# Sicily Region HOSPITAL MEETING VILLA SOFIA - CERVELLO Regional Law No. 5 of 14/04/2009 Registered Office Viale Strasburgo N. 233 - 90146 Palermo P.I. 05841780827

PROCEDURA APERTA UNDER D. LGS. N. 163/2006 E S.M.I. FOR RENT IN EXPECTATION OF DELIVERY OF TWO SYSTEMS RIS / CIS / PACS REASONABLY AND FULLY INTEGRATED SCANNING, ARCHIVING AND TRANSMISSION OF IMAGES FOR RADIOLOGICAL, and CARDIOLOGIC FOR VILLA SOFIA - CERVELLO HOSPITAL MEETING

CIG: 3972904019

SPECIFICATIONS SPECIAL

Criterion Award: The economically most advantageous

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#### **ARTICLE 1 Objectives of the rental**

With Resolution no. 353 of 24.02.2012, the Director General of United Hospitals Palermo Villa Sofia Cervello (AOOR below), he was prepared to proceed, by open, all Award in the charter of two systems RIS / CIS / PACS, provided at different times, and logically fully integrated, as are necessary to AOOR for a period of 6 years. The procurement for the supply, in the form of rent, a single logically integrated RIS / CIS / PACS for the management of Computerized UO Operational Unit of Radiology and Nuclear Medicine and Cardiology of AOOR

The goal of the project and to adopt technologies that increase the content of operational and clinical quality of AOOR writer, in particular through integrated information systems RIS / CIS / PACS, for the acquisition, storage, handling, processing and distribution of images and reports, in turn integrated with the realities of Enterprise Information Systems.

With this project, we intend to achieve the following strategic objectives:

- Creation of a project of computerization and archiving of diagnostic images comprehensive multidisciplinary

- Create an inter-repository, based on the data-XDS standard radiological, nuclear medicine and cardiology, to ensure the sharing of diagnostic images and reports;

- Complete digitization of images produced, creating a work environment in a logical film-less and paperless for the management and distribution of images in electronic format at inside and various external and local hospitals;

- Filmless and paperless Management of radiological performance resulting in progressive elimination of the consumption of radiographic films and materials / equipment for the development and management needs of archive films and reports.

As indicated above will go made with technologies and tools to:

- Maximum level of use and consistency with existing standards in radiology (DICOM, HL7) and their correct use (IHE Profiles);

- technological innovation in systems engineering and application components to provide updates in line with i | evolution of functional and operational requirements of Company;

- Opening, modularity and expandability of the systems offered to optimize resources to be used during both phases of the project, both in the face of prospective acquisitions of new equipment and increase the number of executable tests annually for both inserting new health facilities in the territory;

- Possibility of connection, through use of appropriate network links with primary care physicians and specialists, allowing them the access to reports and pictures,

- maximum continuity of insurance through appropriate operating system redundancy;

- to ensure optimization of the workflow, even in the presence of non-performing geographic network connections, immediate usability of all the functions required, especially regarding the availability of images for viewing operations and reporting;

- Easy to use and flexible application of workstations, to allow maximum usability to health professionals but with a limited background information.

#### ART. 2 Purpose of the rental

This contract provides for the hiring of two supply systems, logically and natively integrated RIS / PACS-CIS, for the management of clinical radiology, cardiology and nuclear medicine complete with all hardware and software, ancillary services necessary to its insertion in the production process of the Operational Unit of i | AO and all software updates that become available.

The two systems will be provided at different times.

In particular, the RIS / PACS on clinical data management of radiological UOC of Radiology PO Villa Sofia - CTO will be provided from the date of expiry of the rental agreement currently in place.

While the charter of the RIS / CIS / PACS, for the data management cardiology, nuclear medicine and of UOC of Radiology PO V. Cervello will have duration of 6 years from the first day of the month following that in which the testing will be carried out successfully.

For both systems, in particular, it includes the provision in the charter of a RIS / CIS / PACS fully integrated and properly sized to the operational needs of units of Cardiology, Nuclear Medicine and Radiology of AOOR, so detailed:

- PACS system, understood as hardware and software (basic application) and related licenses use, made with an electronic archive that are referenced by appropriate visualization systems and workstations for the management, development and digital transmission of diagnostic images; that PACS, which will be installed in the Radiology and Nuclear Medicine Services, will have to be able to act as a hospital system for the future management, storage and transmission of images also coming from other operating units of company (hemodynamics, echocardiography) and will have to be perfectly integrated with the RIS / CIS in the next step;

- radiological information system RIS / CIS, defined as hardware and software (basic application) and related licenses use, fully integrated with the PACS system, referred to above, aimed at supporting the processes and the flow of work (book, acceptance, planning, execution, reporting, etc..) Services of radiology, cardiology and nuclear medicine of AOOR; the RIS / CIS will have to be integrated / interoperable with Hospital Information Systems used by the principals involved.

- Supply of hardware for hire archive consists, roughly, as described below:

" Server-based application architectures and performance standards appropriate for the number required to bear the burden in terms of processing capacity and assuring continuity of service in case of failure;

" storage disks must be managed so that any breakdown occurs can be repaired quickly and hot, with no interruption of service, proper operation;

"Archive with the ability to ensure the continued line of 5 years of production;

"Second X Memory disaster recovery site located in other than the primary (such at the registered office of company) to guarantee a fast and secure data recovery in case of loss of destruction.

" The system will have to be redundant to include parts such as accessory power ventilation systems, etc.. In this regard, the company awarded the contract will have to arrange for supply of UPS Freight (for servers, storage, and for reporting stations) short autonomy;

" will have to be provided for the automatic recording of images on optical media, complete the necessary software to automatic reading, to be delivered to outpatients in place of traditional media skins;

" will have to be provided a system for comprehensive management of conservation and substitution of data storage required by law, with the help of appropriate management of the conservation procedure for the manager appointed by the Conservation Substitute AOOR.

" Workstation reporting with ability to display diagnostic imaging devices, according to client-server architecture.

" Distribution of reports and images to the inpatient and outpatient care and of the entire Hospital;

"Systems X Computer Radiography (CR) for the digitization of images produced by analog equipment;

" Verification, integration and implementation of the hospital network to service the data transfer (images and text);

"X Construction works and installations necessary for the realization of the server room, as well as to adjustment of the seat of disaster recovery, of network infrastructure, local and geographical radiation.

