

SUPPLY AND DELIVERY OF 15 X NIGHT VISION EQUIPMENT

1. General requirements

- 1.1 The night vision equipment must be able to be legally procured and have the following available to the end user in South Africa (SA):
 - 1.1.1 spare parts for repairs, after market accessories, upgrades, and maintenance must be done in SA;
 - 1.1.2 must be of robust quality finishing to avoid corrosion and with minimum operating parts to complicate the handling under duress.
- 1.2 Bidders are reminded that all specifications issued to them are the property of the CLIENT and must be returned to the CLIENT whether a tender is submitted or not.
- 1.3 It may be required from a Bidder, before acceptance of his tender, to furnish proof to the satisfaction of the CLIENT that he is able to secure all the materials required to complete this contract within the time provided by him and accepted by the CLIENT.
- 1.4 Should it occur that any part or parts of the specification should be intelligible to the bidder or that the materials or the articles to be used in the execution of the works are insufficiently described, it is to be clearly understood the CLIENT representative shall be requested in writing to make clear his requirements in writing. The Bidder will be deemed to have carefully examined all the parts of this specification to this project.
- 1.5 The bidder shall provide at least Two (2) previous similar contracts successfully completed with contactable references. This is subject to verification.
- 1.6 Bidders are required to provide at the time of tendering the schedules of equipment and materials offered, the manufacturers of the materials, on which their tender is based, and the catalogue numbers and other information by which the materials may be identified. The brochures of material offered shall be submitted with the tender to enable the unit concerned to be identified without ambiguity.
- 1.7 All materials and equipment used shall be of new or recent manufacture and shall be suitable for the environment and service for which it is to be used. This pertains; inter alia, to corrosion protection, UV stability etc.
- 1.8 If requested by the Client, the bidder shall submit samples of material and equipment for the Client's approval.
- 1.9 It shall be assumed that the bidder is conversant with the above-mentioned requirements. Should any requirement, by-law or regulation which contradicts the requirements of this specification apply or become applicable during the supply thereof, such requirement, byelaw or regulation shall overrule this specification and the bidder shall immediately inform the Client of such a contradiction. Under no circumstances shall the bidder carry out any variations in terms of such contradictions without obtaining the written permission to do so from the Client.
- 1.10 Equipment proposed must carry a two-year warranty or more.

2 Standard Technical Specification (STS)

- 2.1 The standard technical specifications cover the general technical requirements with regards to material and equipment. These specifications shall be read in conjunction with the rest of this contract in its entirety.
- 2.2 The conditions and/or specifications in this document shall be regarded as the absolute minimum requirement.
- 2.3 Once the supply has commenced with the appropriate approvals for using any type and make of material or equipment, the same type and make of material or equipment shall be used throughout the project for that specific application unless otherwise specified.
- 2.4 The workmanship under this contract shall be of a high standard and to the satisfaction of the CLIENT.
- 2.5 All materials and equipment supplied and/or installed under this contract shall be new, of high quality and the best of their respective kinds and shall comply with the requirements laid down in the latest editions of the relevant SABS and their amendments and with the requirements of this specification.
- 2.6 The bidder is warned to place all orders for material or special articles a week after the purchase order is issued to him by Transnet as he will be held solely responsible for any delay in the delivery of such goods, unless such delay has been declared to the CLIENT in writing, who may unreasonably withhold acceptance of such delay and its resultant effects.
- 2.7 The bidder shall furnish, without delay, such samples for testing or other purposes as called for or may be called for by the CLIENT, who may reject all materials or workmanship not corresponding with the approved sample. Notwithstanding that samples and approved brands of materials etc. are exhibited or included in classified lists at the offices of the CLIENT, the CLIENT may retest any samples, brands of materials, etc. included in the contract and reject articles and materials, etc. that do not strictly comply with the specification.
- 2.8 At all times for the duration of the contract, the work shall be carried out under the direct supervision of a qualified, skilled, and competent proxy of the bidder.
- 2.9 The equipment must be provided with a carry case and cleaning kit with owners' manual.

3. Practical completion

- 3.1 Practical completion will only be granted when:
 - 3.1.1 supply and delivery of all material and equipment has been completed.
 - 3.1.2 Quality of material and equipment has been satisfactorily demonstrated.
 - 3.1.3 The Client is satisfied that the material and equipment are in the correct and specified manner.
 - 3.1.4 Transnet employee have been trained to a satisfactory level of competency.
 - 3.1.5 All information has been supplied to the Client for final approval. This includes all documentation as specified in this contract.

3.1.6 Irrespective of the above mentioned, the Operator's Manuals must also contain short form instructions to enable trained operators (trained by the bidder) to use the material and equipment supplied.

3.1.7 All the required documentation shall be to the satisfaction of the Client.

3.1.8 Retention moneys (10% of the total contract value) will be withheld until such items are handed to and approved by the Client.

4. Product description/Specifications

Minimum specifications of the night vision equipment

4.1	Sensor, active pixels (H x V):	640 x 512
4.2	Pixel pitch:	12
4.3	Display type:	LCOS
4.4	Resolution of display, pixel:	1280 x 960
4.5	Display diagonal:	0.4 inches
4.6	Sensor type:	Vox
4.7	Frame rate:	50Hz
4.8	Focal length:	42
4.9	Diopter compensation, dpt:	±5
4.10	Basic magnification:	2,5x
4.11	Digital zoom:	1x / 2x / 3x / 4x
4.12	Field of view:	10.5x8.4° (18.3m x 14.6m / 100m)
4.13	Detecting distance:	3000 m (1,7x0,5m) 2 Pixels
4.14	Recognition distance:	1000m (1,7x0,5m) 6 Pixels
4.15	Identification distance:	500 m (1,7x0,5m) 12 Pixels
4.16	Recording:	Yes
4.17	Internal storage:	Yes
4.18	Live streaming:	Yes
4.19	Video out:	PAL
4.20	Video out connection:	USB-C
4.21	Battery lifetime:	4~5h
4.22	Safety class:	IP67
4.23	Splash and shock proof	
4.24	With carry bag	