 1kHz
- Current Limit: Variable control
- Safety: Constructed to IEC 348
- Outputs continually displayed by digital meters
- Remote voltage & current sensing capability
- Full short circuit, reverse voltage & overload protection,

- Current limit may be set prior to connecting load
- Safety: Complies with EN601010-1
- EMC: Complies with EN61326
- Warranty: 24 calendar month guarantee on-site on all parts (no exception) and labour on site

5.3 - Digital Multimeter

Instrument must comply to these minimum specifications:-

- DC Voltage: 5 ranges, 1000 V max. Accuracy $< \pm 0.5\%$
- AC Voltage: 4 ranges, 1000 V max. Accuracy $< \pm 0.8\%$
- DC Current: 6 ranges, 10A max. Accuracy $< \pm 0.8\%$
- AC Current: 6 ranges, 10A max. Accuracy $< \pm 1.5\%$
- Resistance: 6 ranges, 50 M Ω max. Accuracy $< \pm 0.8\%$
- Capacitance: 6 ranges, 50 nF – 10 uF, Accuracy $< \pm 3.5\%$
- Frequency: 5 ranges, 100 Hz – 1 MHz, Accuracy $< \pm 0.5\%$
- Other features: diode test, continuity test (with audible signal), HFE test, low battery indication, auto-power off.
- Temperature: -10C~200 degrees C, Accuracy $\pm 0.75\%$ (optional)
- Case type: hand-held, battery operated.
- Safety: Complies with EN601010-1
- EMC: Complies with EN61326
- Warranty: 24 calendar month guarantee on-site on all parts (no exception) and labour on site

Lot 6 – Spectrum Analysis Equipment

6.1 - Spectrum Analyzer

The frequency analyzer must comply to the following minimum specifications:

- Frequency range: 3 Hz to 50 GHz
- Frequency reference:
 - Aging rate: $\pm 1 \times 10^{-7}$ / year
 - Temperature stability: 0 °C to 55 °C $\pm 5 \times 10^{-8}$
 - Calibration accuracy: $\pm 7 \times 10^{-8}$
- Frequency span (FFT and swept mode):
 - Range 0 Hz (zero span), 10 Hz to 50 GHz
 - Resolution 2 Hz
 - Accuracy $\pm [0.2 \text{ percent} \times \text{span} + \text{span} / (\text{sweep points} - 1)]$
- Sweep time and triggering:
 - Range:

Span = 0 Hz	1 μ s to 6000 s
Span \geq 10 Hz	1 ms to 2000 s
 - Accuracy

Span \geq 10 Hz, sweep	$\pm 0.01\%$ nominal
Span \geq 10 Hz, FFT	$\pm 40\%$ nominal
Span = 0 Hz	$\pm 0.01\%$ nominal
 - Trigger: Free run, line, video, RF burst, external front, external
 - Trigger delay

Span = 0 Hz, or FFT	-150 ms to +500 ms
Span \geq 10 Hz, swept	1 μ s to 500 ms
 - Resolution: 0.1 μ s
- Sweep (trace) point range

○ Span = 0 Hz	2 to 8192
○ Span \geq 10 Hz	101 to 8192

- Gated FFT
 - Maximum span 10 MHz
 - Delay range -150 to +500 ms
 - Delay resolution 100 ns or 4 digits whichever is more
 - Gate duration 1.83/RBW $\pm 2\%$ nominal

- Resolution bandwidth (RBW)
 - Range (-3.01 dB BW) 1 Hz to 3 MHz (10% steps), 4, 5, 6, 8 MHz

- Bandwidth accuracy (power):

RBW range	
1 Hz to 51 kHz	$\pm 0.5\%$ (± 0.022 dB)
56 kHz to 75 kHz	$\pm 1.0\%$ (± 0.044 dB)
82 kHz to 330 kHz	$\pm 0.5\%$ (± 0.022 dB)
360 kHz to 1.2 MHz (< 3 GHz CF)	$\pm 1.0\%$ (± 0.044 dB)
1.3 MHz to 2.0 MHz (< 3 GHz CF)	± 0.07 dB nominal
2.2 MHz to 6.0 MHz (< 3 GHz CF)	± 0.02 dB nominal

- Bandwidth accuracy (-3.01 dB):

RBW range	
8 MHz (< 3 GHz CF)	$\pm 15\%$ nominal
Selectivity (-60 dB/-3 dB)	4.1:1 nominal