"Installing a rule art and installation of entire system;

" Technical Manuals and operating system administration in Italian;

" Integration of RIS / CIS / PACS for diagnostic modalities in use at company in accordance with the DICOM 3.0 standard;

" Providing freight in the following additional services

" Recovery of historical data stored in current system of RIS included Hospital (Company supplying AGFA) and eliminate any false homonyms and / or record personal errors.

" recovery of all data / files currently on the previous RIS / PACS in each of Hospital (Company supplying AGFA) and their integration, with possible translation, the new PACS system;

"Services need to Activation of the RIS / CIS / PACS.

" Training, coaching and support to Starter, intended for physicians, medical technology, nursing, administrative and technical staff involved with the digitization and computerization, as well as for technical staff responsible for supervising the activities of system administration ;

" Service and routine maintenance and repairs in full-risk mode.

" The supply of freight services needed to ensure a high uptime of these systems, the first year and 5 years later, and in particular:

" by continuous monitoring systems with remote assistance connection enabling it to act in a timely manner and to detect any malfunctions or poor performance;

" monitoring system hardware and components of any network infrastructure built.

" maintenance, management of integration.

During installation the successful bidder will have to provide the company and technical assistance throughout the material use necessary for the finalization of procedures and for optimization of workflows.

For each of the components, arranged as above, must be defined in the technical and functional specifications, all interior of technical offer, as shown below.

If, during the contract period, you make hardware or software updates available for the systems to be supplied in the freight, the company awarded the contract will proceed according to the following cases: "in case of malfunction or software version updates, performance must be included in the contract; "in the case of adaptation to national or regional regulations, the performance must be included in the contract;

" in the case of amendments that would ensure new features and new possibilities of development, the company awarded the contract will subject to AOOR accompanied by a project to modernize its economic offer.

The architecture of entire system over time will have to allow for easy expansion, which will ensure the increased capacity and performance of storage systems and in the event of a budgetary increase of radiological equipment in case of increase of productivity of UUOO concerned.

The system offered will have to necessarily be in possession of technical, functional and service given in the following articles.

The competing firms must submit a special project that they consider better optimize workflows and service organization, based on information provided and acquired.

## Section 2.1 Duration and amount of the rental

1. The supply contract hire service including full risk of all equipment will have duration of 72 months with effect from the first day of the month following the month in which the testing is done successfully, for the RIS / CIS / PACS on Involved research groups following:

" UOC P.O. Nuclear Medicine Villa Sofia;

" UOC P.O. Nuclear Medicine Brain;

" UOC Cardiology P.O. Villa Sofia;

" UOC Cardiology P.O. Brain;

" UOC Radiology P.O. Brain;

2. For the RIS / PACS on the management of digital images of UOC of the Presidium of Radiology Villa Sofia - CTO, the contract will have duration from the date of expiry of the contract referred to the system already

in use, and therefore from 01.05.2015 and will have same end of the contract to stipulate that you will go to the Presidium of the Brain and UUOOCC Villa Sofia in the preceding paragraph.

At the maturity of both the freight rates, the contract may be extended for the time necessary to performance of a new race and all Installation of replacement systems, in terms of the law allowed.

It is understood that the supplier will have to allow mounting in parallel of any other equipment that might be allotted, in order to allow the rotation without any downtime.

The total amount of freight, for duration specified above, totale € 5.000.000,00 excluding VAT, impassable limit.

The Administration reserves the right to extend the contract within months further 12 (twelve) and on the same technical and economic conditions, in case it was not possible to Administration define a new contract.

## Section 2.2 Inspection Required

Firms competing, must take cognizance of any circumstances or facts that may affect the formulation of offers.

For this reason, the Companies will have to perform, under penalty of exclusion from the race, the survey of affected areas, at the hospitals involved.

For the company performing the inspection will have to contact the competitor Computer Company 091 7808744 begin\_of\_the\_skype\_highlighting 091 7808744 end\_of\_the\_skype\_highlighting (cell manager Mr. Antonio Marsala. Company. 3666379195).

## Article 2.3 Any submission of the Project

When deemed necessary by the Technical Committee, each competitor will be able to Company to be convened by the Commission for a presentation of the project and a demonstration of the software offered.

The adjudication committee, where it deems appropriate, will be able, then, further to require participating companies to visit a site on the territory on which it is installed and fully functioning system similar to that offered in the race.

ARTICLE 3. Current Situation Article 3.1 Productivity

#### OMISSIS

#### Article 3.2 Diagnostic Modes

We report the list of diagnostic equipment, divided by Operating Unit and supervision in Annex A Section 3.3. Characteristics of the data network

The AOOR and equipped with a WAN-LAN connecting all Hospital Hospitals.

Remains the responsibility of the company awarded the redesign, upgrade and commissioning of LAN, for services of radiology, cardiology and nuclear medicine total existing and interested in this race. AOOR will provide you the venues for the housing system servers, storage devices and disaster recovery that will eventually put under the company awarded the contract at no added charge for AOOR.

The structural adjustment and technical premises and the sole responsibility of the bidder company. The firm bidder is to submit a detailed project that will have to provide:

1) the realization of the LAN, including the wiring, in UO Involved research groups in diagnostic radiology and nuclear medicine and cardiology in two hospitals of Company.

2) integration with the corporate network if necessary.

3) the creation from scratch, if necessary, the WAN interconnection between the principals involved for handling the traffic generated by the RIS-PACS system.

The firm tenderer will have to produce detailed project report with attached feasibility study, highlighting the solution architecture, the technologies involved, the proposed topology, the Analysis of the data stream produced by the system as a whole, the security measures taken and timely solutions to reliability and redundancy architecture. The firm tenderer will have to contact the company contact the Information System in order to acquire all the necessary information about the status of the existing corporate network. The firm tenderer will have to draft a LAN-WAN compatible with the corporate network and able to ensure complete integration. As far as network equipment, the proposed project will have to ensure complete homogeneity and conformity with existing LAN equipment.

The communication network will have to ensure planned WAN reliability and robustness, ensuring optimum performance even during times of increased workload: the dimensioning of the network to be prepared under the worst case application accurately and promptly documented by the proponent. The sizing and selection of equipment that make up infrastructure will have to be made to allow the maximum modularity and scalability with large expansion possibilities in view of its future expansion, in particular the proposed system of connectivity will have to guarantee at least twice the banda request from the calculations regarding the volume of traffic generated by applications on the network design shown in the report. The proposed system will have connectivity provide for the possibility of implementing a dynamic allocation of bandwidth resources between sites, especially the system in relation to traffic conditions and demands of end to end data transmission between the hospitals involved, will have to increase the efficiency system through multiple paths. Will be the responsibility of the participating companies determine the best network solution in relation to the architectural features of the RIS-PACS system proposed. Design solutions will be valued based on architectures and technologies that ensure the best usability of the system and improve and enhance the security features and performance of the system offered.

