

NATIONAL PHARMACEUTICAL COMPANY HARARE CENTRAL STORES

TERMS OF REFERENCE FOR THE CONSULTANTS FOR THE DESIGN WORKS

I. BACKGROUND INFORMATION

The National Pharmaceutical Company (NatPharm), is a commercial company under the Ministry of Health and Child Care (MOHCC) for procurement, storage and distribution of health commodities to the public sector in Zimbabwe. The health commodities for HIV, TB, and Malaria constitute the largest component of the total volume currently stored and distributed in the public sector.

Due to increased initiation of patients onto Antiretroviral therapy, the years 2009-2015 have been marked by a significant increase in the volume of health commodities handled by NatPharm. At the same time, there have been plans to improve the handling capacity of this supply chain with refurbishment of the NatPharm stores mainly the Harare and Bulawayo Regional Stores. Partners including Global Fund (GF) and JSI were in 2010 mobilized to support the Roadmap for improvement which achieved the following milestones:

- Financial systems are now in place that provides information needed to objectively assess the company's financial position.
- A new organizational structure has been approved; staff skills are known and a training program has been developed to improve staff skills where possible; a retrenchment program has also been devised to reduce over-staffing.
- Existing warehouse procedures and processes have been updated to align with present best practices.
- A program for improving storage space for the Harare Regional Store is completed.
- Coordination between NatPharm and the partners has been improved; NatPharm provides key financial information to partners to facilitate reimbursement of funds.
- All software developed for distribution has been converted to Microsoft Dynamics NAV; key commodity and customer data have been input into Microsoft Dynamics NAV.
- Communication links between the Harare central office and branch stores have been substantially improved through the introduction of fibre optic lines.
- Many changes to infrastructure and equipment have been completed, including generators for all stores, new cold room compressors for Harare Regional Store, and installation of insulation at Harare Regional Auxiliary Store.

Despite these significant improvements, additional storage space is required at the Harare Store to meet the growing storage needs resulting from increased commodity consumption rates. Without this additional storage/racking, NatPharm will face a serious storage shortage in the near future.

The Government of Zimbabwe through its Strategic blueprint, ZimAsset 2013-2018 outlines the need to improve infrastructure in all sectors of the economy and this document has been prepared in the context of the blueprint.

II. CONTEXT

The Global Fund management after discussions with the Minister of Health and Child Care (MoHCC) in 2014, made a deliberate decision to prioritise construction of a state of the art modern warehouse for NatPharm among all the PSM activities. This decision culminated in the ring-fencing of all PSM funds under approved grants until the completion of the warehouse.

The MoHCC has since initiated the processes that will culminate in the construction of a new state of the art modern warehouse in Harare Central Hospital grounds. The Ministry constituted a Steering Committee in May 2015 to provide an oversight for the construction and the committee has since developed a roadmap for the construction. The Steering Committee visited four modern warehouses in Johannesburg, South Africa, to learn more on modern warehousing and the lessons learnt have been incorporated into the concept for the design of the proposed Natpharm warehouse.

The increase in warehouse space will be accompanied by modernization of the structures, equipment and systems; for long term sustainability, the use of materials and construction resulting in energy efficiency as well the use of energy efficient equipment have been identified as essential elements of the infrastructure sustainability strategy. Solar power will also be part of the investment in an environmentally friendly and sustainable energy solution for the proposed NatPharm warehouse.

The Global fund committed funds based on the MOHCC priorities and milestones articulated in the roadmap. The funds available for this infrastructure improvement are time bound and need to be used within a relatively short period.

UNDP is the PR for the management of the funds and will contract consultants for the preparation of the designs and tender documents for the new stores as well as the supervision of the construction of the stores including the supply, delivery and the installation of the necessary equipment.

In the roadmap, one of the key activities is the engagement of consultants who will facilitate the development of the designs and the tender documents for the central stores infrastructure and equipment.

The proposed consultancy aims to provide NatPharm with all the necessary technical support for the provision of the required reference documents for the design of the building including the tender documents and all the other required materials as per the main objectives of the consultancy and as detailed in the specific objectives herein below by 31st October or early November 2015.

