

Tender document

Competition with negotiations cf. the Public Procurement Act and the Regulations relating to public procurement part I and III

for

Coordination of Support to the Angolan National Water Resources Institute

Reference number: 32565-03

Submission date :

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12:00 hours

Contract period:

01.10.2013 – 31.12.2015

Innhold

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1 GENERAL DESCRIPTION

1.1 *Client*

The Norwegian Water Resources and Energy Directorate (NVE) is a directorate under the Ministry of Petroleum and Energy. NVE's mandate is to ensure an integrated and environmentally sound management of the country's water resources, promote efficient energy markets and cost-effective energy systems and contribute to efficient energy use. NVE also contributes to Norwegian overseas development assistance through institutional capacity building programmes in the energy and water sectors in a number of countries.

For more information about NVE, visit our website www.nve.no

1.2 *Scope of procurement*

In February 2013, The Angolan Ministry of Energy and Water (**MINEA**) and the Norwegian Water Resource and Energy Directorate (**NVE**) entered into an agreement on a Technical Assistance Programme covering the areas Renewable Energy, Energy Efficiency and Hydrology.

The assistance in the area Hydrology has as objective to build capacity in the Instituto Nacional de Recursos Hídricos (**INARH**) to manage the hydrometric network and use hydrologic data for the formulation of policy. The objective shall be achieved through providing training and technical assistance from NVE's hydrological department and other sources. However, the support to INARH needs to be coordinated by a technical focal point.

According to the signed Technical Assistance agreement, procurement of goods and services necessary for the implementation of the Programme shall be undertaken by NVE.

On behalf of the Programme, NVE now wishes to contract the services of an individual or a company that may provide the services described in the enclosed Terms of Reference.

1.3 *Partial Tenders*

Tenders for parts of the assignment will not be considered.

1.4 *Period of contract*

The contract period shall be 27 months (tentatively).

Depending on possible extensions of the Programme, the Client may extend the contract up to a maximum of 4 years on the same conditions. Extensions will be made in periods harmonizing with any extensions of the Programme.

Such an extension, if required, shall be notified to the consultant at least 2 months prior to the expiration of the current contract.

1.5 Announcement

The competition is announced in the MERCELL database, DOFFIN database and in the TED database.

1.6 Time schedule

The Client has set forth a preliminary time schedule for the process:

Activity	Time
Announcement in Merzell/DOFFIN/TED	Se Public Notice and/or Norwegian version
Submission deadline	02.09.2013
Opening of tenders	02.09.2013
Duration of tenders commitment	15.12.2013
Evaluation	Week 37
Contacts/meetings for clarification and/or negotiation	Week 37 - 38
Selection of bid and information to bidders	Week 38
Deadline for filing complaints	10 days
Signing of contract	After deadline for filing complaints

Dates after submission of tenders are tentative.

2 Competition Rules

2.1 Procedure

Competition with negotiations, of the Public Procurement Act of 16 July 1999 No. 69 as amended, see also the Regulations relating to public procurement, laid down by Royal Decree on 7 April 2006 No 402. The competition will be a 2 step competition, where the suppliers having submitted the highest rated bids will be invited to negotiations and to submit revised bids. Negotiations are thus allowed.

For this competition 2 - 3 suppliers will be invited to negotiations. For the selection of bidders, section 4 of this document shall apply.



2.2 Secrecy

The Client shall treat all bids and their contents in line with the Norwegian Public Administration Act § 13 and Royal Decree on 7 April 2006 No 402, concerning secrecy.

2.3 Confirmation of interest

Follow guidance given in the Merccell-database

2.4 Communication during the tender process

All communication during the process shall be routed via the Merccell-portal, www.merccell.no. This is to assure that all communication will be logged. When you are logged on to the competition, chose the flag marked "Communication", click on the symbol  "New message". Enter the information to the authority and then click send . The authority will then receive your message. If the question regards all bidders, the authority will answer the inquiry anonymously by giving the answer as additional information. Additional information is available under the flag "Enquiry", then the flag "Additional information". You will also receive an e-mail with a link to the additional information.

Requests received later than 10 working days prior to the deadline for the offer will not be answered.

2.5 Supplements or changes to the tender documentation

The Client reserves the right to supplement or change the tender documentation before the deadline for presenting tenders. If the changes are of a nature materially changing the scope of work or other important aspects, an extension of deadline will be announced.

Any changes in the tender documentation will be published in the Merccell-database. The changes will take precedence over previous versions of the tender documentation.

If the supplier becomes aware of lack of information or ambiguities in the tender document that may affect the implementation of the assignment, pricing etc., the Client shall be made aware of this immediately.

2.6 Cancellation of competition

The Client may cancel the competition and reject all bids if adequate reasons are found to be existent.

2.7 Sub-contractors

There shall be one main contractor responsible for the assignment.

The main contractor may use sub-contractors for parts of the assignment. In such case, the tender shall include information regarding which sub-contractors will be used for which parts of the work.

If the Consultant intends to sub-contract any part of the assignment, the Client will require documentation of the agreement, either in the form of a signed letter of intent, or a copy of a signed contract between the Consultant and any sub-contractor.

The main contractor is fully responsible to the Client for the engagement of sub-contractors, for committing them contractually to fulfil the requirements in the contract agreement between Client and main contractor, and for the work performed of sub-contractors.