#### Section 3.4. Operational Units involved

This project provides for the management of data and images for the following Operational Unit: "X U.O.C. RADIODIAGNOSTICS

"X U.O.C. of CARDIOLOGY

"X U.O.C. of NUCLEAR MEDICINE

#### **ART.4. General System Architecture**

The architecture and configuration of the system should be based on the fundamental principles expressed in paragraph Objectives of the rental.

The charter will have to comply with the following guidelines for technology:

"- High level of integration and connettivita through industry standards (DICOM, IHE profiles, HL7), can use specialized tools and interfaces for integration of information systems;

"- technological innovation in systems engineering and application components to provide updates in line with evolution of functional and operational requirements of AO;

"Opening X, modularity and expandability to optimize resources to be used during both phases of the project, both in the face of prospective acquisitions of new equipment and increase the number of annual examinations, both for the inclusion of new health facilities in the territory ;

"- Continuity operational, the proposed solution will have to be characterized by a architecture to ensure maximum operational continuity;

"Architecture to enable multi garrison to modulate the composition of the system in a flexible manner and to ensure users the highest level of usability in the area in terms of performance and facilitates operational;

"- Data Recovery (reports and images) from the existing archives;

"- Security The RIS / CIS / PACS will have to include procedures for secure access to data through the use of user IDs and passwords to access different levels (radiologists, clinicians, technologists, management and

administrative system). Will have to be guaranteed the certainty of the preservation and traceability of data;

"- homogeneous solution to the operational units involved such as Radiology, Cardiology and Hemodynamics, and Nuclear Medicine;

"- Easy to use and flexible application of workstations, to allow maximum usability to health professionals but with a limited background information;

"- Tools for centralized management, control and update of the main components of the lease. We consider minimal elements for the evaluation of the goodness of the rental:

"Architecture X Enable Web

"- Support of digital signatures for reports

"- Declaration of conformity of the medical PACS Device Directive (MDD 93/42EEC) of class IIa

- "- Support the functionality of structured reporting
- "- Unlimited Licenses for SW modules proposed

"- homogeneous solution, based on unique software platform on which they can rely on all specialist applications, ensuring uniformity and homogeneity of planning for all areas involved Clinics (Radiology, Nuclear Medicine, Hemodynamics, echocardiography).

## ART. 5. Functional characteristics CIS RIS and PACS

## ART. 5.1. THE SYSTEM RIS / CIS: technical specifications

The computerized X-ray system must provide for the management of patient data and the tests carried out, making the information available to the Company Information System, which, following the patient throughout his career at inside the hospital, contributes to the creation of a single container that collects all the services provided in interoperability with clinical systems and regional business.

The goal is not merely to provide real-time clinical information, the information system must also manage the organizational part of the department, the diagnostic rooms, staff, materials used and any intramural activity in order to obtain a optimization of work, from which it follows a more effective control, thanks to the possibility of extrapolating statistics and reports on activities carried out.

The RIS / CIS will have to ensure unique identification of the patient review undertaken, allowing for transparent management of x-ray archival.

The RIS / CIS must be designed in adherence and compliance to the most recent standards and modes of integration, both in type and structure of the data base that, above all, its components must interoperate. You shall provide for the handling of your request by department, including through integration with the current Platform Order Entry department Noemalife Company of Galileo, and be integrated into the system image management (PACS). Moreover, on all workstations reporting RIS / PACS will have to be available and integrated digital signature software and voice reporting.

In particular, the RIS / CIS will have to be integrated with the following information systems in use and those of the Company equips itself in the course of providing rent.

## OMISSIS

The additions will guarantee the current architectural standards in use.

The costs of integration of applications offered to the enterprise applications listed are the sole responsibility of agent, limited services related to its application.

All data collected in the RIS / CIS are borne by principal firm must be present and export functions of data interchange formats that are not encrypted.

Will have to be guaranteed completely interfaced with the computer network company in the current version and for the duration of the lease. Will have to be guaranteed the possibility of data import and

export data for statistical purposes.

Also with regard to compliance with the standards, the system will have, if necessary, be accompanied by IHE Integration Statement (Integrating Healthcare Enterprise) profiles related to integration and DICOM Conformance Statement.

## Art.5.1.I. RIS SYSTEM: functional specifications

The RIS will have to meet the needs of a modern diagnostic imaging service that has as its goal the filmless and paperless.

The different modules of the information system (RIS reservations, acceptance, execution, reporting, delivery reports) will be managed through worklist that should allow the selection of performance using filters and sorting criteria.

The RIS will have to be able to implement the following functions:

"- The personal information management of patients through the insert, update and maintenance of data, with automatic generation of a unique code for patient identification to be used to ensure the correct association between images and patients. Must be planned integration with ADT Company

"- will be given a detailed description of RIS integration with clinical systems and administrative Businesses.

"- should be specified the modalities of integration between the RIS and PACS:

"- The RIS will have to be able to manage the entire workflow of radiology, with particular reference to:

The reservation or request management (department or not)

or acceptance of the patient

o The generation and send worklist to diagnostic rooms

or update the status of execution of test

o The reporting

The registration or delivery of the report

o The production of statistics.

"- Management of diagnostic rooms agendas through customized programming to support changes and diversifications for downtime, from the patient, types of examinations, etc.. The agendas will be integrated into the system CUP Company.

"- Managing the printing of labels to be affixed to envelopes of delivery reports. The layout will be indicated by Hospital.

"- Monitoring of the progress of the examinations (booked, accepted, executed, refertato, signed, delivered)

"The management of X acceptance of the patient, after booking / request consideration for direct or urgent requests.

"- The transfer of the job listings diagnostic equipment capable of receiving services through the DICOM (Worklist Service Class Managenebt).

"- The customization of the print layout of reports, preparations, work lists and fields to be agreed in accordance with the needs of the radiology service.

"- The management of structured reporting functionality including:

o Integration in the report, the following:

"- Pictures Key

"- measurements, calculations and reconstructions performed on images from the Medical Radiologist Collection or data, notes anamnestic, clinical question

Management encodings or pathologic (ACR and / or free text)

"- Management of statistics relating to activities took place.

"The X system management for the production of CD copies required by the patient.

"-The management of different levels of access based on the operational functions of the staff, according to

the needs of Radiology.

- "- Must be supported management of digital signature
- "- The management of an unlimited number of licenses RIS.