- Information bandwidths

Maximum FFT width	10 MHz
I/Q waveform digital output bandwidth	10 MHz
321.4 MHz IF output:	
-1 dB bandwidth	20 to 30 MHz nominal
-3 dB bandwidth	30 to 60 MHz nominal
70 MHz IF output:	
-1 dB bandwidth	20 to 30 MHz nominal
-3 dB bandwidth	30 to 60 MHz nominal

- Safety: Complies with EN601010-1

- EMC: Complies with EN61326

- Warranty: 24 calendar month guarantee on-site on all parts (no exception) and labour on site

Lot 7 – Eye Tracking Equipment

7.1 - Eye Tracker

Eye tracker for use in usability research with the following minimum specifications:-

- Data rate 120Hz
- Accuracy: typical 0.5 degrees
- Drift: typical 0.1 degrees
- Spatial resolution: typical 0.3 degrees
- Head movement error: typical 0.2 degrees
- Head movement box: 30 x 22 cm at 70 cm
- Tracking distance: 50-80 cm
- Max gaze angles: 35 degrees
- Top head-motion speed: 25 cm/second
- Latency: max 33 ms
- Blink tracking recovery: max 8 ms
- Time to tracking recovery: typical 300 ms
- Eye tracking technique: both bright and dark pupil tracking
- Eye tracking server included
- Screen size min 17"
- User camera included min 640 x 480 @ 30fps
- Adjustable mounting arm
- Calibration board for camera
- Data and Gaze Analysis software included
- Data export functionality included
- Web-based application analysis capabilities included
- Interface SDKs for third-party applications
- Minimum 2 year warranty on hardware

Lot 8 – Robotics Equipment

8.1 - Mindstorm Robots

- Mindstorm NXT2 Robotic Kits with proximity, optical, and colour sensors.

8.2 - Humanoid Robot

- Humanoid 35-45cm robot controlled by servo step-motors.
- USB connection to Windows PC
- Compatible with Windows XP, Vista and 7.
- Including remote control and Lithium battery pack.

TENDER PREVIEW

Lot 9 – Audiovisual and other equipment

9.1 - Ceiling Mountable Projectors

Ceiling mountable projectors, complete with lens cover, AC power cord, VGA cable, wireless remote control, user manual, having the following minimum specifications:

- Native Resolution: XGA 1024 X 768
- Brightness: 2500 ANSI Lumens
- Contrast: 2000:1
- Aspect Ratio: 4:3 Native; 16:9 Compatible
- I/O connections: VGA-In, VGA-out, S-video, Composite
- Computer Compatibility: VGA; Mac
- Projection Screen Size: 2.5m (diagonal)
- Projection Distance: up to 4m
- Ceiling Mount Kit
- Easy lamp replacement without the need to dismantle the projector
- On-screen menu supporting English language.
- Installation of projector including appropriate mounting of ceiling bracket to intended installation site and optimal alignment and connection to electrical system.

9.2 - Portable Projectors

Portable projectors, complete with lens cover, AC power cord, VGA cable, wireless remote control, user manual, having the following minimum specifications:

- Native Resolution: XGA 1024 X 768
- Brightness: 2500 ANSI Lumens
- Contrast: 2000:1
- Aspect Ratio: 4:3 Native; 16:9 Compatible
- I/O connections: VGA-In, VGA-out, S-video, Composite
- Computer Compatibility: VGA; Mac
- Projection Screen Size: 2m (diagonal)
- Projection Distance: up to 4m
- Easy lamp replacement without the need to dismantle the projector
- On-screen menu supporting English language.

9.3 - Large Venue Ceiling Mounted Projector

Ceiling mountable projector for auditorium, complete with lens cover, AC power cord, VGA cable, wireless remote control, user manual, having the following minimum specifications:

- Native Resolution: Full HD (1920 x 1080)
- Brightness: 5000 ANSI Lumens
- Contrast: 2000:1
- Aspect Ratio: 16:9 Native
- I/O connections: VGA-In, VGA-out, S-video, Composite, HDMI with HDCP support
- Projection Screen Size: 4.5m (Diagonal)
- Projection Distance: up to 8m
- Easy lamp replacement without the need to dismantle the projector
- Ceiling Mount Kit
- On-screen menu supporting English language.
- Installation of projector including appropriate mounting of ceiling bracket to intended installation site and optimal alignment and connection to electrical system.