III. MAIN Objectives of the assignment

A team of four consultants will work together to achieve the main objectives of this assignment which include:

1. Detailing the concept described in the concept note and the client brief for warehouse infrastructure, equipment, temperature control systems and energy supply.
2. Prepare the designs , architectural, structural, civil works and mechanical and electrical works drawings , Bill of Quantities and the Engineer's Estimate as per client brief and the concept note
3. Prepare a Program of Works / Master Plan of the Project showing the calendar of the different activities to be carried out, their sequencing and the Critical Path of the activities.
4. Prepare the Bid Documents for the purposes of Tendering of the Proposed Works including participating in the tender evaluation and recommendation for Award.
5. Provide a scale model (on laminated posters)of the store as per final result after the completion of the works.

1. Specific Objective - Improving / Detailing the existing Concept Note

1.1. The warehouse/Central Store

✓ General Storage Area:

- Identify the appropriate size and location of the area (three dimensions: surface and levels) for bulk storage within the space to be constructed in this phase, if any
- Identify the size and location for the area for racked storage, and eventually the area required for storage on shelves.
- Identify the area for locating the cold store
- Provide a detailed layout of the different storage areas.
- Describe and quantify the equipment required for handling and storage, and determine the exact location for this equipment in the different storage areas of the store.
- Eventually adapt the size of the store to accommodate the maximum number of pallets approximately (20,000pcs) rack lanes.

✓ Receiving Area:

- Identify the appropriate size and location of the receiving area
- Describe and quantify the equipment required for receiving and determine the location of this equipment in the store.
- Determine and design the area for transit storage awaiting transfer to the storage areas

✓ Picking Area

- Identify the appropriate size and location of the picking area Describe and quantify the equipment required for picking "retail and wholesale" commodities and flow of goods, and determine the location of this equipment in this part of the store.
- Define the areas for charging electrical equipment stackers, bar code readers, etc.

✓ Verification/Manifesting and Dispatch Areas

- Clearly situate and specify the sizes and dimensions of both areas and loading docks,

- Identify the area for racked and bulk storage for dispatch goods
 - Provide a layout of the racking area.
 - Describe and quantify the equipment required for the flow of goods and verification.
 - Determine the exact location for the equipment in this part of the store
- ✓ **Cold room.**
- Describe the stores layout (surface and levels) inside the central store,
 - Provide a list of equipment requirement, and the equipment eventually to be transferred from the current existing store as well as Zimbabwe Expanded Programme on Immunisation (ZEPI) for vaccines management.
 - Propose energy supply, alarm and back-up systems
 - Propose required specific racking, shelving and handling equipment if any
- ✓ **Hazardous/Flammable Commodities Store**
- Provide a layout and specific construction requirements for this store
 - List the equipment required and site the equipment within this store.
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 - Site the store on the compound taking into account safety requirements and potential for future extension of the warehouse
- ✓ **Controlled Commodities Store/Area**
- Provide a layout and specific construction requirements for this store/area
 - List the equipment required and
 - Situate store/area on the compound taking into account safety requirements and potential for future extension of the warehouse
- ✓ **Existing Store**
- Identify equipment that eventually can be used in the new stores and be transferred to the new and/or other NatPharm store if any.

1.2. The Office Space:

- ✓ Use the existing and future estimated number of staff and levels of staff to determine the number and size of offices, meeting rooms and support areas.
- ✓ Propose a site within the compound adjacent to the store for the construction of a new office building and link to the central warehouse.
- ✓ Design and describe the offices using landscape and individual offices for each level and service of NatPharm, and
- ✓ Describe the sequence of activities and works linked to the relocation and construction of offices.

1.3. Parking of Personnel Vehicles

- ✓ Design the parking area for staff and visitor's vehicles,
- ✓ Situate its location in the compound, and
- ✓ Propose the time schedule for its construction.

1.4. Parking Transport Vehicles

- ✓ Design the 'final' parking areas for NatPharm Delivery trucks, trailers and services and monitoring vehicles,
- ✓ Identify the locations in the compound
- ✓ Provide the timing for their construction

1.5. Internal Roads, Circulation, Fencing and Gates

- ✓ Propose circulation of vehicles and persons inside the compound
- ✓ Provide the location of the internal roads, the fencing type and separations within the compound as well as the gates for the circulation of vehicles and persons in the compound.
- ✓ Describe the works required and
- ✓ Describe the sequence and calendar of the works.

