

Landsat Data Continuity Mission USGS Acquisition Strategy for Ground System Segments

The National Aeronautics and Space Administration (NASA) and the Department of the Interior's U.S. Geological Survey (USGS) share responsibility for the Landsat Data Continuity Mission (LDCM). NASA will develop the flight systems including the spacecraft, instrument, mission operations element and mission launch, and perform on-orbit checkout. The USGS will develop, implement, and operate the ground data acquisition network and image processing and archive facilities and will disseminate products to the user community. In addition, the USGS will be responsible for satellite flight operations.

The USGS will employ the following acquisition strategy for specific mission ground system segments and their associated elements:

Flight Operations Segment:

The Ground Network Element will be procured through competitive solicitation to install a primary ground receiving station at the USGS Center for EROS and secure supplemental data receiving capabilities to ensure repetitive and timely global data acquisition.

The Collection Activity Planning Element will be modeled after the successful Long-Term Acquisition Plan employed for Landsat 7 to collect global data and will be developed primarily by the engineering and development staff of the on-site, competitively procured USGS Technical Support Services Contract.

The Mission Operations Element (systems required for control and management of the spacecraft and instrument) will be competitively procured through NASA's acquisition process. The Mission Operations Center -- a facility to house these operational systems and associated staff -- will be configured within the USGS EROS facility through competitive procurement of design and facility modification contracts.

The Flight Operations Team will be procured competitively through a USGS contract.

Data Processing and Archive Segment:

The Archive Element will be procured competitively through a USGS contract.

The Image Processing Element will be developed by the engineering and development staff of the on-site USGS Technical Support Services Contract.

The User Portal Element will be procured competitively through a USGS contract.

Ground System Architecture Analysis and Integration:

The USGS will lead ground system integration activities and will acquire architecture analysis and integration support through a Federally-Funded Research and Development Center (FFRDC) contract.

Infrastructure integration will be accomplished through the USGS Technical Support Services Contract to ensure optimal incorporation into the evolving USGS data management infrastructure.

Further details regarding the USGS LDCM acquisition strategy can be found at <http://ldcm.usgs.gov/>.