

Queries and Clarifications made during Pre-BID meeting held for Procurement of Scientific Equipment for  
 NCSCM, Chennai, on 18 -01-2017

Sl. No.	Particulars	Queries	Clarification/ Response
		<b>PACKAGE NO 45 : Hand held XRF</b>	
1.	2.1 EXCITATION SOURCE - X-ray tube, Target Anode Rh / W/, Rating min 40KV, current 100µA	In this technical specification of instrument it is mentioned as EXCITATION SOURCE - X-ray tube, Target Anode Rh / W, Rating min 40KV, current 100µA. Can it be changed to EXCITATION SOURCE - X-ray tube, Target Anode Rh / W/Ag, Rating min 40KV, current 100µA	Please refer to Amendment
2.	ii) RoHS Material.: Analysis of RoHS material. Sample size: Provision to have to analysis small sample size by small spot adopter for min 2mm.	In this technical specification of instrument it is mentioned as Analysis of RoHS material. Sample size: Provision to have to analysis small sample size by small spot adopter for min 2mm. Can it be changed to Analysis of RoHS material. Sample size: Provision to have to analysis small sample size by small spot adopter for min 3mm.	Please refer to Amendment
3.	6.0 DATA STORAGE: Internal or USB flash drive minimum 4GB. Stored data must be easily down loadable to a standard window based PC/Laptop though USB cable & blue tooth.	In this technical specification of instrument it is mentioned as Internal or USB flash drive minimum 4GB. Stored data must be easily down loadable to a standard window based PC/Laptop though USB cable & blue tooth. Can it be changed to 10000 readings data storage with image and spectra. Stored data is easily down loadable to a standard window based PC/Laptop though USB cable & blue tooth.	Please refer to Amendment
4.	Cost of CMC (Maintenance, repair including supply of spare parts and software updates of the supplied	In this technical specification of instrument it is mentioned as Cost of CMC (Maintenance, repair including supply of spare parts and software updates of	No change in specification as the requirement is based on

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	goods) for Year 1 after Warranty please refer BDS Clause 14:6 (a) (iii) Service required every quarter	the supplied goods) for Year 1 after Warranty please refer BDS Clause 14:6 (a) (iii) Service required every quarter Can it be changed to only AMC( excluding spare parts which are charged to customer based on the repair requirements)	the World Bank procurement norms

**Revised technical specifications for hand held XRF (Amendments)**

	Technical Specifications for hand held XRF	Technical Specifications for hand held XRF Modification now made (Blue)
1	Hand held XRF spectrometer, fully factory calibrated for the analysis of Ferrous and non ferrous metals & alloys;	Hand held XRF spectrometer, fully factory calibrated for the analysis of Ferrous and non ferrous metals & alloys;
2	RoHS with required accessories and utilities, CRM samples.	RoHS with required accessories and utilities, CRM samples.
3	TECHNICAL DETAILS	TECHNICAL DETAILS
4	2.1 EXCITATION SOURCE - X-ray tube, Target Anode Rh / W/, Rating min 40KV, current 100µA	EXCITATION SOURCE - X-ray tube, Target Anode Rh / W, Rating min 40KV, current 100µA. Can it be changed to EXCITATION SOURCE - X-ray tube, Target Anode Rh / W/Ag, Rating min 40KV, current 100µA
5	2.2 DETECTOR: Silicon Drift Detector (SDD) with resolution 170ev (max.)	2.2 DETECTOR: Silicon Drift Detector (SDD) with resolution 170ev (max.)
6	2.3 APPLICATION:	2.3 APPLICATION:
7	Analysis of elements range: Mg(12) to U(92)	Analysis of elements range: Mg(12) to U(92)
8	i) Metal & alloy analysis : All ferrous & non ferrous metals and alloys and the alloying elements are Sb, Sn, Pd, Ag, Cd, Mo, Nb, Zr, Se, Bi, Pb, Ta, Hf, Re, W, Zn, Cu, Ni, Co, Fe, Mn, Cr, V, Ti, Ru, S, P, Si, Al	i) Metal & alloy analysis : All ferrous & non ferrous metals and alloys and the alloying elements are Sb, Sn, Pd, Ag, Cd, Mo, Nb, Zr, Se, Bi, Zr, Se, Bi, Pb, Ta, Hf, Re, W, Zn, Cu, Ni, Co, Fe, Mn, Cr, V, Ti,