1.6. Miscellaneous

- ✓ Describe the fencing required to separate the different areas of circulation within the compound
- ✓ List the buildings/areas that are to be demolished during the different stages of the works and specific activities
- ✓ Propose the adaptations required after demolishing these buildings
- ✓ Present an estimated budget for these works

2. Specific Objective-Warehouse/Central Stores Drawings

Prepare the drawings for the following:

- ✓ The compound master plan with the overall layout of the different elements clearly shown
- ✓ The warehouse/ Central Store building, with the following functional areas clearly indicated;
 - The central store general storage area
 - The central store receiving area
 - The picking and
 - The cold store
 - The Hazardous/Flammable Commodities goods store
 - The controlled substance area
 - The central office building
 - The manifesting and despatch areas
 - The Equipment charging area/store
- ✓ Parking's, gates, access roads and loading and off loading docks

3. Specific Objective-The Temperature Control Requirements

Provide description of the following:

- ✓ The temperature requirements for the different areas of the main stores, cold store, Hazardous/Flammable goods store and offices.
- ✓ The internal and external insulation including the roof insulation, radiation barriers and gates to be used
- ✓ Areas / walls where air conditioning systems can be connected

4. Specific Objective-The Security Systems

- ✓ The fire prevention and firefighting requirements, system and equipment and location of all these inside the buildings and compound
- ✓ The security systems: circulation/access of goods and persons in the compound and buildings, CCTV monitoring of stores, docking stations , gates and all necessary access control system
- ✓ External lighting system inside the compound.

5. Specific Objective-List Of Additional Storage And Handling Equipment Required:

Provide detailed description and quantification for the following:

- ✓ Storage:
 - Mezzanines
 - Racking
 - Shelves
 - Temperature monitoring
 - Automatic doors for internal stores movement
 - Cold room
- ✓ Handling equipment:
 - Stackers
 - Manual pallet carriers
 - Carts for boxes
 - Conveyor belts fixed and movable
 - Picking lines for large orders
 - Picking lines for primary health facility orders
 - Packing equipment
 - Bar code readers (Radio Frequency) system

6. Specific Objective-Energy Supply And Wiring Systems

- ✓ For the main store
- ✓ For the cold store
- ✓ For the central office
- ✓ For the other buildings and

The stores energy source should be mainly solar power. It is proposed that the solar system will use both a) direct solar energy during day time, and b) energy of the battery systems

during the night times, and where insufficient solar energy can be produced during day time.

The energy supply is also expected to include the connection to the national power grid as first back up; while generators will be the second back up for the cold stores in particular, and for the other warehouse operations and offices.

The roof structure and strength will be conceived to receive large scale solar panels. The specific area and size will be determined and roof structure adapted for this part of the roof where required. Specific rooms for the battery and inverter systems will be included into the structure if and where required.

7. Specific Objective-Water Supply-Evacuation And Sanitary Systems

NatPharm's water supply and drainage system will also need to be adapted to the new infrastructure situation. The water tower will need location for water for fire prevention and fighting and the securing of sanitary systems

Collection of rain water for internal use (toilets, truck cleaning, and garden) and use of different piping for rain and drinking water as well as collection tanks will be part of the design.

The same is valid for the sewer system. Note also that docking areas will be relatively low and need proper evacuation during the rainy season.

Sanitary blocks are to be adapted to the new situation and legal requirements.

8. Specific Objective: Cold Room Management

The warehouse infrastructure will include a cold store. This cold store will cater for the storage of a number of essential medicines and laboratory reagents, vaccine, kits and materials that need specific temperature requirements beyond the standard warehouse storage conditions. Two separate cold rooms will be provided so as to avoid a crisis in case of breakdown of one of the two. There is a long term potential for the ZEPI supply chain including the storage and distribution of vaccines will also become part of NatPharm responsibilities. This will mean that the cold store will also need a provision for vaccine storage.

There is an option under consideration to have one main cold room build and isolated that may cater for all storage between 2 - 8 °C and small areas or store rooms for temperatures of up to - 25°C. That type of storage can use the same equipment for storage and handling as for the general store. The use of such a store may have an impact on the overall infrastructure as this option may provide for a cold store completely integrated into the main warehouse as opposed to a separate store.

The warehouse consultant and the engineers will include the work on this element in his support and eventually get advice from the other engineers to prepare recommendations for NatPharm with regards to this element of the infrastructure within the context of the stores design preparation.

This specialised activity is essential to determine the final specifications and drawings for NatPharm's store.