## Art.5.1.II. Features specific to the nuclear medicine

In the department of nuclear medicine diagnostic and therapeutic benefits are paid:

"Conventional X (scans, MOC)

"- PET.

The functional macroblocks to be managed by the RIS system in compliance with GMP (good preparation standards) became operational from 01/07/2011 to 06/24/2010 Decree of the Ministry of Health are:

- 1. Reservations, acceptance, planning and management of question, even in different sessions;
- 2. Preparation, administration and management of radiopharmaceuticals;
- 3. Managing log loading and unloading of radiopharmaceuticals;

4. History of the patient;

- 5. Structured reporting;
- 6. The record of delivery of the report.

All inside of the category of performance of conventional type and treatment, will manage the different types of tests that differ in their mode, execution time and radio drug used.

## Art.5.1.III. THE SYSTEM CIS: functional specifications

The characteristics of minimum for the CIS system dedicated for Cardiology, must be:

"- Hemodynamic Management:

o Management of inventory, of i | inventory and orders;

or complete description of i | registry information and materials characteristics such as manufacturer, distributor, cost of i | united, expiration date, lot number, etc..;

or on-line collection of materials used during the procedure with automatic updating of the store; Possibility to integrate or readers of bar codes to simplify the loading and unloading of material for the stock;

Archive or patients with easy integration of clinical data and procedure;

o Create professional reports and uniform procedures for all of hemodynamics, such as coronary angiography, angiography, angioplasty and coronary vascular catheterization studies shunts, etc..; History or clinical cardiology of the patient always on top for i | previous analysis;

"- Management Echocardiography:

o Management and automatic import of measures from U.S. studies that manage structured the report in DICOM SR;

Organization or flexible (providing the concept of structured report) and easy to use on the part of i | end user, including all information necessary for compiling a test according to standards of quality;

- o Organization of anatomical structures divided into:
- Quantitative Analysis o Dimensions (B-Mode, M-Mode) or Doppler Flussimetrie

Qualitative Analysis of Morphological Descriptions or structured

- create and configure templates pathology reports;

- Management segmental wall motion (model segments 16 and 17).

#### Art.5.1.IV. Digital Signature

The system will have to support the digital signing process while generating the report. In particular, the RIS / CIS you will have to also integrate with the procedures provided in the Digital Signature AO, ensuring compatibility with readers and certificates already owned by j | Company.

## Art.5.2 integration between the RIS / PACS and CIS

The management system RIS / CIS and the management system PACS images must be perfectly integrated

and homogeneous for user, who must obtain a single functional vision and transparent.

In particular, the integration between RIS / PACS and CIS should aim to:

- 1. Using a single master data;
- 2. Receive local area network (directly by mode) patient data from the RIS / CIS;
- 3. Simultaneously display images (PACS resident) and reports related to them (residents of RIS / CIS);
- 4. Automatic loading of the job listings governed by RIS / CIS;
- 5. Automatic distribution of wards;

6. Advanced search for any past, residents in the archive, all || act of booking, of acceptance of reporting and / or clinical consultation.

## Art.5.3. Legal filing system

The system will have to allow the electronic storage of images and reports digitally signed.

The filing office shall be in accordance with existing legislation, with ministerial guidelines and provisions DIGITPA force and their subsequent amendments.

Radiological images and reports digitally signed, will be saved and stored in the system for Storage and Preservation Replacement, ensuring their integrity, authenticity and usability over time.

All examinations must be kept easily recoverable in case of necessity, will have to be so accessible, through a special user interface, the database containing the association between disc label and store exams.

The proposed replacement system legal hold will have to ensure the preservation of the rule of law reports and images through use of hard disk based storage systems, that will not have to be necessary except as a residual, use and material handling consumable (DVD, tapes, etc iK)

The whole process will have to conform to the methodology for use of compatible media, and any other required information to the existing legislation and guidelines CNIPA.

## Art.5.4. THE SYSTEM PACS

The PACS is the central element of the project, as it determines the strategies of the unit of Radiology (extended also to the Operational Unit of Nuclear Medicine, hemodynamics and echocardiography) in terms of management iconographic information.

The digital image archiving system will have to be sized based on workload and indicated future, and will have to make the images readily available to the workstation for the duration of the contract. The competitor must explain, in the project bid, its storage strategy.

The storage system must meet the immediate requirements but must be scalable so that it can be expanded according to future needs. This problem will have to be addressed and analyzed in the project. Every operation performed on the database of images of the archive must be made according to the DICOM 3.0 standard specifications and will have to be provided the conformance statement. Will have to be specified in addition to the compliance initiative, IHE profiles and actors to participate enclosing IHE Integration Statement. Shall be provided preferably more levels of storage so you can easily manage the store short-term, medium term and long-term backup and archiving. The archives in the short and medium term must be accessible at short notice, and act generally at the individual Hospital. The long-term storage capacity must be proportionate to the overall workload and should be expanded with additional modules as a function of increased demands. Companies Bidders must specify the methods of applied fault-tolerant storage levels. L i | long-term repository must be centralized at the Hospital. The archives should be made in accordance with the laws and regulations. The archive will have to be made by Juke-box/librerie capable of containing data stored without loss of information, keeping in line, quick-access media (RAID systems) at least 5 years of activity, while the level of near-line (jukeboxes or libraries) will have to ensure only the long-term archiving. Any compression algorithms used to increase the storage capacity must be adequately documented. The systems must be able to support the functionality of automatic prefetching and uploading of digital exams earlier, useful for reporting and remote deployment, automatically activated

based on the information on booking the exam. At any time must be guaranteed access to the archive from any workstation to query and retrieve images stored.

Given the high value of medical information contained in PACS systems in a department fully operational, it becomes imperative to define the system in its entirety, as a system "mission critical" and how this can work without interruption. The configuration of the system then will have to provide a high level of hardware redundancy and software so that failure of one component does not lead interruption of operability of the system and therefore the failure, even partial, of the X-ray flux ( "department workflow"). Companies Tenderers must describe the systems of protection through redundancy and backup provided and make a detailed and careful analysis to demonstrate the reliability of the proposed system. For each user will have to be able to access data stored in consultation automatically and transparently. However, the limitation will have to be assured of access to data and images in relation to different users' qualifications (qualification related to the profile set to the system) as provided for by Legislative Decree 196/03.

The data stored together with the images in the PACS system, must be uniform and consistent with those produced by the RIS / CIS and diagnostic equipment. In order to ensure proper management of archived data without ambiguity, the identification of all the exams will have to be stored is unique to all users. All reporting stations, so any comparisons should have the opportunity to draw all the images and reports, which must be immediately available, associated with a particular patient. Regardless of the form in which it will be realized, the management of stock images will have to be completely automatic and transparent to end user.