	and Mg	Ru, S, P, Si, Al and Mg
9	<b>ii) RoHS Material:</b> Analysis of RoHS material. Sample size: Provision to have to analysis small sample size by small spot adopter for min 2mm.	<b>Analysis of RoHS material. Sample size: Provision to have to analysis small sample size by small spot adopter for minimum 3mm .</b>
10	<b>3.0 Library:</b> The standard grade library should contain common grade and alloy grade total min 500alloys including	<b>3.0 Library:</b> The standard grade library should contain common grade and alloy grade total minimum 450 alloys including.
11	Ferrous nonferrous and RoHS.	Ferrous nonferrous and RoHS .
12	<b>4.0 Calibration:</b> Calibration certificate for the analysis of Ferrous and non ferrous metals & alloys; and RoHS valid for two years.	<b>4.0 Calibration:</b> Calibration certificate for the analysis of Ferrous and non ferrous metals & alloys; and RoHS valid for two years.
13	<b>5.0 DISPLAY:</b> High resolution Touch sensitive colour display system.	<b>5.0 DISPLAY:</b> High resolution Touch sensitive colour display system.
14	<b>6.0 DATA STORAGE:</b> Internal or USB flash drive minimum 4GB. Stored data must be easily down loadable to a standard window based PC/Laptop though USB cable & blue tooth.	<b>6.0 DATA STORAGE:</b> Substantial storage card or Internal storage facility, suitable for busiest field testing requirement. Stored data must be easily down loadable to a standard window based PC/Laptop though USB cable & blue tooth.
15	<b>7.0 BATTERY:</b> Li – ION rechargeable battery (2nos) along with charger, each should provide minimum 6Hrs constant use on a single charge.	<b>7.0 BATTERY:</b> Li – ION rechargeable battery (2nos) along with charger, each should provide minimum 6Hrs constant use on a single charge.
16	<b>8.0 SAFETY :</b> Safety should be provided for protection against radiation which include shielding such that user shall not be exposure	<b>8.0 SAFETY :</b> Safety should be provided for protection against radiation which include shielding such that user shall not be

<p>exposure to radiation and instrument shall not be triggered unless the sample is detected, warning etc Safety certificate to be provided for safe operation.</p>	<p>to radiation and instrument shall not be triggered unless the sample is detected, warning etc Safety certificate to be provided for safe operation.</p>	
<p><b>9.0 ACCESSORIES:</b></p> <p>a) Stand kit for mounting as per analytical requirement.</p> <p>b) CRM samples: i) 316TI grade 01no, ii) SS 304 &amp; 302 one no each iv) Brass 70/30 one no v) RoHS one polymer &amp; one soldering alloys standard.</p> <p>c) Laptop with i5 processor and windows operating (<b>atleast windows 7, 1 TB hard disk, 8GB RAM or better</b>) system for data storage, mounting on S.S. top table along with operating chair. d) Printer - Color, A4 size for data output,</p>	<p><b>9.0 ACCESSORIES:</b></p> <p>a) Stand kit for mounting as per analytical requirement.</p> <p>b) CRM samples: i) 316TI grade 01no, ii) SS 304 &amp; 302 one no each iv) Brass 70/30 one no v) RoHS one polymer &amp; one soldering alloys standard.</p> <p>c) Laptop with i5 processor and windows operating system for data storage, mounting on S.S. top table along with operating chair. d) Printer - Color, multi paper size for data output,</p>	<p>17</p>
<p><b>GENERAL REQUIRMENTS/ TERMS AND CONDITIONS</b></p> <ul style="list-style-type: none"> <li>• Light-weight tripod, suited for mobile use.</li> <li>• List of optional accessories shall be quoted along with the main system.</li> </ul> <p>It shall be ensured that software is valid for minimum 10 years from date of operation of the instrument.</p> <p>Cost of CMC (Maintenance, repair including supply of spare parts and software updates of the supplied goods) for Year 1 after Warranty please refer BDS Clause 14:6 (a) (iii) Service required every quarter</p>	<p><b>GENERAL REQUIRMENTS/ TERMS AND CONDITIONS</b></p> <ul style="list-style-type: none"> <li>• Light-weight tripod, suited for mobile use.</li> <li>• List of optional accessories shall be quoted along with the main system.</li> <li>• It shall be ensured that software is valid for minimum 10 years from date of operation of the instrument.</li> </ul> <p>Cost of CMC (Maintenance, repair including supply of spare parts and software updates of the supplied goods) for Year 1 after Warranty please refer BDS Clause 14:6 (a) (iii) Service required every quarter</p>	<p>18</p>
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