The main activities in connection with cold room management include:

- ✓ Determination of the appropriate size and design of the cold room based on the overall cold storage volume requirements for the ZEPI program as well as for the other essential medicines, laboratory reagents, kits and materials with a projection for the coming 10 years.
- ✓ Evaluate the options for one cold room, the use of individual stand-alone cold rooms only or hybrid(s).
- ✓ Identify the most energy efficient solution for NatPharm for this cold rooms.
- ✓ Identify the type of additional equipment eventually required for the proposed options and an indicative cost of the equipment, transport (moving from other sites).
- ✓ Provide recommendations on the back-up solutions required for the specific vaccine storage if any including specifications and indicative unit costs.

Deliverables:

- ✓ A list of recommendations for the cold room space requirements for the next 10 years
- ✓ Specific technical recommendations for the construction of the store.
- ✓ A list of options and preferred option for cold room-storage equipment.
- ✓ References to energy efficient cold rooms and sustainable energy sources if applicable.
- ✓ Indicative budget for procurement and maintenance costs.

9. Specific Objective: Sustainable Energy Technical Support

The decision to support NatPharm's new infrastructure with sustainable energy solution makes a lot of sense in relation to the impact on the overall operational costs, NatPharm financial sustainability and capacity to function outside the capital and the environmental impact.

The investment will be important and needs to be supported by the right equipment to provide a maximum of sustainable energy to NatPharm.

There is also a need to use energy efficient solutions for NatPharm construction and equipment, temperature control equipment in particular, to optimize the use of energy using modern technologies.

The consulting team leader will include support to the preparation of the recommendations for NatPharm with regards to this element of the infrastructure within the context of the master plan preparation.

This work determine the potential of using renewable energy sources as the main source of energy for warehouse operations outside the capital and maybe also serve as reference for similar projects in other countries in the region.

The main activities are:

- ✓ Propose potential energy efficiency gains by using specific construction materials or strategies within the framework and budget identified in the concept note.
- ✓ Identify the most energy efficient solution for NatPharm for 'temperature control' of the warehouses and offices

The use of the outside air and night temperatures to cool the warehouse is an option that should be considered in the proposed air conditioning equipment.

- ✓ Identify the solar energy solution (s) (Photovoltaic) that will be most beneficial to NatPharm for both the central warehouse, the cold rooms including the type of solar panels and batteries, inverter systems etc...
- ✓ Identify the volume of equipment and indicative cost (eventually solar panels) that needs to be installed to provide at least 80 % of the energy required for NatPharm operations separated in the two elements of warehouses and offices.
- ✓ Identify the space where these panels should be installed on the roof and weight requirements for this roof structure.
- ✓ Identify the volume of equipment and indicative cost specifically for the cold store operations and provide a feasibility of using a major part of solar energy for this part of the NatPharm central store.

10. Specific Objective: Calendar And Sequence Of Activities

All activities will be indicated in an overall Master Plan that captures the calendar of activities as well as a calendar for each phase of the infrastructure works.

The sequence will take into account the fact that the project is time bound with regard to the funding for the construction of the warehouse.

11. Specific Objective: Scale Model

The consultants will provide a scale model presented on laminated posters as well as a tri-dimensional electronic scale model to allow for a clear understanding of the future structures and final expected result.

All the above eleven specific objectives need to be translated in reference documents to be used for the tender process

Note that the proposed works and documentation will take into account the national requirements.

IV. EXPECTED RESULTS

1. Description of the different elements of the store as per above (specific objective 1-11 above)
2. Drawings (Architectural, Civil/ Structural and M & E)
3. Crosscutting elements as energy supply, electricity distribution and wiring, water, security integrated in the above but also designed and drawn in detail
4. Scale models (specific objective 11)
5. Bid (Tender) documentation for building infrastructure and should include Bill of Quantities (BoQ) and Specifications where appropriate (including temperature control equipment)

6. The Scope of Works (SoW) for the tender documentation which should cover the following elements Main warehouse including all the required equipment Hazardous / Flammable goods store and handling equipment
 - Cold store and its equipment
 - Office space including all the furniture and fittings
 - Civil Works
7. Mechanical, Electrical and Access Control Services Bid (Tender) documentation including Bills of Quantities and specifications for office furniture, fittings and equipment,
8. Bid (Tender) documents including Bills of Quantities and specifications of security, Access Control and fire prevention/fighting equipment,
9. Bid (Tender) documents and specifications for equipment for alternative/sustainable energy solutions,
10. Calendar of the works and need for timely availability of equipment per phase.

Provide an estimated budget and value engineering proposals

V. THE CONSULTING TEAM AND ITS FUNCTIONING:

The consultants will be working under the direct daily technical supervision of Public works, whose role is to act as the Project Assurance on behalf of UNDP.