9.4 - Mini LED Projector

- Long Lamp life (approx. 20,000 hours)
- 100 Lumens brightness
- 2000:1 contrast ratio
- SVGA resolution
- Support for both 4:3 displays and widescreens
- Small projector mount (tripod)

9.5 - Portable Interactive Whiteboard System

Interactive Whiteboard System, including interactive whiteboard, floor stand on wheels, wall-mount kit, board cover and short-throw projector with the following specifications:-

- Interactive Whiteboard:-
 - Diagonal active area not less than 2m
 - Robust and scratch proof hard-coated screen surface.

- Touch sensitive surface. Pens must be wireless, non-mechanical and battery-free operated
 - Amongst other features the software should be able to: Add notes, highlight or add emphasis to images and text. Move and resize objects. Create a working space easily by means of flip charts and scrolling. Convert hand-drawn shapes into geometrical objects. Includes hand written software recognition. Hide-and-reveal questions. Spotlight or magnify a specific area. Record Audio-Visual live sessions. The sessions should be able to be saved in AVI amongst other formats.
 - Software must be compatible with Windows XP/Vista/7; Mac OS 10.4.11 and above
 - Connectivity to pc through RS232 and/or USB and/or Bluetooth (specify)
 - 2 slim stereo amplified speakers (one on each side) should be incorporated with the board
- Projector:
 - Native Resolution: WXGA (1280 X 720).
 - Ansi lumens: 2000 or better.
 - I/O connections: VGA-In, VGA-out, S-video, Composite, RS232, HDMI and/or DVI
 - On-screen menu supporting English language.
 - Maximum projection distance from board (to cover entire board): 1.5m
 - Including fixing brackets, power and signal cables, remote control

Installation of whiteboard and projector to intended installation site. Projector and whiteboard must be aligned.

9.6 - 250cm Pull-Down Projector Screens

- Diagonal active area not less than 2.5 meters
- Auto-locking mechanism controls height adjustment
- Dual wall and ceiling installation design
- Matte white surface
- 4:3 Aspect Ratio
- 4-side black masking borders
- Durable and easy to clean surface
- Screen's pull down handle to be reached from high areas

9.7 - 200cm Portable Pull-Down Projector Screen

- Diagonal active area not less than 2 meters
- Auto-locking mechanism controls height adjustment
- Matte white surface
- 4:3 Aspect Ratio
- 4-side black masking borders
- Durable and easy to clean surface
- Fabric carrying case

9.8 - 450cm Motorised Pull Down Projection Screen

- Diagonal active area not less than 4.5 meters
- Dual wall and ceiling installation design
- Matte white surface
- 4:3 Aspect Ratio
- 4-side black masking borders
- Screen should be controlled through a wall control panel featuring 3 buttons: up, down and stop. Screen should stop automatically in the up and down positions
- The screen will be ceiling mounted. When in the up position, the screen should be flush with the soffit.
- Durable and easy to clean surface
- Installation of screen, including connection to electrical system and wiring of control unit.

9.9 - Public Address System

Public Address System for use in a 200m² auditorium (160 seats), consisting of the following:

- Amplifier
 - Preamplifier with a minimum of 4 Mic / line inputs and 2 Aux stereo inputs
 - Line output for connecting to a booster amplifier
 - Minimum power of 300 watts
 - Minimum of 8 analog electronically balanced outputs

- 4 x handheld Wireless Microphones including adequate receivers
 - Frequency response: 60 to 15,000 Hz
 - No interference with 2.4GHz and 5GHz channels
 - Clean sound without distortion
 - Noise cancellation
 - LED indicator for power, mute and low battery
 - Approximate 100m operating range
 - Including table stands
- 6 x wall-mountable Slimline Array Speakers
 - High efficiency
 - Including wall-mount kit
 - 6 x high quality cables: (2 x 10m length cable 2 x 20m length cable and 2 x 30m length cables).
 - Please specify colour available
- Mains supply 230V AC

System Installation to intended installation site. The system must be installed according to the hall aesthetics.

The system must have a uniform coverage from 60 to 75dB throughout the hall without any audio distortion. In order to achieve the minimum values of speech intelligibility, it is obviously necessary to provide a sufficiently high sound level. Level differences in the seating area should not exceed 6 dB.

