**TENDER DOCUMENT**

in accordance with the Norwegian Public Procurement Regulations, Part II

Earth reinforcement system for avalanche catching dam - Samuelsberg

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# GENERAL DESCRIPTION

## Contracting authority

The mandate of the Norwegian Water Resources and Energy Directorate (**NVE**) is to ensure an integrated and environmentally sound management of the country’s water and energy resources. The directorate plays a central role in the national flood and landslides contingency planning and bears overall responsibility for maintaining national power supplies.

The NVE head office is located in Oslo, and the regional offices are located in Førde, Trondheim, Narvik, Tønsberg and Hamar. NVE has approximately 600 employees.

The Norwegian Water Resources and Energy Directorate, NVE is here after named “Client”.

## Scope

The contract comprises one project, which involves the furnishing (design and production) of an earth reinforcement system (earth retaining wall), to reinforce the steep impact face of avalanche catching dam; deflecting dams and a catching dam in northern Norway. The catching dam are constructed of earth fill, from excavations of loose soil/scree material or blasted bedrock.

The reinforcement system is meant to reinforce the steep front of a catching dam made of earth materials. The procurement entails design and delivery of the reinforcement system, as well as partial supervision of on‐site assembly.

The catching dam is placed in urban areas and intertwined with walking paths and outdoor activities areas and are in a very close proximity to people that live in the towns and villages where these are located. It is therefore especially important that the structures have a solid and trustworthy appearance. Experience, for example from Iceland, has shown that this is best attained utilizing stiff construction elements, i.e. facing units, and reinforcing elements made of steel. Using other materials has resulted in sometimes undesirable deformations of the steep front causing surveillance and maintenance cost to start much earlier than expected.

The services are further described in Annex 1: Scope of work.

## Important deadlines

The following deadlines will apply for this assignment:

|  |  |
| --- | --- |
| Activity  | Deadline |
| Invitation to tender published in DOFFIN  | Jan. 13th 2021, 18:00 CET |
| Site visits | Not applicable |
| Deadline for submitting questions relating to the tender documents | Jan. 25nd 2021, 12:00 CET |
| Final date of responses to submitted questions | Jan. 29th 2021, 12:00 CET |
| Submission of tender  | Feb. 5th 2021, 12:00 CET |
| Tender opening  | Feb. 5th 2021, 13:00 CET |
| Evaluation | Week 6 |
| Notification of award | Feb. 15th 2021 |
| Waiting period | Feb. 26th 2021 |
| Signature of contract | March 1st 2021 |
| Period of validity of tenders | 90 days |
| Client’s approval of tenderers design | Two weeks |
| Delivery date of the offered product/service | June 18th 2021 |

The deadlines after the tender opening are preliminary. An extension of the period of validity of tenders must be agreed with the supplier.

# TERMS FOR THE COMPETITION AND TENDER REQUIREMENTS

## Procurement procedure

The procurement is conducted in accordance with the Norwegian Public Procurement Act of 17 June 2016 (LOA) and Public Procurement Regulations (FOA) FOR 2016-08-12-974, Part I and II.
Client plans to award a contract without having a dialogue with the suppliers beyond making any clarifications / corrections. However, if Client find it required negotiations will be held.

The tenderer/supplier is strongly encouraged to follow the instructions given in this tender document with attachments and raise questions if anything is unclear.

## Confidentiality

The Norwegian Freedom of Information Act regulates the public access to the documents relating to a public procurement. The contracting authority and its employees are obliged to prevent others from gaining access to knowledge of information about technical installations and procedures or operating and business conditions that due to commercial importance are confidential, cf. FOA §§ 7-3 and 7-4 and, cf. the Norwegian Public Administration Act § 13.

## Period of validity of tenders

Tenders shall remain valid for a period as specified in item 1.3.

## Communication

All communication regarding this procurement shall take place via the Mercell web-page, [www.mercell.com](http://www.mercell.com)

Having opened the competition web-page, bidders must select the communication tab. Then click on the new message symbol. Enter the relevant information and press the symbol to send. The Client will then receive the message. If the question is relevant for all tenderers, the Client will answer this anonymously by providing the answer as additional information. Additional information is available under the Request tab and then under the Additional Information tab. You will receive an email with a link to the additional information.