UNDP HAS OVERAL OVERSIGHT ADMINSTRATIVELY ON THE PROJECT

The Team Leader (TL) of the consultants will have the final responsibility for all the deliverables expected from the project and is administratively accountable to UNDP.

UNDP, the Ministry of Local Government, Public Works and National housing and MOHCC/NatPharm senior management will brief the consultant team at the start of the mission.

The consultant's team will present the draft design and documentation to the parties mentioned above for their observations and consensus in a formal meeting where the team will invite relevant partners and stakeholders.

Then final draft design documentation will be presented to the steering committee, MOHCC, the Ministry of Local Government, Public Works and National housing and UNDP senior management

The MOHCC Programme Coordination Unit (PCU) and the UNDP Programme Management Unit (PMU) will provide the necessary support to the process through their Procurement and Supply Management Experts.

An action plan and timelines during the first days of the mission and before starting the site assessments will be provided to UNDP and the Ministry of Local Government, Public Works and National Housing for their approval by the consulting Team Leader. Note that there will be basically 3 phases:

- Initial briefing and discussions with the national team,
- Preparation of the draft design and presentation of the initial proposal

- Preparation of the final design and presentation to senior management of UNDP and MOHCC/Natpharm

Any final comments will be included after the last presentation to compile the final consultancy report. It is expected though that a consensus will be reached during the second phase on the overall design and specifications.

VI. Period, Timeline And Payment terms

This consultancy is to start in 1st September 2015 with an expected result / final report by 31st October 2015.

The timelines are critical and no deviation is expected.

A presentation of the final results will be done to NatPharm and then the steering committee.

Payment terms

The consultant's team will present their reports according in three phases described above:

- Initial briefing and discussions with the national team,
- Preparation of the draft design and presentation of the initial proposal
- Preparation of the final design and presentation to senior management of UNDP and MOHCC/NatPharm

The consultants will be paid 15 % of the total amount after the presentation and acceptance of the inception report covering phase 1

25 % will be paid after the first major presentation and submission and acceptance of the relevant report.

The remaining 60 % will be paid after submission and acceptance of all final documents.

The Consultancy team lead will authorise all payment of his/her team members and all payments have to be approved in accordance with UNDP Financial rules and Regulations.

VII. Qualifications And Division Of Labor

1- The Architect team leader: (40 days)

Qualifications:

- ✓ A Master's degree or equivalent in Architecture
- ✓ At least 10 years' proven working experience in the construction sector in architectural work
- ✓ Experience in the preparation and supervision of large storage related construction projects is a must

- ✓ International Experience and experience in developing countries is a must
- ✓ Experience in the region and SADC countries is essential
- ✓ Experience in pharmaceutical warehouse construction/rehabilitation is an asset
- ✓ Experience and skills for leading teams is essential
- ✓ Capacity to deliver work under pressure is a key asset for this assignment
- ✓ Registration with the Architects Council of Zimbabwe is a must.

Responsibilities:

Team leader

- ✓ The team leader will have the overall responsibility for this assignment and the timely submission and quality of the results and reports.
- ✓ The team lead will coordinate the work, prepare a calendar of activities for the team and coordinate and monitor progress for this assignment
- ✓ Take the lead for specific objective 1 and share the workload with the other members of the team
- ✓ Have the final responsibility and coordinate the work for specific objectives 3, 6, 10 and 11
- ✓ Contribute to Specific objective 7,
- ✓ Is responsible for all the expected results and deliverables
- ✓ Ensure and/or delegates the work under expected result 4
- ✓ Coordinate the response for the totality of expected results
- ✓ Is a key contributor for the expected results 5 to 7
- ✓ Coordinate the work on expected results 8 and 9
- ✓ Be responsible for the development of the concept for the warehouse infrastructure and associated requirements
- ✓ mechanical works progress for this assignment
- ✓ Ensures that country knowledge is incorporated in all key results
- ✓ Has final responsibility in the presentation of the detailed estimated budget.
- ✓ Coordinates the work of the team

2-Engineer (30 days)

Qualifications:

- ✓ A master's degree in Construction engineering
- ✓ At least 10 years' proven working experience in the construction sector
- ✓ Experience in the preparation and supervision of large construction projects including storage infrastructure is essential
- ✓ Responsible for electrical, structural, mechanical and civil works
- ✓ Experience in turnkey solutions is an asset
- ✓ International experience especially with FIDIC Contracts (Red Book) is an asset
- ✓ Experience and skills for working in teams is essential
- ✓ Capacity to deliver work under pressure is a key asset for this assignment