9.10 - Digital Conference Recording System

Conference Recording System for use in Board Rooms comprised of 4 noise-cancellation microphones and a Digital Voice Recorder with below specs:-

- Supports 4 conference microphones, each allowing 360 degree pick up
- Power supplies and rechargeable batteries operated
- PC Interface USB Connector
- 4GB Data Storage or more
- Recording Formats:-
 - MP3 (MPEG-1 Audio Layer 3)
 - Digital Speech Standard / Quality Play (DSS QP)
 - Digital Speech Standard / Standard Play (DSS SP)

- PCM (Pulse-Code Modulation)

9.11 - Blu-Ray Player

- Composite, HDMI, USB Port, Multi-Region, Card Reader (SD/MMC/MS)
- Compatible with DVD, DIVX, MPEG, Music Files, JPEG

9.12 - Socket Power Extension with Surge Protection

- 8 Socket Power Extension with Surge Protection
- CE Certified

9.13 - Wii UI Research Console

Nintendo Wii Console with the following minimum specifications:-

- Nintendo Wii Console with Wii Motion Plus
- Additional 5 Wiimotes for research
- Wii Balance Board

9.14 - XBox Console with 'Natal' Motion Capture

Microsoft XBox Console with the following minimum specifications:-

- Microsoft Xbox360 Console
- 'Natal' motion capture technology
- Development kit and license

9.15 - Digital Camcorder

- Minimum recording HD (1080p) resolution quality
- Must be able to store at least 1.5 hours of video
- Internal Hard disk or DV tape based
- Minimum 1 year warranty
- 6 hour battery life minimum

- Spare battery
- Tripod attachment
- USB or USB2 connectivity
- Time lapse recording functionality

9.16 - Digital Camera

- Minimum 6 megapixel
- Compatible with a standard storage format such as SD card or Memory Stick
- Minimum 1 year warranty
- 6 hour battery life minimum
- Spare battery
- Tripod attachment
- USB or USB2 connectivity

9.17 - Android Research Smartphone (Security Lab)

- Android smartphone with the following minimum specifications:-
 - 480x800 4.3 inch TFT LCD display
 - Snapdragon QSD8650 1GHz processor
 - 1 GB built in memory and 512MB RAM
 - 8 mega pixel camera with built in flash and 720p video
 - 802.11b/g WiFi
 - 8GB micro SD card

Lot 10 – Other General Equipment

10.1 - Desk Lamp

- Ergonomic design
- Must be adjustable along a minimum of 2 axes of movement and provide adequate working light
- Ideally power saving using LED lights
- CE certified

10.2 - Kitchen Equipment

10.2.1 - Microwave oven

- Minimum capacity: 20litres
- Including: grill; defrost functions
- Electronic timer
- Minimum power: 800Watts

10.2.2 - Fridge-Freezer

- Class A +
- Separate doors for fridge and freezer
- Net capacity Fridge: 200 Litres
- Fridge with adjustable shelves
- Net capacity freezer: 65 Litres

10.2.3 - Electric Kettles

- Minimum capacity: 1.5 litres
- transparent water-level indicator
- 2000W minimum
- cordless on power base unit
- boil dry cut-out
- auto switch-off
- thermal safety cut-out
- hinged lid with safety lock

- heat insulated handle

10.2.4 - Toaster

- Minimum Power: 1200 W
- heat insulated housing
- 2 long slots for up to 4 slices of toast
- electronic browning control with temperature sensor
- mid-cycle cancel button
- automatic pop-up
- crumb tray

10.2.5 Sandwich Maker

- Minimum power: 1200W
- Heat insulated handle
- Power On & Ready Indicators
- Non Stick Plates
- Plates for 2 sandwiches

10.2.6 – Electrical Stove

- Maximum surface area: 40 x 40cm
- Minimum surface are: 20 x 20cm
- Plastic Base
- Minimum Power:: 1600W
- Timer Function
- Auto shut-off function

VOLUME 4 - FINANCIAL BID

Breakdown of Costs

TENDER PREVIEW

The Financial Offer for Lot 1	Tender for the supply, delivery, installation, testing and commissioning (as applicable) of Information Technology Equipment for the Faculty of Information Communications Technology (ICT) Building at the University of Malta
PUBLICATION REF: CT 3086/2010	NAME OF TENDERER:

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
1.1.1	Lower-end Desktop Personal Computer (no OS) as further amplified in the technical specifications.	49				
1.1.2	Lower-end Desktop Personal Computer including Windows7 as further amplified in the technical specifications.	14				
1.1.3	Higher-end Desktop Personal Computer as further amplified in the technical specifications.	56				
Sub Totals Carried forward:						

