Requirements

- A remote location with low radio frequency interference
- Electrical power to supply Callisto (4W) and a PC (< 200 W)
- Internet connection (directly or via a server 1MBit/sec min)
- People for installation and operation and maintenance (~2% job)
- A standard PC running on Windows XP or Windows 7
- A power supply for Callisto 12V 0.25A min
- An antenna directed to the sun, if possible tracking the sun
- Coaxial cable between Antenna, preamplifier and Callisto
- A rf-preamplifier ~20dB gain, low noise, high IP3
- A power supply for preamplifier, may be the same as for Callisto
- A water proof box containing preamplifier
- Allow FTP connection to copy data to Zurich-archive
- Allow remote desktop (RDP) or TV to help remotely, if needed
- All other users of the Callisto network shall have access to the
  data collected by the system
- Full support for travel and accommodation for one engineer

Deliverables

- A Callisto spectrometer tested with operating manual (English)
- A serial cable to connect ot the PC
- An adapter RS232 – USB, if needed
- A cable to connect Callisto to a power supply
- Complete source and exe-files for application (Windows compatible)
- Support during site evaluation by email/telecon etc.
- Support during evaluation of antenna by email/telecon etc.
- Support during evaluation of preamplifier by email/telecon etc.
- Full access to all existing data of the e-Callisto network
- Example programs in IDL and Python to analyze FIT files
- Help during installation, set up, configuration
- 1 … 3 day education for local technicians, engineers, if needed
- Option: Low noise preamplifier

Processes needed

1. Memorandum of Understanding (MoU takes 1 day … sometimes many years)

2. Schedule preparation (takes days)

3. Education (Demo-Installation + Configuration + Operating + Analysis 2-3 days at host location)

4. Site evaluation -> report (host by themselves takes a few days … months)

5. Installation (depending on antenna size ½ day …. a few weeks by local people)

6. Operating and maintenance (software updates, etc.)

7. Fully automated data transfer to ETH Zurich

Skills needed for Callisto

Phase	Needs
Planning, MoU	Director, Scientist, Engineer
Installation	El. Technician + Mechanic
Configuration	El. Techn., Engineer, Scientist
Operating	El. Techn., Eng., Sci., PhD
Maintenance	El. Techn. or Eng.
Data Analysis	PhD, Plasma-Scientist