Responsibilities:

The engineer will

- ✓ Make sure all proposals and documentation comply with national regulations
- ✓ Contribute largely to specific objective 1 and
- ✓ Takes a key role in specific objective 2
- ✓ Contribute to objectives specific 3 and 4
- ✓ Play an important role in specific objectives 6 and 7
- ✓ Is the lead for expected result 2
- ✓ Contributes country knowledge to incorporate in all key results
- ✓ Is a key contributor for the expected results 5 to 7
- ✓ Play a central role for expected result 9 and 11.
- ✓ Have the overall responsibility for the electrical, mechanical, structural and civil works and the timely submission and quality of the results and reports.
- ✓ Registration with the Engineering Council of Zimbabwe is a must.

3-Quantity Surveyor (30 days)

Qualifications:

- ✓ Master's degree in Quantity Surveying or related field
- ✓ Minimum 7 years' experience in quantity surveying
- ✓ Proven experience in quantity surveying of warehouses
- ✓ Experience in pharmaceutical warehousing and distribution is a key asset
- ✓ Experience in developing countries and the African region is essential
- ✓ Experience and skills for working in teams is essential
- ✓ Good communication skills will be important for the success of this assignment
- ✓ Capacity to deliver work under pressure is a key asset for this assignment
- ✓ Proven report writing skills is a key qualification
- ✓ Registration with Zimbabwe council for Quantity surveyors is a must.

Responsibilities:

- ✓ Initial feasibility studies
- ✓ Ensuring materials are suitable for the environment
- ✓ Estimate what's involved in the project, based on measurements of the designer's or client's sketches.
- ✓ studies the architects' and engineers' plans, identifies the costs involved, and
- ✓ then sets an overall estimated budget for the project.
- ✓ Estimates and cost advice of the project
- ✓ Plan costs to help the design team stay within the project budget using practical solutions.
- ✓ Prepares the final detailed estimate of requirements (BoQ), together with a project architect. This is the basis for evaluating tenders.

NB-all the consultants will need to be available immediately and will work with the relevant officers of the Ministry of Local Government, Public Works and National Housing ,who are the overall technical supervisors of the project on behalf of the Steering Committee.

4-Warehouse specialist: (12 working days)

Qualifications:

- ✓ Master's degree in Logistics, Warehouse management or related field
- ✓ Minimum 7 years' experience in logistics and warehouse management
- ✓ Experience in Cold room management a must
- ✓ Proven experience in design of warehouse infrastructure, equipping stores with storage and handling equipment
- ✓ Experience in preparation of tender documents for and/or procurement in storage and handling equipment
- ✓ Experience in pharmaceutical warehousing and distribution is a key asset
- ✓ Experience in design and implementation of warehouse software is an asset
- ✓ Knowledge of Radio Frequency (bar code) reading systems is of importance
- ✓ Experience in developing countries and the African region is essential
- ✓ Experience and skills for working in teams is essential
- ✓ Good communication skills will be important for the success of this assignment
- ✓ Capacity to deliver work under pressure is a key asset for this assignment
- ✓ Proven report writing skills is a key qualification

Responsibilities and deliverables:

The warehouse specialist will

- ✓ Participate closely for the specific objectives 1.1,1.2,1.5 and 1.6 as well as 11
- ✓ Take the lead for specific objectives 4 and 5
- ✓ Contribute largely to the expected results 1
- ✓ Assist in the verification of expected result 2
- ✓ Focus on equipment and warehouse layout for the expected results 5 to 7
- ✓ List the office, stores, ICT equipment requirement for the warehouse
- ✓ Contribute to expected results 3, 8, 9 and 11 where appropriate

Deliverables:

- ✓ A list of recommendations for the warehouse construction works
- ✓ A clear proposal for the temperature control system
- ✓ References to energy efficient cold rooms if any but also the use of other energy efficient equipment in NatPharm where applicable
- ✓ The list (s) of potential solutions for renewable energy sources and detailed description for equipment
- ✓ The key elements to be taken into account for warehouse construction when renewable energy solutions are used
- ✓ Indicative budget for procurement and maintenance costs

Consultancy days

The number of working days is established at 12

Period:

- ✓ Preferably in October 2015
- ✓ Preliminary finding to be ready by the first weeks of October 2015
- ✓ Report to be submitted by 15 October
- ✓ Expected days of work: 12 working days of which 10 on site.