

# European Laser Timing as a part of Atomic Clock Ensemble in Space

## SLR station questionnaire

### SLR hardware prerequisites for ELT participation

- local time base ties to UTC
- frequency reference
- laser fire epoch precision
- SLR tracking capability
- laser wavelength 532+/- 2 nm
- laser nominal rep.rate 10 Hz minimum, >= 100 Hz optimum
- laser fire epoch programmable in =< 100 ns steps, shot by shot
- laser power density adjustable beam divergence control in a real time

Station name and ID	...
Laser	wavelength ...
	nominal rep.rate ...
	energy / pulse ...
	beam divergence range ...
Timing	resolution RMS ...
	Stability ps/hr ...
Time ref.	"1pps"source ...
	pulse (amp.,slope, slew r.) ... ..
	Definition of trig. Level ...
	Slope ...
	BW optional ...
Freq. ref.	frequency 5,10 or 100 MHz ...
	source ...
	Amplitude, shape ...
Arrangement	
	Epoch timer to Mount cable length ... (m)