3 Qualification requirements

See Public Notice in Merccell –database (TED-version)

Requirement	Supporting documentation
Supplier shall be in good order with respect to payment of tax and VAT.	Company tax certificate; Value added tax certificate. A certificate of tax and a certificate of payment of tax issued either by the local tax office or the tax office where the supplier has its headquarters. See: http://www.skatteetaten.no/Templates/Artikkel.aspx?id=9196&epslanguage=NO Foreign suppliers must submit certificates from the corresponding authorities to the Norwegian.
Supplier shall have a functioning HSE system.	HSE self-declaration
If the supplier is a company, proof of establishment must be submitted.	Norwegian companies: Company registration certificate. Foreign companies: Confirmation that the company is registered in a trade or business register as prescribed by the law of the country where the supplier is established.
Service provider shall have the financial capacity to undertake the assignment / contract	Annual accounts including management report and auditor's notes If a service provider has valid reasons not to submit the documentation requested by the award authority, he may prove his economic and financial position by submitting any other documentation that the award authority can accept.
Academic qualifications of staff offered	At least a MSc. in hydrology or closely related fields
The supplier must be able to deliver electronic invoices to NVE (Electronic Trading format (EET))	Confirmation from the supplier. For further information see, http://www.anskaffelser.no/e-handel/artikler/web-faktura-leverandorer

From the 1st of July 2012 all Norwegian state entities shall demand electronic invoices from their suppliers.

4 AWARD CRITERIA

4.1 General

The tender offering the economically most advantageous proposal will be selected, and the selection will be based on the criteria in this section.

Proposals will be ranked according to their combined technical (S_T) and financial (S_F) scores, calculated by the formula: $S = S_T \cdot t + S_F \cdot f$, where the t is 0.85 and f is 0.15.

4.2 Technical Criteria

The technical score S_T shall be the weighted sum of the scores for:

- Appropriateness of the consultants understanding of the assignment;
- Quality of Methodology and Workplan; and
- Qualifications of personnel offered.

Technical criteria will be scored on an absolute, and not relative, basis. All categories will be scored on a scale from 0 to 10, ten being best.

The scoring of the criteria will take into account:

Understanding of the assignment (weight 0.15)

The evaluation will focus on the appropriateness of the consultant's appreciation of the situation at hand and the purpose of the assignment as evidenced in comments to the Terms of Reference. Relevant, clear, specific comments backed by evidence from the ground are thus likely to be rewarded.

Methodology and Work Plan (weight 0.25)

The evaluation will focus on the completeness with regard to the Terms of Reference, the adequacy of proposed approach, effectiveness of suggested methods, potential for effective coordination with the Client and INARH, potential for transfer of capabilities, and proportion of time worked in Angola. The consistency of the proposed work plan with the resources suggested will be assessed, as will the work plan's resilience towards unforeseen events and the measures proposed for quality assurance of the work produced.

Qualifications of personnel offered (weight 0.6)

The evaluation will focus on the staff proposed having thorough and relevant experience for their respective tasks, thorough experience from the region, personal experience from development of institutions, capacity building experience, process facilitation experience, relevant language skills etc. In the case where teams are offered, the score will be the weighted average of the team members, using time planned for work on the project as weight.

When sub-criteria are used, the same weighting methodology will be used as for main criteria.

4.3 Financial Criterion

The financial scores of the proposals will be computed as follows: $S_F = 10 \cdot P_L / P$, where P_L = the lowest offered price and P = the price offered in the Financial Proposal in question. This criterion is thus weighted on a relative basis. All prices will be converted in the common currency NOK, if necessary. Exchange rates from the Norwegian Central Bank on the day of the deadline for submission will be used.

5 Submission of Tender

Special information for overseas Suppliers:

All tenders shall be submitted electronically via the Mercell portal, www.mercell.no by the tender deadline. Tenders delivered after the deadline will not be accepted. (The system does not permit tenders to be sent electronically via Mercell after the tender deadline.)

If you are not a Mercell customer, or you have questions regarding how the application functions, e.g. how to submit a tender, please contact Mercell Support at tel +47 21 01 88 60, or by e-mail to support@mercell.com. It is recommended to submit the tender in adequate time before the deadline. A minimum of 1 hour before the deadline is suggested.

If the authority should provide additional information that results in you wanting to change your tender before the deadline, you can access your offer, open it, make the necessary changes and send it again right up to the deadline. The last submitted tender will be regarded as the final one.

The tender requires an electronic signature when it is submitted. When sending the tender electronically, an electronic signature will be requested to confirm that you are the actual bidder who has submitted the tender. An electronic signature can be obtained at www.commfides.com, www.buypass.no or www.bankid.no.

We would like to remind you that it can take some days to acquire an electronic signature, and therefore recommend that this process be initiated as soon as possible.

The request for qualification shall be structured according to the structure presented below, accompanied with a signed cover letter.

The supplier is solely responsible for answering all questions, and for that criteria are answered and/or reviewed.

The application shall have the following structure:

1. A cover letter for the tender, dated and signed by an authorised person. The cover letter shall state the validity of the tender.

The tenderer shall be identified in the cover letter by the following information:

- Name
- Type of company / organization
- Official registration number (if relevant, official registration number in the Norwegian "Foretaksregisteret") or personal identification number
- Street address
- Postal address
- Telephone, fax and e-mail address

- Contact person
- Any deviations or conditions related to these terms should be explicitly stated. Reservations not included in the cover letter will not be accepted.

If the letter is signed by a person other than the one(s) authorised according to the Norwegian Company Act or similar legislation in other countries, the tender shall include a power of attorney.