Questions/inquiries that are received later than 5 working days prior to the deadline(s) will not be answered.

## Sub-contractors

If the supplier uses sub-contractors for parts of the work, the supplier must document that sub-contractor will have the necessary resources at his disposal. This can be done through a signed declaration from the sub-contractor, pledging the resources necessary for the assignment to the supplier. The supplier can not have more than two level of sub-contractors without NVE’s approval.

## Language

Tenders must be submitted in English or Norwegian.

# QUALIFICATION CRITERIA

The suppliers have to supply documentation that fulfil the following qualification criteria.

## Tax

| **Criteria** | **Documentation requirements** |
| --- | --- |
| The tenderer must have orderly conditions regarding payment of tax, labour tax and value added tax. | Tax certificate, not older than 6 months or last valid certificate. |

## Tenderer’s registration, authorization etc.

| **Criteria** | **Documentation requirements**  |
| --- | --- |
| The tenderer must be registered in a professional or trade register in the country where the company is established. | For Norwegian companies: FirmaattestFor foreign companies: Documentation that the company is registered in a professional or trade register as required by law in the country where the company is legally established. |
| The tenderer shall have had a minimum yearly turnover of 2.000.000 euros in 2019 in delivering earth reinforcement systems.The tenderer shall have a minimum equity ratio of 10%. | The tenderer shall submit a financial statement for the year 2019, verified by a certified auditing firm. |

## Quality assurance standards

The tenderer shall submit a certificate from independent parties to verify that an economic operator meets ISO 9001 quality assurance standards or equivalent.

|  |  |
| --- | --- |
| **Requirements** | **Documentation** |
| The tenderer shall have a quality control system (ISO 9001:2015 or equivalent) and be certified by an accredited third party. | Copy of ISO 9001 certificate or equivalent. |

# AWARD CRITERIA

Tenders will be assessed according to the following evaluation criteria

| **Criteria**  | **Weight** | **Documentation requirements** |
| --- | --- | --- |
| Price | wp = 75% | Completed price form (the price shall be stated in NOK or Euro). Prices shall be quoted exclusive of VAT, but inclusive of other taxes that apply. For price form see 5.2. |
| Competence | wc=25% | Three reference project last 7 years. The projects shall be similar to the Samuelsberg project, i.e. dams mitigating snow avalanche danger. Complexity, extent, location and cost shall be described. |

Points for price are calculated in the following manner: Lowest price/Tender price\* 75 points.

Points for competence are determined objectively from delivered documents. Accuracy of calculations is rounded to 0.1.

# TENDER SUBMISSION AND FORMAT

## Submission of tenders

The tenders must be submitted on digital format in the Mercell web-page.

## Format

The tender must be submitted in accordance with the following requirements:

1. Tender letter
2. Specification of the packages offered.
3. Documentation of compliance with section 3.1
4. Price form. Prices must be quoted in Euro or NOK, and the currency specified. If different bids specify different currencies, the bids will be compared using the exchange rate given by https://www.norges-bank.no/tema/Statistikk/Valutakurser/for transfers to the currency at the date of the deadline for submission.

# ATTACHMENTS

* Scope of work
* Template for tender letter
* Price form
* Contract format

Annex 1: Scope of work

Earth reinforcement system for avalanche catching dam - Samuelsberg

11.January 2021

1. Introduction
	1. Background

The Norwegian Water Resources and Energy Directorate (NVE) on behalf of Kåfjord municipality issues this invitation to tender ‐ Earth reinforcement system for avalanche catching dam Samuelsberg. The reinforcement system is meant to reinforce the steep front of a catching dam made of earth materials. The procurement entails design and delivery of the reinforcement system, as well as partial supervision of on‐site assembly.

* 1. Organisation and responsibilities

The Client’s organisation is as follows:

The district office in Alta is responsible for the design and construction work and the work is led by Anders Bjordal, e-mail: abjo@nve.no.

Multiconsult AS is the consulting geotechnical engineer. Their role is geotechnical design, and they will control the Suppliers geotechnical design delivered with the tender as well as the global stability of the catching dam area. They will also re-evaluate the ground- and stormwater system at the catching dam site.

HNIT Consulting is the “snow engineer” and they are responsible for geometrical design, coordination, and preparation of the technical part of tender documents. HNIT will also control the design of steel parts of the earth reinforcement system.