For investment protection, the proposed system will have to be expanded over time, in the face of increasing workloads, via simple implementation of new elements, preferably without any replacement, upgraded and because of changing technology.

The architecture of the system offered will have to be scalable and modular in order to evolve with the growing needs whilst ensuring maximum performance. The architecture of the system will have to be also ready to offer evolution of PACS systems to large-scale implementation planning.

3D functionality. It requires the provision of new advanced features specifying the domains involved on the basis of clinical need specialist.

The architecture of the system as a whole, will have to be able to streamline workflows, distribute the workload between servers and optimize network traffic.

The participating company will have to analyze and propose the best architecture of the storage system. The system will have the following characteristics:

"- Management of all radiological modalities (CR, DR, MG, U.S., XA, NM, etc..)

"- Connection and integration, in accordance with the DICOM standard, the equipment used by the Company, any diagnostic modality integration costs will be borne by the side of the company awarded the contract.

"- Automatic archiving of images at the time of implementation of examination, with the possibility of combining all i test original images result of subsequent revisions;

"- Export images in various formats, compressed and / or possibility of writing to external media (HD, CD, DVD etc.) for educational / scientific reporting on each workstation;

"- Reception and viewing of images in DICOM format from other systems;

"- Opening and viewing simultaneously more tests and report the same patients and, possibly, of different patients;

"- Use of 3D features

"- automated mechanisms for managing data security and redundancy, to ensure conditions for faulttolerance "- Compliant DICOM, HL7 and IHE.

### Section 5.5. Data Sharing

In view of the fact that AO United Hospitals will provide the PO Brain of a RIS / CIS / PACS to achieve a system-wide Business and Paperless Filmless, and necessary and the rental object integration with core systems used by the Company and especially with the system RIS / PACS already possessed by Company Hospital at Villa Sofia CTO that will be replaced, the company awarded only from the date of expiry of the contract currently in place and therefore the 01.05.2015.

This integration has to offer, using the systems in use, the possibility of:

"- Display on any of the workstations allocated Involved research groups at the Diagnostic Imaging of AO images in the archive in any one of the deans of Company itself.

"- Request from any department of P.O. of entire company performance to any of Diagnostic Imaging Diagnostic Imaging Service of the AO, to ensure a i | global integration at the level of hospital wards, the RIS / CIS competitive tendering will have to be a sort of RIS enterprise functions the master against the RIS / CIS currently in use at the secondary PO Villa Sofia CTO

"- Display the report and image as soon as the report signed and made available for consultation;

"- Request Performance of Diagnostic Imaging, directly from the emergency management information system used by the PO of Company and the return of the report and images;

"- Store through the system of clinical document repository used by the AO, all radiology reports according to a logic-centric paziento.

It seems evident that, in order to implement a solution entirely independent of the particular RIS / CIS / PACS enabling all existing AO, at the end of each lease, if the replacement of a RIS / CIS / PACS without what goes to minimally affect the overall operation, the system offered should be based on adherence to the XDS-profile example by establishing a level of storage over company. This hypothesis is based on the overall architectural guidelines IHE (Integratine Healthcare Enterprise). You can then implement:

"- A centralized repository reports the level of AO;

"- A centralized registry of AO with Master Patient Index function;

"- A Registry for radiological images / cardiac / MN.

#### Section 5.6. Viewing stations and reporting

The diagnostic workstation reporting, as well as ensure compliance with the general principles required level technology architecture, compared to international standards and security, and functionality already specified for applications RIS / PACS and CIS, in particular, ensure:

-The possibility to process the acquired images and prepare them for i | diagnostic activities, will be evaluated positively the richness and variety of diagnostic tools for the various types of investigations, which allow, among else, reduce the efforts operational control of the workstation of the various methods;

- The possibility of making the diagnosis of high-resolution monitor in the most automated way possible;

- The possibility to perform the necessary keyboard and voice reporting and other functions as RIS The availability of a interface RIS / CIS / PACS to allow only use for the purposes of reporting to monitor a single tool for image processing and report writing. On the reporting stations, RIS / PACS and CIS, will be managed by one keyboard and one mouse, dual LCD monitors for diagnostic resolution for 5 MP grayscale mammographic images, 3 MP color images for RX, CT and MRI, 2 MP for U.S. images, also will have to be made active for an additional monitor Application RIS / CIS.

- The possibility to customize the layout of the screen for optimal viewing of images, based on functional needs of logged in user;

- Possibility of definition of user profiles;

- The possibility to send and receive images in DICOM format, including automatic and programmed with any DICOM device on the network

- The availability of tools for structured reporting and composition of the layout of report;

- The possibility to simultaneously view more images and reports, even of different patients;

- The possibility of each user to work on any workstation, having available all the features of the basic

2D/3D visualization, keeping your settings in the layout view and the personal hanging protocols.

- Support of hanging protocols

- Possibility to automatically display the previous studies for comparison to monitor. The studies compared the images can be processed independently and navigate the from each other.

- Possibility to set at least the following views: MPR, MIP, VR, Projections axial, sagittal, coronal.

- The possibility to export the displayed images (including images of 3D post-processing) industry standard formats like JPEG, BMP, TIFF.

-The possibility of selecting the print layout of the images for each available format.

Patient - The possibility of creating CD / DVD

Below are the basic functionality required for the display and 2D/3D drafting, preferably provided by a unique application, web-enabled, highly integrated archives RIS / PACS and CIS:

- Possibility of setting the function of window / level of individual images, groups of selected images, all images or a Region of Interest (ROI)

- Possibility of setting of the Window / level of images by:

Defaults or the second mode

Directly or by moving the mouse

- Each user must be able to apply its settings window / level default

- pan, zoom, move, zoom lens, the Pseudo-> Staining

Features - annotation text and graphics (using lines and circles) and sizes.

Features - definition of regions of interest (ROI) rectangular, oval and freeform, calculation and display of statistical values related to the ROI.

- Possible configuration of the information displayed at the same time view in relation to Mode. It appreciated the opportunity for each user to customize the layout and the information displayed.

- Imaging Key (Key Image)

Features - image publishing for consultation after the close of the report

Features - cine loop

- reconstructions MPR, MIP / MinIP

- Volume Rendering

Additional functionality will be appreciated operational needs.