2. Acceptance of terms. It should be stated that the terms of the Client's tender documentation are accepted. If the supplier has reservations regarding parts of the tender documentation, required specifications or other tender documents, it shall be clearly stated in the application. Any reservations must be specified, including consequences for performance, prices or other conditions. Reservations not stated in this section will not be accepted.

The same applies to non-conformity. Reservations and non-conformities shall be stated precisely and unambiguously. They shall be stated in such a manner that the contractor can evaluate them without it being necessary to contact the supplier, cf. Section 20-3 of the Public Procurement Act. Substantial reservations, and reservations or non-conformities that can result in uncertainty regarding evaluation of the bid compared to other bids, will result in the bid being rejected, cf. Section 20-13(1) of The Public Procurement Act.

If the supplier refers to standardized terms of delivery, or something similar, and such terms or conditions deviates from existing tender or contract provisions, it will be regarded as a reservation.

3. Tax- documentation (payment of in-come tax)
4. Tax- documentation (payment of VAT)
5. HSE-self declaration form
6. Documents providing information on the legal status of the Supplier
7. Annual accounts or similar for the last two years
8. Documentation of Academic qualifications of team members.
9. Confirmation that the supplier is able to deliver electronic invoices.
10. Documentation of any contracts/agreements with sub-contractors, if applicable.
11. Signed self-declaration form on salary and working conditions
12. Comments to ToR (Maximum 3 A4-pages)
13. Methodology and workplan, including time and manning schedules. (Maximum 10 A4 pages)
14. Presentations of the proposed personnel. The presentation shall state the man-months planned for him/her. (Maximum 4 pages)
15. CVs of the proposed personnel. (Maximum CV length strictly 5 A4-pages only)
16. Financial proposal. The price shall be quoted in Norwegian kroner (NOK) exclusive of VAT. Fee rates shall be given for all personnel (hourly rate). Tables presenting the total cost for fees, including a detailed breakdown on tasks and persons, and the total cost for reimbursable expenses, including a detailed breakdown on tasks, shall be included.

Enclosure 1: Terms of Reference

Terms of Reference for "Coordination of Support to the Angolan National Water Resources Institute"

Introduction

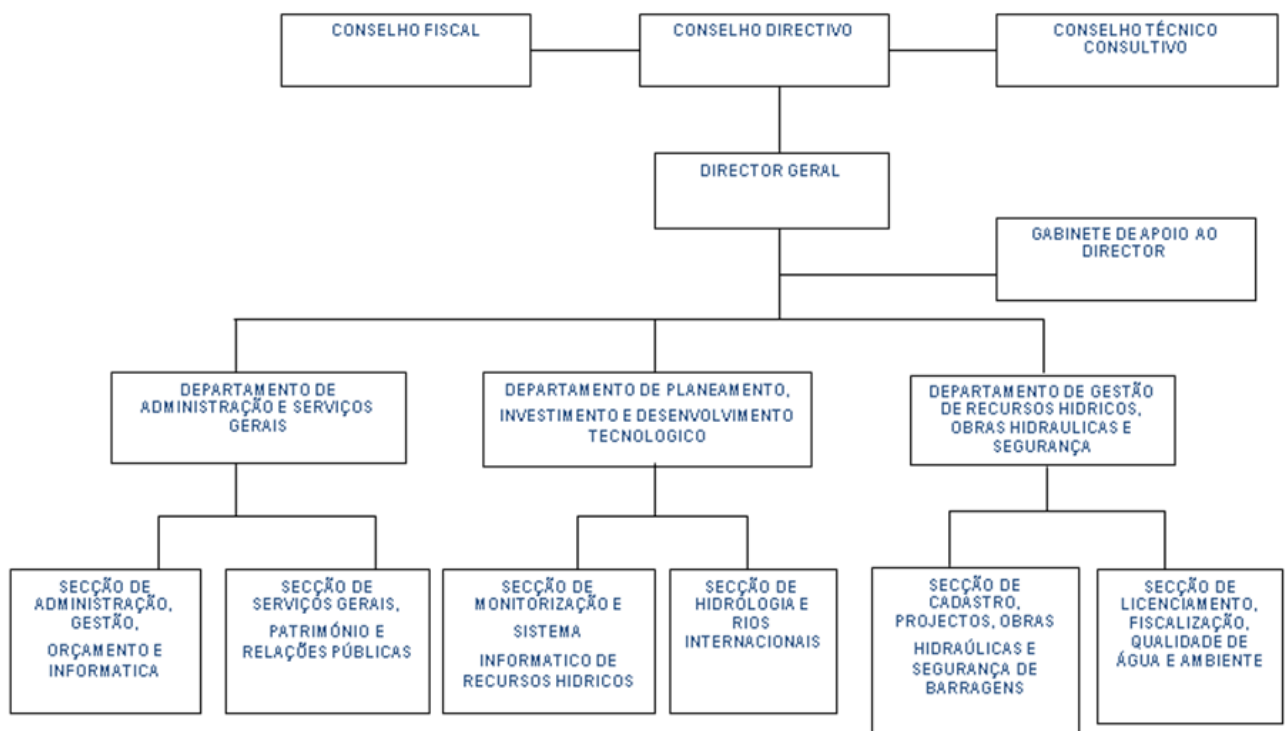
The National Institute for Water Resources (**INARH** – Instituto Nacional de Recursos Hídricos) is under the leadership of the Angolan Ministry of Energy and Water (**MINEA**).