1. Scope of Work
	1. Services

The contract comprises one project, which involves the furnishing (design and production) of an earth reinforcement system (earth retaining wall), to reinforce the steep impact face of avalanche catching dam in Samuelsberg in northern Norway. The catching dam is constructed of earth fill, from excavations of loose soil/scree material, blasted bedrock or rock from tunnel.

The catching dam is placed in urban areas and intertwined with walking paths and outdoor activities areas and are in a very close proximity to people that live in the towns and villages where these are located. It is therefore especially important that the structure has a solid and trustworthy appearance. Experience, for example from Iceland, has shown that this is best attained utilizing stiff construction elements, i.e., facing units, and reinforcing elements made of steel. Using other materials has resulted in sometimes undesirable deformations of the steep front causing surveillance and maintenance cost to start much earlier than expected.

The Supplier shall submit all necessary drawings to the Client’s representative, i.e., all the necessary drawings for the installation contractor to do his job. A set of drawings, static calculation of the steel cages and geotechnical calculations, shall be submitted to the Client’s representative for approval before the production begins. Note that the Client will need two weeks for the approval process.

The Supplier shall at his costs deliver the material at construction site in Samuelsberg, Kåfjord municipality in Northern Norway. The Client is responsible for unloading the materials at the construction site. The Supplier is responsible for all other handling, shipping and transportation of the materials. The Supplier is responsible for import and customs clearance including all costs regarding this such as customs duty, VAT and taxes and all other costs. All costs related to this shall be included in the bid and shall be specified in the Annex 3 Price Form. The Client shall be informed about the delivery date one week in advance. The Client’s site manager/supervisor will direct the delivery to a storage area.

The installation of the reinforcement system will be executed under a separate contract.

The Supplier shall provide specialist(s) working on Supplier’s behalf. The Supplier will be notified about the start of the installation at least two weeks in advance. The specialist shall be experienced and knowledgeable about the installation of earth reinforcement systems and shall have familiarized himself with conditions at site, such as the reinforced fill and other pertinent issues, prior to his arrival at site. The Client is responsible for providing relevant information. The specialist shall assist the Contractor with the installation at the construction site for 3 periods each for 3 days at a time at the construction site. Travelling time both to and from the construction site will come in addition. The Contractors weekly working hours is Monday to Wednesday 0700-1800 and Thursday 0700-1130. The Suppliers and specialists work includes giving instructions on the installation procedure and supervision during the installation period. The three periods will be in the beginning stages of the installation, in the middle of the installation period as well as the latter stages of the work. The periods shall be arranged in cooperation with the installation Contractor and the Client´s representative.

However, the Suppliers support and supervision at the construction site may be affected by Norwegian and other international regulations regarding Covid-19. This must be taken into consideration and has to be detailed according to prevailing regulations at that time.

Estimated construction period and other key facts about the project are as follows:

* Construction period starts: Medio august 2021
* Construction period ends: Preferably by the end of 2021
* Quantity: Approx. 2.570 m². Corners are excluded in this number
* Location: Samuelsberg, Northern Norway; Lat/Lon: 69.5491556/20.5289954
* Maximum dam height: 12 m
* Approx. length: 240 m

The production shall be in accordance with approved European standards considering both design and quality of materials.

* 1. Drawings and documents supplied by the Client

The following drawings are included in this tender and provide information about the structures.

Text on drawings is in Norwegian and English.

Table . List of drawings.

|  |  |  |
| --- | --- | --- |
| **No.** | **Description** | **Scale** |
| 20254-D-B100 | Snow avalanche catching dam. Overview | A1-1:2500 |
| 20254-D-C100 | Snow avalanche catching dam. Plan view. Alignment 10000 | A1-1:500 |
| 20254-D-C101 | Snow avalanche catching dam. Profile: 1000. Details | A1-1:500 |

Following CAD-drawings are delivered on a dwg-format.

Table 2. List of dwg-files delivered with the documents.

|  |  |  |
| --- | --- | --- |
| **No.** | **Description** | **File format** |
| 20254-D-Terrain | Contour lines, 1 m | dwg |
| 20254-D-PLN-10000 | Plan geometry of alignment 10000 and boundary of fill | dwg |
| 20254-D-PRO-10000 | Profile of dam top and bottom | dwg |

* 1. Geotechnics
		1. Geotechnical site conditions

The structures will be constructed from excavations of loose soil/scree or blasted rock from tunnel. The Supplier will be provided with detailed information on soil properties at the construction site. Details for the project are given below.

