

SPECIFICATION OF REQUIREMENTS
MOTORISED EASEL FOR NATIONAL MUSEUM



(Illustration photo)

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1 Introduction

The invitation relates to the development, production and delivery of a motorised easel for photographing paintings at the New National Museum in Oslo.

This document describes what is to be procured and forms the basis of the suppliers' replies.

The specification of requirements consists of a general functional description of the purposes, needs and requirements relating to the delivery.

The indicated product dimensions derive from the actual room in which the product is to be located. External dimensions must be complied with.

Alternative solutions and functionalities for the described product may be submitted and further developed by means of planned negotiations.

The Supplier is responsible for the product's quality, strength, stability and durability. The Supplier is responsible for pre-production check measurements on site.

The Client is looking for a flexible, solution-minded Supplier with an interest in providing an optimum solution.

2 Client's specification for the desired functionality and product

2.1 Functional description

The easel is for use in photographing paintings and other two-dimensional art objects from the National Museum's collection. A solution is desired which can both be used as an ordinary, static easel and permits stitching by moving the painting vertically and horizontally.

2.2 Guideline dimensions

The studio in which the easel rig is mounted has a floor area of 120.7 m². The end wall behind the easel is 865 cm wide and 465 cm high. We desire an easel rig which exploits these dimensions to the full, in order to permit stitching of the largest possible paintings.

2.3 Area of use

Photographic workshop, paintings

2.4 Easel design

The easel rig must:

- Be motorised.
- Be software controlled.
- Be independent of camera platform.

- Secure the paintings safely when stitching.
- Withstand a minimum load of 100 kg.
- Be permanently fixed within the room.
- Move paintings at low speed, thus minimising movement of the canvas.
- Function with different light settings, such as normal flash, side light, UV and IR.
- Have an emergency stop system at 2-3 locations on the rig and in the studio.
- Have a rearward inclination of 7-8°, or an adjustable tilt solution connected with the boom/canvas holder (frame on which the painting stands), allowing the rig to be used as an ordinary easel without further securing of the painting during photographic shoot.
- Have fixing devices, boom/canvas holder and frames close to the painting in matt black.
- Have sensors recording whether there is an item on the rig and if the work extends outside the safe working area.

The easel rig **should preferably:**

- Have a variable-depth boom/canvas holder.
- Be in matt black, either as a whole or over as large areas as possible.
- Have sensors indicating if the weight exceeds the maximum.

2.5 Software

Software for controlling the easel must:

- Trigger the camera, regardless of camera platform. Including multi-shot.
- Have facilities for start-stop points, painting dimensions, overlapping and number of shots in case of stitching.
- Have a user-friendly interface permitting good work flows.
- Have an emergency stop.
- Have administrator start-up after emergency stop.
- Require operator login.
- Record all shot positions in a batch, thus allowing later shots of exactly the same section.
- During stitching, have time-adjustable stop-duration.
- Give a warning if the item is too large and in danger of colliding with the ceiling or wall.

Software for controlling the easel should preferably:

- Be able to control start and stop damping.
- Allow speed of motion to be adjusted.

2.6 Electrical connection/infrastructure

The electrical supply in the studio consists of 230V(50 Hz)/16A circuits. The Supplier must state whether this is sufficient or if further circuits need to be installed. Upgrading power circuits will be possible.

3 Installation and general requirements

Transport, installation, testing and training must be included in the bid. Desired date of operation is before 1 October 2019 or as agreed.

The Supplier should be able to offer a service contract.

The Supplier should be able to offer a warranty agreement in addition to the statutory rights.

The Supplier must be able to guarantee good support for both the rig and the software.

The Supplier must be able to guarantee spare parts for the rig for the foreseeable future.

The Supplier must be able to guarantee that the software can be upgraded to function together with future operating systems.

The above specifications of requirements form the basis for competitive tendering. It will be necessary to optimise the rig and software in cooperation with the final Supplier.

4 Working hours

It is assumed that all work will be completed within the ordinary working hours of 07:00-17:00, Monday-Friday. All overtime must be agreed with the Client and follow the rates in the applicable wage agreement.

5 Language requirements

Execution of the contract shall be in the English or Norwegian language. This covers all matters, including drawings, descriptions, reports, HSE, quality, nonconformities, site instructions, etc.

6 Delivery date

The client requires the Service Provider to have the capacity to initiate and execute the contract within the agreed period. Ordinary work must be started as soon as possible and no later than five working days after ordering, unless otherwise agreed. Contracts must be executed with satisfactory rates of progress.

7 Special conditions

7.1 MOM

The Supplier must draw up a document plan for supply of MOM documentation for all products under the contract, in cooperation with the Client. The document plan must be completed by the milestone laid down in connection with contract formation. (This section may be replaced if all that is needed is basic information and a product sheet for the procurement package).

The Supplier must itself complete and upload the MOM documentation (images, drawings and illustrations, together with other relevant documents such as operating tasks, maintenance requirements, etc.) in Pims365. Pims365 is the Client's tool for MOM information gathering where the Client covers the licensing costs and is willing to assist with training.

The Client will prepare ID numbers corresponding to the structure of the Client's cross-disciplinary labelling system (TFM), for the equipment to be procured. It is the Supplier's responsibility to physically label all products (equipment/components) before making them available. This labelling must follow the Client's TFM structure.

The Supplier must assist in identifying suitable tape or other material for labelling. Labelling tape must be white with black text. The labelling tape must be located where it is accessible, but need not be visible in daily use.

The Project Manager must approve the tape type and where it may be used. Multi-layer labelling tape with good quality printing must be used, e.g. plastic-coated tape. Tape width approx. 12mm. Print size min. 4 mm bold, font Arial or similar. Embossed tape is not acceptable. The Supplier is responsible for using a suitable tape type, etc., for the type of furniture. TFM code labelling need not have a long lifespan, i.e. longer than 10 years. The TFM code should be written without spaces, e.g.:

=434.113-KW006

7.2 Specific information to foreign suppliers

Information about invoicing and national VAT

VAT at 25 % will be added to the contract price for national VAT. This is a consulting contract which will be executed abroad, but installed and partially developed in Norway. The client will therefore be obliged by national law to pay 25 % VAT, which has to be invoiced and paid by the Supplier.

Foreign suppliers must register a company/NUF in Norway to handle invoicing and payment and Norwegian VAT. As an option they can engage a national agent in Norway to complete all invoicing and handling of national taxes/VAT, customs according to the delivery. This could typically be an attorney or an audit company (KPMG, PwC etc.). Details to be discussed.

Incoterms DDP

In case of import of goods in relation to deliveries related to the contract and assignment, the Supplier is required to handle all aspects of import and duty payment according to national law and regulations, cf. Incoterms DDP:2010.

Logistics and APP registration

Statsbygg has recently established a system for registration of deliveries on site that all contractors and suppliers must follow. The following will be included in all contracts:

Internet based warning system for registration of deliveries

Statsbygg will establish and operate a net based system for registration of deliveries. Each contract/supplier will receive a user profile/password after start on site with access to the system. All suppliers are obliged to enter deliveries to the site into the system with all necessary information at least a week in advance, so that Statsbygg can coordinate logistics at the site. If there are any queues/delays all contracts/suppliers must make sure that drivers are notified to wait outside the city, as it is not possible to wait at or near the building site. Any need for assistance with unloading must be agreed with Statsbygg a week in advance. Cost of loading will be billed to the contract/supplier.