Created by a Presidential Decree No. 253/10 dated of 16th November 2010, INARH started to function “*de facto*” in May 2012, when its Management was appointed by the Angolan Minister of Energy and Water. The INARH has become like a “heiress” of the former National Directorate for Water Resources (**DNRH**). After the dissolution of DNRH, its entire staff was transferred to the INARH.

At the central level, INARH develops its activities through the following services: Division of Planning, Investments and Technological Development (**DPIDT**); b) Division of Water Resources Management, Water Infrastructures and Dam Safety (**DGRHOHSB**) and c) Division of Administration and General Services (**DASG**).

At the regional level, the INARH will develop its activities through the Regional Directorates North (**INARH – Norte**), Centre (**INARH – Centro**), East (**INARH – Leste**) and South (**INARH – Sul**). The Regional Directorates will be manned with its own staff depending on each one’s specific needs. The figure below shows the organization of INARH.

ORGANIGRAMA DO INARH



Among other tasks of the INARH, the following can be emphasized:

- a. To prepare the National Policy of Water Resources;
- b. To secure the Planning and Management of Water Resources, having in mind their efficient and sustainable use;
- c. To monitor and evaluate the design and implementation of River Basin Water Resources Master Plans by the River Basin Authorities.

INARH is foreseen to have 61 staff, but currently it only has 12 staff members. Three of them are the Director-General and two Deputy Directors. This is a very small staff for carrying out many urgent activities in the 47 main River Basins and 30 secondary River Basins existing in the country.

Among the main important River Basin can be mentioned Cuanza, Cunene, Cubango, Catumbela, Bengo, Dande, Cuvelai and Zambezi.

Currently the INARH is carrying out the following tasks:

- Design of a Master Plan in the Angolan Portion of The Zambezi River Basin
- Phase I of Rehabilitation of the National Hydrometric Network
- Monitoring of Design of the National Water Master Plan (Plano Nacional de Água)
- Start of the Design of the National Cadastre for Water Resources

In the pipeline are the following tasks:

- Public Tender for the Design of Master Plans for Keve and Longa River Basins
- Public Tender for the Design of Master Plan for Bengo and Dande River Basins

Under the implementation of Component II – Water Resources – of the Project on the Institutional Development of the Water Sector (**PDISA**), a project co-funded by the Government of Angola and the World Bank, the following activities are foreseen:

- Development of a Master Plan for the Cuanza River Basin
- Development of Master Plan for a group of River Basins in Benguela Region (Rivers Cubal da Hanha, Catumbela, Cavaco e Coporolo)
- Rehabilitation of 189 hydrometric stations
- Installation of a Management Information System (MIS)
- According to the current Investment Plan for the Water Sector, development of 22 River Basin Master Plans are foreseen until the 2017.

To the current tasks of the INARH should be added the Management of Quiminha Dam built on Bengo River in the River Basin of the same name.

With its small human and technical capacity, the INARH will struggle to accomplish its tasks. Additional Technical Assistance is available through the Technical Assistance by the Norwegian Water Resources and Energy Directorate (**NVE**). However, the assistance must be coordinated by a dedicated person. This document describes the Terms of Reference for this coordinator.

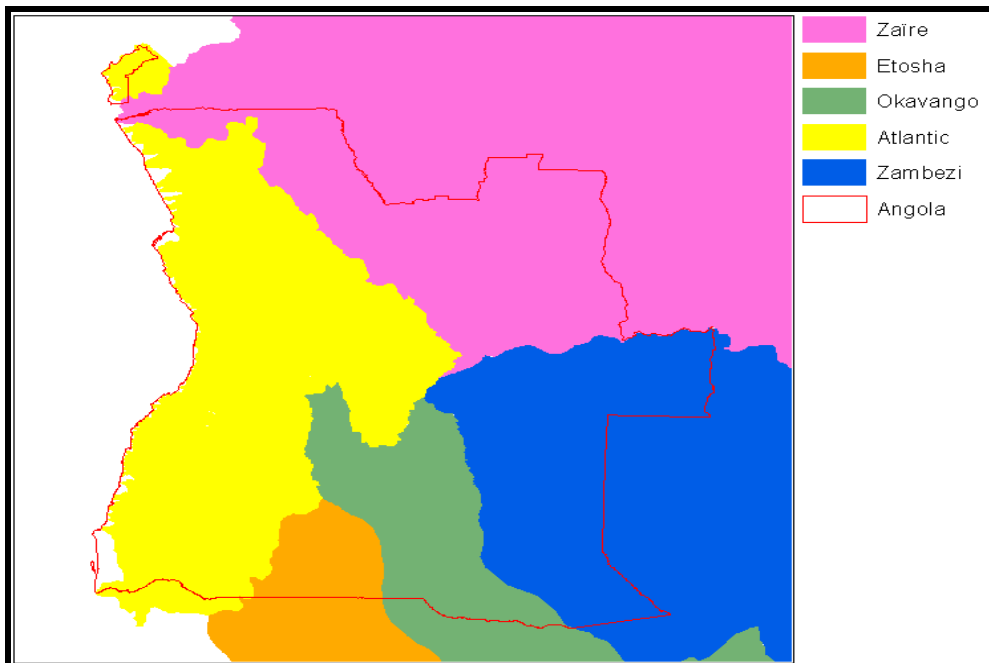
Background

Water resources in Angola

The Angolan climate is generally tropical in type, tempered by sea and altitude, but it does vary considerably depending on latitude, as well as the effects of the cold Benguela current along the coast. The mean annual rainfall in Angola is calculated as some 1014 mm, but exhibits great differences in spatial distribution. Along the south-western coast, in the Namibe region, the mean annual precipitation is at its lowest with around 50 mm a year. The coastal region has a gradually increasing annual precipitation northwards and from the coastal areas and inland. The central highlands have an annual precipitation of approximately 1300 to 1400 mm and the highest precipitation is to be found in the north-eastern part of the country, in the province of Lunda Norte, with approximately 1600 mm. It is over 1500 mm in the highest parts of the highlands, especially in Huambo, Lunda Norte and Uíge provinces. The hydrology in Angola generally reflects these precipitation patterns.

