

Memorandum of Information

Applicable to the European public Procurement Procedure for a femtosecond laser source system, Reference number WS2359773965

Questions can be asked until no later than the closing date of the 'Deadline for asking questions' as mentioned in the tendering schedule shown in sub-section 2.1.

No.	Section nr. / subject	Question	Answer TNO
1	8.1.70	Is a horizontal polarization for the second harmonic beam acceptable, if the other outputs have vertical polarization?	Yes, that is acceptable.
2	8.1.70	Therefore, our question is if the contrast ratio of 1:1000 is for all harmonics, or would it be allowed to have a lower contrast ratio for the 4th harmonic? Is it absolutely critical to have a contrast ratio of 1:1000 for the fourth harmonic? Would this be an exclusion criterion or would it just lower the points earned?	The contrast ratio 1:1000 is for all wavelengths.
3	8.1.70	All polarizations are vertical except the 2H (second harmonic), which is horizontal. Is this acceptable? In case you want to have this vertical too, we'd need to add a waveplate which stands on the optical table after the laser head. However, we don't see much benefit in adding a waveplate. Please comment?	Only the linearity is specified. And the orientation should be specified. The contrast ratio should be 1:1000.
4	8.3.05	FAT measurement requirements are higher than what Light Conversion measures.. We are checking what we can measure and at which cost. Is the non-fulfillment of this criterion a reason for exclusion from the tender?	Yes, We do expect a laser system that can be accepted without an extensive SAT measurement. For this we specified the FAT measurements. If that comes at extra costs we accept that.
5	8.3.10	There is a sentence "All requirements, and all possible additional preferences will be checked". Who will do the SAT tests? There are a lot of requirements specified, so the measurements on site could take a long time. Also, it will likely require multiple different measurement devices, which could be a problem to bring. We only measure "Output measured at specified repetition rate(s)". Would that be enough? Would you do the installation yourself and measure the power, or do we need to plan a service visit for the installation?	We have no objections to do the installation and measurements ourselves. If the laser is ready for use after unpackaging and installation, we will do the measurements ourselves.
6	8.3.10	You mention: "The specifics of the SAT will be determined collaboratively by TNO and the selected Tenderer. However, the Tenderer is required to include a draft SAT acceptance protocol in their Tender." The price depends on the specifics of the SAT. Is it acceptable that we state that we measure laser output power, while all other parameters are guaranteed? Additional parameters can be measured on site if agreed in advance and this would be at extra cost. How do we deal with this in the tender? How do we agree in advance which parameter should be measured on site so that we can provide a pricing for this?	We accept the measurement of laser output power, while all other parameters are guaranteed. The output power is measured while the laser is in the system, directly after the laser exit, without any optics of the system setup in the beam path. If the laser deviates from the previous measured output, we do expect on line help from the Tenderer to identify the cause. In case no on site service is possible, the laser will be send back for repair. And will be measured again after reinstallation.