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Sub Totals brought forward:						
1.1.4	Nvidia GPU with Intel Desktop Personal Computer as further amplified in the technical specifications.	1				
1.1.5	ATI GPU with AMD Desktop Personal Computer as further amplified in the technical specifications.	1				
1.1.6	Laptop 1 as further amplified in the technical specifications.	7				
1.1.7	Laptop 2 as further amplified in the technical specifications.	1				
1.1.8	Laptop 3 as further amplified in the technical specifications.	1				
1.1.9	Lower-end Mac as further amplified in the technical specifications.	3				
Sub Totals Carried forward:						

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Sub Totals brought forward:						
1.1.10	Higher-End Mac as further amplified in the technical specifications.	7				
1.1.11	Mac Laptop as further amplified in the technical specifications.	3				
1.1.12	Mac Backup Device as further amplified in the technical specifications.	2				
1.1.13	2-port KVM Switch as further amplified in the technical specifications.	5				
1.2.1	19" TFT LCD Monitor as further amplified in the technical specifications.	80				
Sub Totals Carried forward:						

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Sub Totals brought forward:						
1.2.2	24" TFT LCD Monitor as further amplified in the technical specifications.	52				
1.2.3	32" TFT LCD Monitor as further amplified in the technical specifications.	16				
1.2.4	52" TFT LCD Monitor as further amplified in the technical specifications.	13				
1.3.1	Monochrome Laser Office Printer as further amplified in the technical specifications.	2				
1.3.2	Monochrome Laser Network Printer as further amplified in the technical specifications.	6				
1.3.3	All-In-One Inkjet Colour Printer/ Scanner/Copier as further amplified in the technical specifications.	6				
Sub Totals Carried forward:						

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Sub Totals brought forward:						
1.3.4	Colour Laser Printer as further amplified in the technical specifications.	1				
1.4.1	Virtualization Server as further amplified in the technical specifications.	3				
1.4.2	Storage Server as further amplified in the technical specifications.	1				
1.4.3	Multi-Core Server as further amplified in the technical specifications.	1				
1.4.4	Large-Scale Multi-Core Server as further amplified in the technical specifications.	2				
1.4.5	Large Scale Multi-Core Research Server as further amplified in the technical specifications.	1				
Sub Totals Carried forward:						

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Sub Totals brought forward:						
1.4.6	Modular Storage Array (iSCSI -based SAN) as further amplified in the technical specifications.	1				
Grand Total for Lot 1:						

Total number of items for Lot 1, in these 6 pages: 27

Done at:

by *[name]*

On behalf of :

[tenderer's stamp and signature]

The Financial Offer for Lot 2	Tender for the supply, delivery, installation, testing and commissioning (as applicable) of Information Technology Equipment for the Faculty of Information Communications Technology (ICT) Building at the University of Malta
PUBLICATION REF: CT 3086/2010	NAME OF TENDERER:

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Supply, deliver, install, test and commission the following network equipment.						
2.1	Wireless Router as further amplified in the technical specifications.	1				
2.2	2m patch leads as further amplified in the technical specifications.	550				
2.3	3m patch leads as further amplified in the technical specifications.	700				
Sub Totals Carried forward:						

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Sub Totals brought forward:						
2.4	5m patch leads as further amplified in the technical specifications.	50				
2.5	HDMI over IP Transmitter as further amplified in the technical specifications.	8				
2.6	HDMI over IP Receiver as further amplified in the technical specifications.	12				
2.7	Standard access layer switches as further amplified in the technical specifications.	10				
2.8	Advanced access layer switches as further amplified in the technical specifications.	4				
Sub Totals Carried forward:						

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Sub Totals brought forward:						
2.9	Standard PoE switches as further amplified in the technical specifications.	7				
2.10	Advanced PoE switches as further amplified in the technical specifications.	2				
2.11	Data centre access layer modular switches as further amplified in the technical specifications.	2				
2.12	Wi-Fi Access point as further amplified in the technical specifications.	50				
2.13	Wi-Fi Management System as further amplified in the technical specifications.	1				
Sub Totals Carried forward:						