The wet season lasts from October to May. Temperatures in the coastal plain region average about 21°C in January and about 16°C in June. The central plateau is cooler.

The annual drainage from Angola is calculated as some 140 km³ and is among the highest in southern Africa. There are 77 hydrological river basins forming five main drainage areas: the Atlantic with 41% of the surface of the country, Zaire (Congo) with 22%, Zambezi with 18%, Okavango with 12% and Etosha with 4%. Lakes and lagoons are relatively few in number, covering a small area of land of approximately 5,500 km². Most of Angola's rivers rise in the central mountains and drain either to the Atlantic Ocean or the Congo River, but those in the southeast drain to the Okavango swamps in Botswana.



Main Drainage Areas of Angola

Hydropower is destined to be a major activity in Angola and is a non-consumptive water user and provider of clean energy. Dams and hydropower development may also lead to other benefits such as flood control and increased agricultural output. It is estimated that presently the existing hydropower schemes in Angola generate only about 4% of the total potential of the country, which has been estimated to be some 75,600 GWh/year.

Most of the hydropower production will occur in the central-eastern region of the country, where rivers fall rapidly before reaching the Atlantic Ocean. The region between the Cuanza and Catumbela rivers contains 80% of the inventoried hydropower potential of the country. Most of the Angolan hydropower schemes are located in the following river basins: Cuanza (Upper Cuanza and Middle Cuanza), Lucala,

Catumbela, Cunene (Angola), Cunene (international), Cubango, Queve, Longa, Cambongo, Quicombo, Evale and Balombo.

The river with the majority of Angola's hydropower resources is the Cuanza, containing some 45% of the country's hydropower potential. In all 11 hydropower schemes have been identified along the entire reach of the Cuanza River, which would produce 30,000 GWh/annum of hydroelectric energy. Two schemes, namely Cambambe and Capanda are already built. As far as Cambambe hydropower scheme is concerned, its first phase is concluded. The second phase is now under construction including heightening of the dam by 20 m and a new surface power station.

However, the inventory through Integrated Water Management Plans and an acceptable hydrometric network is necessary to assure the sustainability of the projects and the sustainable management of the water resources.

Institutional structure of the Energy and Water Sectors

The Ministry of Energy and Waters, MINEA, is the Government body for the energy and water sectors, being responsible for the development of sector policies and planning, coordination, supervision and control of activities related to recovery and rational use of the national water and energy resources. The organizational structure and responsibilities of the Ministry of Energy and Water and its directorates are given in Appendix 1.

The responsibility for the development of water resources used to belong to the National Directorate of Water Resources (DNHR) within MINEA. However, the institutional framework for the water sector was recently reformed. MINEA still maintains National Directorate for Water(DNA), which is primarily focusing on water supply and sanitation.

Although a new institution, the INARH remains within the framework of the Ministry of Energy and Waters. The idea is to introduce a more holistic management of water resources. INARH's main priorities will be execution of projects and programmes in the field of water resource management.

The newly formed National Institute of Water Resources is in many respects starting from zero – there is very little done on water resources so far in Angola after the colonial time. However, given the importance of Angola as a source of water for the whole region, it is very important that Angola has a well informed water policy, both for its own development and for the water security of some of its neighbouring countries.

Ongoing work

The Ministry is currently carrying out an Integrated Water Resources Master Plan (IWRM) which is partly financed by a World Bank loan. This project, Water Sector Institutional Development Project (PDISA), includes components of Water Resources Management; Hydrometric Stations Rehabilitation; Training; Integrated Water Resources Master Plans for the Cuanza basin and for a group of small river basins in the coastal area of the Benguela province. This latter group of river basins includes Cubal da Hanha, Catumbela, Cavaco and Coporolo. Consulting studies financed by other sources are in progress for the Okavango and the Zambezi basins which are both shared international transboundary basins.

Financed by "Programa de Investimentos Públicos - PIP", an Integrated Water Resources Management Plan for Zambezi River Basin is being run. This moment, the terms of reference for the Keve and Longa River Basins are being prepared, and for the 2nd half of this year the terms of reference for Bengo and Dande River Basins will be prepared.

The World Bank loan provides for the upgrading of some 189 of the country's 200 hydrometric stations within a time frame of 36 months. Angola is refurbishing 38 stations with its own funds. This latter work has been contracted and started in 2012.

Context of the assignment

The Norwegian Water Resource and Energy Directorate (**NVE**) is the Norwegian Government's principal authority in the water and energy sectors. NVE counts on a large hydrology department, that often render services to institutional capacity building in other countries. The capabilities of NVE's hydrology department are further described in Appendix 2.

