

# LCLS Ultrafast Science Instruments

STATEMENT OF WORK (SOW)	Doc. No. SP-391-001-77 R0	LUSI SUB-SYSTEM XCS Detector Mover				
XCS Large Angle Detector Mover Main Carrier Mover Statement of Work						
Prepared by: Eric Bong XCS Lead Engineer/WBS Manager	Signature	Date				
Approved: Aymeric Robert XCS Instrument Scientist Approved:	Signature	Date				
Darren Marsh Quality Assurance Manager Approved:	Signature	Date				
Tom Fornek LUSI Project manager	Signature	Date				

Revision	Date	Description of Changes	Approved
R0	13APR09	Initial release	

#### 1. Introduction

The X-ray Correlation Spectroscopy (XCS) instrument to be built at the Linac Coherent Light Source (LCLS) by the LCLS Ultrafast Science Instruments (LUSI) on the SLAC National Accelerator Laboratory site requires a detector positioning system to detect the x-ray signal scattered from a sample.

This document describes the scope of work required to design, fabricate and install the Main Carrier Mover subsystem of the Large Angle Detector Mover.

## 2. Scope

The work required is the design, fabrication, installation and testing of the Main Carrier Mover subsystem of the Large Angle Detector Mover. The Main Carrier Mover subsystem specifications are described in SP-391-001-31, XCS Large Angle Detector Mover Engineering Specification.

The work required excludes the Adjustable End-Module and Vacuum System in Sections 7.2, 7.3 of SP-391-001-31, XCS Large Angle Detector Mover Engineering Specification.

The suggested and desired time durations between the award of the contract and the delivery of the completed mechanical system is 9 months.

## 3. Applicable Documents

SP-391-001-33	XCS large A	Angle Detector	Mover system Physics
	Requirements		
SP-391-001-31	XCS Large	Angle Detect	or Mover Engineering
	Specification		
SP-391-001-75	XCS Large Ar	ngle Detector Me	over Main Carrier Mover
	Subsystem Procurement Specification		

All documents referenced within the above documents are applicable to the required work.

## 4. Requirements and Specifications

All requirements for the Main Carrier Mover subsystem of the large Angle Detector Mover are found in SLAC document No. SP-391-001-31. All specifications in SLAC document No. SP-391-000-31 shall apply except for those of the Adjustable End-Module and Vacuum in Sections 7.2 and 7.3.

## 4.1. Delivery Time

The suggested and desired time durations between the award of the contract and the delivery of the completed mechanical system is less than 9 (nine) months.

## 5. Quality Assurance Requirements

The vendor will demonstrate the existence and functionality of a quality assurance program at the vendor's site.

#### 6. Selection Criteria

The potential vendors shall submit a Technical Proposal which shall contain no pricing data of any kind; cost and price information shall be included only in a separate volume. The following sections shall be present in the Technical Proposal and the proposals shall be judged and rank based on the content of each category

## 6.1. Technical Specifications

The technical proposal will consist of responses to each of the specifications described in SLAC document No. SP-391-000-31. The proposal shall provide written documentation describing how individual specifications are to be met, including substantiating data or schematics where appropriate. An overall layout of the-system, and appropriate detail drawings, shall be included with the proposal.

## 6.2. Delivery and Milestone Schedule

A delivery and milestone schedule shall be provided. It is preferred that every component of the system be delivered to SLAC at latest by June, 2010. A schedule for installation and acceptance testing of the system at SLAC after delivery, by vendor personnel (if necessary) in conjunction with SLAC personnel, should be provided as well.

## 6.3. Personnel, Experience and Facilities

Proposer shall provide descriptions of the key technical and management personnel who will be involved in the production, testing, delivery, and acceptance testing of the system, and their relevant experience, A description of production facilities and testing equipment should be provided, A listing of similar systems sold and delivered, and to whom, including sale and delivery dates, should also be provided. If subcontractors are planned to be used, similar information on the subcontractors shall also be included.

## 6.4. Quality Assurance, Implementation and Performance Verification

The proposer will provide a quality assurance plan, which includes provision for performance verification of major sub-components of the system. The plans for implementation, performance testing and acceptance testing should be clearly described. The quality-assurance plan should include the possibility of access to the vendor's facility, and that of any major sub-contractor during production, by SLAC representatives. Subcontractors should be identified and their quality assurance procedures should also be documented.

## 6.5. Financial Solvency

The proposer shall provide evidence of financial stability in order to demonstrate the capability to carry the project to its completion.