

**Allegato L1.2 - attribuzione dei punteggi sulla base dei criteri di valutazione (Lotto 1)**

**Offerta tecnica UpNano GmbH**

Description of elements and qualifying requirements		Type of score	Evaluation method	Max points	PUNTEGGIO ATTRIBUITO DALLA COMMISSIONE	NOTE	
1 - 2-photon lithography 3D printer	1.1	Printing area (mm <sup>2</sup> )	Q(+)	Value greater than the mandatory requirement 1.2	4	4,00	120x100 mm <sup>2</sup> - VAT mode 40x40 mm <sup>2</sup>
	1.2	** Printing height	Q(+)	Value greater than the mandatory requirement 1.3	4	4,00	They offer 40 mm
	1.3	** Ability to print components with surface roughness <10nm	T	Present/absent	2	2,00	Below 10 nm, 8,6 ...
2 - High resolution 3D printing (magnification higher than 40x)	2.1	* Printing time	D	Technical evaluation based on the report of the 3D printing test	4	0,00	11'11"
	2.2	* Horizontal feature size in the xy plane (µm)	Q(-)	Value lower than the mandatory requirement 2.2	4	1,02	227 nm
	2.3	* Vertical feature size along the z-axis (µm)	Q(-)	Value lower than the mandatory requirement 2.3	4	2,33	367 nm
3 - Low resolution 3D printing (magnification lower than 5x)	3.1	* Printing time	D	Technical evaluation based on report of the 3D printing test	4	4,00	5:27 h
	3.2	* Horizontal feature size in the xy plane (µm)	Q(-)	Value lower than the mandatory requirement 3.2	4	4,00	1,08 µm
	3.3	* Vertical feature size along the z-axis (µm)	Q(-)	Value lower than the mandatory requirement 3.3	4	0,38	47 µm
4 – Software interface	4.1	Integrated development environment, with the ability to generate and edit 3D printing files with custom parameters	T	Present/Absent	2	2,00	Present
	4.2	Adaptive printing option, for automatic optimization of parameters according to the shape of the object	T	Present/Absent	1	1,00	Present
	4.3	Remote access to monitor printing	T	Present/Absent	1	1,00	Present
	4.4	System to compensate for any tilting errors	T	Present/Absent	2	2,00	Present
5 – Printing Materials	5.1	Supply of sample materials with different chemical-physical and mechanical properties (ml)	Q(+)	Value greater than the mandatory requirement 5.1	1	1,00	5 resine to 125 ml
	5.2	Possibility of using elastomeric materials	T	Present/absent	1	1,00	Present, UPFlex
6 - Accessories and add-ons	6.1	Number of objectives (including accessories and parameters for use) with different magnifications or numerical apertures	Q(+)	Value greater than the mandatory requirement 6.1	4	4,00	6 obiettivi
	6.2	Touchscreen interface to control printing processes	T	Present/absent	1	1,00	Present
	6.3	CO2 control system, to ensure cell viability during printing	T	Present/absent	4	4,00	The BioUnit of the N1B has a CO2 control system concentration of 0.15% with 0.1% increments, to ensure cell viability during printing.
7 - Training	7.1	Duration of post-installation training	Q(+)	Value greater than the mandatory requirement 8.1	2	2,00	4 days
	7.2	Perpetual access to online training and support resources (e.g., e-learning support or webinars) for the good and efficient use of the system	T	Present/absent	1	1,00	Present
8- Service and maintenance	8.1	Duration of service and maintenance	Q(+)	Value greater than the mandatory requirement 9.3	5	5,00	48 months, quindi 12 in più...
	8.2	Quality of the service and maintenance (e.g., frequency of service visits with travel costs included, responsive support etc.)	D	Value based on the information provided by the Economic Operator	3	3,00	See DRAFT SLA_PISA_2024.pdf
9 - Warranty	9.1	Duration of warranty, including possible replacement of all failed and/or malfunctioning components	Q(+)	Value greater than the mandatory requirement 10.1	8	4,00	12 ulteriori mesi

TOT	70,00	53,73
Normalizzato		70,00