1. The subsoil consists of granular soil with friction angle 36°.
2. Depth to bedrock is between 13m-20m.
3. Ground water level is assumed to be in level with terrain.
4. New ground investigations are planned in February, and site conditions may be revised afterwards.
5. The earth fill materials that will be used are blasted rocks from tunneling works nearby, and well graded frictional material with friction angle 38°.
6. The materials directly behind the steel mesh facing are rocks with fraction 100-200mm.

The construction material is the material from the collapsed dam. As of now the material is being transported to a temporary storage area at the coast east of the river, approximately 800 m from the construction site. Only 9 m from the impact face into the dam will be removed as it is thought to be enough space for the reinforcement of the rebuilt dam.

The catching dam will be founded on competent foundation. The facing material/core is mostly built on an old highway where the asphalt has been removed. The supporting fill on the lee side is partly founded on the old highway and partly on competent existing ground where the topsoil and other organic/incompetent material has been removed.

Extensive drainage system was constructed under the supporting fill in the initial phase (collapsed dam). Some modifications/extensions of it are planned before the building of the new dam will take place.

* 1. Construction of steep earth fill dams

In this chapter, the construction of the catching dam, which the reinforcement system is used for, is described. The required assistance of the Supplier is described. Drawings given by the Client are in Norwegian/English and are listed in chapter B.2.

* + 1. Construction of earth fill dams

The catching dam, which is for the most 12 m high, is made of earth fills with steep impact face (3:1, vertical:horizontal), constructed with the aid of the reinforcement system. The top of the catching dam has a width of 2.1 m and a sloping wedge (supporting fill/backfill) will be on the lee side of the catching dam. The slope of the supporting fill will be from 1:1.5 to 1:2. The catching dam will be built from loose soil/scree material and blasted rock from tunnel. The material is located at temporary storage site some 800 m from the construction site and is originated from the collapsed dam; the material will be reused.

The various fill categories of steep dams may in general be described as follows:

1. Foundation pad/levelling layer under the reinforced fill of catching dam
2. The reinforced fill will be founded on a compacted pad layer of varying thickness, resting on competent foundation. The material utilized for this will be the gravel used as foundation for the old dam.
3. Supporting fill in a sloping wedge
4. A sloping wedge on the lee side of the catching dam is made from the well graded frictional materials of the old dam.
5. Reinforced fill/core
6. The reinforced fill will be processed from the blasted rock from tunnel. The fill is compacted according to requirements.
7. Behind the facing panels, stones 100‐200 mm in diameter, will be placed. A geotextile filter may be used between the facing stones and the reinforced fill if necessary.
8. Reinforcement system (retaining wall system)
9. The steep impact face of the catching dam is constructed with the aid of steel reinforcement system and facing panels.
	* 1. Installation of the reinforcement system

See text in B.1.

* 1. Design of the earth reinforcement system

Fill material is as described in chapter B.3.1.

The Supplier designs the construction of the steep parts of the earth fill dam structures and the necessary number of anchors, compaction and pertinent lengths as applies. The lift thickness of fill layers should be 0.5 m to be able to fit to the remaining 1 m high gabions at the 5 m high dam, se Figure 1.



Figure 1. Schematic figure of 0.5 m high C-facing material on the left and existing 1 m high gabions on the right. Note that the figure does not show the 45° angle connection starting at bottom and to the right.

The Supplier shall define the grain size distribution of fill materials based on local site conditions.

The Supplier shall define the compaction requirements for the reinforced fill.

The Supplier shall in his design account for closed visible cages, ie. the top of each cage shall be closed.

The Supplier shall in his design account for the edges of the catching dam, as to prevent erosion at the edges. This could include a design of special edge elements (corners). The Supplier shall show on his drawings how his system accommodates these requirements for the edges. The design of edge elements shall be approved by the Client´s representative.

The Supplier shall define how to tie the top anchor to/into the core/fill to prevent the top row to loosen. As well how to prevent the core material from eroding into the 100-200 mm material at top during heavy rain.