Requirements Minimum requirements are given in the following table:

#### OMISSIS

#### Section 5.7. Functionality distribution images

The system will have offered help, beyond Integration with Order Entry system currently in use at Company, Web distribution of images to all Operational Unit of Company and any services Extra-Hospital. Are preferred in the evaluation of technical projects offered solutions that allow distributions to optimize image compression and therefore the size of the pictures sent in accordance with the needs of user-optimized network traffic and local geography.

Are preferred in the evaluation of technical projects offered, distribution solutions that enable images to avoid duplicating the images to be disclosed on a separate database, but use the same DB PACS.

They will be guaranteed the same functionality as basic display systems for diagnostic workstation, including the possibility of managing the dual monitor display image hanging protocols and the availability of personal display, enabled the login for each user in the event that a radiologist to be logged on the system display department, her personal hanging protocols will be automatically activated. The department will not be enabled users to save in store any changes to the PACS images.

The client used to display the distribution of images relating to the service departments of radiology / cardiology will have to be natively interfaced with other family products RIS / CIS / PACS, and must be able to handle the broadcast of a compression non-destructive image corresponding to the specific DICOM 3.3 and to be compatible with the images from all diagnostic modalities (CR, DR, CT, MR, U.S., XA, NM, etc..) Must be supplied to all the Operational Unit of A.O. divided by the garrison (presented below) complete workstations (PCs, monitors, licenses SO) of specifications necessary for the proper and quick display of images.

The distribution list and security policy of workstations at various Involved research groups will be agreed with the IT Services Company.

## OMISSIS

The number of workstations (PDL) must be complete not less than 150 units.

The PDL will be configured as established through the Computer Related Services Company, in order to comply with corporate security policies.

#### Section 5.8. CD Burning System Patient

Should be provided n.6 systems hardware and software CD / DVD to be delivered to the patient as iconographic documentation of i | for examination and report of the RIS / CIS / PACS.

Further more No.3 systems shall be given later in association with RIS / PACS PO Villa Sofia.

The proposed solution must allow the production of CD / DVD with the following characteristics:

"- Allow the centralization of the delivery point

"The X CD / DVD should include a DICOM viewer (self-reading software) for viewing on any PC DICOM images in it

"- The CD / DVD must be equipped with DICOMDIR to allow loading and display of examination contained in it from any workstation

"The X CD / DVD should include a medical report signed

"- All viewed images produced with tools that allow manipulation by the physician recipient

"- The screen printing of CD / DVD should include at least the following relevant information:

or the patient's ID

and date of examination or test

or logo of Company

The authority will have to support the Company hospital in the customization of the information on screen-printed media.

#### Section 5.9. Interface to the diagnostic mode

The RIS / CIS / PACS rental object will have to interface with diagnostic equipment (receptions images and sending work lists) used by the principals involved.

They will also be provided, at no additional cost, activities and software modules interfacing side RIS / PACS and CIS for additional DICOM modalities that Hospital will be able to acquire the contract period, subject to the assessment of the impact of their introduction into the system object of the rental (eg increase of examinations / year, etc iK).

For non-standard compliant DICOM mode, Local Health reserves the supply of components needed to

update them without any charge to the i | tenderer shall, to the exclusion of any activities necessary configuration (on the RIS / CIS / PACS ) during the rental and installation of RIS / CIS / PACS. the integration of these systems will have to be made so as not to reduce production capacity and integrated diagnostics mode.

## Section 5.10. Compatibility with standards and conformity certification

The system offered will have to provide the most comprehensive compliance with the standards described above and therefore must be attached DICOM Conformance Statement and the related IHE Integration Statement for each product offered (to be produced in the technical documentation).

The rival firm will have to attach a copy of the ISO9000 certification. The system offered will have to possess, under penalty of exclusion from the race, the declaration of conformity to the Medical Device Directive (MDD 93/42/EEC) of grade IIa, which will have to be attached as an offer for an evaluation by the evaluating committee.

## Section 5.11. Monitoring System

The RIS / CIS / PACS will have to have suggested the possibility of an automatic monitoring of hardware and software, with possibility of remote consultation also by the corporate staff, to ensure the proper functioning of the system.

## ART. 6. Computed radiography

Systems Computed Radiography (CR) should enable the digitization of images produced with existing analog systems supplied, to ensure the computerized management of all medical units of AOOR imaging. The rental of digital imaging systems include every kind and quantity of consumables required for operation of the systems offered, including the provision of all boxes (plate) needed. The consistency of cassettes to provide various medical units and their deployment must be indicated in the draft submitted by the company and will be evaluated. The number of boxes will not be able in any case be less than the minimum required and specified in the table below.

#### OMISSIS

The digital radiography systems must be of the type for use with high-resolution mammography of the normal use for radiology. The companies, in the project on offer, will present both CR-loaded single and multi-loading, subject to the minimum quantity and characteristics indicated herein from AOOR. The proposed systems must provide for:

Integration with the RIS. In particular, work lists generated by the application must be received RIS, via the network, the proposed CR systems, without having to retype any data, thus ensuring the proper management of data (Patient ID, Accession Number, Study ID, patient name, service description, etc..);
Integration with PACS. In particular, the digitized images from CR systems must be sent via network to the PACS in full mode in order to ensure the management, archiving and distribution. The competing companies must ensure the integrity of the images sent to PACS, both in terms of both data-level image information. The interface between the PACS and CR system must ensure the "consistency" of the image;
Compliant with IHE initiative, specifying profiles and actors to participate and attach the IHE Integration Statement.

- Compliant with DICOM conformance statement enclosing;

- Adequate resolution images (preferably above 10linee/mm for conventional radiography and 20 lines / mm for mammography);

- Adequate depth of gray levels (preferably greater than 4096 levels, 12 bits / pixel);

- Automatic distribution of images produced at different nodes (printers, CD, Server, diagnostic stations / service, etc..);

- A memory dimensioned so as to allow to store a significant number of diagnostic images, being able to thereby ensure the continuity diagnostic even in case of temporary inability to transmit images;

- Terminal (console) for management and quality control of images with the same pre-visualization, identification of the examination, choice of projections and the possibility of inclusion of the right and / or left on the examination performed;

- Possibility of sending the CR from both printers on film than on CD burning robot;

- Complete supply UPS, preferably integrated. The maintenance of 'UPS, including battery replacement, and to be considered included in the offer.

- Ability to accept plates in sizes 18x24, 24x30, 35x43, and availability, at no additional cost, the management system for analysis of the size of the spine in its entirety;

- The schemes proposed in multiple loading should ensure a productivity of not less than 80 cassettes / time also in the format 35x43;

- CE 93/42 MDD and technical standards.