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Sub Totals brought forward:						
2.14	IP Phones as further amplified in the technical specifications.	120				
2.15	42U Rack as further amplified in the technical specifications.	5				
2.16	Power Distribution Unit as further amplified in the technical specifications.	2				
2.17	Power Distribution Extension Unit as further amplified in the technical specifications.	10				
Grand Total for Lot 2:						

Total number of items for Lot 2, in these 4 pages: 17

Done at:

by [name]

On behalf of :

[tenderer's stamp and signature]

The Financial Offer for Lot 3	Tender for the supply, delivery, installation, testing and commissioning (as applicable) of Information Technology Equipment for the Faculty of Information Communications Technology (ICT) Building at the University of Malta
PUBLICATION REF: CT 3086/2010	NAME OF TENDERER:

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Supply, deliver, install, test and commission the following Graphics Equipment						
3.1	Rack-mountable GPU Computing Server as further amplified in the technical specifications.	1				
3.2	Desktop GPU Computing Server as further amplified in the technical specifications.	1				
3.3	Hand-held 3D Laser Scanner as further amplified in the technical specifications.	1				
Sub Totals Carried forward:						

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Sub Totals brought forward:						
3.4	3D Vision Equipment as further amplified in the technical specifications.	1				
Grand Total for Lot 3:						

Total number of items for Lot 3, in these 2 pages: 4

Done at:

by [name]

On behalf of :

[tenderer's stamp and signature]

The Financial Offer for Lot 4	Tender for the supply, delivery, installation, testing and commissioning (as applicable) of Information Technology Equipment for the Faculty of Information Communications Technology (ICT) Building at the University of Malta
PUBLICATION REF: CT 3086/2010	NAME OF TENDERER:

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Supply, deliver, install, test and commission the following Network Analysis Equipment						
4.1	Network Protocol Analyzer as further amplified in the technical specifications.	1				
Grand Total for Lot 4:						

Total number of items for Lot 4: 1

Done at:

by [name]

On behalf of :

[tenderer's stamp and signature]

The Financial Offer for Lot 5	Tender for the supply, delivery, installation, testing and commissioning (as applicable) of Information Technology Equipment for the Faculty of Information Communications Technology (ICT) Building at the University of Malta
PUBLICATION REF: CT 3086/2010	NAME OF TENDERER:

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Supply, deliver, install, test and commission the following Test and Measurement Equipment						
5.1	Signal generator and counter as further amplified in the technical specifications.	12				
5.2	Power supply as further amplified in the technical specifications.	15				
5.3	Digital Multimeter as further amplified in the technical specifications.	20				
Grand Total for Lot 5:						

Total number of items for Lot 5: 3

Done at:

by [name]

On behalf of :

[tenderer's stamp and signature]

The Financial Offer for Lot 6	Tender for the supply, delivery, installation, testing and commissioning (as applicable) of Information Technology Equipment for the Faculty of Information Communications Technology (ICT) Building at the University of Malta
PUBLICATION REF: CT 3086/2010	NAME OF TENDERER:

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Supply, deliver, install, test and commission the following Spectrum Analyzer						
6.1	Spectrum Analyser as further amplified in the technical specifications.	1				
Grand Total for Lot 6:						

Total number of items for Lot 6: 1

Done at:

by [name]

On behalf of :

[tenderer's stamp and signature]

The Financial Offer for Lot 7	Tender for the supply, delivery, installation, testing and commissioning (as applicable) of Information Technology Equipment for the Faculty of Information Communications Technology (ICT) Building at the University of Malta
PUBLICATION REF: CT 3086/2010	NAME OF TENDERER:

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Supply, deliver, install, test and commission the following Eye Tracking Equipment						
7.1	Eye Tracker as further amplified in the technical specifications.	1				
Grand Total for Lot 7:						

Total number of items for Lot 7: 1

Done at:

by [name]

On behalf of :

[tenderer's stamp and signature]

The Financial Offer for Lot 8	Tender for the supply, delivery, installation, testing and commissioning (as applicable) of Information Technology Equipment for the Faculty of Information Communications Technology (ICT) Building at the University of Malta
PUBLICATION REF: CT 3086/2010	NAME OF TENDERER:

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Supply, deliver, install, test and commission the following Robotic Graphics Equipment						
8.1	Mindstorm Robots as further amplified in the technical specifications.	4				
8.2	Humanoid Robot as further amplified in the technical specifications.	1				
Grand Total for Lot 8:						

Total number of items for Lot 8: 2

Done at:

by [name]

On behalf of :

[tenderer's stamp and signature]