* + 1. Drawings and documents delivered by the Supplier

The Supplier shall submit all necessary drawings to the Client’s representative, i.e., all the drawings, specifications, and instructions necessary for the installation contractor to do his job.

The Supplier shall submit design criteria and calculations of his design (steel and geotechnical) two weeks prior to commencement of production of the system, for the Client´s representative´s approval.

The Supplier shall submit a set of drawings to the Client´s representative for approval two weeks prior to commencement of production.

The Supplier shall provide detailed information on the construction of the reinforcement system, describing the technical aspects of the system and installation procedure.

* + 1. Design criteria

The reinforcement system shall be designed of steel and produced according to approved European standards. The geotechnical design shall be in accordance with Eurocode 7 and 8, or comparable standards. The structure is categorized according to Eurocode 7: Geotechnical class GC2 according to section 2.1 of NS-EN 1997-1:2004+A1:2013+NA:2016 and consequence class CC2 according to table B1 of NS-EN 1990:2002+A 1:2005+NA:2016. The Supplier shall specify the standards and codes applied in the design of the system and production, to be approved by the Client.

The steep impact face of the constructions shall be stable at an inclination 3:1 (vertical:horizontal).

The angle of internal friction of the fills for the reinforced part (reinforced fill) is 38°. The grain size distribution in the reinforced fill may be assumed to be 0‐200mm and the unit weight of the material is 19kN/m3. All material in calculations shall be treated as unfrozen material.

As mentioned earlier (Chapter B.1) stiffness of the front is of great importance. The facing panels of the system (impact face) shall be a steel mesh of sufficient stiffness – C or U shaped ‐ such that deflections within each lift are at a minimum. Supporting brackets of same shape as the facing units shall be employed to further increase the stiffness of the front. The supporting brackets shall have a secured connection vertically to the bracket above and below. The supporting brackets shall also have a secure connection to the soil reinforcement. These connections shall be bolted or constructed by other replaceable means to better facilitate maintenance of the front, should it be damaged by avalanche or rock impact.

The impact face of the structure shall be a steel grid with selected stones behind. The stones are to be sized 100‐200 mm and shall, in combination with the steel grid, form the appearance of the catching dam. If the steep impact facing units are damaged, repair must be possible, by relatively simple measures and without significantly changing the appearance of the face. The Supplier shall include information on reparation procedures.

The system´s reinforcing elements/strips shall be made of material not requiring any tensioning or special care before the fill material is placed on top of these, to better ensure the stiffness. Therefore, the reinforcing strips/elements shall be of steel, in one single piece that is connected to the supporting brackets.

The thickness of each of the main steel parts of the system, not covered with soil, is minimum 8 mm and for minor steel parts the minimum thickness is 5 mm. Anchors or reinforcing strips in the earth fill shall be of steel with a minimum thickness of 5 mm.

For steel quality and corrosion protection see chapter B.6.1.

The structures shall be designed to withstand loads as follows:

1. Gravitational load from the specified earth fill.
2. Seismic loading is omitted in this work.
3. Loading from snow‐cover on the dam is according to NS-EN 1991-1-3:2003/NA:2008 table NA.4.1(901), Storfjord Troms: Sk,0=5 kN/m².
4. Loading from vehicles acting on top of the dam: 15 kPa without partial coefficient or 19.5 kPa with partial coefficient 1.3. This is according guidelines in handbook N200 of the Norwegian Public Road Administration (NPRA), paragraph 205.6 and table NA.A1.2 (C) in Eurocode 0.
5. Avalanche load on impact face of dam between stn. 71 and 312 is according to following tables. The coordinate system is shown on Figure 2:



Figure 2. Map (design) plane and definition of various parameters. **u** is the avalanche velocity at impact face, **φ** is the angle of impact, **α** is the angle between impact face and terrain and **ψ** is the average inclination of the terrain at dam site.

