
APPENDIX 2 – SPECIFICATION OF REQUIREMENTS

Marts 2015

Open tender of APPENDIX 2 '4K CMOS Camera for Tecnai Spirit electron microscope'

1. Minimum requirements and wishes

This section holds the Contracting Authority's specification of minimum requirements and wishes relation to the sub criteria "Performance and quality" and "after-sales service and technical support".

In the table below the Tenderer must do the following with regard to minimum requirements (MR) and wishes (W):

Fill in either "Yes" or "No" in the column asking 'fulfilled? (Yes or No)

Fill in a complete description of whether the "MR", "W high priority" or "W" is satisfied/not satisfied where requested.

Provide a full description of why the tendered system satisfies or does not satisfy the requirements.

The statements in the description in this Appendix 2 will be assessed in conjunction with the tender evaluation of the sub-criteria "Performance and quality" and "After-sales service and support".

The assessment will focus on the degree to which the requirements are satisfied.

Tenderers are therefore urged to provide as detailed an account of each requirement as possible - simple Yes/No answers may result in a low score.

Please note that a minimum requirement (MR) is a requirement that the Tenderer MUST satisfy in order for the tender to be taken into consideration (need to have), whereas a wish (W) does not need to be satisfied in order for a tender to be taken into consideration (nice to have).

The tender evaluation will take into account the extent to which preferences are satisfied.

It should be stressed that failure to satisfy a wish (W) will be given great importance in the tender evaluation and thus considerably lower the score.

The Tenderer is urged to submit additional documentation for the fulfilment of both minimum requirements (MR) and wishes (W). Such documentation could consist of the following however non-exhaustive list:

Product brochure
 Technical specifications
 User manual
 Maintenance manual
 Service contract(s) / document(s)
 Relevant certificates' etc.

The Tenderer is urged to be as specific as possible in the description of and in any reference to such submitted additional documentation.

Nr.	Minimum Requirements	Is the minimum requirement fulfilled? "Yes"	Is the minimum requirement fulfilled? "No"	Description of how the minimum requirement is met or reference to the part of the offer where the description of the fulfillment or the non-fulfillment is to find
1	System specifications			
1.1	The system must be a modern CMOS (Complementary metal–oxide–semiconductor) based digital TEM camera. The format of the camera should be 4096 x 4096 pixel ²			
1.2	The camera should be compatible with a FEI Tecnai G2 Spirit electron microscope			
1.3	The system must be on axis, bottom mounted and have a post magnification of at least 1.4x.			

1.4	The system must include control software that can readily be accessed for remote data collection using the Legikon data acquisition system			
1.5	The camera must be capable of movie collection			
1.6	The camera must have a sensitivity of ~160 for a single electron at 120kV and a signal-to-noise-ratio of 15:1 for a single electron at 120 kV			
1.7	The camera must be capable of different binning factors (e.g. 1x, 2x and 4x binning)			
1.8	The camera must be capable of high readout (>2 frames/second)			
1.9	The scintillator must be optimized for 120kV and 80kV			
2	Miscellaneous			
2.1	The vendor must agree to an extended testing period (6 months) prior to purchase to evaluate if the performance of the camera is satisfactory before final purchase			
2.2	At least 1 year service agreement			

2.3	At least 2 years warranty			
2.4	An (1) hardcopy manual			
2.5	No special installation requirements. The vendor performs installation and takes the risk relating to installation procedure			
	Services			
3	<p>The CMOS camera (the entire delivery) must be delivered and installed by the Supplier at the address stated in the Contract.</p> <p>The instrument package must be installed and fitted to the microscope described in section 1 above.</p> <p>Installation covers all fittings, associated material etc. necessary for a proper mounting of the entire systems offered and the intended use hereof.</p>			
3.1	The instrument package must be delivered and installed within 14 weeks from receipt of order.			

3.2	The Supplier must perform an acceptance test documenting the fulfilment of the quality and performance of the entire offered solution as specified by the Tenderer.			
-----	--	--	--	--

	<p>The Purchaser carries the cost and responsibility for readying the installation site with necessary supplies (electricity, cooling, etc.).</p> <p>All other costs related to the installation of the instruments are covered by the Supplier. The Supplier must install the camera incl. additional equipment.</p>			
--	---	--	--	--

Nr.	Wishes (Nice to have)	Is the minimum requirement fulfilled? "Yes"	Is the minimum requirement fulfilled? "No"	Description of how the minimum requirement is met or reference to the part of the offer where the description of the fulfillment or the non-fulfillment is to find
	Miscellaneous			
4	Extended warranty provided			
4.1	User-Friendly			

	<p>The system offered is to be the key instruments in the laboratory working with the research as described in Instructions to Tenderers.</p> <p>Please describe how the,</p> <ul style="list-style-type: none"> – Handling, adjustment and usage of both systems <p>supports the daily work in the laboratory, and describe any functionality of the system not described above that underlines that the solution offered are the most suitable for the intended use.</p>			
	Guarantee			
4.2	<p>The CMOS camera must be covered of at least a 2-year warranty period counted from the Customer's approval of the acceptance test.</p> <p>The warranty period should include one (1) yearly alignment and performance test within the guarantee period (PM).</p> <p>The Contracting Authority determines the time of the PMs in cooperation with the supplier.</p> <p><i>If the Tenderer offers a longer guarantee period this is weighted</i></p>			

	<i>positively in the evaluation.</i>			
4.3	<p>Please describe the service contract covering the PM's in the warranty period.</p> <p><i>The evaluation will be focussed on "the more the better", therefore please describe the service contract offered as thorough as possible.</i></p>			

2. Validity period

The tenderer stands by this offer in three (3) months from after expiry of the deadline for the submission of a tender.

The tenderer acknowledges that in case of acceptance of the tender the validity period may be extended for a period by up to three (3) months upon written notice to the tenderer's contact person.

Yes	No

3. Signature

Date and place:

Signature and Name