The required minimum number of CR and No. 3 for i | OU of Radiodiagnostics of the PO Brain and n. 4 for the P.O. Villa - CTO that will be supplied later.

#### **ART. 7. PRINTERS AND RADIOGRAPHIC FILMS**

The provision in the charter will have to provide digital printers dry imaging and radiographic film. The freight and taken to cover all types and quantity of supplies needed for operation of the systems offered (including films, CD / DVD labels, toner / ink etc..).

Nothing will therefore have expected over the contractual payments. The dry printers must provide for:

- Connection and integration with the RIS / PACS and CR systems covered by the charter;
- Support for printing multiple sizes up to 35x43;
- Integration with all installed or future acquisition mode;

- Communication standard Dicom 3.0 Dicom specifying the classes available and attaching the conformance statement;

- Compliant with IHE initiative, specifying profiles and actors to participate and enclosing IHE Integration Statement.

- High-resolution printing (for each size);
- High productivity;
- Print the first film in the shortest possible time
- Small footprint
- Possibility to print diagnostic mammography films.

- High capacity memory.

Companies Tenderers must specify the hardware and software of the printer offers. The minimum number of required printers and 12, including No. 7 will be delivered later with the RIS / PACS dedicated to the PO Villa Sofia - CTO. The company awarded the contract will have to provide the X-ray films from at least six months after the date of receipt of notification of award stating in detail the time and manner provided in order to reach their complete elimination and will have to be but not later than one year from the date of testing successfully. The company awarded the contract will have to ensure in all cases essential continuity of radiological activities. The firm tenderer will have to specify, failing which the exclusion, time and methods envisaged to achieve the above objectives set.

#### **ART. 8. METHODS DELIVERY**

The delivery of all the provisions of this contract is understood to include all costs of packaging, transportation, and quant Another expected in in this tender offer and, at the premises specified in order. Shall be borne by the company awarded all costs arising from the internal transport, even if it were not possible use of lifts / elevators exist.

The contracting company will have equipment and components required to deliver factory-fresh and updated to latest release available at the time of delivery.

If innovations were introduced, the company awarded the contract will have to notify AO reserves the right to examine at its discretion whether to accept the innovations offered an equal number of economic conditions or demanding delivery of the same characteristics offers.

The delivery of everything covered in will have to be offered to all the risk and expense of the company awarded the contract and will have to be completed no later than 60 days. solar from the date of award of contract. The delivery of goods will have to be accompanied by the accompanying document bearing the references of good order.

The successful bidder will have to provide the company manuals in Italian with respect to:

or User Manual for use of the systems in Italian:

Manuals or technical / operational and administration system used by staff of the successful bidder for the management and administration system;

or supports for installation software included in the project offered.

## ART. 9. INSTALLATION

The fare includes installation of the items and everything covered in offers.

The installation must include all accessories, consumables, transducer necessary for the operation of logins and / or testing.

The complete installation of a system as complex as that which ensures the management of radiological and generated images, requires many long execution times even on the basis of the need to contain as much as possible the disadvantages and limitations to the normal conduct of Service Radiology.

It is therefore essential that companies bidders present in the technical design of a time trial program from which to deduce the time of installation of individual components and the total time within which the whole system will be operating.

To better be able to compare individual time trial program to be presented is deemed necessary to divide the installation partial objectives for which the individual companies will state the time of realization. The partial objectives that this Hospital proposes are:

- Recovery of data and images from electronic repository currently in use and store them in the new system;

- Installation of the system's main storage for images Radiology Department;

- Installation of security system image storage (disaster recovery);

- Preparation of the total management of conservation and substitution of data storage required by law;
- Installation of RIS in Unit of Radiology, Nuclear Medicine and Cardiology and its interface with the CUP;
- Configuration and tuning of complex system RIS and PACS;

- Installation of RIS in at Unit of Radiology, Nuclear Medicine and Cardiology with integration of configuration and tuning of complex system RIS and PACS;

- Installation of display systems in operating rooms with installation of hardware and software necessary to performance of any alterations;

- Installation of display systems in the various hospital departments and, in particular, in the ER.

- Incorporation into the RIS / PACS for the PO Villa Sofia - CTO with the hire and installation of hardware and software needed and the new adaptation of the system;

The individual companies will have a time trial program even more detailed, but which, although inserting intermediate targets, do not neglect those listed above.

## ART. 10 UPDATE AND TECHNOLOGICAL ADAPTATION

During the contract period, the supplier will be held at his own expense to the constant technological equipment if no longer offers adequate performance, or to the purposes of this contract provided that no

action no significant change (greater than 20%) of activities or needs operational services.

### ART. 11. START RENT AND TESTING

The rental shall commence on the date of signing the contract. The first test, technical, system and equipment will have to be made within 120 days from the date of commencement of hire. A This will follow the final functional testing and compliance with the adversarial company with a special commission of AO appointed by the Directorate General within 30 days from previous testing. The costs related to testing of entire rental are the responsibility of the bidder company.

The checks will be made to overcome the testing times will be to certify the full functioning of the various parties and the globality of individual systems, the completeness and grip of the freight according to order and in general the elements of the contract and be completed by and no later than 15 calendar days from the date of commencement.

Payments relating to the fees payable will not be made unless upon passing the same test with positive results.

## ART. 12. TRAINING

The company awarded the contract will have to plan and organize courses on-site training to all staff involved in use of new equipment deals.

The company awarded the contract will have to include in hiring suitable number of training days and for coaching and support during system startup, will have to be presented for which appropriate temporal level.

All training days and service will be held at the location or locations determined by Hospital.

In counting days of training and assistance to starter should be excluded all those used by the firm awarded the contract to deliver and install the hardware and software for testing.

The company awarded the contract will have to provide a training plan divided by professionals with course content, the names of teachers, the mode of execution.

The training plan will have to be differentiated by type of user and will have to adapt to staff working conditions (working shifts, vacation time, etc. ..)

In order to ensure correct sizing of the training activities, the table below shows the composition of the staff of the Hospitals involved:

## OMISSIS

Will have to be provided specific training for staff in the IT Services Company.

## ART.13. MAINTENANCE AND SUPPORT

Firms must warrant the following services, detailing the mode of delivery of services required and any additional services offered.

"Installing a rule art and installation of entire system, archives and servers on the premises made available to the AO

"- Management and Maintenance: Each participant must include in its offer management services and maintenance of the proposed system and detailing the type of service offered.