Table 3. Misc. values for load calculation.

|  |  |  |  |
| --- | --- | --- | --- |
| *Item* | *Symbol* | *Value* | *Comments* |
| Density of avalanche dense part (core) | ρd | 250 kg/m³ |   |
| Density of avalanche debris | ρr | 250 kg/m³ | Assumed to be the same as for flowing avalanche |
| Height of old snow on ground | hs | 2 m | Estimated  |
| Avalanche flow height, dense part | hd | 1,5 m | Estimated |
| Angle of impact | ϕ | 90° | Assumed to be 90° at all locations |
| Angle impact face - terrain | α | ~90° | Assumed to be 90° at all locations |
| Terrain inclination | ψ | ~15° |  |
| Velocity | u | 16 m/s |  |

Table 4. Dynamic pressure Pd. acting for 20 sec in x,y,z-planes.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Catching dam | Acting at[m.a.g.l.] | Pd.x[kPa] | Pd.z[kPa] | Pd.y[kPa] |
| Stn. 71-312 | 0-12 | 64.0 | 19.2 | 19.2 |

Table 5. Initial peak pressure (dynamic), Ppeak, acting for 0.1 second in x,y,z-planes.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Catching dam | Acting at[m.a.g.l.] | Ppeak.x[kPa] | Ppeak.z[kPa] | Ppeak.y[kPa] |
| Stn. 71-312 | 0-12 | 192 | 58 | 58 |

Table 6. Point load from rocks/tree trunk within avalanche debris, Prock.x acting on 0.05m² area.

|  |  |  |  |
| --- | --- | --- | --- |
| Catching dam | Acting at[m.a.g.l.] | Prock.x[kPa] | Frock.x[N] |
| Stn. 71-312 | 0-8 | 4.3 | 210 |

Table 7. Static pressure from avalanche debris, Pstat at impact side.

|  |  |  |  |
| --- | --- | --- | --- |
| Catching dam | Pstat at foot[kPa] | Pstat at top[kPa] | Remark |
| Stn. 71-312 | 30 | 0 | Linear over 12 m height |

m.a.g.l.=meters over ground level.

* 1. The production of the reinforcement system
		1. Material quality

All materials shall be approved by the Client who may request that the Supplier submit a certificate assuring the quality of all materials used on the project.

All the materials shall be new and without flaws and fulfil all requirements on strength and classification.

Steel parts shall fulfil the following requirements:

Quality of steel: S355JR according to NS-EN 10025-1:2004.

All steel parts, including bolts, nuts, and washers, of the reinforcement system shall be hot dip galvanized after production.

Every steel part of the reinforcement system shall be hot dip galvanized according to NS-EN ISO 1461:2009 and EN ISO 14713-1: 2017 with a minimum thickness of zinc coating ≥ 805 g/m² (115 µm) which deviates from the standard values. Additionally, the reinforcement strips, buried in the dam’s fill, shall be coated with bitumastic paint the initial 2 m into the fill, with thickness of the coating not less than 350 μm. The Supplier has the option to replace zinc coating and bitumastic paint of reinforcement strips by adding 1 mm to the necessary thickness and width.

The site conditions are assumed to comply with environmental category C3.

Annex 2. Template for tender letter

Tender letter

*(Supplier shall complete the table below and sign under the table.)*

|  |  |
| --- | --- |
| Company name: |       |
| Company registration number: |       |
| Address: |       |
| Visiting address: |       |
| Telephone number: |       |  |  |

|  |  |
| --- | --- |
| Contact person: |       |
| Telephone number: |       | Mobile number: |       |
| E-mail address: |       |

The Supplier hereby confirms that the submitted tender is in accordance with the terms and conditions that are given in the tender documents.

We stand by our tender until the date given in the tender document. The tender can be accepted by the contracting authority anytime up to the end of the period of validity of tenders.

We declare that we satisfy the competition’s qualification requirements.

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Place | Date | Signature |
|  |  |  |
|  |  | Name in block capitals and stamp |

Annex 3: Price Form

Prices shall be stated in NOK or €.

Travelling time both to and from the construction site will be compensated separately by hours. Travelling costs as well as accommodation costs, will be reimbursed adding a 10 % fee.

The Client may assist arranging accommodation at Suppliers request.

Prices shall be quoted exclusive of VAT, but inclusive of other taxes that apply.

Supplier shall in his own words specify all the services that are included in the bid. This includes of course such as steel/materials delivered to construction site, travelling and accommodation costs and compensation for Suppliers supervisor. The Supplier is free to use his own form if more suitable.

|  |  |  |  |
| --- | --- | --- | --- |
| Ref. | Services | Fixed fee | Variable fee |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Currency used:

Annex 4. Contract template

NS8409 contracting standard is attached and is a part of the tender documents.