In January 2013, NVE signed an agreement with MINEA concerning Technical Assistance to the energy and water sectors (**the Programme**). One of the activities specifically targets water resource management and support to the institutions responsible for this. The objective of the activity is: ***To build capacity in INARH to manage the hydrometric network and use hydrologic data for the formulation of policy.***

The Activity comprises the following tasks:

<i>Task 3.1.</i>	<i>Support in establishment of National Institute of</i>
<i>Water Resources</i>	
<i>Task 3.2.</i>	<i>Support in Rehabilitation of Hydrometric Stations</i>
<i>Task 3.3.</i>	<i>Support in Planning and Management of Basin</i>
<i>Studies</i>	
<i>Task 3.4.</i>	<i>Capacity Building & Training</i>

It is expected that the Activity will provide hydro power generation projects with hydrometric data and contribute to a better utilisation of water for other purposes, like potable water and irrigation.

Task 3.1: Support in establishment of National Institute of Water Resources

The country is will be divided into 4 regions and each region will have its own regional office under the new National Water Resources Institute: the Northern, Western, Eastern and Southern regions. Each regional office will be staffed as follows:

- Director
- Hydrologist
- Civil Engineer
- Water Quality Expert
- Topographer
- Hydrometrists
- Ancillary staff, drivers etc.

The newly recruited staff of the regional offices will need training in installation, operation and maintenance of the hydrometric gauging stations and other water resources aspects. Support will also be provided to the development of routines to update, maintain and operate the hydrological database.

There is also a need to establish a new hydrological database system with a new data server and database and other software which is included in the programme. Currently the DNHR is using the HYDATA software. However, they plan to migrate to the HYDSTRA software in order to make the system compatible with the hydrometric networks of other SADC countries. It is expected that Angola will be able to finance the migration to the HYDSTRA platform through the SADC-HYCOS project. If this should prove not to be the case, a reallocation of funds in this activity may be considered to allow financing of the software.

Training will be one of the most important aspects of the cooperation. They will need to populate the Institute with additional staff who will need training in all aspects of hydrology and water resources management.

Task 3.2 Support in Rehabilitation of Hydrometric Stations

Angola aims at rehabilitating some 50 hydrometric stations per year under financing arrangements with external and own funds. In addition, a small allowance has been included in the Programme for rehabilitation of a few key stations in basins which are important for the development of clean renewable energy hydropower projects.

There is no training of hydrometrics in the World Bank loan, and it is proposed to fill this gap with the current programme. This activity hence focuses on developing the capacity of the INARH as regards specification of needs, installation, operation and maintenance for stations.

For the hydrometric stations rehabilitation the needs of each station are different according to the local conditions. The general plan is to establish them with Photovoltaic power supplies and remote satellite transfer of measurement data etc. Station rehabilitation involves four main steps:

1. Assessment of condition of each station;
2. Make rehabilitation plan for each station;
3. Prepare an area plan for rehabilitation;
4. Procurement, construction and installation of equipment.

Training in all of the above steps is essential to ensure the sustainability of the network, which again will secure the necessary data for development of the country's clean energy hydropower resources.

Task 3.3 Support in Planning and Management of Basin Studies

The energy sector in Angola has plans for developing the hydropower resources of the country but they do not have an integrated water resources master plan to assist them. The basis for such a plan are detailed basin studies. The costs per basin study are of the order of 3 million USD, with a time frame of about 30 months per basin.

The new National Water Resources Institute will be responsible for the 77 river basins in Angola and there are plans to carry out Integrated Water Resources Management Master Plan studies for 22 of the river basins by 2016. As mentioned above in this section, the partly World Bank loan-financed PDISA project has started this work.

There is a need for further financing of studies, which is, however, beyond the scope of the present programme. Support to INARH is instead included for project planning and management and procurement support for the basin studies.

Task 3.4 Capacity Building & Training

The Directorate is today understaffed and once the Institute is established there will be a need for further increasing staffing levels. (See organogram for the new Institute of Water Resources Management, INARH). INARH will require Technical Assistance in its first 3 to 5 years of activities.

The following capacity building and training is envisaged under the Programme :

- Training of INARH staff in hydrometrics and station construction, operation and maintenance
- Training of INARH staff in the re-establishment of the Data Server and facilities

- Training of INARH staff in hydrological data processing, analysis and reporting
- Training of INARH staff in Integrated Water Resources Management and related fields including dam safety.
- Training in Project Planning & Management (basin studies)
- Training of staff in the 4 regional offices under the new Institute

Purpose of the assignment

NVE has a dedicated department for hydrology that in some areas counts as being one of the foremost professional environments on hydrology in Europe. Although it is an aim that this department shall contribute to the capacity building process under the Programme, the department does not have the capacity to coordinate the hydrology activity. It has therefore been decided to recruit an external coordinator for the hydrology activity. The hydrology coordinator can be either a team or an individual.