"- The competing companies must provide a telephone assistance coverage H24 active and proactive in order to ensure continuous operation of the system

"- The competing companies must provide coverage for all full-risk systems offered including the provision of hardware and network infrastructure for the duration of the contract period, clearly indicating the timing of on-site (but no more than 2 hours of call blocking for failures that affect the operational continuity of the Operational Unit Involved) as well as the timing of fault resolutions. The coverage will have to be provided 24 hours 24 to 365 days. "Companies should clearly state X, offered in technical design, timing and mode of action of assistance (equivalent to i | on-site technical assistance)

"- must be guaranteed at least two preventive maintenance at years, specifying, in offer technical content for the equipment supplied.

"- Technical support from the staff permanently on site for entire duration of the contract.

## ART. 14 - LICENCES USE

The rental includes the license use in rental for the entire contract period of all the basic software, utilities and applications, and firmware in the system with a sufficient number of licenses all implementation of all necessary workstations and included in and offered throughout the contract period, and must be provided the license agreements of the original manufacturer of the software used in the case where such licenses understood the terms to the detriment the customer, they do not have any value in the contractual relationship between Hospital and the company awarded the contract.

In the event that the software was protected by the hardware copy protection (dongle), Hospital agrees to guard and protect it from any unlawful conduct and tear and, in cases of abduction, to present the facts the competent judicial authorities in case of failure of fault / fracture Hospital agrees to return it, in any case, without prejudice to the responsibility of the individual, the company awarded the contract will repair / replace or provide a new key hardware and reinstallation at no extra charge to the i | Hospital, as the unavailability of the key can not be ipso facto forfeiture of the license agreement.

## ART. 15. TECHNICAL DOCUMENTATION TO BE PRODUCED

The competitor, otherwise exclusion, will have to produce, in the competition, the following documents, written in Italian and devoid of any indication (direct or indirect) of an economic nature:

1. Description of overall project performance and general technical data listing the reasons behind the choices made in configuring models and specifications in response to the needs assessment of company and specifications outlined in this Special Specification.

2. List of hardware / software offered

- 3. Detailed technical description of the functional hardware / software offered
- 4. Plan for Disaster Recovery and Business Continuity
- 5. Technical description relating to the functional integrate RIS / CIS / PACS

6. Technical description relating to the functional integration of RIS / CIS with corporate information systems

7. Organization and mode of service delivery of technical assistance

8. Kronos program for all interventions, supplies, installation and functional tests planned on offer with Gantt chart

9. Organization and mode of execution of the training program, training and coaching staff for the booted indication of man-days of guaranteed minimum

10. Data sheets / brochures of the systems offered

11. Regulatory approvals (CE, ISO, DICOM Conformance Statement, IHE)

12. References

a. List of the most recently performed installations of similar systems to what is offered, with reference to the Italian market

b. Reference center for possible functionally to the technical assessment.

# ART. 16. AWARD CRITERIA AND PROCEDURES ALLOCATION OF SCORES

The award criterion and that of most economically advantageous tender pursuant art.83 letter b)

D.Lgs.163/2006, based on the criteria and methods described below.

PRICE

**40 POINTS** 

## QUALITY

## **60 POINTS**

The scores, both related to quality than price, are valued up to two decimal places.

In the event of a tie in final total score between I and II in the ranking, will proceed to award to the company that had a better score on quality

Nothing it will be up to competitors in compensation for any costs and expenses encountered in the preparation of the project, including those for on-site investigation techniques.

The proposed project will not be returned under any circumstances even if the competitor does not prove successful bidder.

The total scores obtained from the evaluation of the parameters listed below (points Economic Offer + Technical Points Offer) will help to determine the final score achieved by the company in question.

#### Article 16.1 Quality Assessment

The Award will be arranged with the criteria laid down art. 83 of D.Lgs. 163/2006, by the method of pairwise comparison, in favor of economic operator which has submitted most economically advantageous offer based on the following items, subject to verification of compliance with the technical requirements of the systems offered described in these specifications:

" Quality: 60 points maximum score assigned.

" Price: 40 points maximum score assigned.

The 60 points related to the qualitative assessment represent the upper limit for the technical committee according to the elements specified in this contract.

The calculation of most economically advantageous offer is made by Administration using the following formula, and, therefore, by the method of aggregation compensator, Annex P, DPR 207/2010, paragraph II, point A), paragraph 1:

## OMISSIS

The jury determines the coefficients V (a) for each quality criterion under Annex D to the DPR 207/2010, paragraph II, letter a), paragraph 5.

Each project will be technically reviewed and evaluated by the technical committee, it will attach, with the method of pairwise comparison, each of the following requirements: a factor V (a) between 0 and 1, after verification of the presence of all the requirements and minimum characteristics required by the CSA and based on the subdivision below:

#### OMISSIS

Will not be admitted to the subsequent opening of the envelopes economic Companies that in the technical evaluation did not reach at least 25 points in the quality criterion.

The maximum amount based auction for the lease and maintenance of the systems required full risk and equal to a total of 5,000,000 euros, plus VAT, for a period of 6 years.

The Contracting station does not provide specific charges as security for equal to 0.

Given that the offers may not be higher at maximum amount based auction AOOR Villa Sofia Brain reserves the right not to award the tender offers will be if the price is not reasonable or if the systems do not offer comply fully with the requirements of this Special Specification.

The AO reserves the option to award even in the presence of only one valid bid.

The price shall also be inclusive of all costs necessary to provide the equipment fully functional and allow

the professional installation art.

The coefficient V (a) relating to the offering of economic competitor (a) and determined under Annex D to the DPR 207/2010, paragraph II, b), through the following formula:

V (a) = Ra / Rmax

where:

V (a) = coefficient for financial offer of the competitor (a)

Ra = downward percentage offered by the competitor (a)

Rmax = percentage of decrease offer more convenient

The rating assigned by the economic financial offer of the competitor (a) is obtained by multiplying V (a) for the maximum score (40 points).

The award will be placed in favor of a single competitor, based on the sum of points assigned to the quality and price, will have achieved the highest overall score.

If two or more economic operators have obtained the same overall score you will proceed to award the same session as a result of drawing lots of offers.

#### **ART. 17 OPTION OF REDEMPTION**

At the end of the contract Hospital reserves the right to redeem all or part of the equipment covered by the contract of service without payment of all sums contractor. That option will be expressed by Hospital with written notice before the contract expires.

#### ART. 18. PROPERTY DATA

The AOOR remains owner of all data type is alphanumeric diagnostic images stored by the RIS / PACS. The provider agrees to end the contract to make them available in standard sizes and provide adequate technical support in the event that these data have to be reloaded into other systems.

THE DIRECTOR GENERAL Dr. Salvatore Di Rosa