The Financial Offer for Lot 9	Tender for the supply, delivery, installation, testing and commissioning (as applicable) of Information Technology Equipment for the Faculty of Information Communications Technology (ICT) Building at the University of Malta
PUBLICATION REF: CT 3086/2010	NAME OF TENDERER:

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Supply, deliver, install, test and commission the following Audiovisual equipment						
9.1	Ceiling Mountable projectors as further amplified in the technical specifications.	12				
9.2	Portable Projectors as further amplified in the technical specifications.	1				
9.3	Large Venue Ceiling mounted projector as further amplified in the technical specifications.	1				
9.4	Mini LED Projector as further amplified in the technical specifications.	1				
9.5	Portable Projectors as further amplified in the technical specifications.	1				
Sub Totals Carried forward:						

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Sub Totals brought forward:						
9.6	250cm wide Pull down Projector screens as further amplified in the technical specifications.	13				
9.7	200cm wide Portable Pull Down Projector Screen as further amplified in the technical specifications.	2				
9.8	450cm wide Motorised Pull Down Projection Screen as further amplified in the technical specifications.	1				
9.9	Public Address System as further amplified in the technical specifications.	1				
9.10	Digital conference Recording system as further amplified in the technical specifications.	2				
9.11	Blu Ray Player as further amplified in the technical specifications.	1				
9.12	Socket power extension with surge protection as further amplified in the technical specifications.	20				
9.13	Wii UI Research Console as further amplified in the technical specifications.	1				
Sub Totals Carried forward:						

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Sub Totals brought forward:						
9.14	Xbox Console with Natal Motion Capture as further amplified in the technical specifications.	1				
9.15	Digital Camcorder as further amplified in the technical specifications.	3				
9.16	Digital Camera as further amplified in the technical specifications.	1				
9.17	Android Research Smartphone as further amplified in the technical specifications.	7				
Grand Total for Lot 9:						

Total number of items for Lot 9: 17

Done at:

by [name]

On behalf of :

[tenderer's stamp and signature]

The Financial Offer for Lot 10	Tender for the supply, delivery, installation, testing and commissioning (as applicable) of Information Technology Equipment for the Faculty of Information Communications Technology (ICT) Building at the University of Malta
PUBLICATION REF: CT 3086/2010	NAME OF TENDERER:

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Supply and deliver the following General other Equipment						
10.1	Desk Lamp as further amplified in the technical specifications.	20				
10.2.1	Microwave oven as further amplified in the technical specifications.	2				
10.2.2	Refrigerator as further amplified in the technical specifications.	2				
10.2.3	Electric kettle as further amplified in the technical specifications.	2				
Sub Totals Carried forward:						

ITEM	DESCRIPTION OF ARTICLE	QTY	Unit Nett Price 'In Situ' In €	Total Nett Price 'In Situ' In €	Applicable Duties & Taxes (if any) In €	Applicable VAT in €
Sub Totals brought forward:						
10.2.4	Toaster as further amplified in the technical specifications.	1				
10.2.5	Sandwich maker as further amplified in the technical specifications.	1				
10.2.6	Electrical Stove as further amplified in the technical specifications.	1				
Grand Total for Lot 10:						

Total number of items for Lot 10: 7

Done at:

by [name]

On behalf of :

[tenderer's stamp and signature]

Summary of Tendered Offer

Publication Ref: CT 3086/2010

Tender for the supply, delivery, installation, testing and commissioning (as applicable) of Information Technology Equipment for the Faculty of Information Communications Technology (ICT) Building at the University of Malta

NAME OF TENDERER: _____

Item	Total Nett Price 'In Situ' In €	Total Applicable Duties & Taxes (if any) In €	Total Applicable VAT in €	Grand Total Inclusive of duties & taxes (if any) & VAT in €
Lot 1: Computers, Monitors, Printers & Servers				
Lot 2: Network Equipment				
Lot 3: Graphics equipment				
Lot 4: Network Analysis Equipment				
Lot 5: Test & Measure Equipment				
Lot 6: Spectrum Analysis Equipment				
Lot 7: Eye tracking Equipment				
Lot 8: Robotics Equipment				
Lot 9: Audiovisual and other equipment				
Lot 10: Other General Equipment				
GRAND TOTAL FOR THE TEN (10) LOTS:				

Done at: _____ by *[name]*

On behalf of :

[tenderer's stamp and signature]