The purpose of the assignment is to coordinate the assistance on hydrology and hydrometric under the Programme, drawing on internal resources from NVE's hydrology department and external resources, as appropriate to achieving the objectives of the Programme. The overall outputs of the activities on hydrology is expected to be:

- National Institute of Water Resources staff competent.
- Hydrometric network effectively managed.
- National Hydrometric Data Base re-established

Scope of work and deliverables:

The following activities shall be implemented:

Activity	Outputs
1. Coordinate all activities in consultation with NVE's country manager and INARH's focal point in order to ensure timely execution of all tasks within agreed budgets. The Consultant must include a visit to NVE's hydrology department in the budget.	Activities completed within deadlines and budget.
2. Inception study, to establish the starting point and adequate coordination with other initiatives in the sector.	Detailed work plan for first 12 months.
3. Carry out a detailed training needs assessment of INARH. The assessment shall cover management as well as operational levels. The formal qualifications, work experience, assessed skills and training needs of key staff in management and operation and maintenance shall be described.	Gap assessment, including needs for tools for carrying out the work. Description of training needs at each level. Plan for on-the-job training, taking into consideration training activities in other programmes.
4. Support to INARH during establishment of the regional offices. The focus of these offices will be the operation of the hydrometric network, and it must be made sure that the staff recruited for these offices are adequately prepared for this task.	Staff at the regional offices qualified for their tasks.

Activity	Outputs
<p>5. Support INARH with planning and management of basin studies and the Integrated Water Resource Management Plan.</p> <p>Several basin studies are under various stages of implementation, with more to follow. The results from these will feed into the Integrated Water Resource Management Plan.</p> <p>The Consultant shall support INARH and develop their capacity for planning and procurement of basin studies, for follow up on studies under way and for use of results of completed studies in the IWRMP.</p>	<p>Quality Assurance of basin studies</p>
<p>6. Reestablishment of the hydrometric database. The integrity of the existing HYDATA database needs to be ascertained, and the necessary steps for migrating data to the HYDSTRA software identified and planned for. Once this is done, provided funding for the software is in place, the system switch should be implemented. The Consultant should supervise this process.</p>	<p>The hydrometry data available on the new platform (HYDSTRA), provided a license is funded through other sources.</p>
<p>7. Ad-hoc support to regional cooperation.</p>	

All tasks shall be carried out in close cooperation with NVE's programme manager and the NVE's hydrology department.

Input by MINEA/INAHR:

INAHR and, as appropriate, MINEA, shall provide:

- Staff for cooperation with the Consultant and capacity building efforts.
- Office space with access to electricity and internet.

Reporting requirements

The Consultant shall provide quarterly reports detailing work done and plans for the next 6 months.

Expected duration

The work will be carried out in the period October 2013 – December 2015. Depending on funding and decisions on extension of the Programme period, the assignment may be extended accordingly.

Bidders are encouraged to devise an approach and work plan to maximize the quality of the work within the resources available. A maximum of NOK 2 500 000 is available for the assignment.

Qualifications

The Consultant must comply with the following criteria:

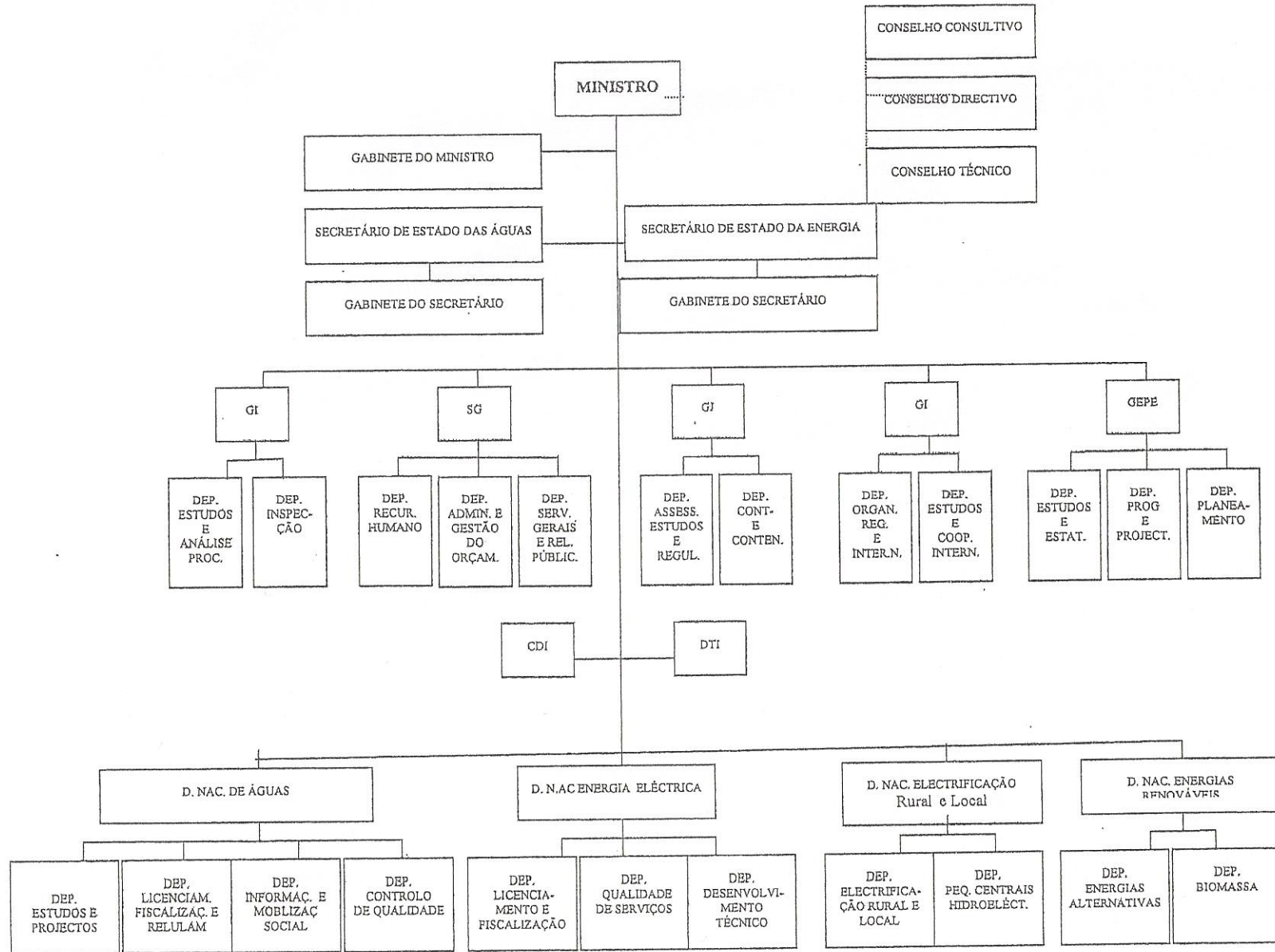
- Good knowledge of English
- Good knowledge of Portuguese or Spanish
- At least a MSc. in hydrology or closely related fields
- Minimum 10 years relevant experience
- Broad experience from water resource management
- Experience from Africa

Experience from public sector administration is an advantage, as is experience from river basin modeling, management of hydrometric data, Geographic Information Systems and analysis of basin studies.

Appendix 1.

Chart of MINEA's organization

Organigrama



O Presidente da República, José EDUARDO DOS SANTOS.

Appendix 2.

Presentation of the Hydrology Department at the Norwegian Water Resource and Energy Directorate

The Norwegian Water Resources and Energy Directorate (NVE) has the national responsibility for hydrology in Norway.

The Hydrology Department at NVE has more than 100 employees and is responsible for collecting, storing and analysing data. The department carries out research and development activities, as well as commissioned work, and is also responsible for the national flood warning service. NVE also has experience from many parts of the world in providing expertise in water resources assessments.

Data collection

The water-related parameters currently collected by the Hydrology Department cover the land-phase of the water cycle:

- Water levels and discharge
- Water temperature
- Ice on lakes and rivers
- Sediment transport
- Snow
- Glaciers
- Soil moisture and groundwater

NVE displays hydrological real-time data on the internet: www.nve.no/realtimedata

Data Storage

The data are quality controlled and stored in our national hydrological database system, called "HYDRA II". This database comprises both observation data and the software for analyses, and is in general open for use by registered external users.

Analyses and assessments

Our expertise includes, for example, station network design and operation, measurement and observation technology, basic and advanced data processing, hydrological database management, environmental impact assessments, and hydrological analyses in general.

Research and development

Our research focuses on understanding processes in the hydrological cycle with a specialization in the areas of the water balance, cryosphere and erosion/sedimentation. Observations, experiments and modelling are key components of the research. The effect of climate change is a key research topic. Recently research related to natural disasters and extremes has become a priority, including studies of floods, droughts, avalanches and landslides in a present and future climate.

Enclosure 2: Model self-declaration for HSE, translation from Norwegian

Statement concerning health, safety and environment

This certification concerns:

Company:

Address:

Postal code:

Country:

You are required to tick-off *one* of the alternatives below:

1)

I herewith confirm that this company has introduced systematic procedures to ensure compliance with the health, environmental and safety legislation and satisfies the requirements of The Regulation relating to systematic Health, Environmental and Safety Work in the company (the Internal Control Regulation), laid down by Order in Council of 6 December 1996,

2)

I herewith confirm that this company is in the process of establishing systematic procedures to ensure compliance with the health, environmental and safety legislation and expects to meet the requirements of The Regulation relating to systematic Health, Environmental and Safety Work in the company (the Internal Control Regulation), laid down by Order in Council of 6 December 1996, by

For foreign contractors who are to perform work in Norway:

I herewith confirm that, in preparing this offer, the requirements that follow from The Regulation relating to systematic Health, Environmental and Safety Work in the company (the Internal Control Regulation), laid down by Order in Council of 6 December 1996, have been taken into consideration.

We accept that, upon request, the contracting party will be given the right to a review and verification of the company's system for the safeguarding of health, environment and safety.

Binding signature

.....
General Manager

Date of signature:

.....
Employees representative

True translation certified:

Enclosure 3: Self declaration on Salary and working requirements for personnel under service contracts with Norwegian public institutions

With reference to the Circular dated 16 July 2005 from the Ministry of Administration and Reform, Norwegian public institutions shall ensure that the use of personnel engaged under service contracts complies with ILO Convention No. 94 regarding work clauses to guarantee equal working conditions regardless of nationality.

The provider shall therefore ensure that its own employees and employees of any sub-contractors enjoy the salaries and working conditions laid down in tariff agreements, regulations or whatever normally applies to the place and work in question. The manager of the entity is responsible for ensuring compliance with this regulation.

All contracts that the provider enters into that cover work under this contract shall include these provisions.

If the provider fails to comply with these provisions, the Client is entitled to retain part of the payment until compliance is documented. The amount to be withheld shall equal twice the amount saved by the provider.

The provider shall upon request present documentation regarding the salaries and documentation used.

I hereby confirm that systematic measures have been implemented to meet the above requirements in connection with salary and working requirements for personnel under service contracts with Norwegian public institutions.

Place: _____ Date: _____

Signature: : _____

Enclosure 4: Contract format

It is the intention to enter into a contract based on the FIDIC Client/Consultant Model Services Agreement, Fourth Edition 2006.